

# musescore

## Handbook

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This handbook is for MuseScore version 3.0 and above. It is maintained and translated by the MuseScore community. [Find out how you can help](#). In case of doubt consult the [English online version of the handbook](#).

(If you are still using MuseScore 2.x, you can access [the old handbook](#)).

## Getting started

This chapter helps you to install and run MuseScore for the first time. It will introduce you to the various learning and help resources.

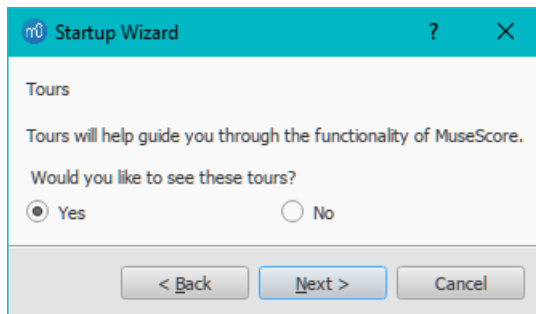
### Learning MuseScore

MuseScore provides a number of learning resources to help the new user get started.

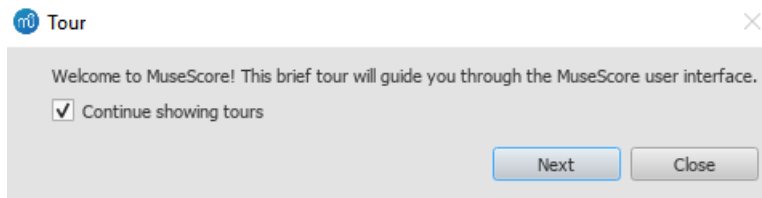
#### Tours

When you run MuseScore for the first time, the **Startup Wizard** appears to help you set up some basic features of the software. One of these features is called **Tours**, and, as the name suggests, gives you a guided tour of the program.

- To activate this feature, on the **Tours** page of the Startup Wizard, tick "Yes" in response to "Would you like to see these tours?"



This will allow the **Tour** to run when the program opens, introducing you to the main features of the user interface.



- **To end the tour:** press the Close button.
- **To stop the Tour showing when you open MuseScore:** Uncheck "Continue taking Tours".
- **To enable the Tour again** (when program reopens): Select Help → Tours → Show Tours.
- **To see all the Tours again** (when program reopens): Select Help → Tours → Reset Tours.

Currently offered tours:

- Introduction to User Interface.
- Entering notes and rests in a score.
- Entering symbols from a palette.
- Navigating the score with Timeline.
- Navigating the score with keyboard.
- Entering multimeasure rests.
- Autoplace positioning of symbols.
- Modify properties with Inspector.
- Selecting elements.
- Add and edit lines in score.

### Getting Started score

The interactive **Getting Started** score is a practical introduction to the basics of entering a score. When you open MuseScore for the first time, it will be displayed in the main window of the [Start Center](#): just click to open it. Follow the instructions written in blue, and you will be led through the basic steps of score writing.

**Note:** If you don't see the Getting Started score, you can find it in the right hand panel of the Start Center. Click the right

or left arrows to browse through the options until it appears.

## Video tutorials

MuseScore offers a full set of instructions videos, each covering a specific subject. You can access these videos in several ways.

- From the MuseScore homepage at [MuseScore.org](https://musescore.org): [Support/Tutorials](#)
- In the [Start Center](#): browse to the Videos page in the right-hand panel.
- Use the list of links in the [Videos](#) section (below).
- Look up directly by searching for "MuseScore in Minutes" on [YouTube](#)

## Other tutorials

In the [Tutorials](#) section on [musescore.org](https://musescore.org) you will also find tutorials on more specific topics (e.g. MuseScore Drumline).

## Videos

- [Lesson 1- Score setup](#)
- [Lesson 2 - Working with MuseScore](#)
- [Lesson 3 - Note Input](#)
- [Lesson 4 - MIDI keyboard input](#)
- [Lesson 5 - More Input Ideas](#)
- [Lesson 6 - Text, Lyrics, and Chords](#)
- [Lesson 7 - Tablature and Drum Notation](#)
- [Lesson 8 - Repeats and Endings, Part 1](#)
- [Lesson 9 - Repeats and Endings, Part 2](#)
- [Lesson 10 - Articulations, Dynamics and Text](#)
- [Lesson 11 - Layout and Parts](#)

## Get Support

If you experience a problem while working with MuseScore, there are several ways to get help and support.

### Handbook

To access the Handbook:

- From the [MuseScore](#) website: select **Support** → [Handbook](#) from the menu.
- From the MuseScore program: select **Help** → [Online Handbook](#) from the menu.

You can browse through the Handbook using the menus, or do [a search](#).

### Context help

If you select an element in your score and press **F1**, a webpage opens displaying a list of links associated with that element in the [Handbook](#).

### Forums

MuseScore offers a number of on-line [Forums](#) for user collaboration. You may be able to find an answer here to your problem among the existing posts. A [general search](#) of the website will return a list of relevant hits to all forums and the Handbook.

### How To's

Some tasks require the use of several different techniques. These can be difficult to find an answer for in the Handbook. Solutions for these *may* be found in the [How To's](#)

### Post a question

If you cannot find the answer to your problem, you can ask a question in the [Support and bug reports](#) forum.

When you post your question:

- Try to be as precise as you can, when you describe what you want to do, and which steps you have already tried.
- Attach the score that shows the problem. This will make it much easier for others to understand the problem — use the "File attachments" option at the bottom of the page, just above the **Save** and **Preview** buttons.
- You may format the text using [these tips](#).

## Report a bug

If you encounter something you think is a bug, the first step is to post it in the [Support and bug reports](#) forum. This will allow others to help check if it is a genuine bug, and to advise workarounds, so you can continue your scorewriting. You will find more details on this in [Bug reports and Feature requests](#).

## External links

- [How to write a good bug report: step-by-step instructions](#) [Isolate bug](#) (MuseScore HowTo)

## Installation

MuseScore exists for various different operating systems, including Windows and macOS, as well as many [Linux distributions](#) and several [BSD variants](#). All are available from the [MuseScore download](#) page.

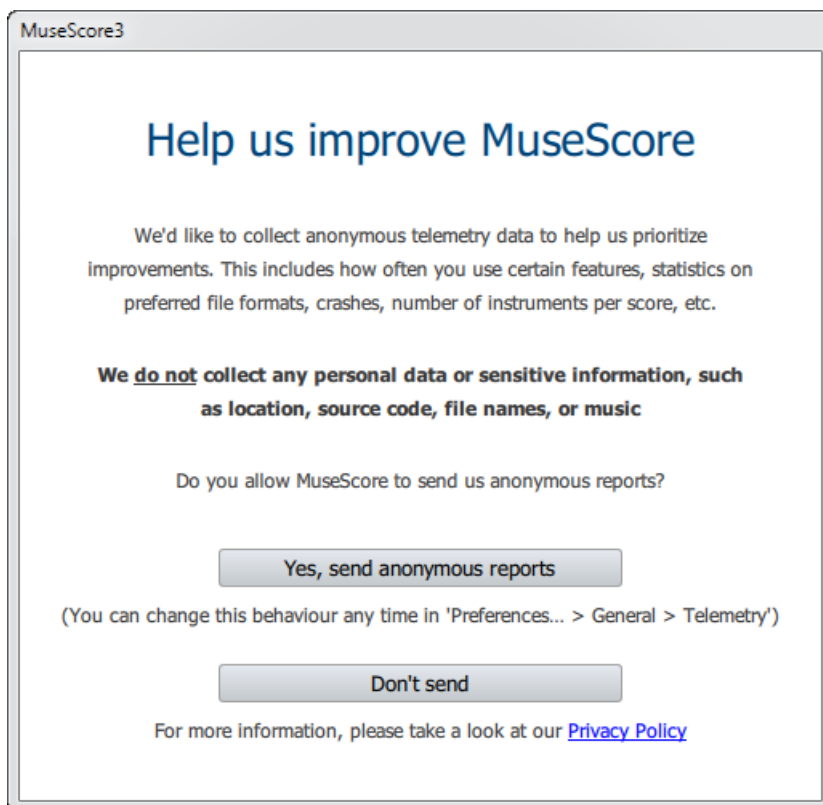
## Installation

When you have downloaded the software, follow the installation instructions for your operating system:

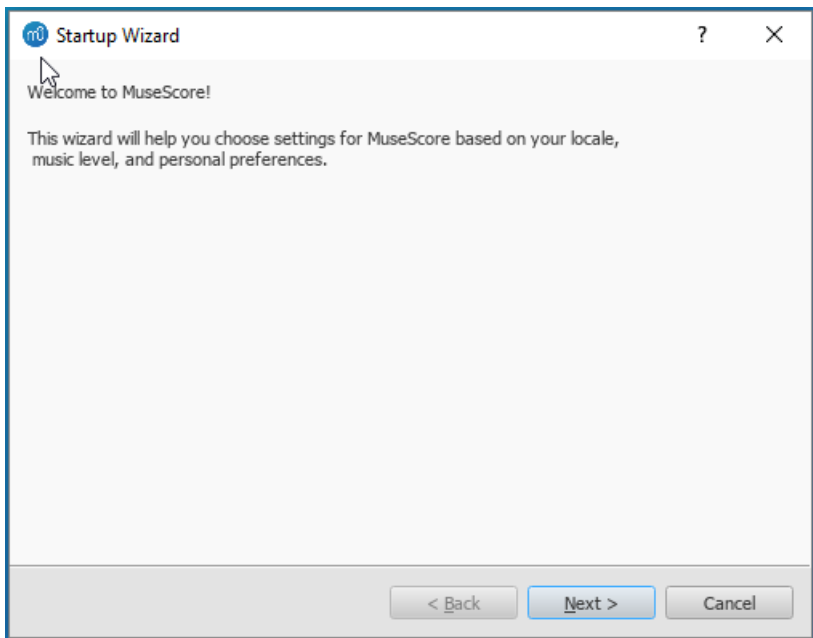
- [Install on Windows](#).
- [Install on macOS](#).
- [Install on Linux](#).
- [Install on Chromebook](#).

## Initial preferences

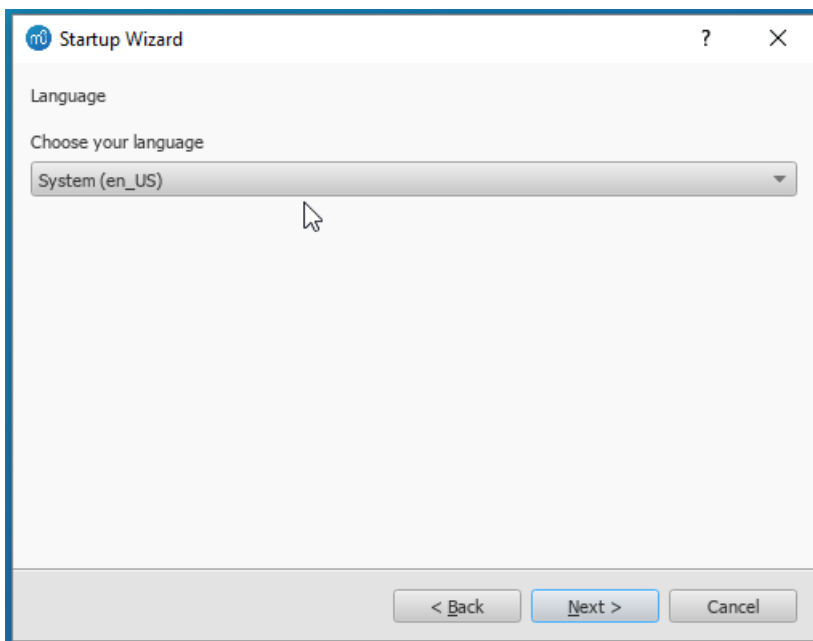
The first time you start MuseScore after the installation, you will be asked to confirm your basic preferences:



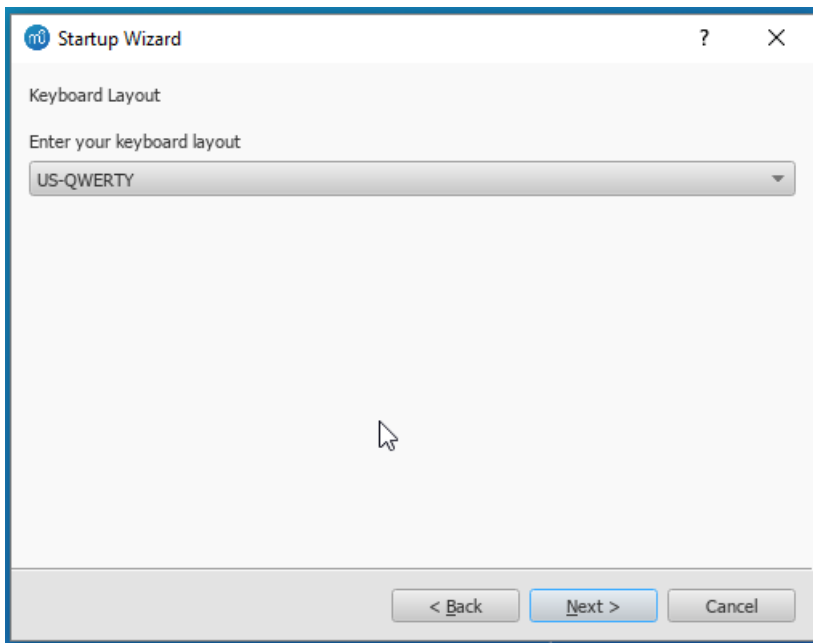
First, you can choose to authorize MuseScore (3.4 or later) to collect usage data, click on **Yes, send anonymous reports** OR **Don't send** to continue:



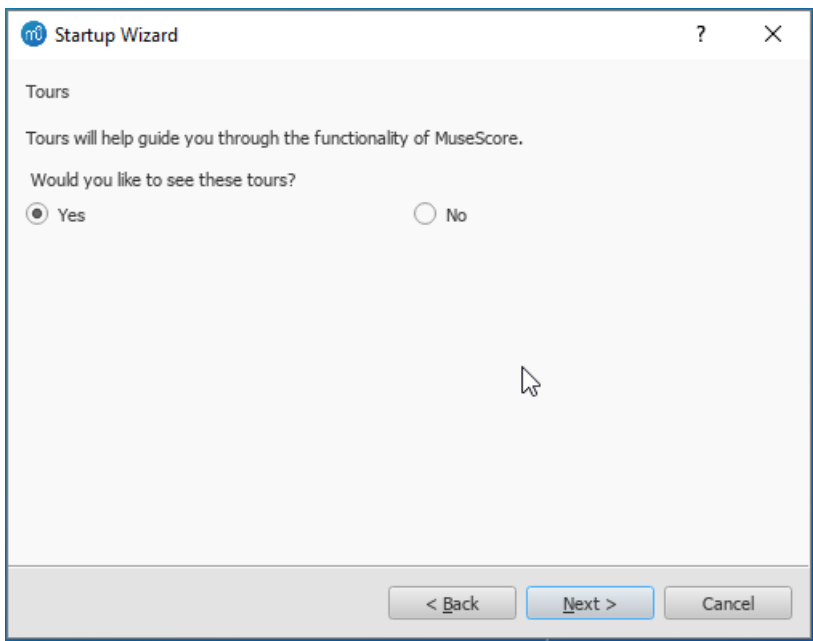
The settings for language is retrieved from your installation, and should normally not need to be changed. Just click Next to continue:



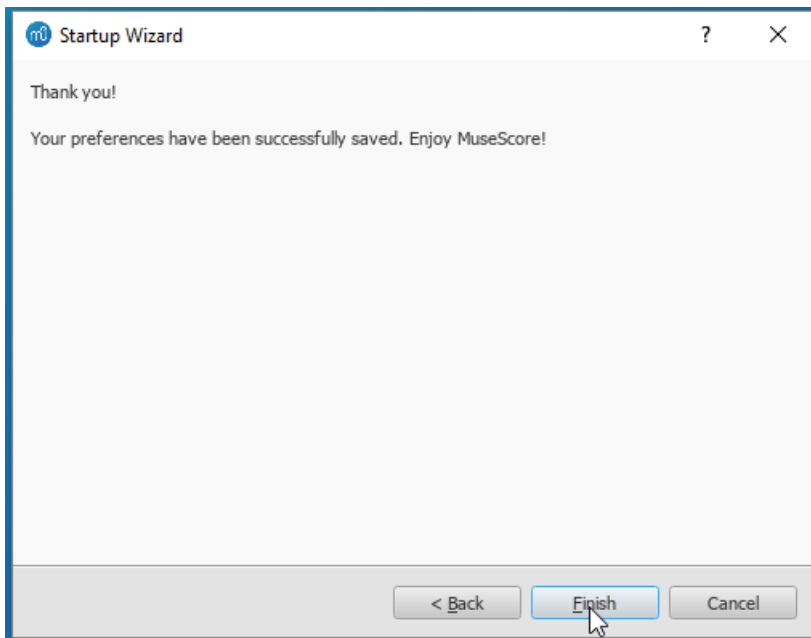
followed by:



Select your keyboard layout in the drop down list, click **Next** to continue:



You will now be asked if you wish to take the Tours. If you are new to MuseScore keep the 'Yes' option checked, and click **Next** to continue:



Finally click Finish to start MuseScore.

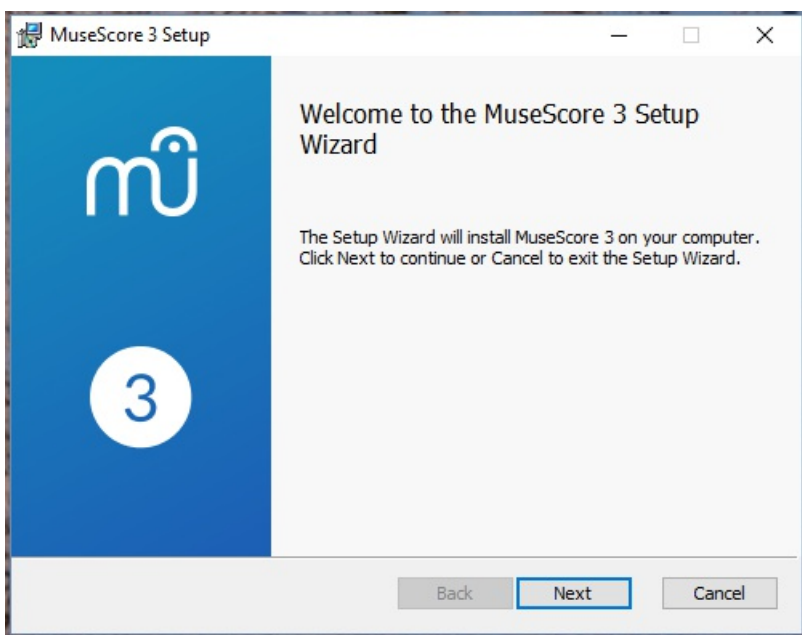
## Install on Windows

### Install

If you're on Windows 10, a 32-bit version of MuseScore can be installed from the Windows Store. Clicking [here](#) will open MuseScore's page in the Store app. There you will only have to click Get the app > and MuseScore will be downloaded, installed and subsequently automatically updated.

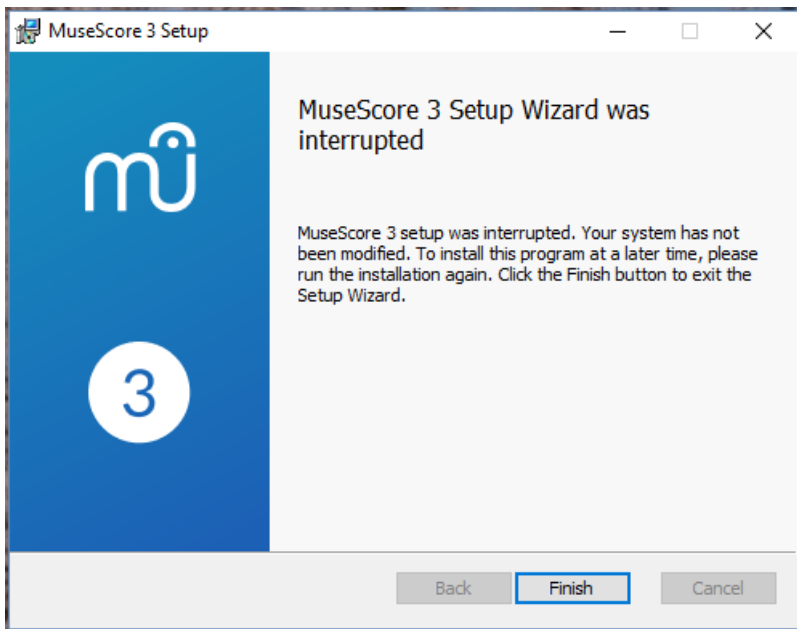
Otherwise you can get the Windows installer from the [download](#) page of the MuseScore website. Click on the link to start the download (pick your choice of 64-bit or 32-bit). Your Internet browser will ask you to confirm that you want to download this file. Click Save File.

When the download finishes, double-click on the file to start the installation. Windows may prompt you with a security window to confirm this before running the software. Click Run to continue. The installation process will now start

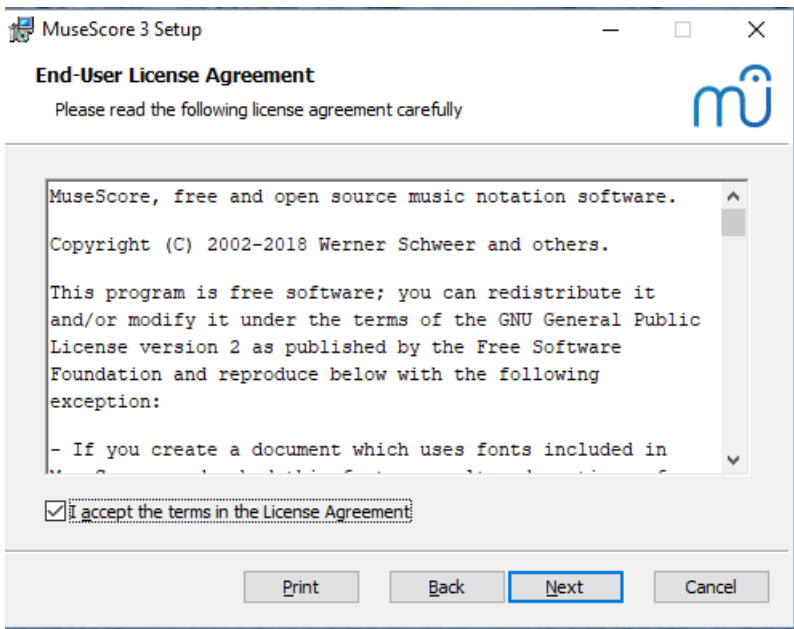


If you click Cancel, here or later, you'll see:

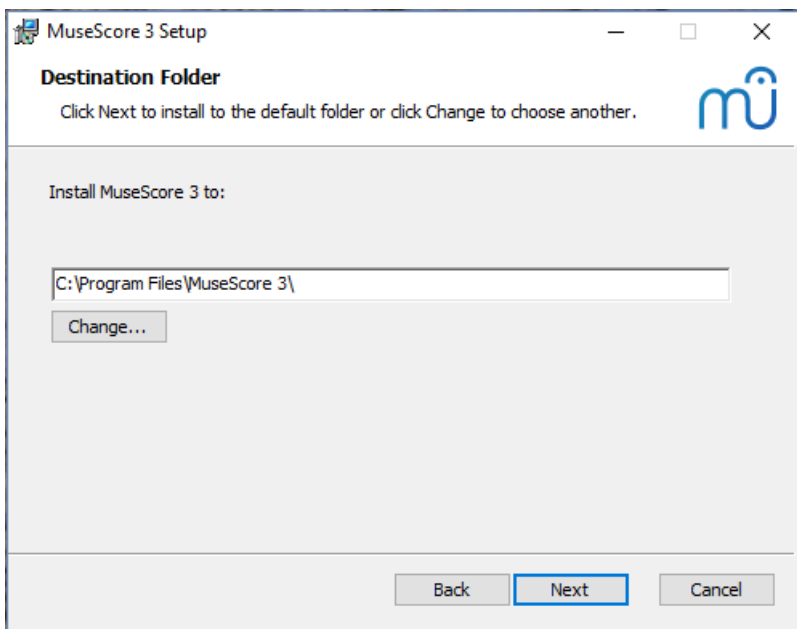




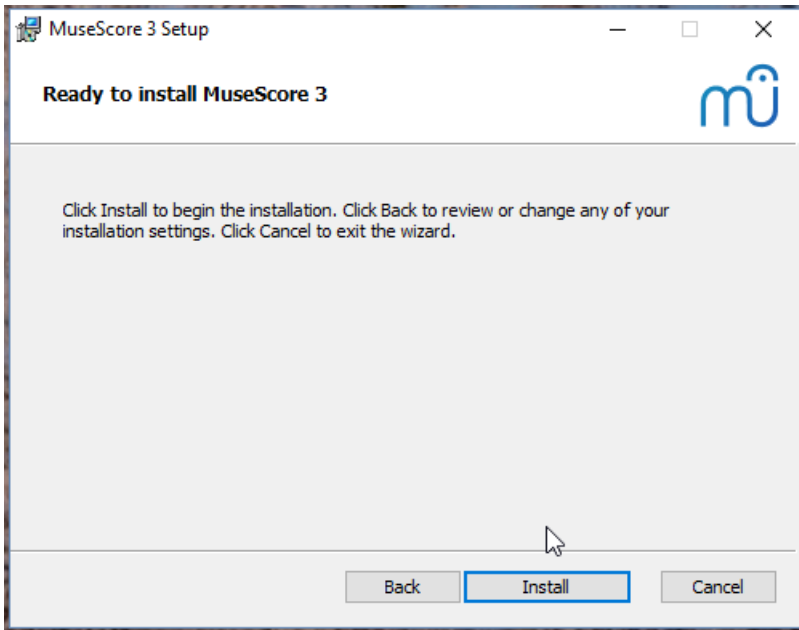
If instead you click Next to continue, the setup wizard displays the terms of the free software license.



Read the terms of the license, make sure the box next to "I accept the terms in the License Agreement" is checked, and click Next to continue. Next the installer will ask you to confirm the location in which to install MuseScore.

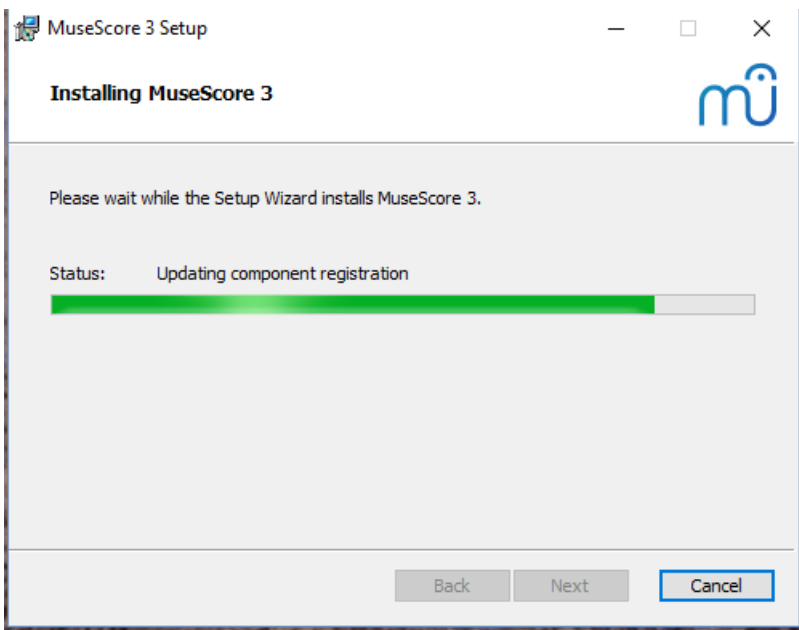


If you are installing a newer version of MuseScore but still want to keep the old version on your computer, then you should change the folder (note that MuseScore 3 can coexist with MuseScore 2 and 1 with no changes needed). Otherwise click **Next** to continue.

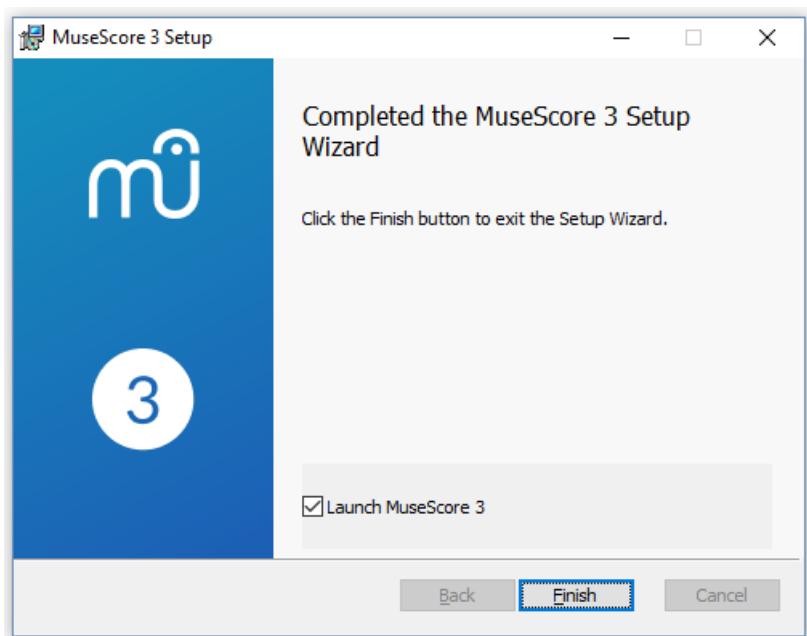


Click **Install** to continue.

Give the setup wizard a few minutes to install the necessary files and configurations. You'll see



and finally



Click Finish to exit the installer. You may delete the installer file you downloaded.

### Start MuseScore

To start MuseScore, from the menu, select Start → All Programs → MuseScore 3 → MuseScore 3.

### Advanced users: Silent or unattended install

- You can install MuseScore silently with the following command

```
msiexec /i MuseScore-X.Y.msi /qb-
```

Append ALLUSERS=1 if you want to install it for all users of the system rather than just the current one.

### Uninstall

You can uninstall MuseScore from the menu by selecting Start → All Programs → MuseScore 3 → Uninstall MuseScore; or via Windows' Control Panel. Note that this will not remove your scores nor your MuseScore settings.

### Troubleshooting

The installer might be blocked by the system. If you don't manage to install MuseScore, right-click the downloaded file and click Properties. If there is a message *"This file came from another computer and might be blocked to help protect this computer"*, click on "Unblock", "OK" and double-click on the downloaded file again.

### External links

- [How to install MuseScore on Windows without administrator rights](#) ↗ (MuseScore HowTo)
- [How to run MuseScore as Administrator on Windows](#) ↗ (MuseScore HowTo)
- [How to fix MuseScore installation error on Windows](#) ↗ (MuseScore HowTo)
- [MSI command-line options](#) ↗
- [Standard installer command-line options](#) ↗

## Install on macOS

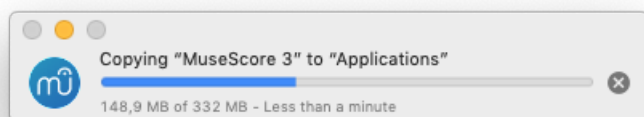
### Install

You will find the DMG (disk image) file on the [download](#) ↗ page of the MuseScore website. Click on the macOS link to start the download. When the download is complete, double-click the DMG file to mount the disk image.



Drag and drop the MuseScore icon to the Applications folder icon.

If you are not logged in as administrator, macOS may ask for a password: click **Authenticate** and enter your password to proceed.



When the application has finished copying, eject the disk image. You can now launch MuseScore from the Applications folder, Spotlight, or Launchpad.

**Note:** As of macOS 10.15 "Catalina", the system has to be told to permit MuseScore to be allowed to access user parts of the file system. The first time you use it on Catalina, it will ask you if you wish to permit it; of course, answer "yes", but if you bypass this by accident, you can set it via System Preferences > Security and Privacy > Privacy > Files and Folders. Unlock with your Admin credentials, then navigate to MuseScore (whichever version(s) you have and want), add it or them to the list of apps, and select "Documents" and "Downloads" folders, or as you prefer.

## Uninstall

Simply delete MuseScore from Applications folder (Admin access will be required to do that, however).

## Install with Apple Remote Desktop

You can deploy MuseScore to multiple computers with the "Copy" feature of ARD. Since MuseScore is a self-contained application you can simply copy the application to the '/Application' folder on the target machines. It is also possible to install multiple versions of the application as long as their names differ.

## Install on Linux

MuseScore packages for various Linux distros are available from the [download](#) [↗](#) page. The easiest to install is the [ApplImage](#), which can be run on any Linux distribution, but a range of other specialist [packages](#) are available if you prefer. [Building from source](#) [↗](#) is another possibility.

## ApplImage

[ApplImages](#) [↗](#) can run on virtually any Linux distribution: all the files needed are contained within the ApplImage itself, just like a portable App. The following procedure allows you to run the MuseScore ApplImage on your system:

### Step 1: Download

Applimages come in different versions. Make sure you download the right one for your system. To check the architecture of your system:

1. Open the Terminal.
2. Type

```
arch
```

or

```
uname -m
```

The output will be something like "i686", "x86\_64" or "armv7":

- i686 (or similar) - 32-bit Intel/AMD processor (found on older machines).
- x86\_64 (or similar) - 64-bit Intel/AMD processor (modern laptop and desktop computers, most Chromebooks).
- armv7 (or later) - ARM processor (phones & tablets, Raspberry Pi 2/3 running Ubuntu Mate, some Chromebooks, usually 32-bit at present).

Go to the [download](#) [↗](#) page and find the ApplImage that best matches your architecture. Once downloaded, the file will be named "MuseScore-X.Y.Z-\$(arch).ApplImage".

### Step 2: Give the file permission to execute

There are two ways to do this:

#### From the File Manager:

1. Right-click on the ApplImage and select "Properties".
2. Open the "Permissions" tab.
3. Enable the option labelled "Allow executing file as a program".

The process may be slightly different in other file managers.

#### From the Terminal:

This command works on all Linux systems (*Note*: The code below assumes that the ApplImage is in the Downloads folder. If not the case then amend the file path accordingly):

```
cd ~/Downloads
chmod u+x MuseScore*.ApplImage
```

### Step 3: Run the ApplImage

- To run the program, just double-click it.

*Note*: You can move the ApplImage to wherever it is most convenient. And to "uninstall" it, just delete it.

#### Install the ApplImage

The above procedure allows you to run the MuseScore ApplImage but doesn't integrate it with the rest of your system: it doesn't appear in your App menu, and MuseScore files are neither associated with the program nor do they have the correct icon on them.

To remedy this, you need to actually install the program as follows:

1. Open the Terminal.
2. Type the following (*Note*: The code below assumes that the ApplImage is in the Downloads folder. If not the case then amend the file path accordingly):

```
cd ~/Desktop
./MuseScore*.ApplImage install
```

Or, alternatively, you can combine the operation into one command:

```
~/Desktop/MuseScore*.ApplImage install
```

Use the "--help" and "man" options to get more information about the available command line options:

```
./MuseScore*.ApplImage --help # displays a complete list of command line options
./MuseScore*.ApplImage man # displays the manual page (explains what the options do)
```

## Distribution Packages

### Debian

(Ideally before, otherwise while or after) installing MuseScore itself, you can install one or more soundfont packages (if none is installed, the dependencies will pull in a suitable soundfont automatically):


- `muscore-general-soundfont-small`: the standard MuseScore\_General soundfont in SF3 format, as shipped with MuseScore for other operating systems
- `muscore-general-soundfont`: the MuseScore\_General HQ soundfont in SF3 format, as available via the Extensions manager
- `muscore-general-soundfont-lossless`: the MuseScore\_General HQ soundfont in uncompressed SF2 format: takes up *alot* more space on your hard disc, but offers the highest sound quality and extremely fast startup times
- `fluidr3mono-gm-soundfont`: the old soundfont shipped with MuseScore 2.0 (antecessor of MuseScore\_General), use only if resources are very tight or you need it
- `timgm6mb-soundfont`: the old soundfont shipped with MuseScore 1.3; cannot substitute the others; use only if you need it; extremely tiny

Note: only the MuseScore\_General soundfont (HQ or regular) supports single-note dynamics (SND), and you need **at least version 0.1.6** of those soundfonts (from unstable or backports) for SND support!

The command `sudo update-alternatives --config MuseScore_General.sf3` can be used at any time to select the default soundfont used by MuseScore if you install more than one (note `timgm6mb-soundfont` cannot be selected here).

Then, install the `muscore3` package for MuseScore 3.x (the current stable version) or `muscore` for MuseScore 2.x (there's also `muscore-snapshot` for the unstable developer preview). The packages are available in the following distributions:

- `muscore3`: sid (unstable), bullseye (testing/Debian 11), buster-backports (stable/Debian 10), stretch-backports-sloppy (oldstable/Debian 9)
- `muscore`: buster (stable/Debian 10), stretch-backports (oldstable/Debian 9), jessie-backports-sloppy (oldoldstable/Debian 8)
- `muscore-snapshot`: experimental (usable on unstable)


See <https://backports.debian.org/Instructions/>  for instructions on how to add an official Debian backports repository to your system and install packages from there.

Note: without the appropriate backports, older versions may be available: MuseScore 2.0.3 on stretch, MuseScore 1.3 on jessie. Using the latest 2.3.2 version for 2.x-format scores instead (or conversion to 3.x) is strongly recommended!

### Fedora

1. Import the GPG key:

```
su
rpm --import http://prereleases.musescore.org/linux/Fedora/RPM-GPG-KEY-Seve
```

2. Go to the [download](#)  page of the MuseScore website. Click on the link for the stable Fedora download and choose the correct rpm package for your architecture.


3. Depending on your architecture, use one of the two sets of commands to install MuseScore


- for arch i386

```
su
yum localinstall muscore-X.Y-1.fc10.i386.rpm
```


- for arch x86\_64

```
su
yum localinstall muscore-X.Y-1.fc10.x86_64.rpm
```

If you have difficulty with sound, see [Fedora 11 and sound](#) .

See also the hints for the various distributions on the [download page](#) .

### KDE neon 18.04 (bionic)

The KDE neon packages are built on a different [repository](#)  than the normal Ubuntu PPAs, as this is the only way for us to build packages for KDE neon. Due to limitations of the OpenSuSE Buildservice used, this currently only provides amd64 (64-bit PC) packages, no ARM packages (Slimbook or Pinebook remix).

All commands listed below must be entered in a terminal, *in one* line each.

1. Remove the [Ubuntu PPAs](#) (all three of them) from your system if you've ever configured it before. This is generally in `/etc/apt/sources.list` or one of the files below `/etc/apt/sources.list.d/`; if you used `add-apt-repository` (the recommended way) to enable the PPA, you can remove them with: `sudo rm -f /etc/apt/sources.list.d/mSCORE-ubuntu-ubuntu-mSCORE*`

KDE neon is **not** compatible with the Ubuntu PPAs!

2. Install a few standard packages (usually they are already there, but just in case they aren't) to be able to securely download the repository signature key:

```
sudo apt-get install wget ca-certificates
```

3. Download (via secure HTTPS connection) and install the repository signing key:

```
wget -O - https://download.opensuse.org/repositories/home:/mirabile:/mSCORE/bionic-neon/Release.key | sudo apt-key add -
```

4. Enable the repository:

```
echo deb https://download.opensuse.org/repositories/home:/mirabile:/mSCORE/bionic-neon / | sudo tee /etc/apt/sources.list.d/mSCORE.list
```

5. Make the new packages available:

```
sudo apt-get update
```

Now, it's time to install one or more soundfont packages (ideally install the one you want *before* installing MuseScore):

- `mSCORE-general-soundfont-small`: the standard MuseScore\_General soundfont in SF3 format, as shipped with MuseScore for other operating systems
- `mSCORE-general-soundfont`: the MuseScore\_General HQ soundfont in SF3 format, as available via the Extensions manager
- `mSCORE-general-soundfont-lossless`: the MuseScore\_General HQ soundfont in uncompressed SF2 format: takes up *a lot* more space on your hard disc, but offers the highest sound quality and extremely fast startup times
- `fluidr3mono-gm-soundfont`: the old soundfont shipped with MuseScore 2.0 (antecessor of MuseScore\_General), use only if resources are very tight or you need it
- `timgm6mb-soundfont`: the old soundfont shipped with MuseScore 1.3; cannot substitute the others; use only if you need it; extremely tiny

If you skip this step, a suitable soundfont will be automatically installed when you install MuseScore itself in the final step.

Note: only the MuseScore\_General soundfont (HQ or regular) supports single-note dynamics (SND), and you need **at least version 0.1.6** of those soundfonts (from our repository) for SND support!

The command `sudo update-alternatives --config MuseScore_General.sf3` can be used at any time to select the default soundfont used by MuseScore if you install more than one (note `timgm6mb-soundfont` cannot be selected here).

Finally, you can install the latest stable version of MuseScore with `sudo apt-get install mSCORE3` and the old 2.x version with `sudo apt-get install mSCORE` (the `mSCORE-snapshot` package with an instable developer preview is also available).

**Ubuntu, Kubuntu, Xubuntu, ...**

**WARNING:** these instructions are **not** for KDE neon users (see [above](#))!

MuseScore 2.x (the old version) is available from 18.10 (cosmic) to 19.10 (eoan) out of the box. Older Ubuntu releases carry older versions (18.04 (bionic) has 2.1, 16.04 (xenial) has 2.0, 14.04 (trusty) and 12.04 (precise) have 1.3 and 1.2, respectively). Similar to the [Debian](#) instructions, we recommend using the latest 2.3.2 version for old 2.x scores instead, or migrating those scores to MuseScore 3.

Besides the versions supplied by the distribution itself, the MuseScore Debian packager provides newer versions of MuseScore for older Ubuntu releases in official PPAs (package archives).

Please activate the [Stable releases of MuseScore 3](#) repository on your system and then install the `mSCORE3` package, available for all releases from 18.04 (bionic) onwards. (It is not feasible to provide MuseScore 3 for older Ubuntu releases, as those lack the minimum Qt version required by MuseScore 3.)

If you wish to install the older MuseScore 2, activate the [Stable releases of MuseScore 2](#) PPA and install the `mSCORE` package, available for 12.04 (precise), 14.04 (trusty), 16.04 (xenial), and 18.04 (bionic) onwards. (Some intermediate releases may have slightly older MuseScore versions still available, but it's best to update to the next LTS.) On the ancient 12.04 (precise) and 14.04 (trusty) releases, this will upgrade the Qt library in your system, which may break unrelated software (and on 12.04 even the C++ libraries are upgraded), mind you; best to upgrade to a newer LTS.

There's also a [MuseScore Nightly Builds \(unstable development builds\)](#) PPA, from which the daring can install the

musescore-snapshot package, for LTS, that is, 18.04 (bionic) only.

**WARNING:** these PPAs are *only* suitable for Ubuntu/Kubuntu/Xubuntu/... but **not** for Debian or KDE neon!


As with Debian, you can install one or more soundfont packages (ideally install the one you want *before* installing MuseScore, but if you don't, a suitable one will be installed alongside MuseScore):

- musescore-general-soundfont-small: the standard MuseScore\_General soundfont in SF3 format, as shipped with MuseScore for other operating systems
- musescore-general-soundfont: the MuseScore\_General HQ soundfont in SF3 format, as available via the Extensions manager
- musescore-general-soundfont-lossless: the MuseScore\_General HQ soundfont in uncompressed SF2 format: takes up *a lot* more space on your hard disc, but offers the highest sound quality and extremely fast startup times
- fluidr3mono-gm-soundfont: the old soundfont shipped with MuseScore 2.0 (antecessor of MuseScore\_General), use only if resources are very tight or you need it
- timgm6mb-soundfont: the old soundfont shipped with MuseScore 1.3; cannot substitute the others; use only if you need it; extremely tiny

Note: only the MuseScore\_General soundfont (HQ or regular) supports single-note dynamics (SND), and you need **at least version 0.1.6** of those soundfonts (possibly from the PPA) for SND support!

The command `sudo update-alternatives --config MuseScore_General.sf3` can be used at any time to select the default soundfont used by MuseScore if you install more than one (note `timgm6mb-soundfont` cannot be selected here).

### External links

- [How to run the MuseScore ApplImage on Linux](#)  (MuseScore HowTo, video)




## Install on Chromebook

### Desktop program

MuseScore's desktop program will work natively on Chrome OS's Linux machine called Crostini. Follow the steps described in the video:

1. Install Linux Virtual Machine called Crostini. Go to `Settings > Linux > Turn On`
2. Download Musescore ApplImage package
3. Configure ApplImage to run. Set `chmod +x` for the ApplImage file
4. Run ApplImage with `./` followed by the Musescore package file name
5. Install required libraries if necessary, e.g.:
  - `sudo apt-get install libvorbisfile3`
  - `sudo apt-get install libnss3`
6. Install ApplImage (using the `install` command line option) to avoid running it from Linux command line each time
7. Enjoy!

### External links

- Watch this [interactive video](#)  for more details
- [How To How to run MuseScore on ChromeOS](#)  (MuseScore HowTo)
- For more detailed instructions that also provide better integration with ChromeOS, see [Install MuseScore on Chromebook](#) 

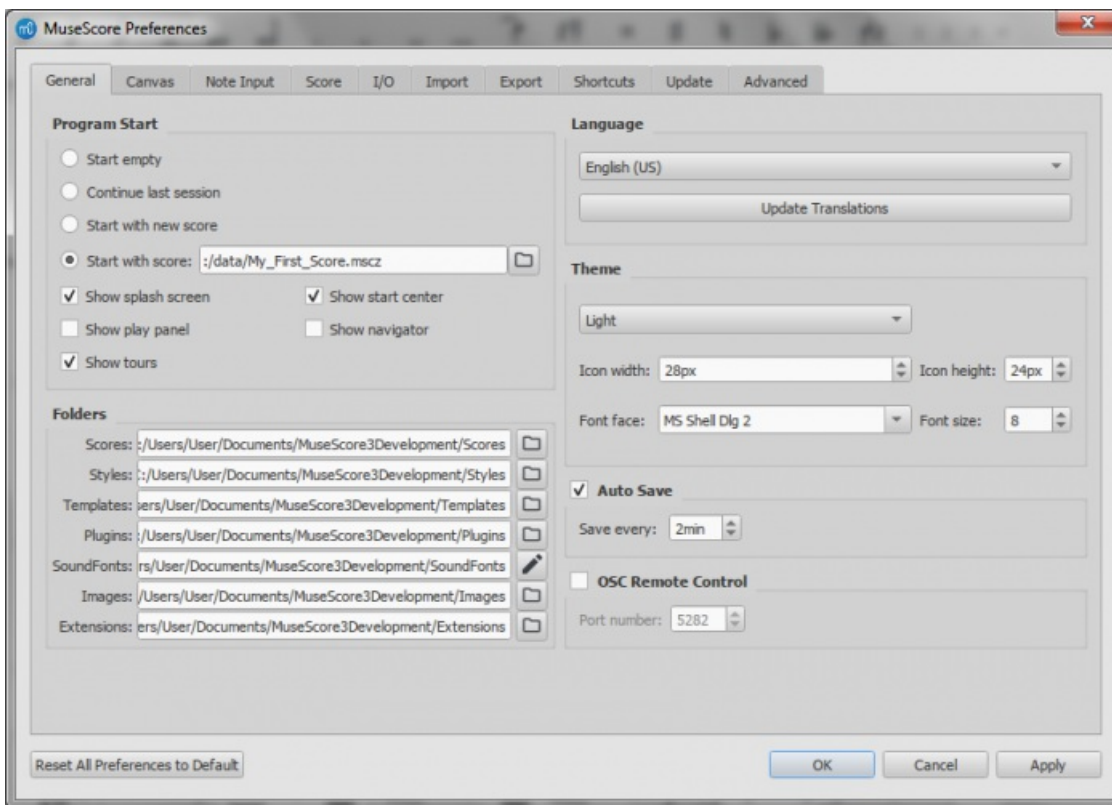
## Language, translations, and extensions

MuseScore works with your "System" language (the one used for most programs, and generally depending on your country and the language settings of the PC, or account).

### Change language

1. From the menu, select `Edit → Preferences...` (Mac: `MuseScore → Preferences...`);
2. In the General tab, select the desired language from the drop-down list in the `Language` section:

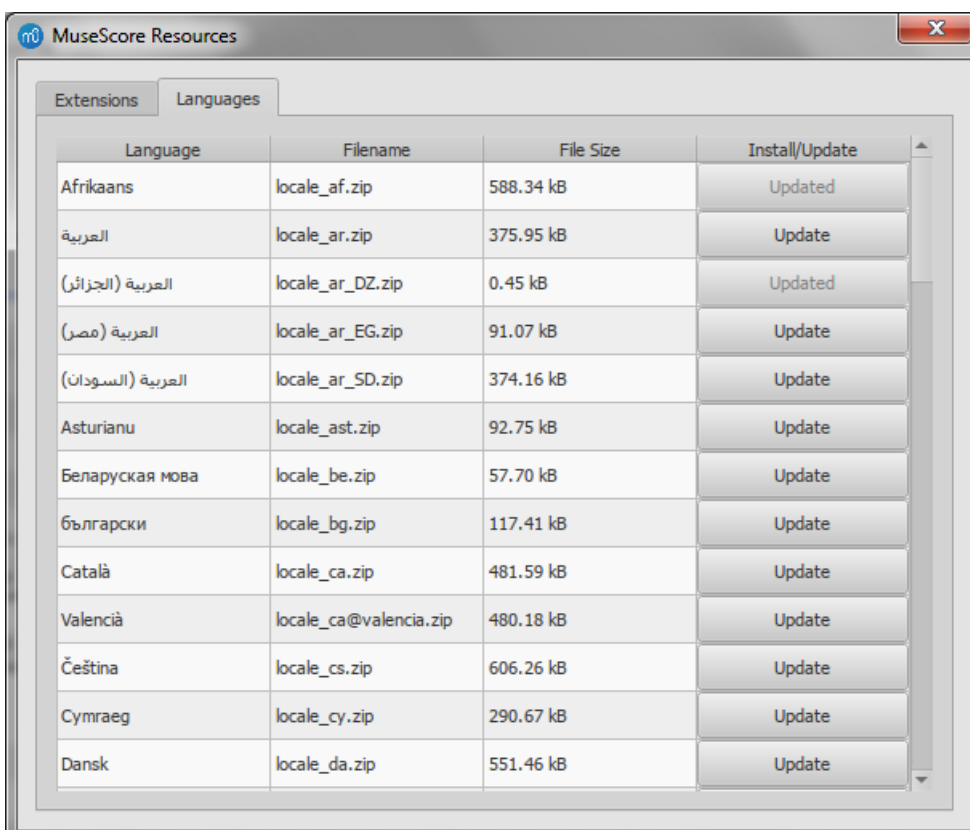




## Resource Manager

The **Resource Manager** is used to install and uninstall extensions, and to handle the update of translations. To access the menu use one of the following options:

- From the menu bar, select Help → Resource Manager.
- From the menu bar, select Edit → Preferences... (Mac: MuseScore → Preferences...), open the General tab, and click on the Update translations button.



### Install/uninstall extension

To install or uninstall an extension:

1. Select the **Extensions** tab in the **Resource Manager**.
2. Select the extension.
3. Click the **Install** or **Uninstall** button.

**Note:** Extensions currently include the MuseScore Drumline (MDL) (as of version 3.0) and the MuseScore General HQ soundfont (as of version 3.1).

#### Update translations

To update translation(s):

1. Select the **Languages** tab in the **Resource Manager**.
2. Click on the **Update** buttons for the language(s) you want to update.

**Note:** Almost all menus and dialogs will switch to the changed/updated translations immediately, but some won't use them until the program is restarted.

#### See also

- [Helping to improve translation](#)

#### External links

- [How to change the language in MuseScore](#)  (MuseScore HowTo)

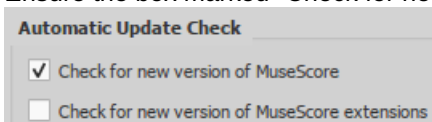
### Checking for updates

**Note:** These options are only available in the Mac and Windows versions of MuseScore (except the version from the Windows Store), as only those can be updated directly from MuseScore.org. Linux distributions (and the Windows Store) have different mechanisms to make updates available.

For the versions of MuseScore that can be directly updated, there are two ways to check for updates.

#### Automated update check

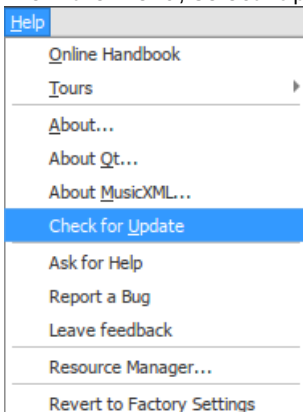
1. From the menu, select **Edit** → **Preferences...** (Mac: **MuseScore** → **Preferences...**);
2. Select the **Update** tab.
3. Ensure the box marked "Check for new version of MuseScore" is ticked. (It should be ticked by default):



If you enable this option, MuseScore will check for updates on every start. On the Mac and Windows versions (excluding the Windows Store version), this option enables an auto-updater that will download and install updates automatically.

#### Check for update

1. From the menu, select **Help** → **Check for Update**:



2. A dialog will appear with the update status: either "No Update Available" or "An update for MuseScore is available:" followed by a link to download it.

#### See also

- [Preferences: Update](#)

# Basics

The previous → "[Getting started](#)" chapter guided you through the [installation](#) process.

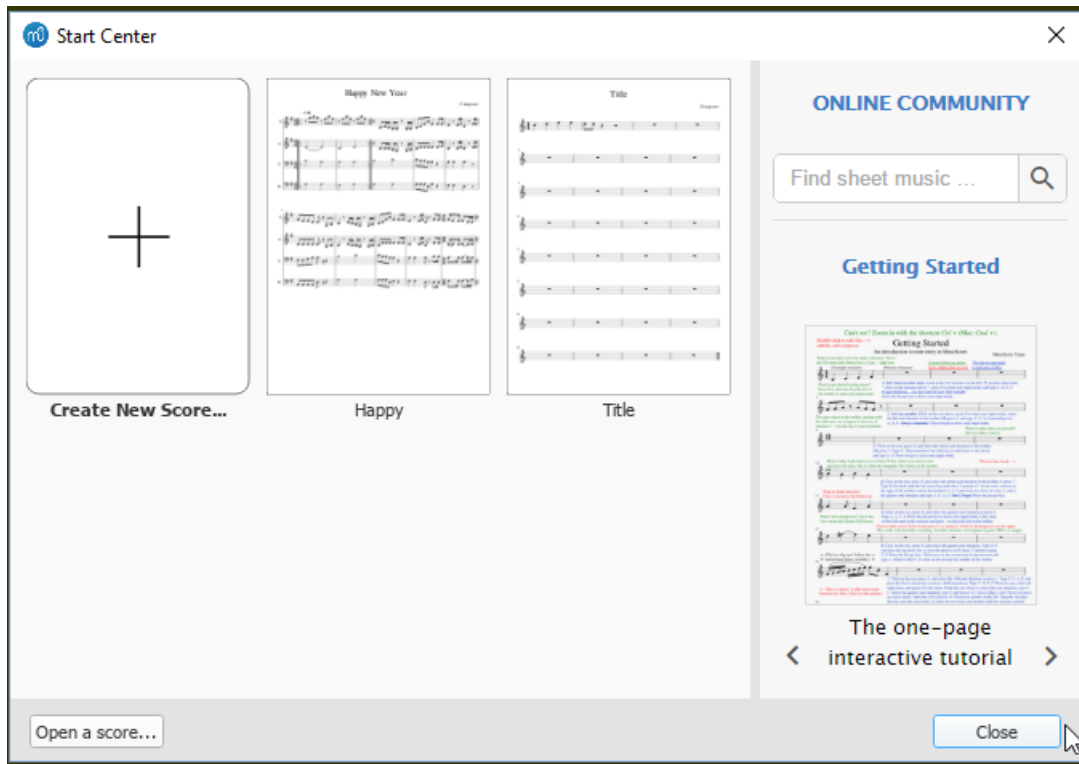
This chapter shows you how to set up a new score using the MuseScore Wizard, and how to enter and edit basic music notation. The various parts of the program window are described—toolbars, Inspector, palettes etc.—as well as viewing and navigation options.

## Create a new score

To create a new score, open the [New Score Wizard](#) (see [Create new score](#), below): this can also be accessed via the [Start Center](#).

## Start Center

This is the window that is displayed when you open MuseScore for the very first time:



To open the Start Center (if not already visible), use any of the following options:

- Press F4.
- From the menu bar, select File → Start Center...

To stop the Start Center from showing up when you open MuseScore:

- From the menu bar, select Edit → Preferences... (Mac: MuseScore → Preferences...) and uncheck "Show start center" in the Program Start section of the General tab.

From the Start Center you can:

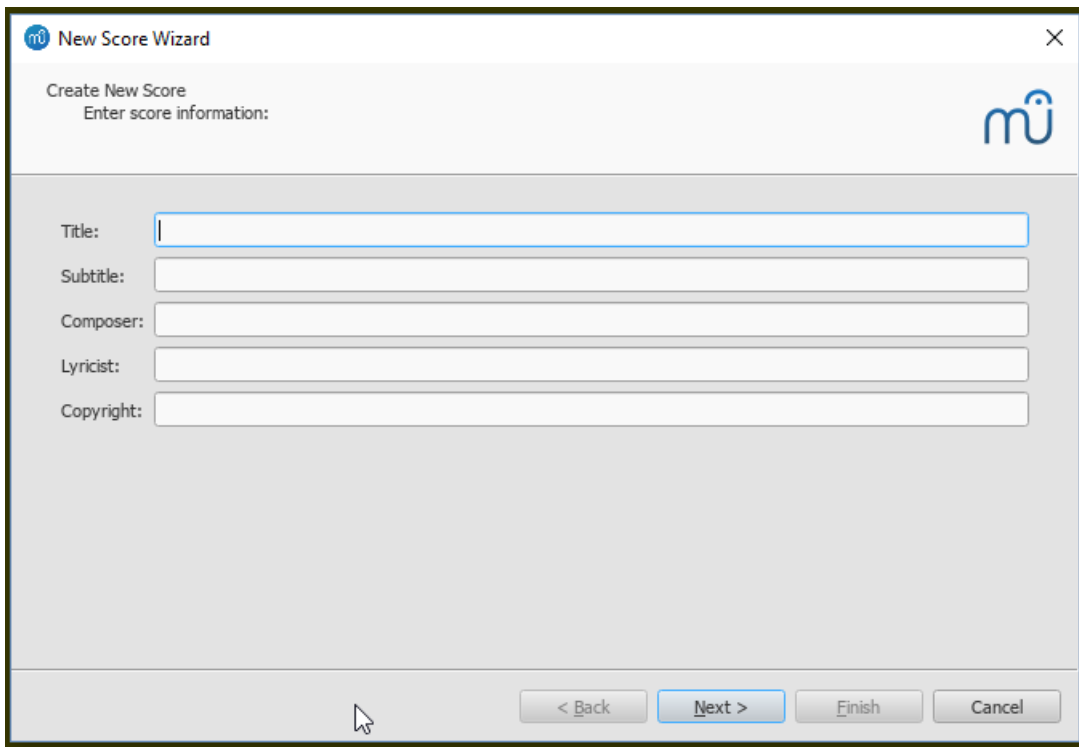
- [Create a new score](#) (by clicking on the icon with the plus sign).
- View thumbnails of previously-opened scores: click on a thumbnail to open it.
- Open a score from your computer's file system: click on [Open a score ...](#)
- Open the "[Getting Started](#)" tutorial score. Use the arrow buttons in the right-hand pane to access the link.
- Search sheet music on [musescore.com](https://musescore.com) [↗](#).
- Access various other facilities (see right-hand pane).

## Create new score

To open the **New Score Wizard** when the Start Center is not open, use one of the following options:

- Click on the New Score icon in the toolbar on the top left of the window;
- Use keyboard shortcut Ctrl+N (Mac: Cmd+N);
- From the menu, select File → New....

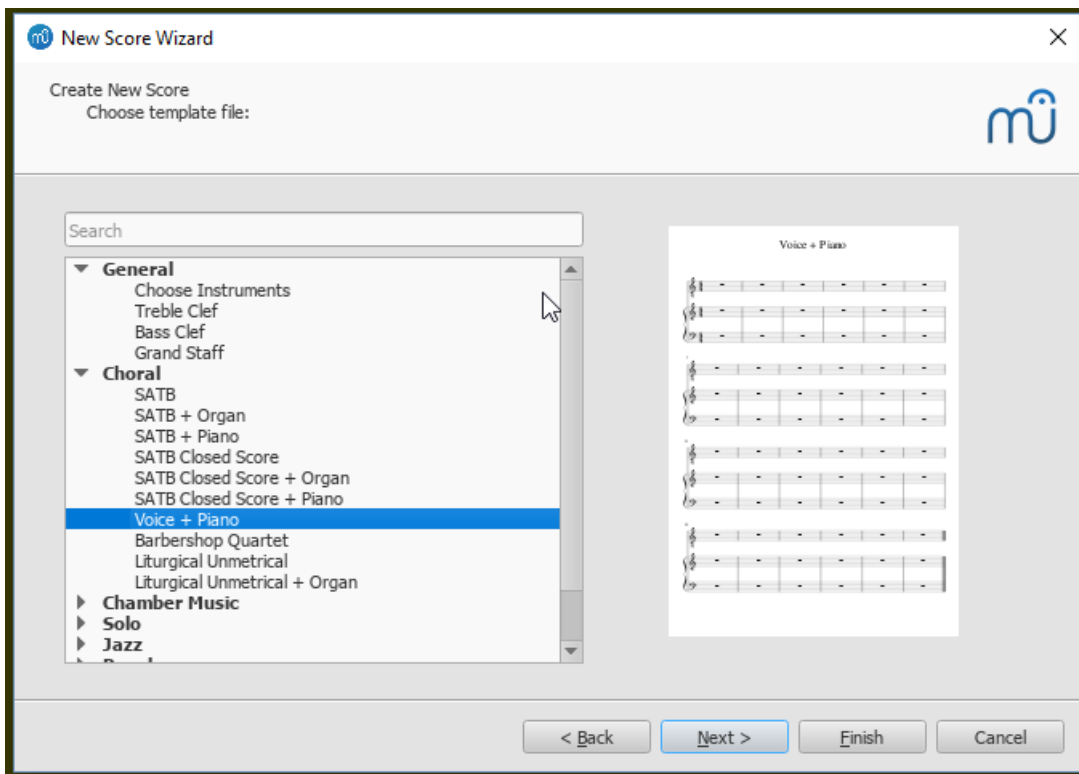
## Enter score information



Step 1: Enter score information.

Enter the title, composer or any other information as shown above, then click on Next >. This step is optional: you can also add this information after the score has been created (see [Vertical frame](#)).

#### Choose template file



Step 2: Choose template file.

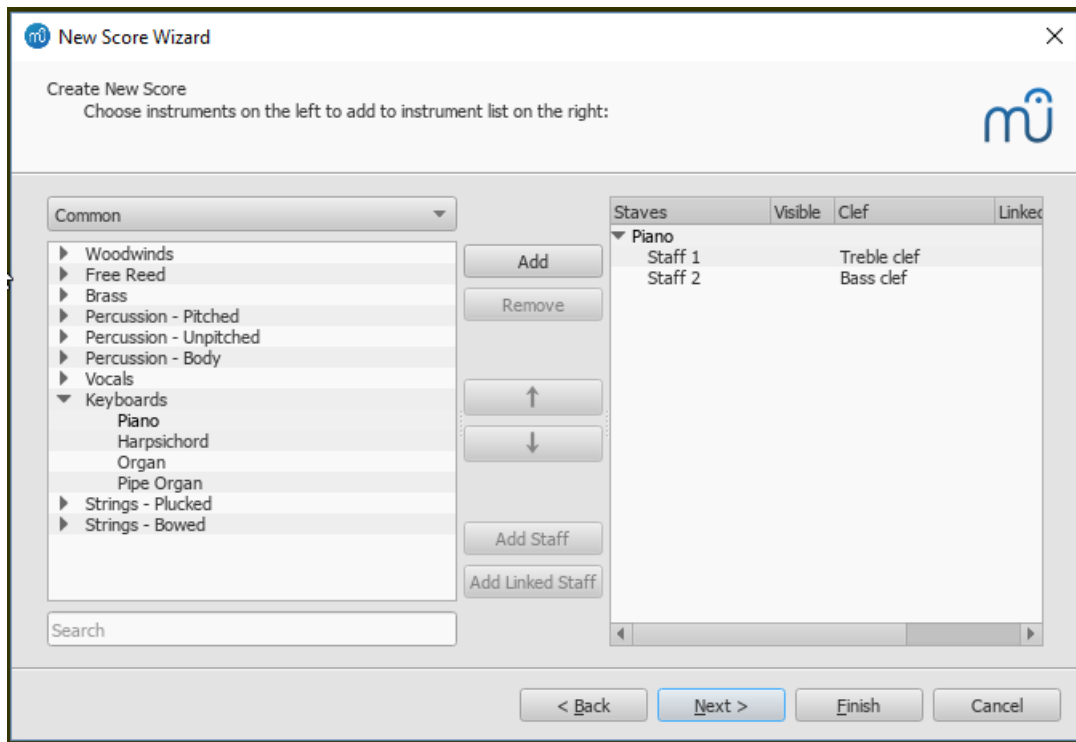
In the left column is a list of solo, ensemble and orchestral templates, divided into categories according to musical styles. If you have previously stored any custom templates in your [user templates folder](#), these are displayed under the heading, "Custom Templates". You can also use the **Search bar** (top left) to find specific templates.

#### To choose a score template:

- Click on the name of a score template to select it, then click Next >; alternatively, just double-click the score template name. This will automatically take you to the next page of the Wizard (see [Choose key signature and tempo](#), below).
- If you wish to create a score template from scratch, click on "Choose Instruments" (under "General"), then click Next

>; alternatively, just double-click "Choose instruments."

### Choose instruments (or voice parts)



The **Choose Instruments** window is divided into two columns:

- The **left column** contains a list of instruments or voice parts to choose from. This list is categorized into instrument families and clicking a category shows the full list of instruments in each family.

The default entry is "Common instruments" but you can choose from others as well, including "Jazz instruments" and "Early music". There is a search box at the bottom of the instrument window: typing the name of an instrument there will search for it in "All instruments".

- The **right column** starts off empty, but will eventually contain a list of instruments for your new score in the order that they will appear.

#### Add instruments

To add instruments to the score, use any of the following options:

- Select one or more instruments in the left column and click **Add**.
- Double-click an instrument in the left column.

The instrument names, and their associated staff lines, now appear in the list of instruments in the right column. You can add more instruments or voice parts, as needed. Each instrument added in this way is allocated its own Mixer channel.

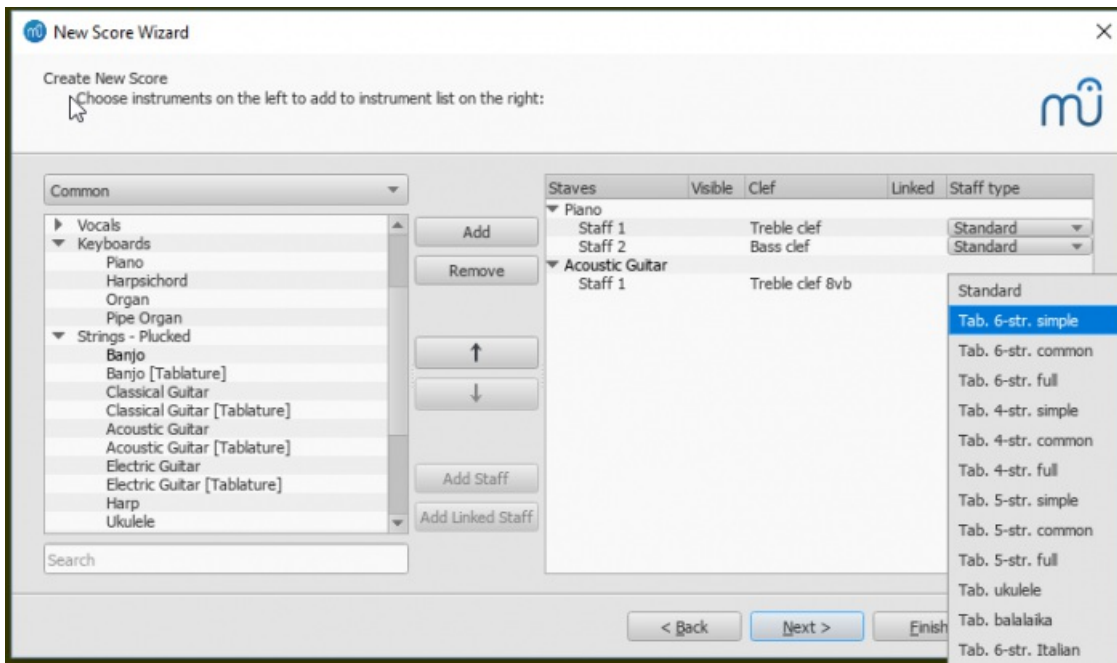
Once an instrument track is added to your score, you can edit its sound features by using the Mixer's track area. You will find a vertical panel in the Mixer menu for that new instrument in the lower half of the panel, next to the volume (master Gain) slider. All instruments in the score will have their own panel, with their names at the bottom of the panel. If you can't see the names, drag the vertical scroll bar downward until the instrument track labels are visible. Then just click on a panel, and edit the volume, name, instrument choice, chorus, reverb, etc. The changes will take effect immediately"

**Note:** If you want staves to share the same instrument, use the Add staff or Add linked staff commands instead (see below).

#### Add Staff / Add Linked Staff

To add a staff to an *existing* instrument in the score:

1. Select a **staff** of the instrument in the score list on the right-hand side (e.g. see "Staff 1" in the image below). Click **Add Staff** Or **Add Linked Staff**.
2. Adjust the **Staff type**, if applicable.



Summary of commands:

Command	Staff added	Edit staves independently?	Share mixer channel?	Examples
<b>Add Staff</b>	Unlinked	Yes	Yes	Guitar staff/tab, Piano grand staff
<b>Add Linked Staff</b>	Linked	No. Edit in one staff updates others	Yes	Guitar staff/tab

See also, [Combine pitched staff with tablature](#).

#### Change order of instruments

To change the order of instruments (or staves) in the score:

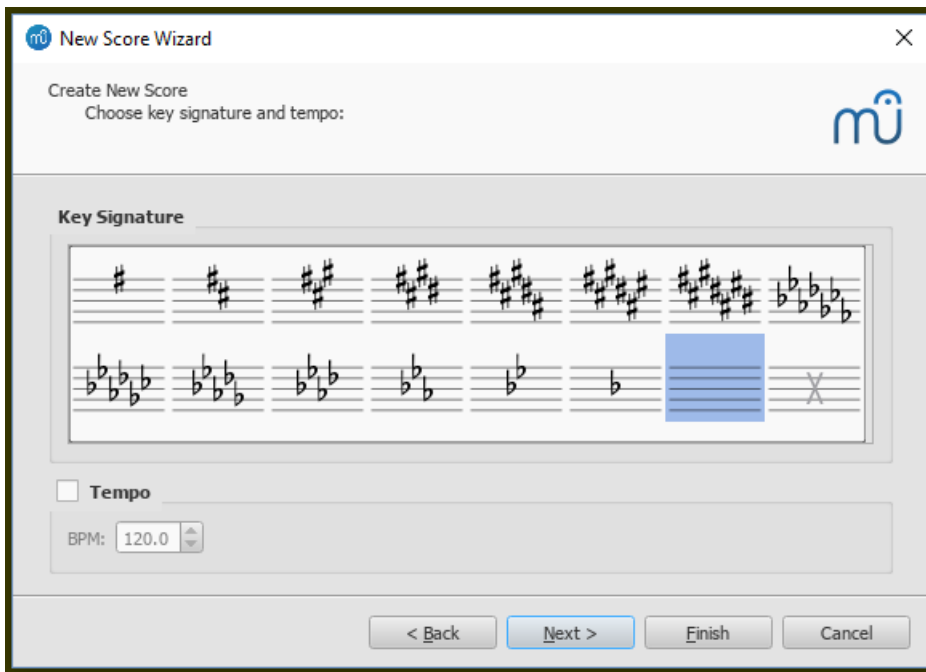
- Click either an instrument name or a staff in the right-hand column, and use the arrow buttons to move it higher/lower.

#### Delete an instrument

To **delete** an instrument, or staff line from the score

- Select an instrument or a staff line in the right-hand column and click Remove.

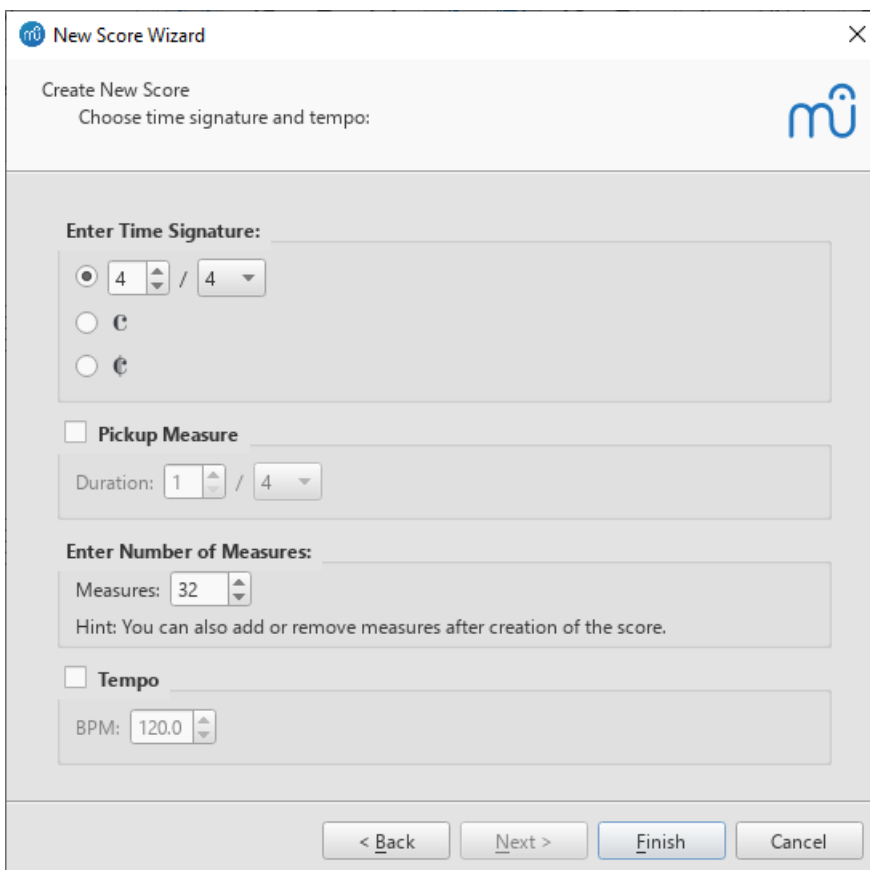
#### Choose key signature (and tempo)



Step 3: Choose key signature (and tempo).

- Select the desired key signature, then click **Next >** to continue. Prior to version 3.5, you can also set the tempo here.

Choose time signature, tempo, pickup measure, and number of measures



Step 4: Choose time signature etc.

Here, you can set:

- The initial **time signature**.
- A **pickup measure** (*anacrusis* or *upbeat* measure), and its duration.
- The initial number of measures in the score (the default is 32, but you can add/remove measures from the score edit window).
- Tempo (prior to version 3.5, this is set on the Choose key signature (and tempo) page instead).

Click **Finish** to create your new score.

## Adjustments to score after creation

Any settings you make in the New Score Wizard can always be changed when you start work on the score itself:

### Add / delete / adjust measures

- [Insert measures.](#)
- [Append measures.](#)
- [Delete measures.](#)
- [Create a pickup measure.](#)

### Add/edit text

- [Add text](#) (Text basics).
- [Edit text.](#)

### Change instrument set-up

#### To add, delete, or change the order of instruments:

- From the menu, select [Edit](#) → [Instruments...](#); or use the keyboard shortcut, [I](#). This opens the **Instruments** dialog which is virtually identical to the [Choose Instruments](#) dialog in the **New Score Wizard** (see [above](#)).

See also [Change instrument](#) (Staff properties).

### Hide a staff

- **To hide a staff permanently:** Open the [Instruments](#) dialog ([I](#)) and untick the "Visible" box for that staff.
- **To hide a staff under certain conditions:** See the "Hide" options in the [Score dialog](#), and [Staff Properties](#).

### Adjust layout and formatting

To adjust the distance between staves and systems, set page margins etc., see [Layout and formatting](#).

## Templates

A **Template** is simply a standard MuseScore file that has been stored in one of two "templates" folders: any files in these folders are automatically displayed on the "[Choose template file](#)" page of the New Score Wizard. Two templates folders are created by default:

- A [system templates folder](#).
- A [user templates folder](#).

### System templates folder

This folder contains the templates installed with MuseScore and should **not** be modified. It can be found in the following locations:

**Windows:** Usually at `C:\Program Files\MuseScore 3\templates` OR `C:\Program Files (x86)\MuseScore 3\templates` (Actually `%ProgramFiles%\MuseScore 3\templates` OR `%ProgramFiles(x86)%\MuseScore 3\templates`, respectively) .

**Linux:** Under `/usr/share/mscore-xxx` if you installed from the package manager. If you compiled MuseScore on Linux yourself, then look under `/usr/local/share/mscore-xxx` (with `xxx` being the version you are using).

**MacOS:** Under `/Applications/MuseScore 3.app/Contents/Resources/templates`.

### User templates folder

Any templates that you create for future use should be stored here. Once in the user "templates" folder, they will automatically appear on the "[Choose template file](#)" page of the New Score Wizard—under the heading "Custom Templates".

The default location of the user templates folder is as follows:

**Windows:** `%HOMEPATH%\Documents\MuseScore3\Templates`.

**MacOS and Linux:** `~/Documents/MuseScore3/Templates`.

To configure the location of your private templates folder:

- From the menu, select [Edit](#) → [Preferences...](#) → [General](#).



## See also

- [Key signature](#)
- [Time signature](#)
- [Clef](#)
- [Tempo](#)
- [Staff properties](#)

## External links

- [Video tutorial: MuseScore in Minutes: Lesson 1 - Score Setup](#)

## Note input

MuseScore allows you to enter music notation from *any* of four [input devices](#): computer keyboard, mouse, MIDI keyboard, or virtual piano keyboard. The default [input mode](#) is **step-time**, in which notes or rests are entered one at a time. However, other [input modes](#) are also available.

After exiting the [New Score Wizard](#), your new score will consist of a series of measures filled with measure rests:



As you enter notes in a measure, the measure rests are changed to appropriate rests to fill the remainder of the measure:



Notes of different durations on the same beat are entered by using [voices](#):



## Basic note entry

This section introduces you to the basics of entering notes and rests in [step-time](#) from a *computer keyboard*. It is also recommended that you work through the tutorial, "Getting Started: An introduction to note entry in MuseScore". This is available from the [Start Center](#).

### Step 1. Select a starting position

Select a starting position for note input by clicking on a note or rest, or [selecting a measure](#), with the mouse. If you don't select a starting point, the cursor automatically defaults to the beginning of the score when you enter **Note Input** mode ("Step 2" [below](#)).

### Step 2. Enter Note Input mode

To enter **Note Input** mode, use either of the following options:

- Click on the "N" icon (on the extreme left of the **Note Input** toolbar).
- Press N on your computer keyboard.

To exit **Note Input** mode, use any of the following options:

- Press N.
- Press Esc.
- Click on the toolbar "N" button.

### Step 3. Select a duration

Still in **Note Input** mode, select a note duration using either of the following:

- Click on a corresponding note icon in the **Note Input toolbar** (directly above the document window):



- Enter the keyboard shortcut for that duration (see [below](#)).

#### Step 4. Enter the note or rest

- To enter a note pitch from A–G, simply press the corresponding letter on your computer keyboard or place it using your mouse/touchpad (and a 'normal' left-click).
- To enter a rest, press 0 (zero) or right-click your mouse.

This method of entry also works if you *aren't* in Note Input mode—as long as you have a note/rest selected, or the score is newly-created (in which case note entry will default to the beginning).

#### Select a note/rest duration

The following keyboard shortcuts are used to select note/rest duration in Note Input mode:

- **64th** (hemidemisemi-quaver): 1
- **32nd** (demisemi-quaver): 2
- **16th** (semi-quaver): 3
- **Eighth** (quaver): 4
- **Quarter** (crotchet): 5
- **Half** (minim): 6
- **Whole** (semibreve): 7
- **Double whole** (breve): 8
- **Longa**: 9
- **Dot**: . (changes the selection into a dotted note/rest)

See also: [Tuplets](#).

#### Additional durations

- **Double, triple and quadruple dots**: Apply from the note input toolbar in the advanced workspace; or via a custom shortcut.
- **128th** note (quasihemidemisemi-quaver): Ditto.
- **256th, 512th or 1024th** durations: First enter a 128th note (or longer), then half it as many times as needed using the shortcut Q.

#### Input devices

Music notation can be entered by:

- [Computer keyboard](#).
- [Mouse](#).
- [MIDI keyboard](#).
- [Virtual Piano Keyboard](#).
- Any combination of the above.

#### Computer keyboard

This section expands on "[Basic note entry](#)" (see above) and introduces you to the full range of commands available for entering notes or rests from the computer keyboard.

#### Enter notes/rests

You can enter a **note** by typing the corresponding letter on your keyboard. Thus, after entering Note Input mode, type: 5 C D E F G A B C.



**Note:** When you enter a note using the keyboard, MuseScore places it closest to the previous note entered (above or below).

To enter a **rest**, type "0" (zero). Thus, after entering Note Input mode, type: 5 C D 0 E.



**Note:** The duration selected in the toolbar applies to both notes *and* rests.

If you want to enter a **dotted note**, press . (period/full stop) after selecting the duration.

For example, after entering Note Input mode, type: 5 . C 4 D E F G A.



If you want to enter a tuplet (such as a triplet): see Tuplets.

If you want to write music with two or more simultaneous lines of independent melody on the same staff, see Voices.

#### Move notes up/down

To move a note up or down by a semitone:

- Press the ↑ or ↓ arrow.

To move a note up or down diatonically:

- Press Alt+Shift+↑ or Alt+Shift+↓.

To move a note up or down by one octave:

- Press Ctrl+↑ (Mac: Cmd+↑) or Ctrl+↓ (Mac: Cmd+↓).

#### Add accidentals

When a note is moved up or down with an arrow key (see above), any accidental required is automatically generated by the program. Accidentals can also be added manually—see Accidentals.

#### Chords

If you want to add a chord note *above* your previous entry:

- Press and hold Shift, then enter a note from A to G.

Thus, typing C, D, Shift+F, Shift+A, E, F results in:



To add a note at a specific interval above or below one or more notes:

1. Ensure that one or more notes are selected;
2. Use one of the following options:
  - From the menu, select Add → Intervals and choose an interval from the list;
  - Press Alt+1-9 for intervals *above* (intervals *below* are also possible by adding relevant shortcuts to the list in Preferences).

**Note:** To create chords with notes of different durations, you will need to use more than one voice.

#### Insert notes

Normally, when you enter music in MuseScore, any existing notes or rests are overwritten. There are, however, several ways to *insert* notes:

- Insert extra measures into the score.
- Cut and paste a section of the score forward, then enter music into the gap.
- To insert a note, press Ctrl + Shift (Mac: Cmd + Shift) + the note name (A to G). This will insert a note of the selected duration and move the rest of the notes to the right in the same measure. If the measure exceeds the duration of the time signature, the blue plus will appear above the measure as in Insert Mode.

#### Delete notes

**To delete a single note:**

- Select the note and press Del (Mac: Backspace).

**To delete a chord:**

1. Press Esc to ensure that you are in Normal mode.
2. Press Shift and click on a note to select the chord.
3. Press Del (Mac: Backspace).

The delete command can also be applied to a range of notes/chords.

#### Keyboard shortcuts

Here is a list of useful editing shortcuts available in Note Input mode:

- ↑ (Up): Increase the pitch of a note by a semitone (uses #).
- ↓ (Down): Decrease the pitch of a note by a semitone (uses b).
- Alt+1-9: Add interval (unison to ninth) above current note.
- J: Change a note up or down to its enharmonic equivalent (e.g. D# to Eb). This alters the spelling in both concert pitch and transposed modes. See Accidentals.
- Ctrl+J (Mac Cmd+J): Change a note up or down to its enharmonic equivalent. This alters the spelling only in the current mode. See Accidentals
- Alt+Shift+↑: Increase the pitch of a note using key signature
- Alt+Shift+↓: Decrease the pitch of a note using key signature
- R: Repeat the last entered note
- Q: Halve the duration of the last entered note
- W: Double the duration of the last entered note
- Shift+Q: Decrease duration by a dot (for example, a dotted quarter note/crotchet becomes a quarter note/crotchet and a quarter note/crotchet becomes a dotted eighth note/quaver).
- Shift+W: Increase duration by a dot (for example an eighth note/quaver becomes a dotted eighth note/quaver and a dotted eighth note/quaver becomes a quarter note/crotchet).
- Backspace: Undo last entered note
- Shift+←: Exchange last entered note with the note before it (repeat to keep moving note earlier)
- Shift+→: Exchange note moved with Shift+← with the note that follows it
- X: Flip direction of note stem (can be reset to Auto position in Inspector)
- Shift+X: Move note head to opposite side of stem (can be reset to Auto position in Inspector)
- Ctrl+Alt+1-4: Switch to corresponding voice)

#### Mouse

It's easy to enter notes with the mouse, but it is not the fastest way to enter lots of notes.

1. Click on the desired note duration symbol in the Note input toolbar.
2. Click on the score to add a pitch of the selected duration.
3. To *add* more notes to an existing chord, simply repeat step 2.
4. To *replace* an existing chord (rather than adding to it), press Shift before clicking.
5. To add a rest, right-click.

**Note:** If you hover the cursor over the score in Note Input Mode it will show you a preview of the note or rest you are about to add.

#### MIDI keyboard

You can also insert pitches using a MIDI keyboard.

1. Connect your MIDI keyboard to the computer and switch the former on
2. Start MuseScore (this must be done **after** the keyboard is switched on)
3. Create a new score
4. Click the rest (selecting it) in measure 1 to indicate where you want note input to begin
5. Press N to enter note input mode
6. Select a note duration such as 5 for quarter notes (crotchets), as described above
7. Press a note on your MIDI keyboard.

The pitch should be added to your score. If the pitch does not appear, either use the toolbar and click 'Toggle MIDI Input' or follow these steps:

1. From the menu, select Edit → Preferences... (Mac: MuseScore → Preferences...).
2. Click on the Note Input tab and check "Enable MIDI Input".
3. Click OK to exit. You will need to restart MuseScore to apply the change.

**Note:** The default method of entry, Step-time allows you to enter one note at a time. Other note input modes are also available: see Note input modes.

If you have multiple MIDI devices connected to your computer, you may need to inform MuseScore which is the MIDI keyboard:

1. From the menu, select Edit → Preferences... (Mac: MuseScore → Preferences...).

2. Click on the I/O tab and select your device under the section labeled "MIDI input".
3. Click OK to exit. You will need to restart MuseScore to apply the change.

### Virtual Piano Keyboard

You can also input notes using the on-screen **piano keyboard**.

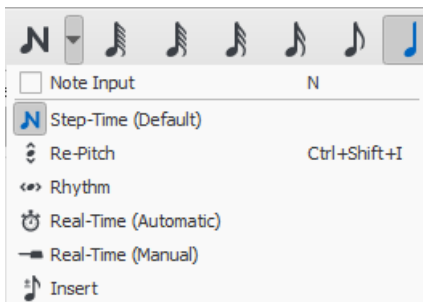
- **To toggle the display on and off** Press P (or select View → Piano).
- **To resize the keyboard:** Position the mouse pointer over the piano keys, hold down Ctrl (Mac: Cmd) and move the mouse scroll wheel up (larger) or down (smaller).

The method of note entry is similar to that for a  MIDI keyboard :

1. Ensure that you are in Note Input mode.
2. To enter a:
  - **Single note:** Click on the appropriate piano key.
  - **Chord:** Select the note you wish to add to, press and hold Shift, then click on a piano key (in versions before 2.1, use Ctrl (Mac: Cmd). Repeat as required.

### Note input modes

MuseScore offers a variety of note input modes in addition to Step-time. All can be accessed by clicking the small arrow next to the "N" button on the left of the Note Input toolbar:



- Step-time (default): The default mode of note entry. See Basic note entry (above).
- Repitch: Replace pitches without changing rhythms.
- Rhythm: Enter durations with a single click or keypress.
- Real-time (automatic): Perform the piece at a fixed tempo indicated by a metronome beat.
- Real-time (manual): Perform the piece while tapping a key or pedal to set the beat.
- Insert: (Called "Timewise" until version 3.0.2) Insert and delete notes and rests within measures, automatically shifting subsequent music forwards or backwards.

### Coloring of notes outside an instrument's range

Depending on the skill of the musician, certain notes are considered beyond the range of a particular instrument. For informational purposes, MuseScore *optionally* colors notes red if they are outside the range of a "professional" player, and olive green/dark yellow if outside the range of an "early amateur." The colors appear on the computer screen, but not on printed copies.



To enable/disable note coloration and to set "professional" and "amateur" ranges, see Usable pitch range (Staff properties: all staves).

### Small notes/small noteheads

1. Select the note(s) you want in small size.
2. Check the "Small" checkbox in the Inspector. The one in the Note section is used to only change the size of the individual notehead; the one in the Chord section will change the note head, stem, beam, and flag sizes all together.

By default, the small size is 70% of the normal size. You can change that setting in Format → Style... → Sizes.

### Change notes or rests already entered

## Change duration

### Version 3.3.3 and above

1. Make sure you are in Normal mode.
2. Select one or more notes/rests, or note-stems/hooks. Apply the desired duration shortcut (listed above), or click on the equivalent duration icon in the toolbar.

### Prior to version 3.3.3

1. Make sure you are in Normal mode.
2. Click on a note or rest. Apply the desired duration shortcut (listed above), or click on the equivalent duration icon in the toolbar.

**Note:** Increasing the duration will overwrite the notes or rests that follow it; decreasing the duration will add rests between it and the notes or rests following.

For example, to change three sixteenth rests into a single dotted eighth rest:

1. Click on the first sixteenth rest.
2. Hit 4 to turn it into an eighth rest.
3. Hit . to turn it into a dotted eighth rest.

As the duration increases, it overwrites the other two sixteenth rests following it.

## Change pitch

To change the pitch of a single note:

1. Make sure that you're not in note input mode and that you have no other notes selected.
2. Select the desired note and use any of the following methods:
  - Drag the notehead up or down with the mouse;
  - Press the keyboard arrows: ↑ (Up) or ↓ (down);
  - Type a new note letter name (A...G). Use Ctrl+↓ or Ctrl+↑ to correct the octave, if necessary (Mac: Cmd+↓ or Cmd+↑). This will automatically turn on note input mode.

To change the enharmonic spelling of a note, select it and use the `h` command. For more information, see [Accidentals](#).

To change the pitches of a passage of music by a constant interval, you can use [Transposition](#).

To change the pitches of a passage of music to a different melody, while keeping the rhythm unchanged, use [Re-pitch mode](#).

If your score contains a lot of misspelled accidentals, you might try the Respell Pitches command (see [Accidentals: Respell pitches](#)).

## Change voice

To change one or more notes to a different voice, see [Voices](#).

### Change rest to note and vice versa

To change a rest to a note of the same duration:

1. Make sure you are not in note input mode (press Esc to exit).
2. Select the rest.
3. Enter the desired pitch by entering a note letter, A–G.

To change a note to a rest of the same duration:

1. Make sure you are not in note input mode (press Esc to exit).
2. Select the note.
3. Press 0 (Zero).

## Note properties

- To adjust the horizontal position of a note/chord: see [Offset notes](#).
- To edit note properties in general (spacing, offset, size, color, notehead direction, playback etc.): see [Inspector and object properties](#).
- To adjust the layout of all notes in the score: see [Layout and formatting](#), especially the sections about [notes](#), [accidentals](#) and [tuplets](#).

## See also

- [Note input modes](#)
- [Drum notation](#)
- [Tablature](#)
- [Tuplet](#)
- [Voices](#)
- [Shared noteheads](#)
- [Preferences](#)

## External links

- [How to enter a chord](#) ↗ (MuseScore HowTo)
- [How to enter a rest](#) ↗ (MuseScore HowTo)
- [How to span a stem over two staves](#) ↗ (MuseScore HowTo)
- [How to add cue notes](#) ↗ (MuseScore HowTo)
- [Video tutorial: MuseScore in Minutes: Lesson 3 - Note input](#) ↗
- [Video tutorial: MuseScore in Minutes: Lesson 4 - MIDI Keyboard Input](#) ↗
- [Video tutorial: MuseScore in Minutes: Lesson 5 - More Input Ideas](#) ↗
- [Video: Semi-Realtime MIDI Demo Part 1: New note entry modes](#) ↗
- [Video tutorial: Musescore Quicktips: Note Entry](#) ↗

## Edit mode

**Edit mode** allows you to perform a wide range of editing operations on individual score elements, such as:

- Adjust the length and shape of slurs, lines, barlines etc.
- Add, delete and format text in text objects.
- Adjust the position of *most* score elements (but not text).

### Enter edit mode

#### MuseScore versions 3.4 and above

For lines, hairpins, slurs, note-stems, note-beams, and barlines, use one of the following methods:

- Click on an element.
- Right-click on an element and, from the menu, select **Edit Element**.

For other elements, use one of the following methods:

- Double-click an element.
- Click on an object already selected (*text-based objects only*).
- Right-click on an element and, from the menu, select **Edit Element**.
- Click on an element and press **Alt+Shift+E**.

#### MuseScore versions prior to 3.4

Use one of the following methods:

- Double-click an element.
- Right-click on an element and, from the menu, select **Edit Element**.
- Click on an element and press **Alt+Shift+E**.

### Exit edit mode

To exit Edit mode use any of the following:

- Press **Esc**.
- Click on a blank area of the document window.

## Text

For text edit mode, see [Text editing](#).

## Lines

See [Lines: Change length](#), and [Adjust slur](#).

## Notes

### Offset notes

Sometimes it is necessary to shift a note to the right or left—to avoid a collision with another element or to override automatic [notehead sharing](#) for example:

1. Enter [Edit mode](#) on the desired note;
2. Press the arrow key in the direction (left or right) that you wish to nudge the note (or use `Ctrl+←` or `Ctrl+→` for larger adjustments);
3. Press the `Esc` key. This will allow the note stem to be redrawn.

Alternatively, you can select the notehead and change the "Horizontal offset" (under "Chord") in the [Inspector](#).

#### Adjust note stem length

1. Enter [Edit mode](#) on the desired note stem;
2. Use [keyboard shortcuts](#) (below) to extend or shorten the stem;
3. Exit edit mode.

Alternatively, you can select the stem and change the "Length Offset" (under "Stem") in the [Inspector](#).

To *reposition* a note stem, you should select it and adjust the "X" or "Y" setting for the "Offset" under "Automatic placement" in the "Element" section of the [Inspector](#).

#### Keyboard shortcuts

In **Edit mode** the following keyboard commands can be used to change the position of either (1) a **score element** (e.g. ornament, accidental etc.) or (2) an **adjustment handle** (e.g. slur, line etc.):

- `←`: Move left 0.1 staff space.
- `→`: Move right 0.1 staff space
- `↑`: Move up 0.1 staff space
- `↓`: Move down 0.1 staff space
- `Ctrl+←` (Mac: `Cmd+←`): Move left one staff space
- `Ctrl+→` (Mac: `Cmd+→`): Move right one staff space
- `Ctrl+↑` (Mac: `Cmd+↑`): Move up one staff space
- `Ctrl+↓` (Mac: `Cmd+↓`): Moves down one staff space
- `Alt+←`: Move left 0.01 staff space
- `Alt+→`: Move right 0.01 staff space
- `Alt+↑`: Move up 0.01 staff space
- `Alt+↓`: Move down 0.01 staff space

The following commands only apply to **adjustment handles**:

- `Shift+←`: Move end handle's **anchor** left by one note/rest.
- `Shift+→`: Move end handle's **anchor** right by one note/rest.
- `Tab`: Go to next handle.

To undo all edits, ensure you are *not* in edit mode and press `Ctrl+R`.

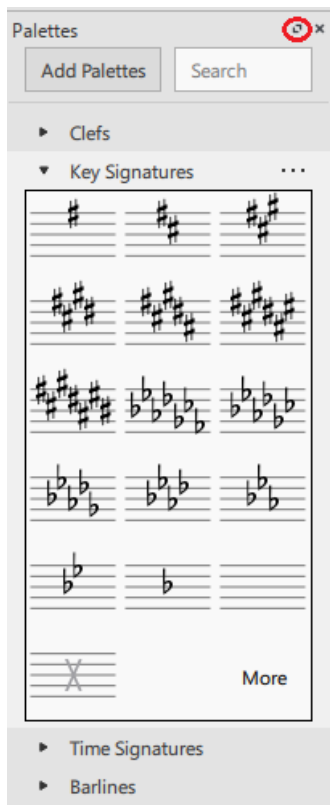
#### See also

- [Text editing](#)
- [Slur](#)
- [Bracket](#)
- [Line](#)
- [Beam](#)
- [Hairpin](#)

#### Palettes

A **Palette** is a folder containing musical symbols which can be applied to the score. Musescore's default palettes contain collections of related symbols, but you can customize palettes to display almost any kind of symbol, line or text. Palettes form the main part of a [workspace](#).





Musescore comes with two sets of *preset* palettes: a **Basic** and an **Advanced** set (contained in similarly-named [workspaces](#)). But that is only the start. You can add your own symbols and text either to the existing palettes or to palettes you create in new workspaces. In other words, *you can customize each workspace to exactly meet your particular scoring needs*. See [Customize palettes](#).

### View or hide the Palette area

The default position of the Palette area is to the left of the document window. To view or hide it:

- From the menu, select **View** → **Palettes**, or use the keyboard shortcut **F9**.

To undock the Palette area:

- Click the double-chevron symbol (circled in the image above), or double-click the top bar of the panel.

To re-attach the panel, double-click on the top bar again. See [Side panels](#) for more information.

### Open/close a palette

- Click on the arrow next to the palette name, or double-click the palette name (in versions prior to MuseScore 3.3, click *once* on either the arrow or the palette name).

Symbols assigned to the palette are shown in a grid below the palette name. If you have customized one of Musescore's default palettes, clicking **More** will show any symbols you have deleted.

### Single Palette mode

If you only want one palette open at a time, right-click at the top of the workspace and check the **Single Palette** box. Any opened palette will now close when you open a different one.

### Apply symbols from a palette

*Versions 3.4 or above*

- Select one or more score elements, then click the desired palette symbol. Or, drag and drop the symbol onto the desired score element in the staff.

*Versions prior to 3.4*

- Select one or more score elements, then *double-click* the desired palette symbol. Or, drag and drop the symbol onto the desired score element in the staff.

If you are dragging a symbol to the score and decide you don't want to apply it, press **Esc**.

*Tip:* To prevent accidental rearrangement of contents during use, right-click a palette name and uncheck **Enable Editing**.

You can search for symbols or palette names by typing in the **Search** box at the top of the list. As you type, symbols and/or palettes with names matching your keystrokes are displayed below, updating continuously as your typed input changes. Displayed symbols can come from any palette, which makes this a powerful way to locate symbols without visually searching through various palettes .

Symbols can be applied directly from the search results as described above.

To restore the list of palette names, which is temporarily hidden by the search results, click **X** in the search box.

Anything added to the score from a palette can be copied, pasted, and duplicated: see [Copy and paste](#).

## Customize the palette list

### Change the order of palette names in the list

- Drag the name of a palette up or down to any desired position.

### Create a new palette

1. At the top of the palette list, click **Add Palettes** → **Create custom palette**. Or, right-click anywhere on the list of palette names and choose **Insert New Palette**.
2. Type the name of the new palette in the **Create Palette** dialog.

See [Customize palettes](#) to learn how to add symbols to the new palette.

### Hide a palette from the list

Hiding a palette depends on whether it is one of MuseScore's default palettes or one you created yourself using the method above.

To hide a MuseScore default palette:

- Right-click the name of the palette you want to hide and click **Hide Palette**.

To hide a palette you created:

- Right-click the name of the palette you want to hide, click **Hide/Delete Palette**, then click **Hide** in the dialog.

### Show a hidden palette in the list

- Click **Add Palettes** at the top of the palette list and click **Add** beside the palette name.

### Delete a palette

Only palettes you created yourself can be deleted.

- Right-click the name of the palette you want to delete, click **Hide/Delete Palette**, then click **Delete permanently** in the dialog.

You cannot delete MuseScore's default palettes. If you don't intend to use a default palette, hide its name from the list instead.

## Customize palettes

You can modify any MuseScore default or user-created palette. Symbols may be added or deleted and layouts can be rearranged.

From MuseScore 3.3 onwards, all preset palettes in the Basic and Advanced workspaces can be customized directly (if you are using a previous version you will need to [create a new workspace](#) first).

Before customizing a palette:

1. Right-click on the palette name and make sure that **Enable Editing** is checked. It is automatically checked for new palettes you create yourself.
2. Make sure the palette is opened.

### Add an existing score element to a palette

- Press and hold **Ctrl+Shift** (Mac: **Cmd+Shift**), then drag the score element from the score onto a palette. The score element could be a symbol, line, text, dynamic, fretboard diagram, [imported image](#) etc.

### Add a symbol to a palette from the Master Palette

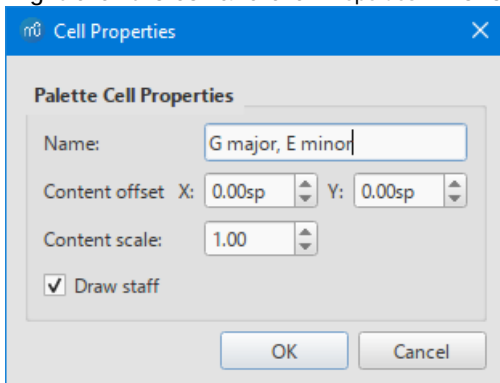
1. If the Master Palette is not visible, select **View** → **Master Palette** from the menu, or use the keyboard shortcut **Shift+F9** (Mac: **fn+Shift+F9**).
2. Drag the symbol from the Master Palette window onto a palette.

### Change symbol order in a palette

- Drag the symbol to the cell in which you wish to display it. Nearby symbols will automatically move to make space available.

### Change the position and size of a symbol in a palette cell

- Right-click the cell and click **Properties**. The following dialog is displayed:



- *Name*: The tooltip that appears when you mouse over the cell.
- *Content offset X, Y*: Adjusts the position of the symbol in the cell.
- *Content scale*: Makes the symbol appear larger or smaller in the cell.
- *Draw staff*: Draws the five lines of a musical staff behind the symbol.

*Note*: Changing these values only affects the appearance of symbols within the palette. It does not change their sizes or offsets on the score page.

### Remove a symbol from a palette

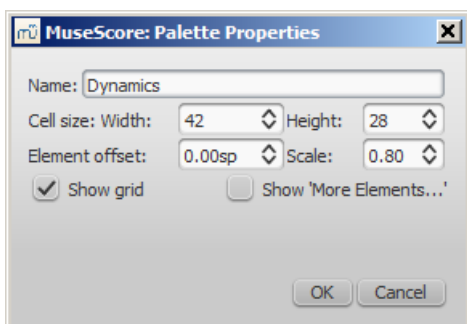
- Right-click the symbol and click **Delete**. Or, select the symbol and click the trash icon to the right of the palette name.

The **More** command functions differently in a user-created palette. It displays one palette at a time from the palette list, allowing you to add symbols from that palette by dragging or by selecting an item and clicking **Add to**. Use **<** and **>** to step through the palettes in the list.

### Palette menu

The following menu appears either by right-clicking the name of a palette or by clicking the **..** to the right of the name:

- **Hide Palette**: Removes the name of the palette from the list of available palettes.
- **Hide/Delete Palette**: Allows you to either hide or permanently delete a palette you created yourself. Shown in place of the above menu item.
- **Insert New Palette**: Creates a new empty palette. Identical to **Add Palettes** → **Create custom palette**.
- **Enable Editing**: Allows you to modify the contents and layout of the palette.
- **Reset Palette**: Discards any customizations made to a palette and restores its default contents and layout.
- **Save Palette...**: Saves the current palette as an **.mpal** file.
- **Load Palette...**: Loads a palette from an **.mpal** file and displays the palette name in the list.
- **Palette Properties...**: Displays the following dialog, where you can adjust the appearance of a palette:



- *Name*: The name shown in the palette list.
- *Cell Size: Width, Height*: The dimensions of each individual cell in the palette.
- *Element Offset*: Adjusts the vertical offset of all symbols in the palette.
- *Scale*: Makes all symbols in the palette appear larger or smaller.
- *Show grid*: Draws a border around each palette cell.

## Behavior of applied text and lines

If the symbol you are adding to the score from a palette contains a text element (e.g. staff text, dynamic, fingering, volta etc.), then properties such as font type, font size, text color and alignment will adapt according to the following rules:

1. Text properties which have not been altered by the user will adopt the relevant text styles.
2. Custom text properties—those changed by the user before saving the symbol to a custom palette—remain as customized.

By contrast, the line properties of lines applied from a palette *always* remain unchanged (i.e. as set by the user before saving to a custom workspace, or as predefined in the Basic/Advanced workspaces).

## See also

- [Master palette](#)

## Workspaces

The **workspace** consists of several components, the main one being the palette area situated to the left of the document window.



Each **palette** is a folder containing musical symbols (usually related) which can be applied to the score.

- **To open or close a palette**: Click on the arrow next to the palette name, or double-click the palette name (in versions prior to MuseScore 3.3, click *once* on either the arrow or the palette name).

### To view or hide the palette area of the workspace:

- Press, F9; alternatively, from the menu, select *View* → Palettes.

MuseScore provides two preset workspaces: **Basic** (the default option) and **Advanced** (a version with more palettes and symbols). These contain symbols drawn from the various sections of the Master palette. In addition, you can create your own custom workspaces (below).

### Switch between workspaces

Use one of the following methods:

- Select a new workspace from the drop-down menu to the right of the Note Input Toolbar (in versions prior to 3.3, this is located at the bottom of the workspace panel).
- From the menu, select *View* → Workspaces, and click on one of the options.

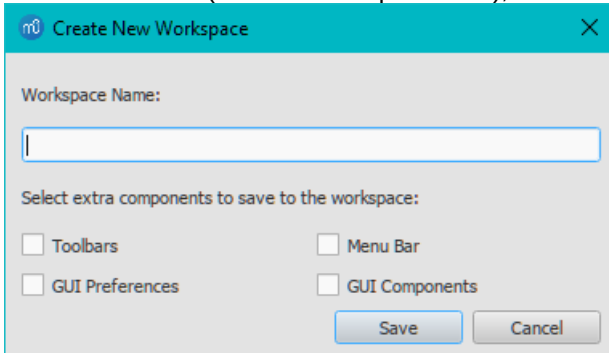
## Docking/undocking

To dock or undock a workspace, see [Side panels](#).

## Create a new workspace

To create a new workspace:

1. Select an existing workspace (use the [Switch between workspaces](#) option if required);
2. Click the + button (next to the dropdown list), which displays the following dialog:



**Note:** this can also be opened from the menu: View → Workspace → New;

3. Enter a name for the new workspace;
4. Tick the components that you want joined to the workspace, namely:
  - o **Toolbars:** Allows you to [customize](#) the tool button display and the order in which they are displayed. Access this via View → Toolbars → Customize toolbars.
  - o **Menu bar:** Allows you to change the menus and menu items displayed in the Menu bar. NOT IMPLEMENTED YET;
  - o **GUI components:** Saves information with the workspace about the position of the GUI (Graphical user interface) components, and whether they are open or not. (e.g. Inspector, Timeline);
  - o **GUI Preferences:** Saves the preferences selected for the GUI elements in Edit → Preferences, such as Theme and Canvas settings;
5. Press Save. The new workspace is added to the panel.

## Edit a workspace

**Note:** In versions prior to MuseScore 3.3, only *new* workspaces can be edited—the Basic and Advanced workspaces are presets only. See [Create new workspace](#).

- To change the **palette display:** see [Palette menu](#).
- To change the **palette contents:** see [Custom palettes](#).
- To change the overall **workspace display:** Select View → Workspace → Edit. This displays a window with the same options as the [Create New Workspace](#) dialog (above).

## Save custom workspace

Any changes you make to the workspaces are automatically saved to the program (no further action required). Each custom workspace is saved as a separate file in a folder called "workspaces." Its location is as follows:

- **Windows:** C:\Users\[USERNAME]\AppData\Local\MuseScore\MuseScore3 (actually %LOCALAPPDATA%\MuseScore\MuseScore3)
- **MacOS:** ~/Library/Application\ Support/MuseScore/MuseScore3/.
- **Linux:** \${XDG\_DATA\_HOME:-~/local/share}/MuseScore/MuseScore3/.

## See also

- [Palettes](#)
- [Master palette](#)

## Inspector

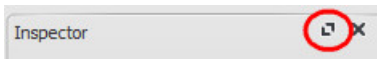
### Displaying the Inspector

The **Inspector** appears by default on the right of your screen. To show or hide it:

- From the menu, select View and check or uncheck Inspector; alternatively, use the shortcut F8 (Mac: fn+F8).

To undock the **Inspector** panel:

- Click the double-chevron symbol or double-click the top bar of the panel.





To re-attach the panel double-click on the top bar again. See also: [Side panels](#).

## What the Inspector does

When you select any object in the score window, its properties are automatically displayed in the **Inspector** where they can be edited. Multiple elements can also be selected and edited together—as long as they are of the same type. However, if the selected objects are of *different* types, then the Inspector restricts you to editing color, visibility, and automatic placement only.

## "Reset to style default" and "Set to style" buttons

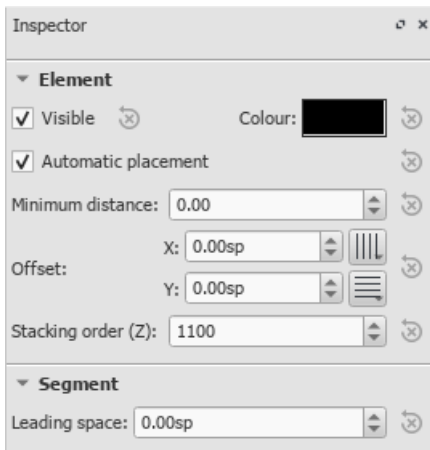
When you select a score object, two types of buttons are clearly visible on the right-hand side of the Inspector:

- **Reset to style default** . Press this button to reset a particular property to the default value—i.e. the one shown in the [Style menu](#).
- **Set as style:** . Press this button to make the value of a particular property the new default for the style. This will update the [Style menu](#) and all other objects governed by that style.

**Note:** You can also edit styles directly from the [Style menu](#).

## Inspector categories

Properties are conveniently listed under **categories** in the Inspector. **Categories** can be identified by their bold lettering. For example, if you select a barline, you will see the following displayed at the top of the Inspector:



For details of the various categories and their properties, see below:

### Element

All score elements—except frames, breaks and spacers—display this category in the Inspector when selected. The options are as follows:

- **Visible:** Uncheck this box to make selected elements **invisible**; alternatively, use the shortcut `v` (toggle). Invisible elements do not appear in the music when printed out or exported as a PDF or image. If you still want them to remain on display in the document window, make sure that the "Show Invisible" option is selected in `View → Show Invisible`. Invisible elements will then be colored light gray.
- **Color:** Click on the rectangle to open a "Color Select" dialog. Adjust the color and opacity of selected elements.
- **Automatic placement:** See [Automatic placement](#).
- **Minimum distance:** Minimum distance from other elements when automatic placement is enabled.
- **Offset X/Y:** Allows you to position selected elements exactly (in terms of [space](#) units). A positive number moves the elements right or down; a negative number moves the elements left or up. [Snap to grid](#) buttons are also provided.
- **Stacking order (Z):** See [Automatic placement: Stacking order](#)

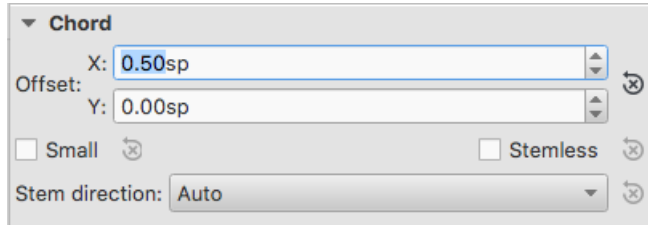
### Element Group

This category is displayed only when you have selected a mixture of different types of elements, and allows editing of color, visibility, and automatic placement only.

### Segment

- **Leading Space:** Use this to increase or decrease the space before an element. This also affects any associated lyric syllables.

### Chord



- **Offset X/Y:** This changes the position of every note in the same voice as the selected note(s). If you want to make changes to the position of *just one note*, use the [Element](#) category instead).
- **Small:** Make noteheads and stem small.
- **Stemless:** Make chord stemless.
- **Stem direction:** Choice of Auto, Up, or Down.

### Note

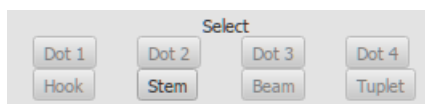
This category allows you to make changes to selected notes (but for note position—see [Element](#)). It contains the following properties:

- **Small:** Make notehead smaller (you can specify the relative size of all small notes from the menu `Format → Style... → Sizes...`).
- **Head group:** See [Notehead groups](#).
- **Head type:** See [Notehead types](#).
- **Mirror head:** Position notehead to the left or right of the stem (default is "Auto").
- **Fix to line:** When ticked, the note is fixed to the top line of the standard 5-line staff.
- **Line:** A positive number moves the "fixed" note down; a negative number moves it upwards.
- **Play:** Unticking this box silences the note.
- **Tuning:** Adjust tuning of note to the nearest `cent`.
- **Velocity type:** Sets the MIDI velocity of notes directly. Choose one of two options:
  - **Offset:** Make the value shown in "Velocity" *relative* to the previous dynamic marking.
  - **User:** Make the value shown in "Velocity" *absolute* (i.e. the MIDI velocity is *unaffected* by dynamic markings).
- **Velocity:** Set the MIDI velocity according to the option displayed in "Velocity type."

### Select

This category appears differently according to the selection you have made:

- *If you select a notehead*, the "Select" category displays buttons which allow you to easily switch the selection to the stem, beam, hook, duration dot (or dots) or tuplet number associated with the notehead (see image below).



- *If you select a range of measures*, the "Select" category allows you to select either all *notes*, *grace notes*, or *rests*.

### Beam

This section is displayed in the Inspector when you select one or more [notebeams](#), and allows you to make fine adjustments to beam position and angle, and also change the spacing of beamed notes.

### Clef

This section appears when you select a clef: the tick box allows you to turn on/off the display of a preceding [courtesy clef](#).



### Articulation

This category appears when you select an [articulation or ornament](#). The following options are available:

- **Direction:** Whether the symbol points up or down: only applicable to certain symbols.
- **Anchor:** The vertical placement of the symbol:
- **Play:** Turn on/off playback effect.
- **Time stretch:** Only applicable to fermatas. Allows you to vary the pause in playback.
- **Ornament style:** A choice of default or Baroque playback.

#### Fretboard diagram

See [Fretboard diagrams](#).

#### Line

This category is displayed when a [line](#) is selected. Here, you can set various general properties.

- **Visible:** Hide or display just the line: any text remains visible.
- **Allow diagonal:** The default is horizontal (unticked). Tick if you want to edit the line to create a slope.
- **Line color/thickness/style:** Set various properties of the line.

#### Text Line Details

This category is displayed when a [line](#) is selected. It allows you to set the wording of a line, edit text properties, set line hooks, and align the text in relation to the line.

- **Begin hook / Height:** At the beginning of the line, specify None, 90° (vertical), 45° (angled), or 90° centered; set hook length.
- **End hook / Height:** Ditto for the very end of the line.
- **Begin Text / Continue Text / End Text:** Refers to text at the very beginning of the line; at the beginning of any continuation line; or at the end of the very last line. All have the same properties, as follows:
- **Text:** Create or edit the text associated with the line.
- **Font face / Size / Style:** Set the [text properties](#), and/or edit the [text style](#) of the line.
- **Align:** Set the horizontal and vertical alignment of the text in relation to the line.
- **Placement:** Place the text on (Above/Below), or to the left of the line.
- **Offset X / Y:** Adjust the x and y offsets for exact positioning.

#### Properties dialogs

Some object types have additional properties. These are accessed by right-clicking on the object and choosing a "... properties" option from the context menu. The settings available in these dialogs are explained in the description of the object type in [Notation](#) or [Advanced topics](#).

See:

- [Articulations and ornaments](#)
- [Time signatures](#)
- [Staff and system text](#)
- [Measure operations](#)
- [Staff/Part properties](#)

#### See also

- [Note input](#)
- [Layout and formatting](#)
- [Parts](#)

#### Measure operations

**Note:** To ensure that [inserted](#) or [appended](#) measures display correctly, [multimeasure rests](#) should be set to off (toggleM).

#### Select

##### Single measure

- To [select](#) a single measure, click on a space within the measure.

##### Range of measures

- To select a continuous range of measures, see [Shift + click selection](#) and [Shift selection](#).



## Insert

### Insert an empty measure into the score

Use one of the following options:

- Select a measure or a frame, then press `Ins` (Mac: `Shift+I`).
- Select a measure or a frame, then choose from the menu: `Add → Measures → Insert Measure`.

### Insert multiple measures

Use one of the following options:

- Select a measure or a frame, then press `Ctrl+Ins` (Mac: `Shift+Del+I`); fill in the "Number of measures to insert" field and press `OK`.
- Select a measure or a frame, then choose from the menu: `Add → Measures → Insert Measures...`; fill in the "Number of measures to insert" field and press `OK`.

## Append

### Append an empty measure to the end of a score

Use one of the following options:

- Press `Ctrl+B` (Mac: `Cmd+B`).
- Select from the menu: `Add → Measures → Append One Measure`.

### Append multiple measures to the end of a score

Use one of the following options:

- Press `Alt+Shift+B`; fill in the "Number of measures to append" field and press `OK`.
- Select from the menu: `Add → Measures → Append Measures...`; fill in the "Number of measures to append" field and press `OK`.

## Remove

### Remove a single measure

1. Select the measure
2. Press `Ctrl+Del` (Mac: `Cmd+Del`).

### Remove a range of measures

1. Select a range of measures;
2. Press `Ctrl+Del` (Mac: `Cmd+Del`).

**Note:** In multistaff scores, measure deletion also removes all corresponding measures in the other staves of the system;

### Remove empty trailing measures

To automatically remove any blank measures from the end of the score:

- From the menu, select `Tools → Remove empty trailing measures`.

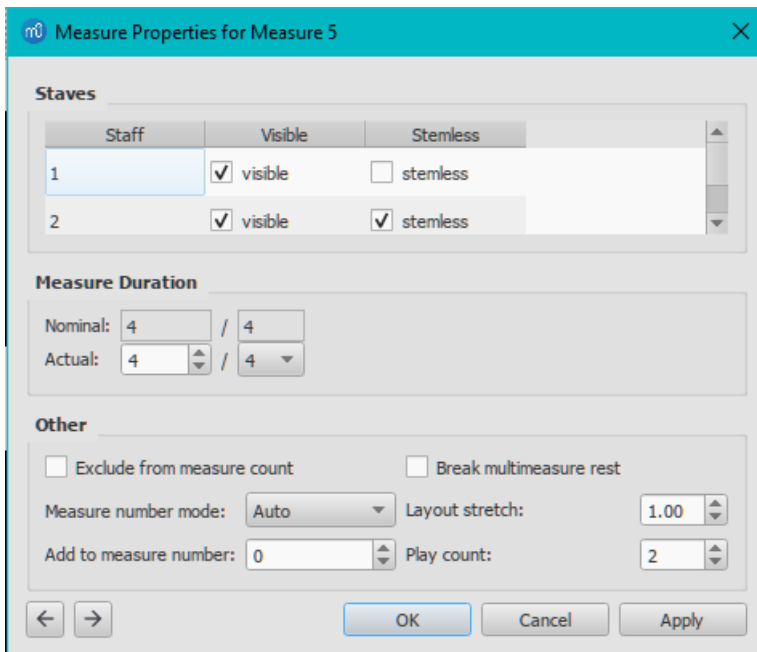
### Delete measure contents



To delete *only* the measure contents (and not the measure itself):

1. Select one or more measures;
2. Press `Del`.

## Properties

To edit the properties of a measure, right-click an empty part of the measure and select `Measure Properties...`:



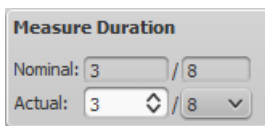
You can use the   buttons, at the bottom left of the dialog, to navigate to the previous or next measure.

#### Staves

- **Visible:** Check/uncheck to show/hide notes and staff lines for the selected measure.
- **Stemless:** Check/Uncheck to show/hide all note stems for the selected measure.

#### Measure duration

This section of the dialog allows you to adjust the duration of a single measure independently of the displayed time signature. Use it to create a **pickup measure** (also known as *anacrusis* or *upbeat*), **cadenza**, **ad lib** section etc.



- **Nominal** is the *apparent* time signature and cannot be edited.
- **Actual** can be set to anything you like regardless of the *nominal* time signature.

**Example:** In the image below, the quarter note *pickup measure* has a *nominal* time signature of 4/4, but an *actual* time sig. of 1/4. The measures in the middle are in normal 4/4 time. The complementary measure at the end of the staff, with a dotted half note, has an *actual* time sig. of 3/4.



**Note:** A small - or + sign appears above the measure when its duration is different than indicated by the time signature (see image below). *This does not appear in any printed or PDF copy* You can turn off these marks by unchecking "Mark Irregular Measures" in the View menu.

Pressing Ctrl+Del on a note or pause also reduces the duration of the measure, while via insert mode you can increase the duration of the measure.



#### Other

##### Exclude from measure count

- **Exclude from measure count:** Tick to exclude the selected measure from measure numbering (e.g. a pickup measure).

##### Break multimeasure rests

- **Break multimeasure rests:** Tick to prevent a multimeasure rest at the start of the selected measure. This option should be checked *before* turning on "Create multimeasure rests" in Format → Style... → Score. The default program setting for scores is *OFF*; for parts is *ON*.

*Note:* Multimeasure rests are broken, by default, at important breaks—such as rehearsal marks, time signature changes, double barlines, irregular measures, etc.

#### Measure number mode

This allows you to control whether and how measure numbers display on the selected measure:

- **Auto:** Follows the setting in Format → Style... → Measure Numbers.
- **Always Show:** Forces display of number.
- **Always Hide:** Hides number.

#### Layout stretch

- **Layout stretch:** Controls the amount of horizontal space between score elements (notes, rests, etc.).

This setting allows a more precise degree of control than offered by the Increase/Decrease Stretch ( { and } ) commands.

#### Add to measure number

- **Add to measure number":** Enter a positive or negative number to change the number of the selected measure, and subsequent measures. A value of "-1" has the same effect as marking a measure to be excluded from measure count.

#### Play Count

- **Play count:** If a measure precedes an end repeat barline, this value controls the number of times that the entire repeat section plays back: see also, Repeats and jumps.

## Numbering

By default, MuseScore numbers the first measure of each System (except for the first measure in a section), but other numbering options are available: see Format → Style... → Measure Numbers.

## Split and join

To make a measure longer or shorter in duration—without changing the time signature—you can adjust its Measure Properties (above). But it is also possible to join or split measures.

### Join measures

**Method A.** To join *two measures only*:

- Select the barline between the two measures and press Ctrl+Del.

**Method B.** To join *any number of measures*:

1. Select the measures you want to join;
2. From the menu bar, select Tools → Measure → Join Selected Measures.

**Notes:** (1) If you select measures on only one staff in a score with multiple staves, the same measures will be joined in each staff of the system. (2) Beaming may be automatically modified. (3) If you have generated parts already, this option is disabled.

### Split a measure

Choose one of the following methods:

- Select a note; then hold Ctrl and click a barline in a palette (double-click in versions prior to 3.4).
- Hold Ctrl and drag a barline (from a palette) to the note that starts the next measure.
- Select a note; then, from the menu bar, select Tools → Measure → Split Measure Before Selected Note/Rest.

**Note:** If you select only one note from one staff, each staff of the system will be split at the same place.

## External links

- [How to span a measure over multiple systems](#) ↗ ( MuseScore HowTo, 1.x)

- [How to delete measures](#) ↗ (MuseScore HowTo)
- [How to get scores without time signature \(and clef\)](#) ↗ (MuseScore HowTo)

## Voices

A **voice** is a musical line or part which can have its own rhythm independently of other voices on the same staff. Voices are sometimes called "layers" in other notation software.

You can have up to 4 **voices** on each staff line. In a polyphonic measure, **voice 1** (and 3) usually takes the *up-stem notes* and **voice 2** (and 4) takes the *down-stem notes*.



**N.B.** Be careful not to confuse the concept of MuseScore voices (1, 2, 3, 4) with the order of voices found in SATB vocal scores:

- In **Open score SATB** (where four staves are used for the four voices), use (MuseScore) voice 1 in each staff.
- In **Close/Closed score SATB** (where two staves are used for the four voices, e.g., as in hymnals), use only (MuseScore) voices 1 and 2 for both upper *and* lower staves.
- There is no need to use (MuseScore) voices 3 and 4 unless there are more than two parts in the same staff. This means that in the bass clef of a "close score", the tenor is voice 1 and the bass is voice 2—beginners often without thinking assign the bass to 1, resulting in stem-direction confusion, or assign tenor to voice 3 and bass to voice 4, which then leads to confusing rests appearing in voice 1 (which cannot be deleted).

## How voices are displayed

Selecting a section of the score highlights each voice in a different color: voice 1 blue, voice 2 green, voice 3 orange and voice 4 purple.




## When to use voices

- If you need stems pointing in opposite directions within a chord, on a single staff.
- If you need notes of different durations within a single staff, played simultaneously.


## How to enter notes in different voices

The following instructions show you how to notate a passage of music in two voices:

1. **Enter voice 1 notes first:** Make sure you are in *note input mode*: the Voice 1 button becomes highlighted in blue in the toolbar.  Enter the notes in the top voice first. On inputting, some notes may have down-stems, but these will flip automatically when the second voice is added.

The following excerpt shows a treble staff with just the voice 1 notes entered:



2. **Move cursor back to start of section:** When you have finished entering a section of voice 1 notes, press the `-` key repeatedly to move the cursor, note-by-note, back to the first note of the section; or alternatively use `Ctrl+←` (Mac: `Cmd+←`) to move the cursor back one measure at a time. Or else you can simply exit *note input mode* (press `Esc`) and click directly on the first note.
3. **Enter voice 2 notes:** Make sure you are in note-input mode and that the voice 1 note at the beginning of the section is selected. Click on the "Voice 2" button  (on the right of the toolbar), or use the shortcut `Ctrl+Alt+2` (Mac: `Cmd+Alt+2`). Enter all the lower voice notes (down-stem).

The following image shows the above example after the addition of voice 2 notes:



## Deleting and hiding rests

All rests can be made invisible, if required: select the desired rest(s) and press **v**, or uncheck the "Visible" checkbox in the Inspector. Rests in voices 2, 3 or 4 (but *not* voice 1) can also be *deleted* (by selecting them and pressing **Delete**) but it is not recommended: make them invisible instead.

A voice 1 rest can only be deleted by removing that part of the measure from the score as well: see Remove selected range; or Delete measure(s).

### Restoring deleted rests

If a rest has been deleted in voices 2-4, you will need to restore it before you can enter a note on that beat in that voice (the problem may arise, for example, in imported XML or MIDI files). The easiest way to fix such a measure is to exchange that voice with voice 1 twice. For the exact method, see Exchange voices of notes (below).

## Exchange voices of notes

To swap the notes between any two voices:

1. Select one or more continuous measures (or arange of notes);
2. From the Menu bar, select **Tools** → **Voices**;
3. Select the option for the two voices you want to exchange.

**Notes:** (a) The selection can encompass content of any voice, but only two will be processed at once. (b) If you select a partial measure the operation will still apply to the whole measure.

## Move notes to another voice (without swapping)

You can also move notes from one voice to another (without note-swapping):

1. Ensure you are not in *note input mode*.
2. Select one or more noteheads (in any voice).
3. Click on the destination voice in the Note Input toolbar or use the shortcut **Ctrl+Alt+1-4** (Mac: **Cmd+Alt+1-4**).

**Note:** For a successful move, the following conditions need to be met:

- The chord in the destination voice must be the same duration as the note to be moved there.
- Alternatively, if the destination voice is occupied by a rest, it must be of sufficient duration to accommodate the moved note.
- Notes should *not* be tied.

## Navigate between voices

To select a note in a *higher*-numbered voice than the current one:

1. Use **Alt + ↓**, to move the selection to the bottommost note in the current voice;
2. Press **Alt + ↓**, to move to the higher-numbered voice;
3. Repeat any of the above steps, as necessary, until the desired note is selected.

To select a note in a *lower*-numbered voice than the current one:

1. Use **Alt + ↑**, to move the selection to the topmost note in the current voice;
2. Press **Alt + ↑**, to move to the lower-numbered voice.
3. Repeat any of the above steps, as necessary, until the desired note is selected.

## See also

- Keyboard shortcuts: Voices [↗](#)
- Noteheads: Shared noteheads

## External links

- How to merge/combine/implode two staves in one with two voices [↗](#) (MuseScore HowTo)
- How to input multiple notes on a staff with different durations [↗](#) (MuseScore HowTo)
- Video tutorial: How To Write Two Parts On One Staff: Voices [↗](#)

## Copy and paste

MuseScore supports standard **copy**, **cut**, **paste** and **swap with clipboard** operations. These commands can be applied to a range of:

- **Musical notes**: e.g. to repeat a section of music, or shift a passage by a beat or a measure.
- **Other score elements**: such as articulations, staff text, dynamics, fingering etc.

Copy/cut/paste/swap commands are accessed in three ways:

- From the **Edit menu** (above the document window) (Mac: the MuseScore menu).
- From the menu displayed by **right-clicking** on an element or range of elements.
- Using one of the standard **keyboard shortcuts**.

### Summary of commands

Command	Kbd Shortcut (Win)	Kbd Shortcut (Mac)	Right-click menu	Main menu
<b>Cut</b>	Ctrl+X	Cmd+X	Cut	Edit → Cut
<b>Copy</b>	Ctrl+C	Cmd+C	Copy	Edit → Copy
<b>Paste</b>	Ctrl+V	Cmd+V	Paste	Edit → Paste
<b>Swap with clipboard</b>	Ctrl+Shift+X	Cmd+Shift+X	Swap with Clipboard	Edit → Swap with clipboard

**Note:** Before carrying out a copy, cut, paste or swap procedure, you should be in normal mode. Press the Esc key to exit into normal mode.

### Notes

You can cut, copy, paste or swap notes as follows:

#### Copy or cut

#### To copy/cut a *single* chord

1. Hold down Shift and click on a note in the chord.
2. Apply a **Copy** or **Cut** option (see [table](#) above).

#### To copy/cut a *range* of chords

1. Click on the first note or measure that you want to select.
2. Shift+Click on the last note or measure that you want to select. A blue rectangle highlights the region you selected.
3. Apply a **Copy** or **Cut** option (see [table](#) above).

#### Paste

1. Click on the note or measure where you want your pasted selection to begin.
2. Apply a **Paste** option (see [table](#) above).

#### Swap with Clipboard

The **swap with clipboard** operation combines two commands into one: (1) First it overwrites a selected part of the score with the contents of the clipboard, just like the *paste* command; (2) Secondly, it transfers the overwritten part of the score *back to* the clipboard, just like the *copy* command.

It can be used, for example, to swap two equal-length sections of a score, **A** and **B**:

1. Select section **A**, then apply the [cut](#) command;
2. Clear the selection (by pressing Esc or clicking on a blank area of the document window);
3. Press Shift and click on a note at the start of section **B**. Or, if **B** begins at the start of a measure, you can also simply [select](#) the measure;
4. Apply a **Swap with clipboard** option (see [table](#) above).
5. Section **B** is now in the clipboard. [Paste](#) it back to the blank area of score left by step "1."

#### Copy pitch of a single note only

It is possible to copy the *pitch* of a note *only* (and no other properties), by clicking on the notehead and applying the standard copy and paste, or copy and swap procedure. The pitch of the destination note changes to match that of the copied note but the duration remains the same.

#### Other elements

Some elements such as staff text, dynamics, fingering, etc. can be cut, copied and pasted *only one at a time*. However, other elements support "multiple-selection" cut/copy/paste: such as articulations (sforzato, staccato etc.), fretboard diagrams, and chord symbols.

**Note:** The Swap with clipboard command is only intended for use with sections of music and not other score elements.

### Copy or cut

1. Select the element (or elements).
2. Apply a **Copy** or **Cut** option (see table above).

### Paste

1. Click on the note where you want your pasted selection to begin.
2. Apply one of the **Paste** options (see table above).

In the case of articulations, they are pasted to the destination notes in exactly the same order (continuous or intermittent) as they were in the initial selection.

### Quick repeat

To quickly copy and paste a note, measure, or passage:

1. Select a chord, measure, or passage as described above.
2. Press R .

MuseScore copies and pastes the selected notation to a point immediately after the last note in the selection. Any existing music in the destination range is replaced.

### Duplicate

To instantaneously copy and paste a text element, line, or other object:

1. Hold down Ctrl+Shift (Mac: Cmd+Shift), click on the element and drag it anywhere in the score.
2. Release the mouse button, and the selected element is cloned to the new location.

### Paste half/double duration (version 3.1 and above)

These commands allows you to copy/cut a section of the score, then paste it back anywhere with all the note durations either halved or doubled.

1. In Normal mode, select a range of notes in the score;
2. Cut or copy the range;
3. Select a destination note (or measure);
4. From the menu, select one of the following:
  - Edit → Paste Half Duration (Mac: MuseScore → Paste Half Duration).
  - Edit → Paste Double Duration (Mac: MuseScore → Paste Double Duration).

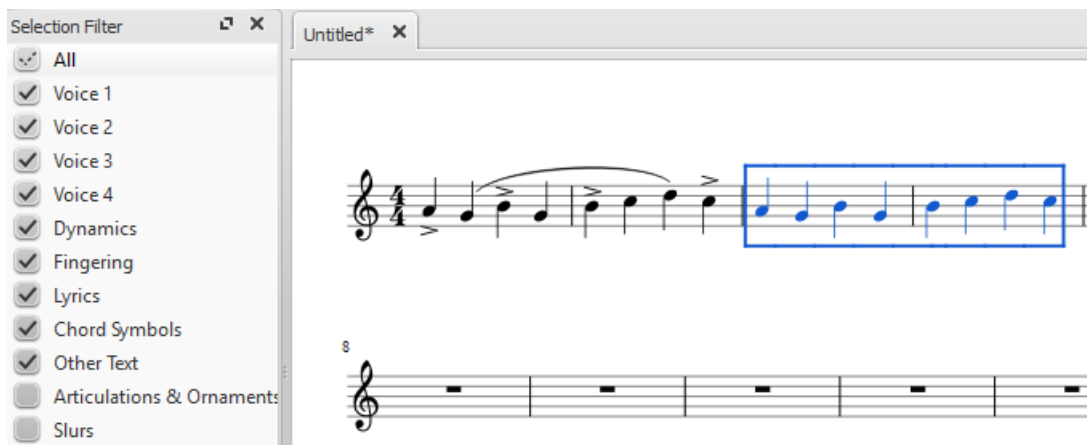
### Selection filter

The **Selection Filter** allows you to choose *exactly* which voices and elements you want to include in your selection.

- To display the Selection filter, press F6 (Mac: Fn+F6); or from the menu, choose View → Selection Filter.

The Selection Filter appears by default below the Palettes. To change the viewing location, see Viewing and Navigation: Side panels.

**Example:** Suppose you want to copy measures 1 and 2 in the following passage (see image), to give measures 3 and 4:



1. Make sure the Selection Filter is displayed (see above);
2. Uncheck the "Articulations & Ornaments" and "Slurs" tickboxes;
3. Copy and paste the desired measures (in this example, 1-2 into 3-4).

**Note:** The Selection Filter works with the [swap with clipboard](#) command as well.

### See also

If you want to change notes without altering the rhythm, you may combine [re-pitch mode](#) with copy and paste.

### External links

- [How To Paste Special - Changing note duration](#) (MuseScore HowTo)
- [Video tutorial: Lyrics, copying & dynamics](#)

### Selection modes

Objects in the score—such as notes, measures, articulations etc.—can be selected in several ways: (1) [one at a time](#), (2) as a continuous [range](#), or (3) as a [list](#).

Selection is invariably used before applying commands such as [delete](#), [copy/cut and paste](#), [transpose](#) and so on.

#### Select a single object

Most score objects can be selected by simply clicking on them in [Normal mode](#).

##### Select a single note

- In [Normal mode](#), click on a notehead.

**Note:** Selecting a single note then copying and pasting it, will only copy and paste the pitch—not duration or other properties (such as stemless). To copy the entire note, including all properties, you need to hold down [Shift](#)—as for chord selection (below).

##### Select a chord

- In [Normal mode](#), press and hold [Shift](#), then click on a notehead in the chord.

##### Select a single measure

- Click on a blank space within the measure.

**Note:** To select a range of consecutive measures, see [Shift selection](#) and [Shift + click selection](#) (below).

#### Select an overlapping element

To select an element from a group of overlapping elements:

- Hold [Ctrl](#) and click until the desired element is selected.

#### Select a continuous range of objects

There are several ways to select a [continuous](#) range of notes, chords or measures etc.:



## 1. Shift + click selection

To select a range of **notes** or **rests**:

1. Make sure you are in Normal mode;
2. Click on the first note or rest in the range;
3. Press and hold shift, then click on the last desired note or rest.

**Note:** The final selected element can be in the same staff or in staves above or below the initial note/rest. All selected elements will be enclosed in a blue rectangle, including associated lines and articulations (but not voltas). You can repeat the operation to extend the selected range as required.

Select chord symbols, lyrics etc. (as of version 3.5)

As of MuseScore 3.5, the shift + click method has been refined to make it easier to select a continuous range of items such as chord symbols, lyrics etc. For example:

1. Click on the first chord symbol in the desired range.
2. Shift + click on the last chord symbol in the range.

*Result* All chord symbols in that range are selected, and nothing else.

Select a range of measures

1. Click on a blank space in the first desired measure;
2. Hold down shift, then click on a space in the last measure of the desired range.

**Note:** As with selecting notes, the range can be extended vertically as well as horizontally.

## 2. Shift selection

1. Make sure you are in Normal mode;
2. Select the first note, chord, rest or measure in the range. You can extend the selection up or down to adjacent staves, if needed, using Shift+↑ or ↓;
3. Then choose one of the following options:
  - To advance the selection one chord at a time to the right: PressShift+→.
  - To advance the selection one chord at a time to the left: Press Shift+←.
  - To advance the selection one measure at a time to the right: PressShift+Ctrl+→ (Mac: Shift+Cmd+→).
  - To advance the selection one measure at a time to the left: PressShift+Ctrl+← (Mac: Shift+Cmd+←).
  - To advance the selection to the beginning of the line: PressShift+Home (Mac: Shift+Fn+←).
  - To advance the selection to the end of the line: PressShift+End (Mac: Shift+Fn+→).
  - To extend the selection to the beginning of the score: PressShift+Ctrl+Home (Mac: Shift+Cmd+Fn+←).
  - To extend the selection to the end of the score: PressShift+Ctrl+End (Mac: Shift+Cmd+Fn+→).

## 3. Drag selection

This method can be used to select notes or rests, or, independently, to select non-note symbols such as staccato dots, lyrics etc.:

- Press and hold Shift, then drag the cursor across the desired range.

## 4. Select All

This method selects the *whole* musical score including notes, rests and associated elements. Use one of the following options:

- Press Ctrl+A (Mac: Cmd+A).
- From the menu bar, select Edit → Select All.

## 5. Select section

This method is used to select a **section**—a region of the score starting and/or ending with a section break:

1. Click on an empty space in a measure in the section;
2. From the menu bar, select Edit → Select Section.

## 6. Selection Filter

The Selection Filter allows you include or exclude certain types of elements within a range selection. See Copy and paste: Selection filter

## Select a list of objects

To select a *list* (or discontinuous range) of score elements:

1. Click on the first element;
2. Hold down Ctrl (Mac: Cmd) and successively click on the desired additional elements.

**Note:** This method cannot be used to select measures. Use single or range selection instead.

## Modify an existing selection (as of version 3.5)

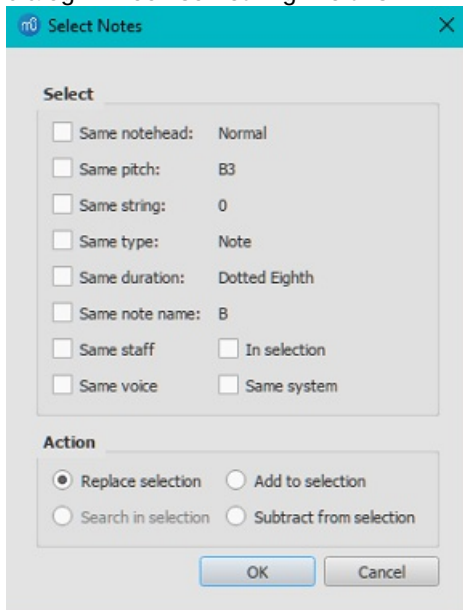
You can also use the Ctrl + click method to add to, or subtract from, an existing selection. For example:

1. Make a selection in the score using any of the methods above.
2. To add a non-selected element to the selection, press Ctrl and click on it. Repeat as required.
3. To remove an already-selected element from the selection, press Ctrl and click on it. Repeat as required.

## Select all similar

To select all elements of a specific type (e.g., all barlines, all text elements, all staccato markings):

1. Select an element;
2. Right-click and choose Select...;
3. Several options are available:
  - **All Similar Elements:** Selects all elements in the score similar to the chosen object.
  - **All Similar Elements in Same Staff:** Selects all elements in the same staff similar to the chosen object.
  - **All Similar Elements in Range Selection** only applies if a range has been selected. Selects all elements in the range similar to the chosen object.
  - **More...:** opens a dialog that lets you fine-tune more options. For example, if you have a notehead selected, the dialog will look something like this:



### Select

- Same notehead: In this example, only noteheads of the same group will be selected;
- Same pitch: Only noteheads of the same pitch will be selected;
- Same string: (tablature only) selects fretmarks on same string.
- Same type: All noteheads (of any group) will be selected;
- Same duration: Only noteheads of same duration will be selected;
- Same note name: Noteheads of that name in all octaves will be selected;
- Same staff: Only noteheads on the same staff will be selected.
- Same voice: Selects all notes of same voice.
- In selection:
- Same system:
- Action**
  - Replace selection: The default option—starts the selection from scratch;
  - Add to selection: Keeps everything you have already selected, and adds the current selection to it;
  - Search in selection:
  - Subtract from selection: Keep everything you have already selected, but takes away the current selection.

## What selections are useful for

- Copy and paste

- [Edit mode](#)
- [Inspector and object properties](#)
- [Tools](#)

## See also


- [Basics](#) chapter, esp. [Note input](#)
- [Notation](#) chapter, esp. [Accidental](#)
- [Text](#) chapter, esp. [Text editing](#) and [Grid-based movement of symbols and staff text](#)

## Undo and redo

MuseScore remembers an unlimited number of undo/redo actions.

The standard [shortcuts](#) are:

- Undo Ctrl+Z (Mac: Cmd+Z)
- Redo Ctrl+Shift+Z or Ctrl+Y (Mac: Cmd+Shift+Z)

Or use the toolbar buttons: 

## Viewing and navigation

This chapter describes the options available in the **View** Menu, and in the **Zoom** and **Page View/Continuous View** menus (located in the toolbar above the score). It also details the various navigation commands and functions.

### View menu

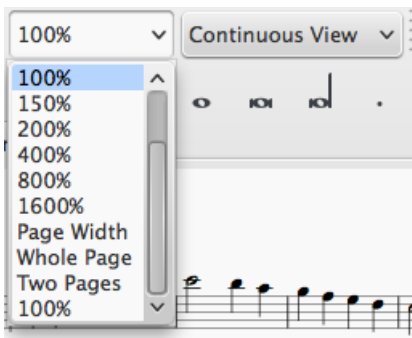
#### Show sidebars/panels

- [Palettes](#): F9
- [Master palette](#): Shift+F9 (Mac: Fn+Shift+F9)
- [Inspector](#): F8 (Mac: Fn+F8)
- [Play Panel](#): F11 (Mac: Fn+F11)
- [Navigator](#)
- [Timeline](#): F12
- [Mixer](#): F10 (Mac: Fn+F10)
- [Synthesizer](#)
- [Selection filter](#): F6 (Mac: Fn+F6)
- [Piano keyboard](#): P
- [Score comparison tool](#)

#### Zoom in/out

There are several ways to zoom the score in or out:

- **Keyboard shortcut:**
  - Zoom In: Ctrl++ (Mac: Cmd ++)
  - Zoom Out: Ctrl+- (Mac: Cmd +-).
- **View menu:**
  - Zoom In: View → Zoom In
  - Zoom Out: View → Zoom Out.
- **Mouse**
  - Zoom In: Scroll *up* with the mouse wheel while holding downCtrl (Mac: Cmd)
  - Zoom Out: Scroll *down* with the mouse wheel while holding downCtrl (Mac: Cmd).
- **Drop-down menu:** To set a specific zoom, use the dropdown menu in the standard toolbar to set the view magnification of the score (25–1600 %) or display it using the options "Page Width", "Whole Page", or "Two Pages".

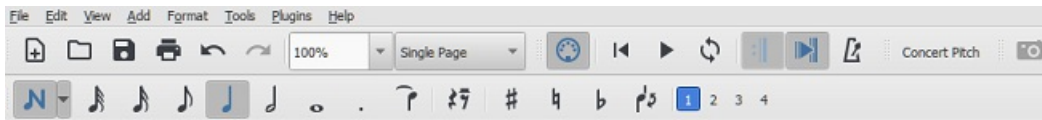


You may type a custom zoom % into the dropdown field if your desired zoom level isn't available by default.

- **To return to 100% zoom:** Use the shortcut Ctrl+0 (Mac: Cmd+0).

## Toolbars

The **Toolbar** area is located between the **Menu bar** and the **document window**.



It contains the following toolbars:

- **File Operations:** New score, Load score, Save, Print, Undo, Redo.
- **Zoom/Page View.**
- **Playback controls:** Enable MIDI, Rewind, Play/Stop, Loop, Play Repeats, Metronome.
- **Concert Pitch:** Displays score in written or concert (sounding) pitch.
- **Image Capture:** Allows you to take a snapshot of part of the score.
- **Note Input:** Note entry mode, Duration, Tie, Rest, Accidentals, Flip stem direction, Voice (1, 2, 3, 4).

### Show/hide toolbars

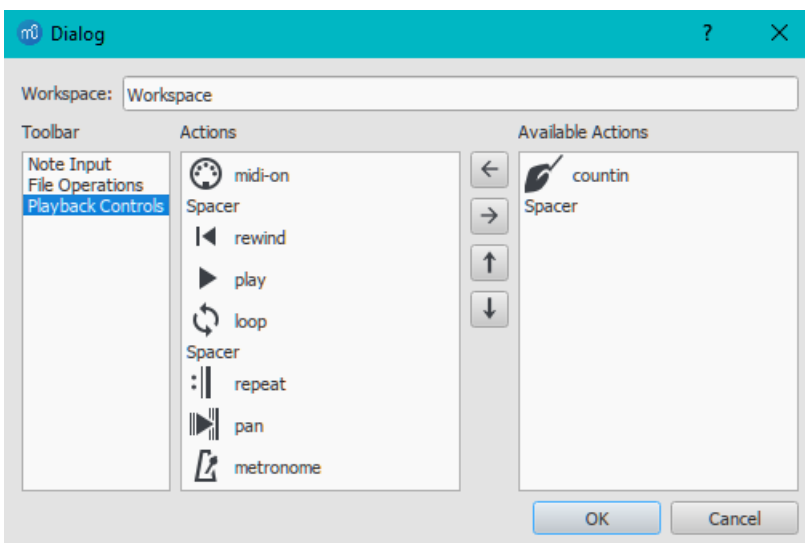
To show or hide certain toolbars:

- Select View → Toolbars, and tick/untick the options as required.
- Alternatively, right-click on an empty space in the toolbar area, or the title bar of the Inspector, and, from the menu, check or uncheck the required options.

*Note:* This option also allows you to show or hide the Timeline, Score Comparison Tool, Script Recorder, Piano Keyboard, Selection Filter, and Drumset Tools.

### Customize toolbar area

- Select View → Toolbars, and click on "Customize Toolbars..."



The dialog shows the toolbars that can be customized on the left, the current tool buttons for the selected toolbar in the middle, and the buttons that can be added on the right. When you have selected a toolbar in the left panel, you can do any of the following actions:

- **Remove a toolbar:** Select the button in the middle panel, and press-.
- **Add a toolbar:** Select the button in the right panel, and press-.
- **Move a toolbar:** Select the button in the middle panel, and move it up or down using or ↓.

Note: The toolbar cannot be customized unless a custom workspace is selected (see below).

### Workspaces

Select this option to create a custom workspace or to edit an existing workspace.

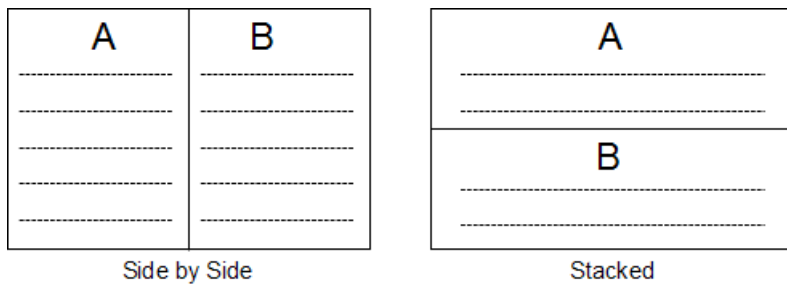
### Show Status bar

The **Status bar**, at the bottom of the screen, gives information about selected score elements. Tick/untick this option to display or hide.

### Split display

It is possible to split the document display so as to view two documents at once, or to view two different parts of the same document. Tabs allow you to choose which document to display in each view. You can drag the barrier separating the two scores to adjust the amount of space in the window devoted to each:

- **Documents Side by Side:** Divides the window vertically into two score views.
- **Documents Stacked:** Divides the window horizontally into two score views, one above the other.



### Visibility options

This section allows you to display or hide various non-printing elements:

- **Show Invisible:** View/hide elements that have been made invisible for printing and export. If this option is ticked, invisible elements are shown in the score window as light gray.
- **Show Unprintable:** View/hide breaks and spacer symbols.
- **Show Frames:** View/hide the dotted outlines of frames.
- **Show Page Margins:** View/hide Page Margins.

### Mark irregular measures

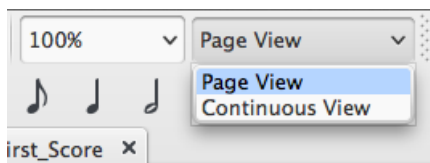
A dash at the top right of a measure indicates that its duration differs from that set by the time signature.

### Full screen

Full Screen mode expands MuseScore to fill your screen so more content is visible.

### Page/Continuous View

You can switch between different views of the score using the drop-down list in the toolbar area:



To scroll the score:

- **Vertically:** Move the mouse wheel up or down.
- **Horizontally:** Press shift and move the mouse wheel up or down.

### Page View

In **Page View**, the score is formatted as it will appear when printed or exported as a PDF or image file: that is, page by page, with margins. MuseScore applies system (line) and page breaks automatically, according to the settings made in [Page settings](#) and [Style...](#). In addition, you can apply your own system (line), page or section breaks.

To choose between **horizontal** or **vertical** page scrolling, see [Preferences: Canvas \(Scroll pages\)](#).

### Continuous View

In **Continuous View**, the score is shown as one unbroken system. Even if the starting point is not in view, measure numbers, instrument names, clefs, time and key signatures will always be displayed on the left of the window.

*Note:* Because the layout is simpler, MuseScore may perform faster in Continuous View than Page View.

### Single Page View

In **Single Page View** the score is shown as a single page with a header but no margins, and with an infinite page height. System (line) breaks are added automatically, according to the settings made in [Page settings](#) and [Style...](#). In addition, you can apply your own system (line) or section breaks.

### Side panels

The **workspaces**, **Inspector** and **Selection filter** are conveniently displayed as **side panels** to the left and right of the score window. To undock a side panel use one of the following methods:

- Drag the panel;
- Click on the double chevron at the top of the panel;
- Double-click in the title area at the top of the panel.

To dock a panel use one of the following procedures:

- Drag the panel to the top/bottom of an existing side panel and it will stack vertically above/below that panel.
- Drag the panel to the middle of an existing side panel and it will overlay that panel. Both panels can then be accessed by tabs.

Alternatively, double-clicking the title bar of the panel will restore it to its previously docked position.

### Navigation

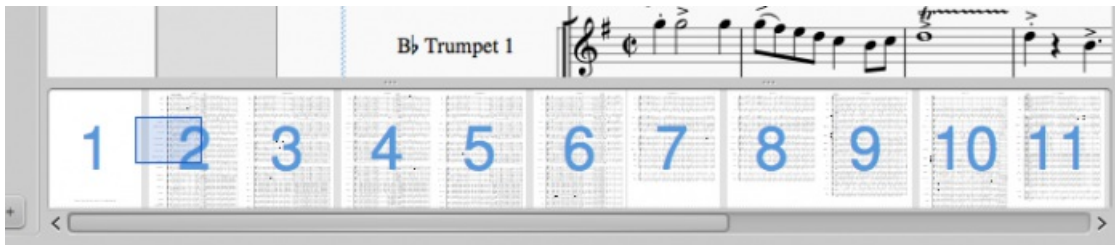
#### Commands

Various commands are available to help you navigate more easily through the score. These are listed under [Keyboard shortcuts: Navigation](#).

#### Navigator

The **Navigator** is an optional panel which displays page thumbnails of the score at the bottom or to the right of the document window.

- To view or hide the Navigator, select **View** → **Navigator**; or use a customized [shortcut](#).



The Navigator appears at the bottom of the document window if scrolling pages horizontally; or on the right if scrolling pages vertically (see [Preferences: Canvas](#)).

The blue box represents the area of the score that is currently visible in the document window: drag the box, or click directly on the navigator panel to bring another part of the score into view. You can also drag the scrollbar.

#### Timeline

The **Timeline** panel provides a detailed overview of the score, with expanded possibilities for navigation and interaction.

- To display the **Timeline**, press F12; or select **View** → **Timeline**.

For details, see [Timeline](#).

## Find / Go to

The **Find / Go to** function allows you to speedily navigate to a specific measure, [rehearsal mark](#) or page number in the score:

1. Press Ctrl+F (Mac: Cmd+F), or select Edit→Find. This opens the **Find** (or **Go to**) bar at the bottom of the workspace.
2. Use one of the following options:
  - **To go to a numbered measure:** enter the measure number (counting every measure, starting with 1, irrespective of [pickup measures](#), [section breaks](#) or manual changes to measure number offsets).
  - **To go to a numbered page:** enter the page number using the format pXX (where XX is the page number).
  - **To go to a numerical rehearsal mark:** enter the number using the format rXX (where XX is the name of the rehearsal mark).
  - **To go to a rehearsal mark starting with a letter:** enter the name of the [rehearsal mark](#) (the search is case insensitive).

**N.B.:** It is best to avoid naming rehearsal marks with the single letters "R," "r," "P", "p," or one of these letters with an integer (e.g. "R1" or "p3"), as this can confuse the search algorithm.

## See also

- [Save/Export/Print](#)
- [File format](#)
- [Layout and formatting](#)

## Concert pitch

You can choose to display the score in either **written** or **concert** (sounding) pitch. Written pitch displays the score as it *should* look when printed for musicians to read. However, during preparation you may prefer the convenience of seeing the [transposing instruments](#) notated as *they sound*, without transposition. In this case you should select the "Concert pitch" option.

To toggle the score display between **written** or **concert** pitch:

- Press the Concert Pitch button (located in the top right of the [toolbar](#) area). When this button is highlighted the score is in concert pitch.

Before printing the score, exporting it to PDF or saving it online, you should ensure that the [Concert Pitch](#) button is **off**, and that the individual parts are correctly transposed.

## See also

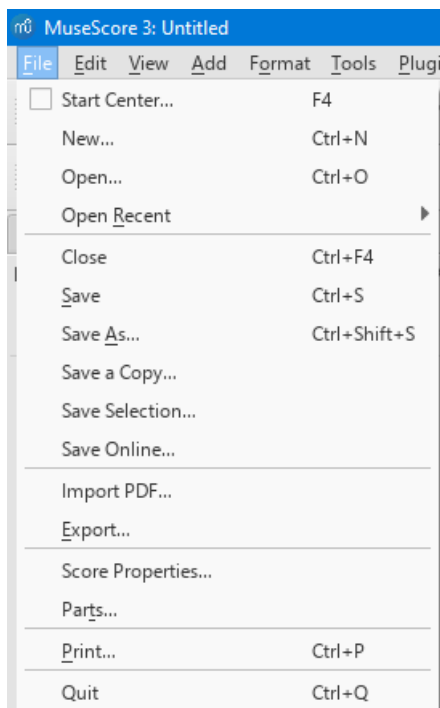
- [Transposition: Transposing instruments](#)
- [Accidental: Respell pitches](#)

## External links

- [Concert pitch](#) [↗](#) (Wikipedia article)
- [Transposing Instrument](#) [↗](#) (Wikipedia article)
- [Concert pitch or not?](#) [↗](#) (MuseScore forum discussion)

## Open/Save/Export/Print

In the **File** menu you can find options for opening, saving, exporting and printing your file:



## Open

Apart from native format files (\*.mscz and \*.mscx), MuseScore can also open MusicXML, compressed MusicXML and MIDI files, as well as a variety of files in other formats.

To open any supported file:

1. Choose one of the following options:
  - o Press Ctrl+O.
  - o Click on the "Load score" icon on the left side of the toolbar area.
  - o From the menu bar, select File → Open....
2. Select a file and click Open; or simply double-click a file.

**Open recent** allows you to choose from a list of recently-opened scores.

## Save

**Save**, **Save As...**, **Save a Copy...** and **Save Selection...** allow you to save native MuseScore files (.mscz and .mscx).

- **Save**: Save current score to file.
- **Save As...**: Save current score to new file.
- **Save a Copy...**: Save current score to new file, but continue to edit original file.
- **Save Selection...**: Save selected measures to new file.
- **Save Online...**: To save and share your scores on the web at [MuseScore.com](https://musescore.com) [↗](#). For details, see [Share scores online](#).

## Export

**Export...** allow you to create non-MuseScore files, such as PDF, MusicXML, MIDI, and various audio and image formats. In the **Export** dialog, you can choose which format to export to.

- **Export...**: Export current score to format of your choice.

MuseScore remembers which format you picked the last time and makes that the default for the next time.

## Print

**Print...** allows to print your MuseScore file directly to a printer from MuseScore. Depending on your printer you will have different options, but generally you can define the page range, number of copies and collation.

If you have a PDF printer installed, you could also "export" to PDF using **Print**, but it's usually better to use the native PDF option under **Export** for more accurate rendition. **Note**: For this to work properly with Adobe PDF, make sure to uncheck "Rely on system fonts only, do not use document fonts" in Printer properties.

## See also



- [File format](#)
- [Part extraction](#)

## Share scores online

[Musescore.com](https://www.musescore.com) [↗](#) allows you to:

- View and listen to scores from a large repository created by the MuseScore community.
- Download any score in a variety of formats—MuseScore, MusicXML, PDF, MIDI, MP3.
- Upload your own scores: control whether to share them publicly or privately (via a secret link).
- Synchronize your score with a YouTube video ("Videoscores").

**Note:** A MuseScore Pro account is required for all scores not marked as PD (Public Domain) or "Original" work, the latter must also have the approval of the score owner.

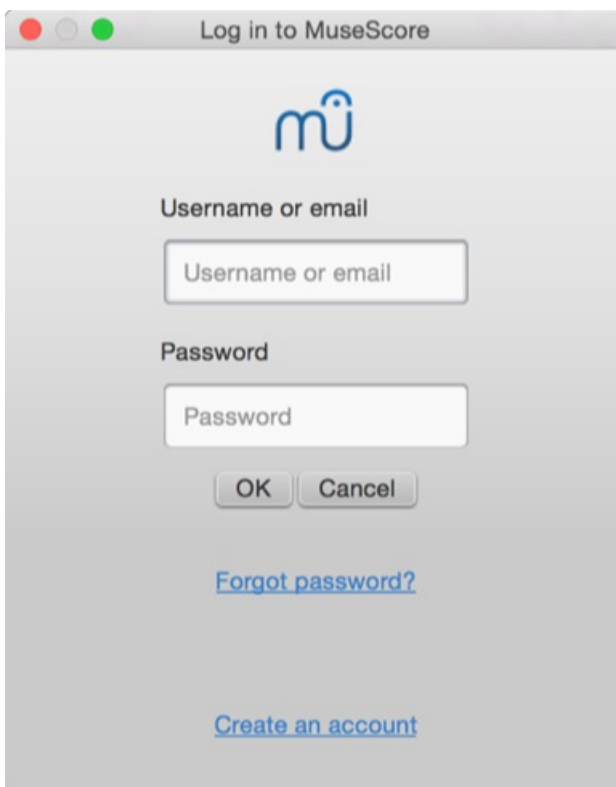
### Create an account

1. Visit [MuseScore.com](https://www.musescore.com) [↗](#) and click on "[Create new account](#) [↗](#)". Pick a username and enter a valid email and press "Create New Account".
2. Wait a few minutes for an email from MuseScore.com support. If no email arrives, check your spam folder.
3. Click the link in the email and visit your [user profile](#) [↗](#) to change your password.

### Share a score directly from MuseScore

To save a score online:

1. Make sure that the Concert Pitch button is **off**, and that the individual parts are correctly transposed.
2. From the menu, select File → Save Online.... The "Log in to MuseScore" dialog will appear:



3. Enter your email address or MuseScore username, and password, then click OK. **Note:** If you don't have a MuseScore account yet, create one first by clicking on the "Create an account" link. That will open your browser app and bring you to [musescore.com/user/register](https://www.musescore.com/user/register) [↗](#).
4. Upon successfully logging in, you'll be able to enter your score information.

- **Title:** The title of the score.
- **Description:** The descriptive text that will appear next to it.
- **Make the score private:** If ticked, the score can only be viewed via a private link. If unticked, the score is visible to all.
- **License:** Choose an appropriate copyright license from the drop-down list. **Note:** [Creative Commons license](#) , allows people to use your scores under certain restrictions.
- **Tags:** You can add **tags** to help identify scores on MuseScore.com. Use commas to separate multiple tags.

5. If the score already exists online, it will be updated automatically—you can add additional information in the changelog section of the dialog if required. This can be retrieved on MuseScore.com under "Revision history" for that score. Uncheck **Update the existing score** to save online as a new score.

6. If you are using a different [SoundFont](#) than the default one and if you are able to export [MP3 files](#) (may not be the case on some Linux versions), a checkbox **Upload score audio** will be visible:

If the checkbox is checked, MuseScore will render the audio of the score using the current [synthesizer](#) settings and upload the audio to MuseScore.com.

### Upload a score on MuseScore.com

You can also upload a score MuseScore.com itself:

1. Click the [Upload link](#) on MuseScore.com.
2. You have the same options as with the Save Online menu.
3. You also have access to more information, such as **Genre**.

### Edit a score on MuseScore.com

If you want to make changes to one of your scores on MuseScore.com, edit the MuseScore file on your own computer, save it, and then do the following:

- If you originally shared the score directly from within MuseScore, simply go to File → Save Online... again to update the online score.
- If you originally uploaded the score via the Upload page [↗](#) on MuseScore.com, then you must follow these steps to update the online score:
  1. Go to the score page on MuseScore.com.
  2. Click the three dots menu ; on the right and choose "Update this score".
  3. In the form, you can upload a replacement score file as well as change the accompanying information and privacy settings.

#### Switch to the direct method of updating an online score

It is much more convenient to update online scores from directly within MuseScore than by updating the score manually from the score page. Follow these steps if you originally uploaded the score via the Upload page [↗](#) and now want to switch to the direct method:

1. Go to the score page on MuseScore.com and copy the URL.
2. Open the score file on your computer with MuseScore.
3. From the menu, select File → Score Properties... and paste the URL into the "Source" field.

Now whenever you want to update the online score simply go to File → Save Online...

#### External links

- [How to delete a score saved on MuseScore.com](#) [↗](#) (MuseScore HowTo)
- [Score download becomes a part of the Pro subscription](#) [↗](#)
- [Download becomes a part of the Pro subscription](#) [↗](#)

## Notation

In the previous → "Basics" chapter you learned how to enter notes and interact with the palettes. The "Notation" chapter describes the different types of notation in more detail, including more advanced music notation.

See also → "Advanced topics".

## Barlines

A range of barline symbols for most ordinary purposes can be found in the **Barlines** palette (Basic workspace); repeat barlines, only, are also available in the **Repeats & Jumps** palette (Basic and Advanced). Additional symbols can be found in the **Barlines** palette of the Advanced workspace. It is also possible to create your own custom barlines [see below](#).



### Change barline type

To change an existing barline, use one of the following:

- Select a barline, or measure, in the score, then click an icon in the Barlines palette (double-click in versions prior to 3.4).
- Drag an icon from the Barlines palette onto a barline, or measure, in the score.
- Select an existing barline in the score, then adjust "Style" in the "Barline" section of the Inspector.

### To change a non-single to a single barline

- Select the barline and press Del.

### To hide a barline:

- Select the line and press v, or uncheck visible in the Inspector.

### Insert barline

To insert a new barline between existing ones, either:

- Drag an icon from the Barlines palette onto a note or rest.
- Select a note or rest, then click an icon in the Barlines palette (double-click in versions prior to 3.4).

### Split a measure

You can insert a barline in order split a measure into two separate ones. Use one of the following methods:

- Press Ctrl (Mac Cmd) and drag the line from the Barline palette to the first note of the new measure.
- Select the first note of the new measure and press ctrl (Mac Cmd) while you click a barline in the Barline palette (double-click in versions prior to 3.4) .

**Note:** As of version 3.1 (or earlier), all barlines entered this way are entered as Normal Barlines. See also [Split a measure](#).

### Custom barlines

It is possible to create custom barlines by selecting one or more barlines, and adjusting the properties in the "Barlines" section of the **Inspector**:

- **Style:** Choose from a range of preset barlines.
- **Span to next staff:** joins the selected barline to the barline in the staff below.
- **Span from:** Sets the position of the *top* of the barline. "0" is the top staff line. Positive numbers start lower down the staff, negative numbers above.
- **Span to:** Sets the position of the *bottom* of the barline (see "Span from").
- **Span presets:** Use the buttons to apply preset customized barlines.

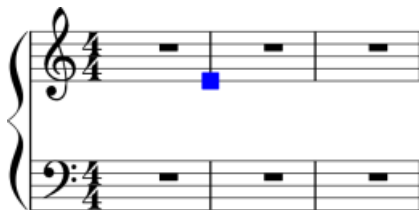
See also [Mensurstrich](#).

Changes to color and horizontal/vertical offset can also be made in the Inspector.

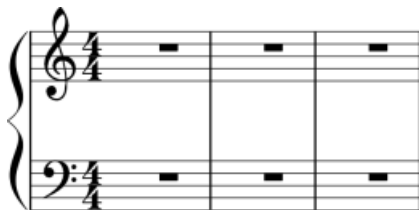
### Connect barlines

Barlines may extend over multiple staves, as in the grand staff of a piano, or in an orchestral score to join instruments in the same section. To join barlines:

1. Enter [Edit mode](#) on a barline.



2. Click on the lower blue handle and drag it down to the staff you wish to connect to. The handle snaps into position so there is no need to position it exactly.
3. Press Esc to exit [edit mode](#). This will update all other relevant barlines as well.



### See also

- [Measure operations](#)
- [Repeats and jumps](#) for information on repeat barlines
- [Add fermata to barline](#)

### Clefs

Commonly used **Clefs** (Treble, Bass, Alto, Tenor) can be found in the [Clefs palette](#) in the [Basic workspace](#). For a more complete range, see the **Clefs** palette in the [Advanced workspace](#) (see image below).

f



## Add a clef

### Add/change clef at the beginning of a measure

- Select a measure and click a clef symbol in the palette (double-click in versions prior to 3.4).
- Drag a clef from the palette onto a measure.
- Select an existing clef and click a clef in the palette (double-click in versions prior to 3.4).
- Drag a new clef from the palette onto an existing clef.

### Add/change a mid-measure clef

- Click on a note, then click a clef in the palette (double-click in versions prior to 3.4).
- If a mid-measure clef is *already present* you can also:
  - Select the clef and click a clef in the palette (double-click in versions prior to 3.4).
  - Drag a new clef from the palette onto the clef.

**Note:** "Mid-staff" clefs are always smaller than the main system clef.

**Example:** In the following image, the top staff starts with a treble clef and switches immediately to bass clef, then after a note and a rest, changes back to treble clef.



**Note:** Changing a clef does not change the pitch of any note. Instead, the notes move to preserve pitch. If you want, you can use [Transposition](#) in conjunction with a clef change.

## Remove a clef

- Select a clef and press Del.

## Courtesy clefs

When a clef change occurs at the beginning of a system, a **courtesy clef** will be generated at the end of the previous system.

To show or hide *all* courtesy clefs:

1. From the menu, select Format → Style... → Page;
2. Check/uncheck "Create courtesy clefs."

It is also possible to show/hide courtesy clefs on a case-by-case basis:

1. "Create courtesy clefs" should already be ticked in the "General" menu (see above);
2. Select a clef and tick/untick "Show courtesy" in the [Inspector](#).

## Hide clefs

### Display clef only in the first measure (for all staves)

1. From the menu, select Format → Style... → Page;

2. Uncheck "Create clef for all systems."

#### Display clef only in the first measure (for a particular staff)

1. Right-click on the staff (Mac: Ctrl-click) , select Staff properties... and uncheck "Show clef;"
2. Open the master palette and select the "Symbols" section;
3. Drag and drop a clef from the master palette onto the first measure of the staff; OR select the first note and click a clef in the master palette (double-click in versions prior to 3.4).

**Note:** This option may be useful to TAB users who do not want the clef to repeat on every subsequent line.

#### Hide all clefs in a particular staff

1. Right-click on the staff (Mac: Ctrl-click) , and select Staff properties...;
2. Uncheck "Show clef."

## Key signatures

Standard **key signatures** are available in the Key Signatures palette in the Basic or Advanced workspaces. It is also possible to create custom key signatures (below).



### Add a new key signature

#### Add new key signature to *all* staves

Use any of the following methods:

- Drag a key signature from the palette onto an empty part of a measure.
- Select a measure and click a key signature in the palette (double-click in versions prior to 3.4).
- Select a note and click a key signature in a palette (double-click in versions prior to 3.4).

#### Add new key signature to *one* staff only

If you wish to change the key signature of only *one* staff line, leaving others unchanged:

- Press Ctrl (Mac: Cmd) and hold while you drag a key signature from a palette onto a measure.

### Replace an existing key signature

#### Replace key signature for *all* staves

Use any of the following methods:

- Drag a key signature from the palette onto the key signature to be replaced (or onto the measure containing the key signature).
- Select the key signature to be replaced, and click a new key signature in a palette (double-click in versions prior to 3.4).

#### Replace key signature for *one* staff only

If you wish to replace the key signature of only one staff, leaving others unchanged:

- Press Ctrl (Mac: Cmd) and hold while you drag a key signature from a palette onto the key signature to be replaced (or onto the measure containing the key signature).

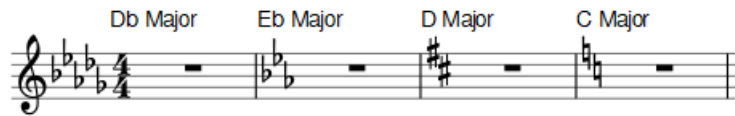
## Remove a key signature

Use any of the following methods:

- Click on an existing key signature and press Del.
- Drag the empty key signature ("open/atonal") from the palette (in the advanced workspace) onto the measure.

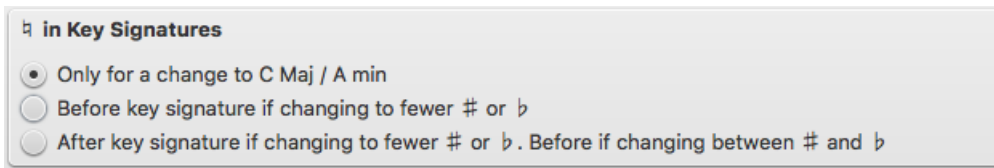
## Naturals on key signature changes

By default, MuseScore only shows cancelling naturals when the key signature changes to that of C Major/A minor (no sharps or flats). In all other cases, it simply shows the new key signature without cancellations:



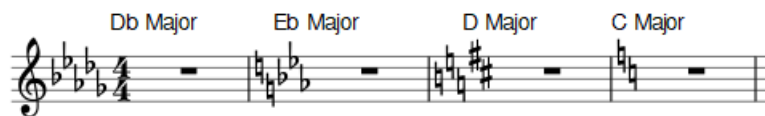
However, you can opt to display cancelling naturals for *all* key signature changes:

1. From the menu, select Format → Style... → Accidentals. You'll see the options:

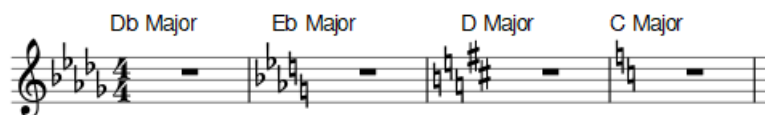


2. Select one of the three options.
3. If you are in a part and want the new option to apply to *all* parts, click on Apply to all parts.
4. Click OK to exit.

For example, selecting the option "**Before key signature if changing to fewer # or b**" gives:



And the option "**After key signature if changing to fewer # or b. Before if changing between # and b**" gives:



## Key signature changes and multimeasure rests

Multimeasure rests are interrupted if there is change of key signature:



## Courtesy key signatures

To turn off the display of a *particular* courtesy key signature:

- Select the relevant key signature and untick "Show courtesy" in the "Key Signature" section of the Inspector.

To turn off the display of *all* courtesy key signatures:

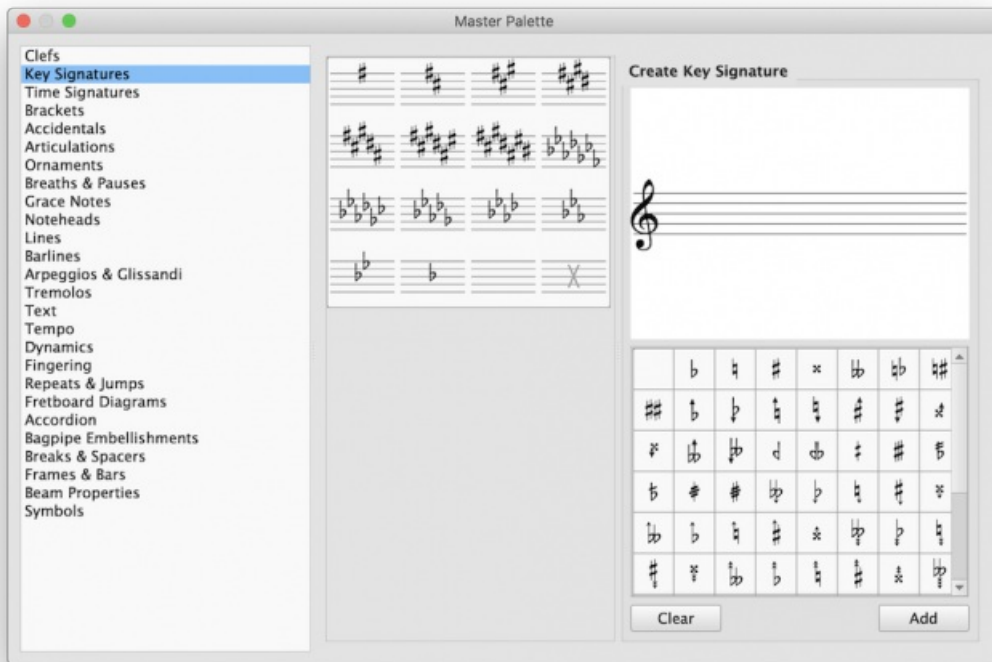
- From the menu, select Format → Style... → Page, and untick "Create courtesy key signatures."

**Note:** Courtesy key signatures are not displayed at section breaks.

## Custom key signatures

To create a custom key signature:

1. Press shift+K to display the **Key signatures** section of the Master palette.



2. In the **Create Key signature** panel, drag accidentals from the palette onto the staff above to create the desired key signature. **Note:** The treble clef is only decorative—custom key signatures for any type of staff can be created here.
3. Use the Clear button, if required, to remove all accidentals from the "staff."
4. To move the new key signature into the library (center panel), press Add. To delete a key signature from the library, right-click it (Mac: Ctrl-click) and, in the drop-down menu, select Delete.

**Note:** A limitation of custom key signatures is that they cannot be transposed in the usual way. If a transposition is needed, or where there is a clef change, you will need to create a new custom key signature.

To move a key signature from the Master palette to acustom palette :

- Drag and drop the key signature onto a palette.

To apply a key signature to the score directly from the Master palette, use one of the following methods:

- Select a measure and click a key signature in the Master palette (double-click in versions prior to 3.4).
- Drag a key signature from the Master palette onto a measure; alternatively, *to apply to one staff only*, hold Ctrl (Mac: cmd) while dragging.

## Accidentals

The most common types of **accidentals** are provided in the Accidentals toolbar above the score and in the Accidentals palette in the basic workspace

	#	b	×	bb
h	()			

A more comprehensive range can be found in the Accidentals palette in the advanced workspace.

### Add accidental

**Accidentals** are automatically added to a note, as appropriate, when you increase or decrease its pitch:

- ↑: Increase the pitch of a note by one semitone (favors sharps).
- ↓: Decrease the pitch of a note by one semitone (favors flats).

To add either (i) a double flat or double sharp, (ii) a courtesy (also known as *cautionary* or *reminder*) accidental, or (iii) a non-standard accidental, use one of the following options:

- Select a note and click on an accidental in the toolbar above the score.
- Select a note and click an accidental in the Accidentals palette (double-click in versions prior to 3.4).



- Drag an accidental from the Accidentals palette on to a note.

If you wish to add brackets to **cautionary accidental**, use one of the following:

- Select the accidental in the score and click the parentheses symbol in the Accidentals palette (double-click in versions prior to 3.4).
- Drag the parentheses symbol from the palette onto the accidental.
- Select the accidental and choose from the **Bracket type** dropdown in the Inspector.

If required, accidentals can be deleted by clicking on them and pressing **Del**.

### Change enharmonic spelling

To change the enharmonic spelling of a note, or notes, in both written *and* concert pitch views:

1. Select a note, or group of notes;
2. Press **J**;
3. Continue pressing **J** to cycle through the enharmonic equivalents.

To change the enharmonic spelling in the written pitch view, without affecting the concert pitch view, or vice versa:

1. Select a note, or group of notes;
2. Press **Ctrl+J** (Mac: **Cmd+J**);
3. Continue pressing the same combination of keys to cycle through the enharmonic equivalents.

**Note:** If the pitches of selected notes are not all the same, the effect may be unpredictable.

### Respell pitches

- From the menu, select **Tools** → **Respell Pitches**.

### See also

- Key signature: Change

### External links

- Accidental [↗](#) at Wikipedia
- Enharmonic [↗](#) at Wikipedia

### Time signatures

**Time signatures** can be found in a Palette of the same name in both the Basic and Advanced workspaces.



### Add or replace a time signature

Use any of the following methods:

- Select a time signature, measure, note or rest, and click a time signature in a palette (double-click in versions prior to 3.4).
- Drag and drop a time signature from a palette onto a space in a measure, or onto an existing time signature.

### Delete a time signature

- To delete a time signature in the score, select it and press **Del**.

### Create a time signature

If the time signature you require is not available in any of the existing palettes, it can be created using one of the following methods:

From the **Time Signatures palette**

Available as of version 3.3.

1. In the *Time Signatures* palette, click on "More", then, in the supplementary palette, click on the "Create Time Signature" button;
2. In the top line, enter the Numerator, Denominator, and Text (the latter is optional where you need the display to be different from the actual time signature).
3. Adjust the default note beaming in the *Note Groups* section. To restore the default beaming pattern, press Reset;
4. Press the "Add" button to transfer the newly-created time signature to the *Time Signatures* palette.

#### From the Master palette

1. Press Shift+T to display the **Time signatures** section of the Master Palette;
2. Select a time signature to edit in the center panel;
3. In the top line of the *Create Time Signature* panel, enter the Numerator, Denominator, and Text (the latter is optional where you need the display to be different from the actual time signature).
4. Adjust the default note beaming in the "Note group" section". To restore the default beaming pattern, press Reset;
5. Press Add to add the newly-created time signature to the center panel. To delete a time signature from the center panel, right-click (Mac: Ctrl-click) on it and select Clear.
6. Drag and drop the time signature from the Master Palette to the *Time Signatures* palette. You can also drag the time signature direct to the score, if desired.

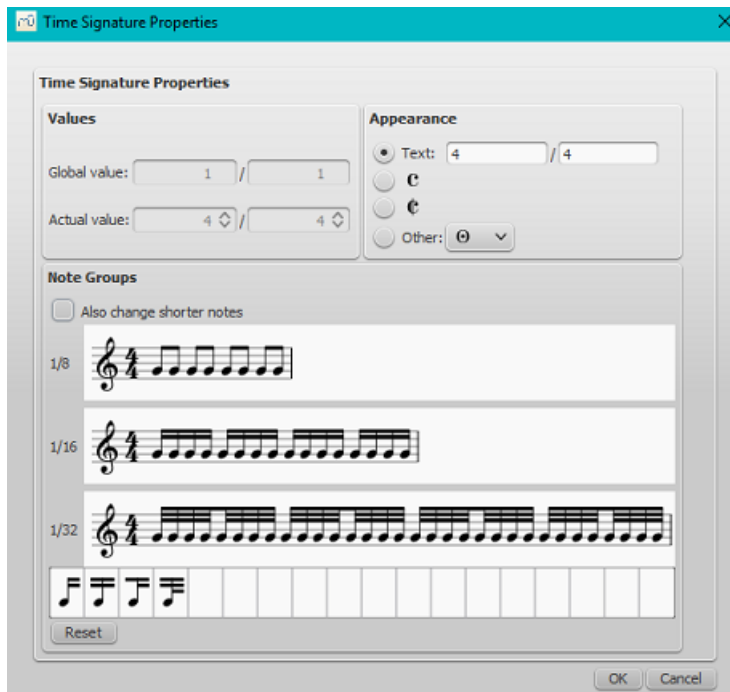
#### Fractional time signatures

Starting in version 3.5.1 there is limited support for fractional time signatures. Only  $\frac{1}{2}$  and  $\frac{1}{4}$  are supported at this time. If your keyboard does not have the characters on them you can enter them using Alt+0189 for  $\frac{1}{2}$  and Alt+0188 for  $\frac{1}{4}$  on some operating systems. You can also copy/paste from here.

#### Time signature properties

To display the **Time Signature Properties** dialog, use any of the following:

- Select the time signature, then click on "Properties" in the "Time Signature" section of the Inspector.
- Right-click (Mac: Ctrl-click) on a time signature and select Time Signature Properties...







- **Global value:** Shows the global time signature and is set automatically when you add a time signature to the score. It is the reference for beats (as shown in the status bar) and tempo markings.
- **Actual value:** Shows the time signature associated with a particular staff. This is normally the same as the global time signature, but can be set independently if required. See Local time signatures.
- **Appearance:** Allows you to edit the displayed text without affecting the underlying time signature. For an example, see Additive meters.
- **Note Groups:** Allows you to change the default beaming of notes associated with a time signature. See Change default beaming.

#### Change default beaming

To adjust note-beaming for a particular time signature:

1. Select the time signature, then "Properties" in the "Time Signature" section of the Inspector; or right-click (Mac⌘Ctrl-click) on the time signature and select, Time Signature Properties...;
2. To break a note beam in the **Note Groups** panel, click on the note following it. To reset the beam, click in the same place. Alternatively, you can change beaming by dragging a beam icon onto a note, as follows:

-  Start beam at this note.
-  Do not end beam at this note.
-  1/8th note beam to left of this note.
-  1/16 note beam to left of this note.

Checking the box for "Also change shorter notes," means that any beam changes at one level are applied automatically to shorter durations as well. The Reset button cancels any changes made in that session.

#### Additive (composite) meters

Additive (or composite) time signatures are sometimes used to clarify the division of beats within a measure. To create an additive time signature:

1. Right-click (Mac: Ctrl-click) on a time signature in the score and select Time Signature properties...;
2. In the **Appearance** section, adjust the "Text" property as required;
3. Adjust note beaming in the **Note Groups** section if required.

**Note:** The Time Signatures section of the Master palette also allows you to create additive time signatures (see above).

#### Local time signatures

In certain cases a score may show staves with different time signatures running at the same time. For example, in Bach's 26. Goldberg Variation:



In the above example, the global time signature is 3/4, but the time signature of the upper staff has been set independently to 18/16.

To set a **local time signature** for just one staff:

- Hold down Ctrl (Mac: Cmd) and drag and drop a time signature from a palette onto an empty measure.

#### Resize time signature

- Select one or more time signatures and, in the "Time Signature" section of the Inspector, adjust the "Scale X" (width) and "Scale Y" (height) values.

#### Pickup measures and cadenzas

Occasionally you will need to decrease or increase the duration of a measure without changing the time signature—for example, in a pickup measure (anacrusis) or in a cadenza etc. See Measure operations: Measure duration.

#### Time signature changes and breaks

Multimeasure rests are interrupted when a time signature change occurs. Also, a section break will prevent a courtesy time signature being shown at the end of the previous measure.

#### See also

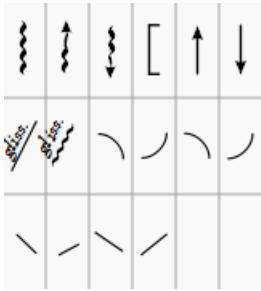
- Key signature

#### External links

- [How To Using Polyrhythm, mixed meters and local time signatures in MuseScore](#) (MuseScore HowTo)
- [Additive meters](#) at Wikipedia.

## Arpeggios and glissandi

**Arpeggio** and **Glissando** symbols can be found in the "Arpeggios & Glissandi" [palette](#) in the advanced [workspace](#). This palette also includes strum arrows, an arpeggio bracket, wind instrument articulations, and slide in/slide out symbols.



### Add symbol

To add an arpeggio, glissando etc. to the score, use one of the following methods:

- Select one or more notes, then click a symbol in a palette (double-click in versions prior to 3.4).
- Drag a symbol from a palette onto a note.

### Adjust dimensions

To adjust the length and height of a symbol:

- Enter [Edit mode](#) for the symbol, and adjust the handles using [keyboard shortcuts](#).

### Custom symbols

After selecting a symbol, various useful properties can be adjusted in the "Glissando" or "Arpeggio" section of the [Inspector](#).

#### Glissando

- **Type:** Choose between a straight or wavy line;
- **Show text:** Tick this box if you want the symbol to display text. Then set the wording, font-face, font-size and font-style underneath. *Note:* If there isn't enough room between notes, the text is not displayed;
- **Play:** Check/uncheck the box to turn playback on or off.
- **Play style:** Choose how the glissando plays back. There are four options: Chromatic, White keys, Black keys, Diatonic;

#### Arpeggio

- **Stretch:** Increase this to lengthen the duration of the arpeggio.
- **Play:** Untick if you don't want the symbol to affect playback.

If needed for future use, you can save the result in [a custom palette](#).

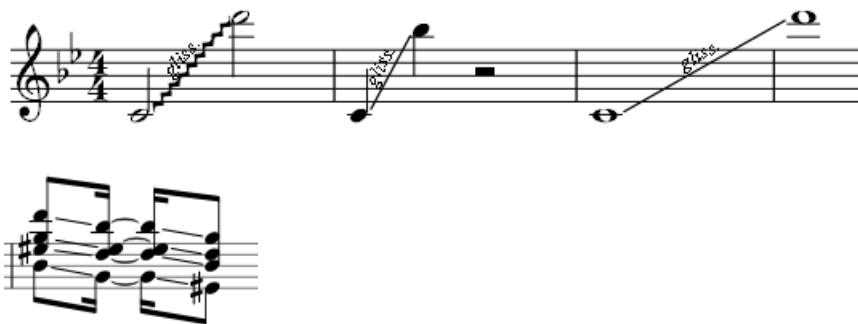
### Arpeggios

When an arpeggio or strum arrow is added to the score, it initially spans only [one voice](#). To change the height, see [Adjust dimensions](#) (above). *Playback* of the symbol can be turned on or off in the [Inspector](#).



### Glissandi (slides)

A **Glissando** or, more informally, a **slide**, spans two consecutive notes. It may be wavy or straight, with or without text. E.g.



### Adjust start and end points of a glissando

To move an end handle vertically or horizontally, from one note to the next:

1. Enter edit mode on the symbol;
2. Click on the start or end handle:
  - Use Shift+↑↓ to move the handle up or down, from note to note.
  - Use Shift+←→ moves the handle horizontally, from note to note.

Use this command to create **cross-staff glissandi**. Or to correct the positions of end handles when applying multiple glissandi to chords.



### Wind instrument articulations

**Fall**, **Doit**, **Plop** and **Scoop** symbols are provided. To change the length and curvature, select the symbol, entered edit mode and adjust the handles as described in Edit mode: Lines.

### Slide in/out

**Slide in** and **Slide out** lines can also be found in the "Arpeggios & Glissandi" palette. To edit the length and angle of a line, double-click on it and drag the handle (or use the Inspector or keyboard arrows for finer adjustment).

### External links

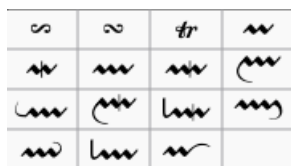
- [Arpeggio](#)  at Wikipedia
- [Glissando](#)  at Wikipedia

### Articulations and ornaments

A comprehensive set of symbols can be found in the **Articulations palette** in the Advanced workspace:



and the **Ornaments palette** (Advanced workspace):



There is also an abbreviated version of **Articulations** in the Basic workspace.



### Articulations

**Articulations** are the symbols added to the score to show how a note or chord is to be played. The principal symbols in this group are:

- Fermatas
- Accents (>)
- Staccato and variations—including mezzo-staccato (portato), staccatissimo.
- Tenuto
- Marcato

Specialist articulations are also included for bowed and plucked strings, wind instruments etc.

## Ornaments

**Ornaments** include:

- Mordents, Inverted Mordents, Pralltrills
- Trills
- Turns
- Bends

**Note:** **Appoggiaturas** and **acciaccaturas** can be found in the Grace Notes palette.

## Add articulation/ornament

Use either of the following methods:

- Select a note or a range of notes, then click a symbol in a palette (double-click in versions prior to 3.4).
- Drag a symbol from a palette onto a notehead.

### Add accidental to an ornament

To apply an accidental to an existing ornament, such as a trill:

1. Select the note to which the ornament is attached;
2. Open the Symbols section of the Master palette;
3. Search for and apply the desired accidental to the score (small accidentals can be found using the search term "figured bass");
4. Drag the accidental into position (or reposition using keyboard shortcuts or the Inspector).

### Add fermata to a barline

Use one of the following methods:

- Select a barline, then click a fermata symbol in a palette (double-click in versions prior to 3.4).
- Drag a fermata symbol from a palette onto a barline in the score.

**Note:** This does not affect playback.

## Keyboard shortcuts

- Toggle Staccato: Shift+S
- Toggle Tenuto: Shift+N
- Toggle Sforzato (accent): Shift+V
- Toggle Marcato: Shift+O
- Add Acciaccatura (grace note): /

Keyboard shortcuts can be customized in MuseScore's Preferences.

## Adjust position

Immediately after adding an articulation or ornament from a palette, the symbol is automatically selected: It can then be moved *up or down* from the keyboard as follows:

- Press up/down arrow keys for fine positioning (0.1 sp at a time);
- Press Ctrl+↑ or Ctrl+↓ (Mac: Cmd+↑ or Cmd+↓) for larger vertical adjustments (1 sp at a time).
- To flip a symbol to the other side of the note (where applicable), select it and press x.

To enable adjustments in *all* directions from the keyboard:

1. Enter Edit mode on the symbol;
2. Press arrow keys for fine positioning (0.1 sp at a time); or press Ctrl+Arrow (Mac: Cmd+Arrow) for larger adjustments (1 sp at a time).

You can also change the horizontal and vertical offset values in the [Inspector](#). To position more than one symbol at a time, select the desired symbols and adjust the offset values in the [Inspector](#).

**Note:** The symbol can also be repositioned by clicking and dragging, but for more precise control, use the methods above.

## Articulation and ornament properties

These can be edited from the **Articulation** section of the [Inspector](#) and may include:

- **Placement:** Above or below the staff.
- **Direction:** Auto / Up / Down.
- **Anchor:** Adjust the vertical placement of the symbol.
- **Time stretch:** For fermatas, adjust the pause length.
- **Ornament style:** Default or Baroque.
- **Play:** Turn playback on or off.



For **Bend** properties, see [Bends](#).

You can find additional global style settings for articulations and ornaments under [Articulations](#), [Ornaments](#).


## See also

- [Grace notes](#)

## External links

- [How to create trills and ornaments with accidentals \(and playback\)](#)  (MuseScore HowTo)
- [Ornaments](#)  at Wikipedia

## Bends

**Bends**, of various kinds, can be created with the **Bend Tool** . You can find this in the [Articulations palette](#) of the Advanced [workspace](#). Any bend applied to the score can be customized in the **Bend** section of the [Inspector](#).

## Apply a bend

To apply one or more bends to the score, use one of the following options:

- Select one or more notes and double-click a bend symbol in the palette.
- Drag a bend symbol from the palette on to a note.

## Edit bend

### Text and line properties

1. Select the bend;
2. Adjust the following properties in the **Bend** section of the [Inspector](#):
  - *Line thickness*.
  - *Font, Size, Style*: Properties of the text.
  - *Play* (checkbox): Whether the bend affects playback or not.

Global text and line properties for all bends in the score can be edited in [Format](#) → [Style...](#) → [Bend](#).

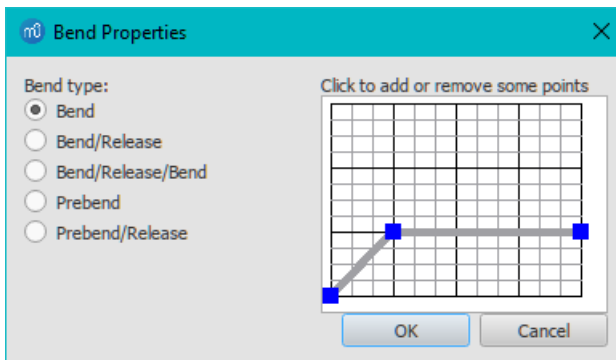
### Bend shape and width

#### Versions 3.4 and above

1. Make sure that the bend is selected.
2. In the "Bend" section of the [Inspector](#) use the **Bend type** dropdown to choose from a range of presets. "Bend" is the default option.
3. Make adjustments, as required, to the graphical display of the bend in the [Inspector](#): see [Edit graphical display](#) (below).

#### Versions prior to 3.4

1. Select the bend and click on **Properties** in the [Inspector](#); Alternatively, right-click on the bend and select "Bend Properties."



2. Choose from a range of presets under **Bend type**. "Bend" is the default option.
3. Make adjustments, as required, to the graphical display of the bend: see [Edit graphical display](#) (below).

#### Edit graphical display

The bend is represented by a graph consisting of gray lines connected by square, blue **nodes** (see image above). The slope of the line indicates the type of bend:

- Up-slope = Up-bend
- Down-slope = Down-bend
- Horizontal line = Hold

The **vertical axis** of the graph represents the amount by which the pitch is bent up or down: one unit equals a quarter-tone: 2 units a semitone, 4 units a whole-tone, and so on. The **horizontal axis** of the graph indicates the length of the bend: each gray line segment extends for 1 space (sp) in the score.

A bend is modified by adding or deleting nodes in the graph:

- To **add** a node, click on an empty intersection.
- To **delete** a node, click on it.

Adding a node *lengthens* the bend by 1 sp; deleting a node *shortens* the bend by 1 sp. The *Start* and *End* points of the bend can be moved up and down only.

#### Adjust height

The height of the bend symbol is automatically adjusted so that the text appears just above the staff. This height can be adjusted, if necessary, with a workaround:

1. Create another note vertically above the note (shortening the line) or below the note (extending the line) at which you want the bend to start.
2. Apply the bend to the created note.
3. To adjust the height of the bend move this created note vertically so that the bend symbol gets the desired height.
4. Drag the bend symbol to the correct position (to the original note).
5. Mark the created note invisible and silent (using the [Inspector](#)).

#### Adjust position


To adjust position use one of the following:

- Drag the bend symbol with a mouse.
- Click on the symbol and adjust the horizontal and vertical offsets in the [Inspector](#).
- Double-click on the symbol; or click on it and press **Ctrl+E** (Mac: **Cmd+E**); or right-click on the symbol and select "Edit element." Then use the arrow keys for fine positioning (0.1 sp at a time); or **Ctrl+Arrow** (Mac: **Cmd+Arrow**) for larger adjustments (1 sp at a time).

#### Custom bends

After a bend has been created in the score it can be saved for future use by dragging and dropping the symbol to a palette while holding down **Ctrl+Shift** (Mac: **Cmd+Shift**). See [Custom Workspace](#).

#### External links

- [Bending](#)  at wikipedia

## Beams

#### Adjust automatic note beaming



By default, MuseScore beams notes according to settings in the **Time Signature Properties** dialog. To change this automatic pattern of note-beaming, see [Change default beaming](#).

### Change beaming of individual notes

MuseScore also allows you to override the default beaming of any note, using the **beam symbols** in the **Beam Properties** palette of the "Basic" or "Advanced" [workspaces](#):



To change one or more note beams (except feathered beams, below), use one of the following methods:

- Drag and drop a beam symbol from the **Beam Properties** palette onto a note or rest in the score.
- Select one or more notes and/or rests in the score and click the desired symbol in the **Beam Properties** palette (double-click in versions prior to 3.4).

To apply feathered note beams, use either of the following methods:

- Drag and drop a feathered-beam symbol from the **Beam Properties** palette onto a note beam in the score.
- Select one or more note beams in the score, then click on a feathered-beam symbol in the **Beam Properties** palette (double-click in versions prior to 3.4).

**Notes:** (1) Feathered beams may use 2 or 3 lines depending on the tempo and the desired rate of the change; (2) To create a 2-line feathered beam, you need to start with a *continuous* run of beamed sixteenth notes; (3) To create a 3-line feathered beam, you need to start with *continuous* run of beamed thirty-second notes; (4) Playback of feathered beams is not supported.

### Beam symbols and their effects

Icon	Name	Description
	Beam start	If the note is beamed to a previous note, break the beam.
	Beam middle	Create a beam from the selected note to the previous note (if applicable). This applies to Beam 16th sub and Beam 32nd sub as well.
	No beam	Break beams before and after the selected note.
	Beam 16th sub	Start a second level beam at this note.
	Beam 32nd sub	Start a third level beam at this note.
	Automatic Beam	Apply default beaming as determined by the current <a href="#">time signature</a> (see <a href="#">above</a> ).
	Feathered beam, slower	Start feathered beam to indicate gradually slower tempo.
	Feathered beam, faster	Start feathered beam to indicate gradually faster tempo.

**Note:** Be aware that the beam between two notes/rests is determined by both of the note/rests. For example: Two consecutive notes with a status of start beam here will not have a beam between them. If the two consecutive notes are willing to connect to each other they will beam, if one of them is not willing, the two notes will not beam.

### Adjust beam angle

To adjust with the keyboard or mouse:

1. Enter [edit mode](#) on the note beam—the right adjustment handle is automatically selected.
2. Use the up/down arrows or drag the right end handle to change the angle of the beam;
3. Press `Esc` to exit edit mode.

To adjust with the [Inspector](#):

1. Click on a note beam.
2. Tick the "User position" box in the "Beam" section of the **Inspector**;
3. Set the "Position" values to get the desired beam angle.

## Adjust beam height

To adjust with the keyboard or mouse:

1. Enter edit mode on the note beam—the right adjustment handle is automatically selected.
2. Press Shift+Tab or click the left handle to select it;
3. Use the up/down arrows or drag the left end handle to change the height of the beam;
4. Press Esc to exit edit mode.

To adjust with the Inspector:

1. Click on a note beam.
2. Tick the "User position" box in the "Beam" section of the Inspector;
3. Set the "Position" values as desired.

## Make beam horizontal

1. Select a note beam
2. Tick the "Force Horizontal" box in the "Beam" section of the Inspector;

**Note:** "Force Horizontal" in the "Beam" section of the Inspector can only be selected if "Custom position" has been deselected previously. This setting overrides the Custom Position values and automatically sets the horizontal bar to its original height.

If you want all note beams in the score to be horizontal there is a "Flatten all beams" option in Format → Style... → Beams. If this option is not selected, automatically inclined beams will be set according to the pitch of the connected notes. This global setting can be overridden for individual beams according to the methods described above.

## Adjust feathered beams

To adjust feathered beams:

1. Select a note beam.
2. Adjust the values in the "Grow left" and "Grow right" boxes in the "Beam" section of the Inspector.

## Local relayout

MuseScore spaces notes according to their time values, allowing for accidentals, lyrics etc. In systems where there is more than one staff, this may result in irregular note spacing, as in the following example:



**Local relayout** is a tickbox option in the Inspector allowing you to specify those passages in the score where you want the note spacing to be independent of other staves in the system. Applying "Local relayout" to the note beams in the top staff of the previous example results in a more even distribution of notes:



To do a local relayout:


1. Select one or more note beams.
2. Tick the option **Local relayout** in the "Beam" section of the Inspector.

## Flip note beam

To flip a beam from above to below the notes, or vice-versa:

1. Select one or more note beams.

2. Use any of the following options:

- Press the x key;
- Press the "Flip direction" icon, , in the toolbar.
- Select a "Direction" option (Auto, Up or Down) in the "Beam" section of the [Inspector](#).

## Reset Beam Mode




To restore beams to the mode defined in the local time signatures:

1. [Select](#) the section of the score you want to reset. If nothing is selected, the operation will apply to the whole score;
2. Select Format → Reset Beams.

## See also

- [Cross-staff notation](#)
- [Edit mode](#)
- [Note input](#)
- [Change default beaming](#)

## External links

- [How beams work](#)  (MuseScore Tutorial)
- [How to add a beam over a rest](#)  (MuseScore HowTo)
- [How to place a beam between notes](#)  (MuseScore HowTo)

## Brackets

MuseScore provides **brackets** and a curly **brace** in the **Brackets palette** ([Advanced workspace](#)).



When a new score is created using a template, MuseScore automatically sets the correct brackets.

### Add

To add a bracket or brace to systems, use one of two methods:

- Select a measure on the staff where you want the bracket/brace to start, and click the desired icon in a palette (double-click in versions prior to 3.4).
- Drag a bracket/brace icon from a palette on to the staff where you want the bracket/brace to start.

### Delete

- Select the bracket and press Del.

### Change

- Drag the desired icon from a palette onto an existing bracket/brace in the score.

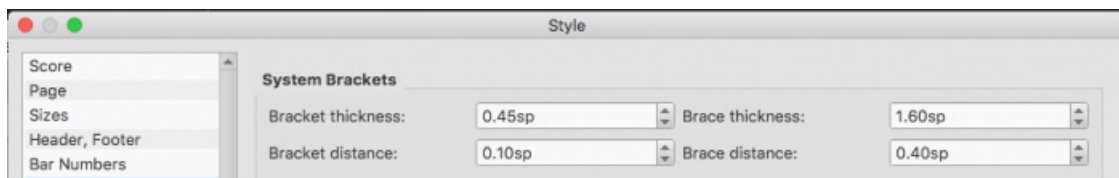
### Edit

When you first apply a bracket it only spans one staff. To extend to other staves:

1. Enter [Edit mode](#).
2. Drag the handle downwards to span the required staves. The handle snaps into position, so exact placement is not required.

### Style

The default thickness and distance from the system of brackets and braces can be adjusted in [Format → Style... → System](#).



In the **System Brackets** section, you can set the properties for the brackets in the two boxes on the left, and the properties for the braces in the two boxes on the right.

## Breaths and pauses

**Breath** and **pause** markings are available in the **Breaths & Pauses** [palette](#) (Advanced [workspace](#)).



### Add symbol

To add a breath, or pause (aka *caesura* / "tram lines" / "railroad tracks") to the score, use one of the following options:

- Select a note or rest and click a breath or pause symbol in a palette (double-click in versions prior to 3.4).
- Drag a breath or pause symbol from a palette onto a note or rest in the score.

The symbol is placed *after* the note. Its position can be adjusted by editing the X and Y offsets in the [Inspector](#), or, in [edit mode](#), using the [arrow keys](#).

### Adjust pause length

You can adjust the pause length (in seconds) of the added symbol in the [Inspector](#).

## Grace notes

A **grace note** is a type of musical ornament, usually printed smaller than regular notes. The **Short grace note**, or [Acciaccatura](#), appears as a small note with a stroke through the stem. The **Long grace note**, or [Appoggiatura](#), has no stroke.

### Create grace notes

Grace notes can be found in the "Grace notes" [palette](#) in the Basic or Advanced workspace.



### Add a grace note

Use one of the following methods:

- Select a regular note and click a grace note in [palette](#) (double-click in versions prior to 3.4).
- Drag a grace note symbol from a palette onto a regular note.
- Select a note and press / to create an acciaccatura only.

This will add a grace note of the same pitch as the regular note. To add a *sequence* of grace notes to a regular note, simply repeat the above actions as many times as required. See also, [Change pitch](#) (below).

*Note:* When a grace note is added to the score, a slur *is not* automatically created with it, so the latter needs to be added separately. See [Slurs](#).

### Add a chord of grace notes

Grace note chords are built up just like regular chords:

1. Enter the first note of the chord as shown above
2. Select this first grace note and enter subsequent notes as you would for any other regular chord (i.e. Shift+A...G).

You can also create a grace note chord by using the **add interval** shortcut in step 2: Alt+1...9 for intervals from a unison to a ninth above.

## Change pitch

The pitch of a grace note can be adjusted just like a regular one:

1. Select one or more grace notes
2. Adjust pitch using the keyboard arrow commands, namely:
  - ↑ or ↓ to increase or decrease the pitch by a semitone;
  - Alt+Shift+↑ or Alt+Shift+↓ to increase or decrease the pitch one step at a time, according to the key signature.

## Change duration

- Select the grace note and either click a duration icon on the toolbar, or apply the duration with the appropriate keyboard shortcut: i.e. 1...9 (see [Note input](#)).

## Manual adjustment

### Horizontal position

To adjust the horizontal space between a grace note and its regular parent note, use one of the following:

- Go into [edit mode](#) on the grace note, then use the left/right arrow keys to reposition as desired.
- Select the grace note and change the X-offset value in the [Chord](#) section of the Inspector.

### Other adjustments

Various other properties of the grace note can be adjusted in the [Inspector](#) (see "[Element](#)", "[Chord](#)", and "[Note](#)" sections) —such as vertical position, size, stem properties etc. The exception is "Leading space" which only applies to standard notes.

## External links

- [Grace note](#) ↗ at Wikipedia
- [Appoggiatura](#) ↗ at Wikipedia
- [Acciaccatura](#) ↗ at Wikipedia

## Hairpins

**Hairpins** are symbols used to indicate gradual changes in volume in the score. There are two kinds: **crescendo** (getting louder) and **decrescendo** (getting quieter).



## Add a hairpin

1. [Select](#) a range of notes or measures;
2. Use one of the following shortcuts:
  - <: to create a crescendo hairpin.
  - >: to create a diminuendo hairpin (decrescendo).

Alternatively, use one of the following options:

- Select a range of notes or measures, and click a hairpin in a palette (double-click in versions prior to 3.4).
- Drag and drop a hairpin from a palette onto a staff line.

## Adjust length and height

A **hairpins** is a type of [Line](#) with [playback properties](#), and its **length** is adjusted similarly:

1. Enter [edit mode](#) on the hairpin. Then click on the end handle that you want to move:



2. Use one of the following shortcuts:

- Shift+→ to move the end handle, and its anchor, right by one note or rest.
- Shift+← to move the end handle, and its anchor, left by one note or rest;

This method of extending or shortening the hairpin maintains playback integrity and allows it to cross line breaks:



3. To fine-tune the horizontal position of an end-handle (without changing playback), use the following shortcuts:

- → to move the handle right by 0.1 sp.
- ← to move the handle left 0.1 sp.
- Ctrl+→ (Mac: Cmd+→) to move the handle right one sp.
- Ctrl+← (Mac: Cmd+←) to move the handle left one sp.

### To change the height of a hairpin

- Adjust the lower handle at the mouth of the hairpin (e.g. the blue square below):



### Cresc. and dim. lines

In addition to hairpins, there are *cresc.* \_ \_ \_ and *dim.* \_ \_ \_ lines with the same function in the Lines palette. You can adjust the text, if desired, in the **Text Line Core** section of the Inspector.

### To turn a hairpin into its equivalent text line

- Select the hairpin and, in the **Hairpin** section of the **Inspector**, select the appropriate line from "Type."

### Copy hairpins

From version 3.1, a hairpin can be cut, copied and pasted just like a text element: see Summary of cut / copy / paste commands.

For versions prior to 3.1, you can only duplicate a hairpin: see Copying lines.

### Edit hairpin properties

Properties of the hairpin can be edited in the Inspector, as follows:

- **Element:** Edit the Y offset to change the height of the hairpin above or below the staff.
- **Line:** Edit line properties such as color, line style and thickness.
- **Text line core:** Add text and set text properties.
- **Hairpin:**
  - **Type:** Change the type of hairpin: crescendo, decrescendo or text.
  - **Circled tip:** Tick box to activate.
  - **Height:** The width at the mouth of the hairpin.
  - **Continue height:** The width of the hairpin at the end of a system, before it continues to the next system.
  - **Placement:** Set hairpin above or below the staff.
  - **Dynamic range:** Specify whether hairpin playback applies to a staff, part (default) or a system.
  - **Velocity change:** ... across the span of the hairpin; from 0 to 127.
  - **Use single note dynamics** (as of version 3.1): When checked (default), allows the hairpin to change the dynamic of a single note if the instrument supports single note dynamics.
  - **Dynamic Mode** (as of version 3.1): Set the method used to change the dynamic: Linear (default), Ease-in and out, Ease-in, Ease-out, or Exponential.

### Playback of hairpins

By default, a hairpin always affects playback when it spans a series of *separate* notes. In addition, for instruments

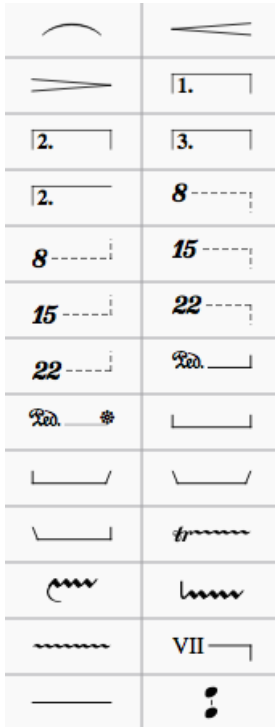
supporting single note dynamics (e.g. strings, brass etc.), playback is also enabled across a *single* note or series of *tied* notes. (Note: Prior to version 3.1 hairpins only affected playback *between* notes, not that of single or tied notes.)

A hairpin only affect playback if there are *appropriate dynamics* somewhere *before* and *after* the hairpin. For example, a crescendo between *p* and *f* dynamics *will* affect playback; but a diminuendo between *p* and *f* will be ignored. And if there are two or more crescendos between *p* and *f*, all but the first will be ignored.

A hairpin may be used without dynamic marks, by adjusting "Velocity change" in the Inspector (values in the range 0 to 127).

## Lines

The Lines palette of the Advanced workspace contains the following lines:



As you can see, the palette includes: Slurs, Hairpins, Volta brackets, Octave lines, and many others.

### Applying lines to the score

Most lines (except Slurs, Volta brackets and the Ambitus) can be applied from a palette in the following ways:

#### To apply a line to *just* one note

1. Click on a note, then Ctrl+Click on the next note;
2. In a palette, click on a line (double-click in versions prior to 3.4).

#### To apply a line across a range of notes

1. Select a range of notes;
2. In a palette, click on a line (double-click in versions prior to 3.4).

#### To apply a line from a note to the end of that measure

Use any of the following methods:

- Click on a note, then, in a palette, click on a line (double-click the latter in versions prior to 3.4).
- Drag and drop a line onto the score.

#### To apply a line across a range of measures

1. Select one or more measures;
2. In a palette, click on a line (double-click in versions prior to 3.4).

### Lines and playback properties

Some lines, such as [Hairpins](#), [Voltas](#), [Ottavas](#) etc., also have an effect on the *playback* of the score itself. Each **end handle** is connected by a dotted line to an [anchor](#) on the staff (visible in [Edit mode](#)). These anchors indicate the *extent* of the playback effect.

## Adjust vertical position

In [Normal mode](#), apply one of the following methods:

- Click on one or more lines and change the vertical offset in the [Inspector](#);
- Click on a line, press and hold **Shift** and drag it up/down with a mouse.

**Note:** You can also adjust the vertical position in [Edit mode](#).

## Change length

**Note:** The following two methods move the end of the line *and its anchor together*. This ensures that correct playback of the score is maintained (if applicable), and that the line can be extended between [systems](#) if required.

### Using keyboard shortcuts

1. Enter [Edit mode](#) and click on an end handle;
2. Apply one of the following shortcuts:
  - **Shift+→** to move the end handle, and its anchor, to the right by one note (or, in the case of [Voltas](#), one measure)
  - **Shift+←** to move the end handle, and its anchor, to the left by one note (or, in the case of [Voltas](#), one measure);

### By dragging (as of version 3.5)

- Click on the end handle of a line and drag it with the mouse.

### Fine adjustment

To make **fine adjustments** to the position of the line end (without changing the position of the anchor):

1. Enter [Edit mode](#) and click on an end handle;
2. Apply one of the following shortcuts:
  - **→** to move the handle right by **0.1sp** (1 sp = one staff space = the distance between two staff lines).
  - **←** to move the handle left 0.1 sp.
  - **Ctrl+→** (Mac: **Cmd+→**) to move the handle right one sp.
  - **Ctrl+←** (Mac: **Cmd+←**) to move the handle left one sp.

## Text lines

A **text line** is a line that has [text](#) embedded within it—such as a [volta](#), [ottava](#), guitar barre line etc.

When you apply a text line to the score from a palette, the *line* properties always remain unchanged, but the *text* properties may, under certain circumstances, assume those of the current [style](#) for text lines. For details, see [Behavior of applied text and lines](#).

## Custom lines

Any line in the score can be customized by adjusting its properties in the [Inspector](#), as follows:

1. Select the line;
2. If *line hooks* are needed, make a selection from **Begin hook**, **End hook** and **Height** (in the [Text Line Core](#) section);
3. To add *text*, tick **Begin Text**, **Continue Text** or **End Text**, then type in the "Text" box:
  - **Begin:** Text added here appears at the beginning of the line;
  - **Continue:** Text added here appears at the beginning of a continuation line (in the next system, if any);
  - **End:** Text added here appears at the end of the line;
4. Edit *text properties* and *alignment* as required;
5. Edit **Placement**: "Above" or "Below" sets the text so that it is on the line. "Left" places the text to the left of the line;
6. Make adjustments to the line color, thickness and style (solid, dashed etc.) in the [Line](#) section. The **Diagonal** option allows you to create a diagonal line by dragging the [end handles](#);
7. To save the result for future use, see [Custom palettes](#).

## Copying lines

Once applied to the score, lines cannot be copied using the usual [copy and paste](#) procedures. However, you can [duplicate](#) lines within a score:





- Press and hold Ctrl+Shift (Mac: Cmd+Shift), click on the line and drag it to the desired location.

## Extended ornament lines

To add an accidental to an extended ornament (e.g. a trill line), select the line and click on a symbol in the Accidentals palette (double-click in versions prior to 3.4).

## External links

- [Piano pedal marks](#)  at Wikipedia
- [Guitar Barre](#)  at Wikipedia

## Measure rests

### Full measure rest

A **whole rest**, centered within a measure (shown below), is used to indicate that an entire measure (or a voice within a measure) is silent, regardless of time signature.



#### To create one or more full measure rests

Use the following method if all selected measures are "standard"—i.e. with no custom durations:

1. Select a measure, or range of measures.
2. Press Del.

If one or more of the measures contains acustom duration, use the following method instead:

1. Select a measure, or range of measures.
2. Press Ctrl+Shift+Del (Mac: Cmd+Shift+Del).

#### To create a full measure rest in a *particular* voice

1. In the appropriate voice, enter a rest that extends for the full measure.
2. Make sure the rest is selected, then press Ctrl+Shift+Del (Mac: Cmd+Shift+Del).

## Multimeasure rest

A **Multimeasure rest** indicates a period of silence for an instrument: the number of measures is shown by the number above the staff.



Multimeasure rests are automatically interrupted at important points, such as double barlines, rehearsal marks, key- or time signature changes, section breaks etc. and also at measures that are set to break multimeasure rests.

#### To display multimeasure rests

To turn multimeasure rests on or off:

- Press M on your keyboard.

Alternatively:

1. From the menu, choose Format → Style...
2. Click on the "Score" tab, if it is not already selected;
3. Tick/untick "Create multimeasure rests". Here you can also set the minimum of empty measures to combine into a multimeasure rest (see also Layout and formatting: Score).

**Note:** It is recommended that you enter all notes in the score *first* before enabling multimeasure rests.

#### Break multimeasure rest

You may want to have a multimeasure rest divided into two multimeasure rests:

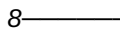

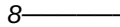

1. Ensure that the option to display multimeasure rests in the score is off (see above).
2. Right-click on the measure where you want the second multimeasure rest to start;

3. From the menu, choose **Measure Properties** and tick "Break multimeasure rest."

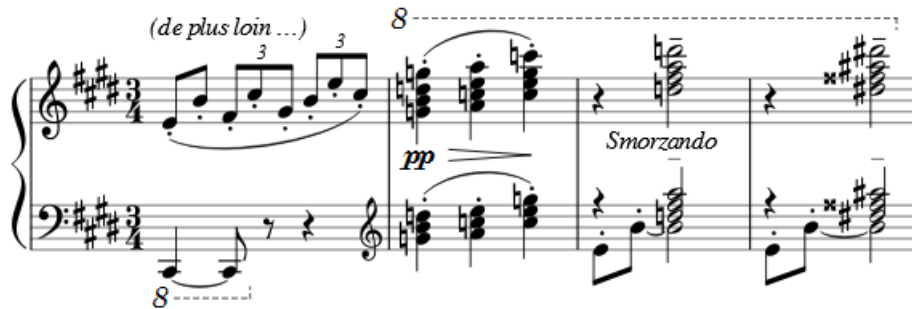
See also: [Measure operations: Break multimeasure rest](#)

## Octave lines

**Octave (Ottava) lines** are used to indicate that a section of music is to be played one or more octaves above or below written pitch: The line may be dotted or solid. Ottavas are available in the [Lines palette](#) of the Basic and Advanced [workspaces](#).

8  or 8va  : Play one octave above written pitch  
8  or 8va  : Play one octave below written pitch

8va alta/bassa lines are particularly common in piano scores, though they are sometimes used in other instrumental music.<sup>1</sup> 15ma alta (2 octaves above) and 15ma bassa (2 octaves below) are also occasionally used.



MuseScore automatically adjusts playback of the score under the ottava to the correct pitch.

### Apply an octave line

See [Applying lines to the score](#)

And to adjust the vertical position, see [Lines: Adjust vertical position](#).

### Change length

See [Lines: Change length](#).


### Custom lines

Ottavas can be customized just like any other line. See [Custom lines and line properties](#).

Properties unique to Octave lines can be adjusted in the **Ottava** section of the Inspector:

- **Type:** Change the Ottava line text.
- **Placement:** Set to "Above" or "Below" the staff.
- **Numbers only:** Untick for both number and text (e.g. "8va"). Tick for a number only (e.g. "8").

### External links

- [Octave](#)  at Wikipedia

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1. Gerou/Lusk. *Essential Dictionary of Music Notation* ([Internet Archive](#) ). ←

## Slurs

A **slur** is a curved line between two or more notes indicating that they are to be played *degato*—smoothly and without separation. Not to be confused with [Ties](#), which join two notes of the same pitch.

There are a number of ways to add a slur to a score, and all may be useful depending on the context (adding a slur from the [lines palette](#) is also possible but not recommended).

### Add slur in note-input mode

1. While in [Note input mode](#), type in the first note in the slurred section;
2. Press s to begin the slurred section;
3. Type in the remaining notes in the slurred section;
4. Press s again to end the slurred section.

## Add slur in Normal mode

### Method 1

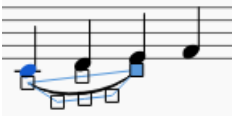
1. Make sure you are in Normal mode;
2. Select the note where you want the slur to start:



3. Press s to add a slur extending to the next note:



4. (Optional) Hold Shift and press → (right arrow key) to extend the slur to the next note. Repeat as required:



5. (Optional) Press x to flip the slur direction:



6. Press Esc to exit edit mode:



### Method 2

1. Make sure you are in Normal mode;
2. Select the note where you want the slur to start;
3. Choose one of the following options:
  - To add a slur to one voice *only*: Hold down Ctrl (Mac: Cmd) and select the last note that you want the slur to cover.
  - To add slurs to *all* voices: Hold down Shift (Mac: Cmd) and select the last note that you want the slurs to cover.
4. Press s.

## Adjust slur

If you only want to adjust the *position* of a slur:

1. Select the slur;
2. Use any of the following methods:
  - Drag the slur.
  - Adjust the horizontal and vertical offset values in the Inspector.

To adjust *all* the properties of a slur (length, shape and position):

1. Make sure you are *not* in note input mode;
2. Go into Edit mode on the slur;
3. Click on a handle to select it, or use Tab to cycle through the handles;
4. To move the *left and right handles* from note to note, use the following shortcuts:
  - Shift+→: Move to next note.
  - Shift+←: Move to previous note.
  - Shift+↑: Move to lower voice (voice 2 to voice 1 etc.).
  - Shift+↓: Move to higher voice (voice 1 to voice 2 etc.).
5. To adjust the position of *any* handle, use any of the following methods:
  - Drag the handle.
  - Use the arrow keys for fine adjustment (0.1 sp. at a time). For larger adjustments (1 sp. at a time) use Ctrl+→ ←

6. Press Esc to exit edit mode.

**Note:** The two outer handles adjust the start and end of the slur, whilst the three handles on the curve adjust the contour. The middle handle on the straight line is used to move the whole slur up/down/left/right.

### Extended slurs

A slur can span several systems and pages. The start and end of a slur is anchored to a note/chord or rest. If the notes are repositioned due to changes in the layout, stretch or style, the slur also moves and adjusts in size.

This example shows a slur spanning from the bass to the treble clef. Using the mouse, select the first note of the slur, hold down Ctrl (Mac: Cmd) and select the last note for the slur, and press **s** to add the slur.



x flips the direction of a selected slur.

### Dotted/dashed slurs

Dotted slurs are sometimes used in songs where the presence of a slur varies between stanzas. Dotted slurs are also used to indicate an editor's suggestion (as opposed to the composer's original markings). To change an existing slur into a dotted or dashed slur, select it and then in Inspector (F8) change Line type from Continuous to Dotted Or Dashed.

### See also

- [Tie](#)
- [Edit mode](#)
- [Note input](#)

### Ties


A **tie** is a curved line between two notes of the *same* pitch, indicating that they are to be played as one combined note (see [external links](#) below). Ties are normally created between adjacent notes in the same voice, but MuseScore also supports ties between non-adjacent notes and between notes in different voices.

In [note-input mode](#), if you specify a tie immediately after entering a note or chord, the program automatically generates the correct destination notes to go with the ties. Or, you can simply create ties "after the fact," between existing notes.

**Note:** Ties, which join notes of the *same* pitch, should not be confused with [slurs](#), which join notes of *different* pitches and indicate *legato* articulation.

### Add ties in Note Input mode

The following command adds an identical tied chord to the selected chord.

1. Ensure that a note is selected (i.e. highlighted). This can be a single note, or part of a chord.
2. Select a new [note duration](#) for the following note(s), if required (but see "Note" below).
3. Press + or the tie button, .


**Note:** This shortcut works, as described above, only if there is no chord following the selected note. If there is, then the duration is ignored and the tied note is added instead to the following chord.

### Add ties in Normal mode

#### Method 1

1. [Select](#) one or more noteheads in the "start" chord.



2. Press +, or the toolbar tie button, :




Ties will be created between the selected note(s) and the next available note(s) of the same pitch.

To remove ties, as of MuseScore 3.3.3, use the same command (toggle)

#### Method 2

This method ties all notes in the 'start' chord (where possible):

1. Select the stem of the 'start' chord;
2. Press +, or click on the toolbar **tie button** .

Ties will be created between all the notes in the selected chord and the following notes of the same pitches.

To remove ties, as of MuseScore 3.3.3, use the same command (toggle).

#### Add extra tied notes to a previously tied chord

Occasionally you may need to return to an existing tied chord in order to add one or more extra tied notes. In this case a different command is used. For example:



1. Add the extra notes to the first chord. e.g.



2. In Note input mode, and with any of the notes in the first chord selected, press **Alt++**. Corresponding notes are added to the following chord and the extra notes are tied:



#### Add ties to unison notes

A workaround is required to create ties between unison notes:

1. Create the first note as usual;
2. Any additional unison notes should be added at an interval *other* than unison: e.g. 2nd, 3rd, 4th etc.
3. Create a tied chord (as shown above): e.g.



4. Move the unison note(s) into position: e.g.




#### Flip a tie

x flips the direction of a selected tie, from above the note to below the note, or vice-versa.

#### See also

Slur

#### External links

- [How to create ties leading into a 2nd ending](#)  (MuseScore HowTo)

- [Ties \(music\)](#) ↗ at Wikipedia

## Tremolo

**Tremolo** is the rapid repetition of one note or chord, or a rapid alternation between two notes or chords. Tremolo symbols can be found in the **Tremolo palette** in the advanced [workspace](#): both one note and two note tremolos are possible.



A **one-note or one-chord tremolo** is indicated by strokes through the stem of the note or chord (or above/below if a whole note). E.g.



In a **two-note or two-chord tremolo**, bars are drawn between the notes. E.g.



Tremolo symbols are also used to notate drum rolls.

### Add a Tremolo

#### Single note/chord tremolo

1. If a single note, select that note; if a chord, select any note in the chord;
2. Click the desired symbol in the Tremolo palette (double-click in versions prior to 3.4).

Alternatively, you can drag the tremolo symbol onto the applicable note.

#### Two note/chord tremolo

1. Input the notes at half the desired final duration;
2. If a single note, select the first note of the pair; if a chord, select any note from the first chord;
3. Click the desired symbol in the Tremolo palette (double-click in versions prior to 3.4).

Alternatively, you can drag the tremolo symbol onto the applicable note.

**Example:** To enter a two-note tremolo with the duration of a half note (minim), enter two normal quarter notes (crotchets). After applying a tremolo symbol to the first note, the note values automatically double to half notes.

### External links

- [Tremolo](#) ↗ (Wikipedia)
- [How to create 'old style' and other special tremolos?](#) ↗ (MuseScore HowTo)

## Repeats and jumps

### Simple repeats

You can create a **simple repeat** by placing a **start** and an **end repeat barline** at the beginning and end of a passage. These can be applied from the *Barlines* or *Repeats & Jumps* palette.



**Note:** If the start of a repeat coincides with the *beginning* of a piece or *section*, the start repeat barline can be omitted if desired. Similarly, an end repeat barline can be omitted at the *end* of a score or section.




### 1st and 2nd endings

First create a simple repeat (as shown above), then apply the first and second time endings—see [Volta](#).

## Playback

### Turn repeat playback on/off

- Toggle the "Play Repeats"  button on the toolbar.

### Adjust repeat section playback

Simple repeats, such as the ones illustrated above, or "1, 2" volta sections, usually play back correctly first time. More complex repeats may need further adjustment as follows:

1. Ensure that the start and end barlines are correctly positioned. For a volta section, ensure that each volta, except the last one, terminates with an end repeat barline.
2. **In the case of a simple repeat**, where more than one repeat is needed, right-click on the measure containing the end repeat barline and select Measure properties. Adjust Play count so that it is equal to the number of times you want the section to play back.
3. **In the case of a complex volta section**, such as the following:






Make sure that the volta "Repeat list" is set up correctly—see [Volta properties](#). Right-click on the measure containing the end repeat barline and select Measure properties. Adjust Play count so that it is one greater than the number of measures listed in the Volta "Repeat list." In this case, since 5 measures are listed, the "Play count" needs to be set to 6.

## Repeat symbols and text

Text and symbols related to repeats are located in the **"Repeats & Jumps"** [palette](#) (in the Basic and Advanced workspaces). This palette contains:

- Symbols for measure repeat, Segno, Segno Variation (Serpent), Coda, and Coda Variation (Codetta)
- D.S., D.C., al Coda, al Fine, To Coda, and Fine text
- Repeat barlines

	
	
	Fine
To Coda	D.C.
D.C. al Fine	D.C. al Coda
D.S. al Coda	D.S. al Fine
D.S.	
	


To add a **repeat** symbol to the score use either of the following:

- Select a measure, then click the desired repeat symbol in the palette (double-click in versions prior to 3.4).
- Drag and drop a repeat symbol from the palette *onto* (not *above*!) the desired measure (so the measure changes color).

## Jumps

**Jumps** are symbols in the score which tell the musician to skip to a named marker (see below). Jumps include the various kinds of D.C. (Da Capo) and D.S. (Dal Segno) text.

To set correct playback of jumps:

- Make sure that the "Play Repeats"  button on the toolbar is selected. This is a toggle, so you can turn off playback by clicking the same button.
- *After* the jump, and following established convention, only the last round of any simple repeat section is played back. If you want playback to take these repeats in full:

1. Select the applicable jump symbol;
2. In the "Jump" section of the Inspector, check "Play Repeats".

**Note:** Jumps are taken only after all simple repeats in the section are played through.





If you click on a *jump*, some text boxes and a checkbox are displayed in the **Jump** section of the Inspector. These have the following effects on playback:

- **Jump to:** Playback jumps to the marker whose "Label" is the same as the "Jump to" tag.
- **Play until:** Playback continues until it reaches a marker whose "Label" is the same as the "Play until" tag.
- **Continue at:** Playback jumps to the next marker whose "Label" is the same as the "Continue" tag.
- **Play repeats:** Ticking this box tells MuseScore to play repeats after D.C. (Da Capo) or D.S. (Dal Segno) jumps. If this option is not ticked then simple Repeats are not taken after jumps and playback works as if it were the last repeat.

**Note:** The tags *start* and *end*, referring to the beginning and end of a score or section, are *implicit* and don't need to be added by the user.

## Markers

**Markers** are the places referred to by the jumps. A list of markers (in addition to the implicit "start" and "end") follows:

- : Segno (tag: *segno*)
- : Segno Variation (tag: *valsegno*)
- : Coda (tag: *codab*)
- : Coda Variation (tag: *varcoda*)
- **Fine:** (tag: *fine*)
- **To Coda:** (tag: *coda*)

If you click on a marker, the following properties appears in the **Marker** section of the Inspector:

- **Marker type:** This can be changed from the dropdown list, if required.
- **Label:** This is the (identifier) tag associated with the marker. See also Jumps (above).

## Examples of jumps

- **Da Capo (D.C.):** At the "D.C." sign, playback jumps to the start (i.e. to the implicit *start* tag) and plays the entire score or section again (i.e. up to the implicit *end* tag).
- **Da Capo (D.C.) al Fine:** At the "D.C. al Fine" sign, playback jumps to the start (i.e. to the implicit *start* tag) and plays the score up to the **Fine** (i.e. the *fine* tag).
- **Dal Segno (D.S.) al Fine:** At the "D.S. al Fine" sign, playback jumps to the **Segno** symbol (i.e. the *segno* tag) and then plays up to the **Fine** (i.e. the *fine* tag)
- **Dal Segno (D.S.) al Coda:** At the "D.S. al Coda" sign, playback jumps to the **Segno** symbol (i.e. the *segno* tag) and then plays up to the **To Coda** (i.e. the *coda* tag). Playback then continues at the **Coda** symbol (i.e. the *codab* tag).

**Note:** The properties (i.e. the tag names) of jumps and markers can be set via the Inspector.







You need to modify them if using multiple jumps and markers.

## See also

- [Barlines](#)
- [Volta](#)

## External links

- [MuseScore in Minutes: Repeats and Endings, part 2](#)  (video tutorial)
- [How to separate a coda from the rest of the score](#)  (MuseScore HowTo)
- [How to create a 2-measure repeat sign with playback](#)  (MuseScore HowTo)
- [How to use Jumps and Repeats](#)  (MuseScore HowTo)

## Tuplets



**Tuplets** are used to write rhythms beyond the beat divisions usually permitted by the time signature. For example, *triple* consists of three notes in the time of two:



And a *duplet* consists of two notes in the time of three:



### Create a tuplet

The exact method of tuplet entry depends on whether you are starting off in **Note input mode** or **Normal mode**. We'll start off with a simple example: the creation of an eighth note triplet.

#### Create a triplet in normal mode

1. Select a note or rest that specifies the full duration of the desired triplet group. In the case of an eighth note triplet, you will need to select a quarter note or rest—as in the example below:



2. Press the keyboard shortcut for a triplet, Ctrl+3 (Mac: Cmd+3); alternatively use the menu, Add → Tuplets → Triplet. This will give the following result:



3. The program automatically changes to note-input mode and selects the most appropriate duration—in this example an eighth note. Now enter the desired series of notes/rests. For example:



#### Create a triplet in note input mode

1. Ensure you are in note input mode (press N).
2. Navigate to the note/rest (or blank measure) where you want the triplet to start (use the left/right arrow keys as required).
3. Select a final duration for the whole triplet group. In the case of an eighth note triplet, click on the quarter note in the note input toolbar (or press 5 on the keyboard).
4. Press the keyboard shortcut for a tuplet, Ctrl+3 (Mac: Cmd+3); alternatively, use the menu, Add → Tuplets → Triplet. This creates a triplet number/bracket and appropriately divides the original note/rest (see image above).
5. The program automatically selects the most appropriate duration—in this example an eighth note—allowing you to immediately start entering the desired series of notes/rests.

#### Create other tuplets

To create other tuplets substitute one of the following commands at the relevant step above:

- Press Ctrl+2–9 (Mac: Cmd+2–9). 2 for a duplet, 3 for a triplet etc.
- From the menu, select Add → Tuplets, then click on the desired option.

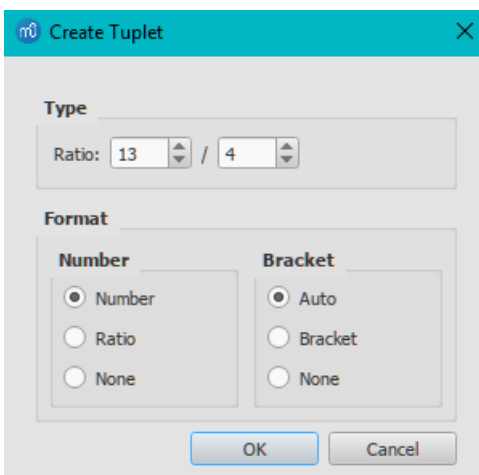
For more complex cases, see [below](#).

#### Custom tuplets

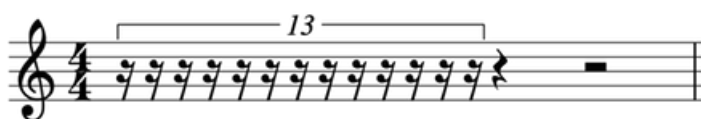
To create other tuplets than the default options (e.g. 13 sixteenth notes in the space of one quarter note):

1. In **Note input mode**, select a note duration equaling the total duration of the tuplet; or, if in **Normal mode**, select a note or rest of the desired overall duration;
2. Open the **Create Tuplet** dialog from the menu: Add → Tuplets → Other...;

- Select the desired number ratio (e.g. 13/4 for thirteen sixteenth notes in the space of a quarter note) under "Relation" in the "Type" section. Specify "Number" and "Bracket" using the radio buttons in the "Format" section;



- Click OK to close the dialog:



- Enter the desired series of notes/rests.

#### Triplet examples

<p>To obtain:</p>	<p>duration      after ctrl+3      enter notes</p>
<p>To obtain:</p>	<p>duration      after ctrl+3      enter notes</p>
<p>To obtain:</p>	<p>duration      after ctrl+3      enter notes</p>
<p>To obtain:</p>	<p>duration      after ctrl+3      enter notes</p>

#### Delete a tuplet

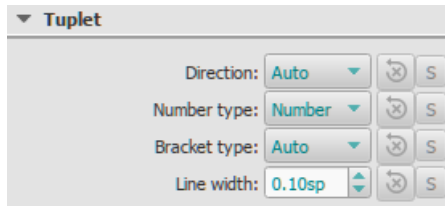
Use either of the following:

- Select the number or bracket and press Del.
- Select the entire tuplet, using the **shift + click method**, then press Del.
- Select any element of the tuplet, then in Inspector, in the bottom right corner, press the Tuplet button, then press Del.

## Change display of tuplets

### Using the Inspector

To change the display properties of tuplets in the score, select the tuplet numbers/brackets, and adjust the desired properties in the "Tuplet" section of the [Inspector](#):

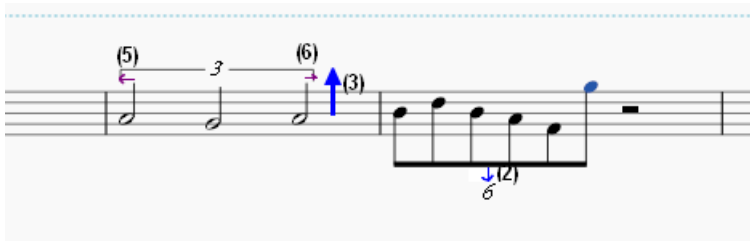


- **Direction:** 'Auto' places the bracket/number in the *default* position. 'Up' *always* places the bracket *above* the note heads; 'Down' *always* places the bracket *below* the note heads.
- **Number type:** Choice of 'Number', 'Ratio', or 'Nothing'.
- **Bracket type:** 'Automatic' *hides* the bracket for beamed notes and *shows* the bracket if the tuplet includes unbeamed notes or rests. 'Bracket' displays the bracket. 'None' hides the bracket.

### Using the Tuples Style dialog

To make fine adjustments to the way that *all* tuplets in the score are displayed: from the menu, select **Format** → **Style...** → **Tuplets**.

The legend below illustrates some of the properties that can be adjusted in the Tuples style dialog:



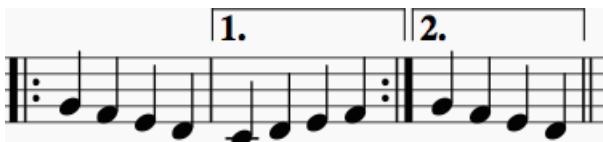
- (2) Vertical distance from stem.
- (3) Vertical distance from note head.
- (5) Distance before stem of first note.
- (6) Distance after stem of last note.

### External links

- [How to create triplets and other tuplets](#) (MuseScore HowTo)
- [How to create nonstandard tuplets](#) (MuseScore HowTo)
- [How To create triplets and other tuplets across measures](#) (MuseScore HowTo)
- [Tuplet](#) at Wikipedia
- [The User Guide to Tuplets in MuseScore](#) [video]

## Volta

Volta brackets, or first and second ending brackets, are lines used to mark different endings for a simple repeat. Score playback automatically follows the repeat indications.



### To add a volta to the score

Use one of the following methods:

- Select a measure, or range of measures and click a Volta icon in the [Lines palette](#) (double-click in versions prior to 3.4).
- Drag-and-drop a volta from the [Lines palette](#), then adjust the length as required (see below).

### To change the number of measures that a volta covers

1. Go into Edit mode on the volta. The end handle is automatically selected.
2. Press Shift+→ to move the end handle *forward* one measure. Press Shift+← to move the handle *backward* one measure. Repeat as required.

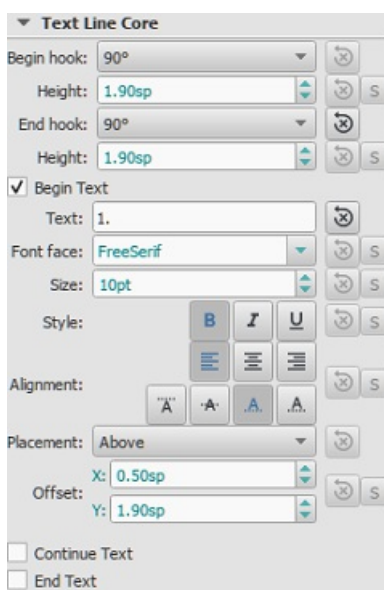
**Note:** When you select a start or end handle, a dashed line appears connecting it to an anchor point on the staff (see diagram, below). This anchor shows the position of the *playback* start/end points of the Volta. The shift commands change the anchor point so playback always remains in sync with the *visual* start/end points. To make fine adjustments to the *visual* start or end points, without affecting playback, use other keyboard arrow commands, or drag the handles with a mouse.



## Volta properties

### To make changes to Volta text

- Select the volta, and edit the properties in the **Text Line Core** section of the Inspector.



### To specify the order of repeats:

- Select the volta, and in "Repeat list" (**Volta** section of the **Inspector**) type in a number, or sequence of numbers separated by commas, to indicate the repeat(s) in which the volta is to be played.

For example, a **first ending** shows the number "1."; a **second ending**, the number "2." and so on. More complex repeats are also possible: e.g. a "Repeat list" displaying "1, 2, 4, 5, 7" indicates that the volta is to be played during repeats 1, 2, 4, 5, and 7, and so on.

**Note:** Each volta section, except the final one, needs to end with an end repeat barline.

## Playback

Sometimes a repeat plays more than two times. If you want to change the number of times MuseScore plays a repeat, go to the measure containing the end repeat barline and change its "Play count". See Measure operations: Other properties and the note on playback for voltas in Repeats and jumps.

### Play count

The play count of the measure with the end repeat barline must be set one higher than the number of times you want the measure to play (this is usually equal to the number of entries in that volta repeat list + 1).

Take the following score:



Measure 4 should have play count set to 4

Measure 6 should have play count set to 3

## External links

- [MuseScore in Minutes, Lesson 8: Repeats and Endings, Part 1](#)
- [How to create ties leading into a 2nd ending](#) (MuseScore HowTo)

## Transposition

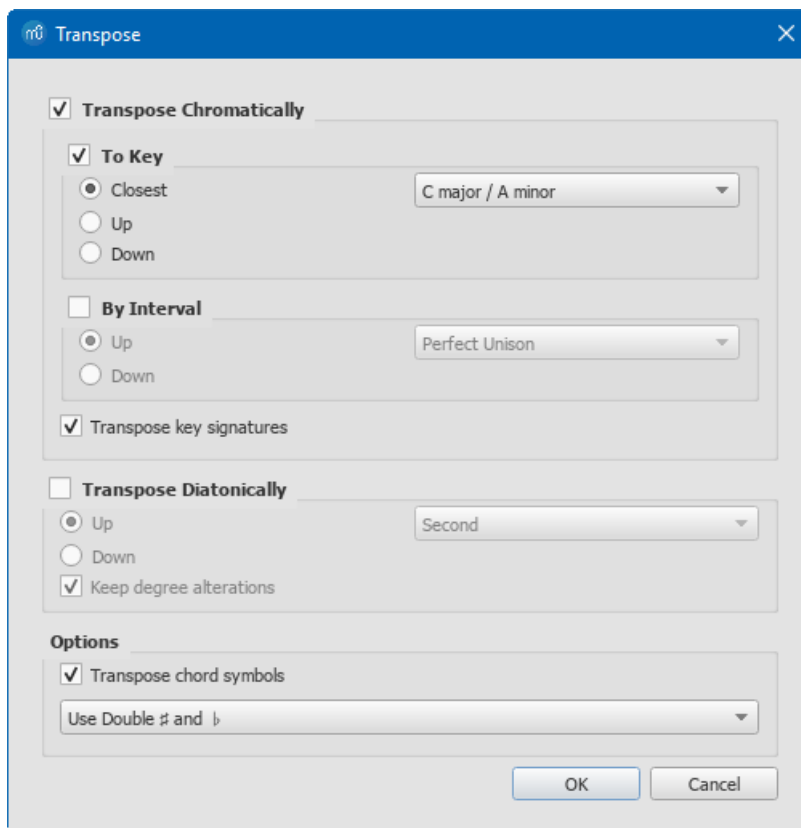
**Transposition** is the act of raising or lowering the pitch of a selection of notes by the same interval. You can choose to transpose notes either manually or by using the Transpose dialog.

### Manual transposition

1. Select the notes that you wish to transpose;
2. Use any of the following options:
  - **To transpose chromatically**: Press ↑ or ↓. Repeat as required.
  - **To transpose diatonically**: Press Alt+Shift+↑ or ↓. Repeat as required.
  - **To transpose by an octave**: Press Ctrl+↑ or ↓ (Mac: Cmd+↑ or ↓).

### Automatic transposition

MuseScore's **Transpose** dialog gives you more options for transposing notes.



**Note:** By default this dialog opens from the **Tools** menu, but you can also choose to open it using a keyboard shortcut (see [Preferences](#)).

### Transpose Chromatically

#### To Key

To transpose notes up or down to the desired key:

1. Select the notes you want to transpose; no selection equals "select all".
2. From the menu bar, choose Tools → Transpose....
3. Tick "Transpose Chromatically" and "To key".
4. Tick/untick "Transpose key signature" and "Transpose chord symbols" if required
5. Tick one of "Closest", "Up" or "Down" and select a destination key signature from the drop-down menu.
6. Click OK.

#### By Interval

To transpose selected notes up or down in semitone increments:

1. Select the notes you want to transpose; no selection equals "select all".
2. From the menu bar, choose Tools → Transpose....
3. Tick "Transpose Chromatically" and "By Interval".
4. Tick/untick "Transpose key signature" and "Transpose chord symbols" if required.
5. Tick "Up" or "Down"; and select a transposition interval from the drop-down menu.
6. Click OK.

### Transpose Diatonically

To transpose selected notes up or down by a diatonic interval:

1. Select the notes you want to transpose; no selection equals "select all".
2. From the menu bar, choose Tools → Transpose....
3. Tick "Transpose Diatonically".
4. Tick/untick "Keep degree alteration" and "Transpose chord symbols" if required.
5. Tick "Up" or "Down;" and select a transposition interval from the drop-down menu.
6. Click OK.

### Options

Two options are available for both Chromatic and Diatonic transposition mode in the options area:

- **Transpose chord symbols**, if required.
- And the choice of **Use Double # and b** or **Single # and b Only**

### Transposing instruments

**Transposing instruments**, such as the B-flat trumpet or E-flat alto sax, sound lower, or higher than their written pitch. MuseScore has a number of features to facilitate the scoring of these instruments.

#### Concert pitch

MuseScore's default viewing mode shows the musical notation in **written pitch**, but you can choose to display the score in concert pitch instead. In the latter mode, the musical notation of *all* instruments matches the actual pitches that you hear on playback.

- **To change the view to concert pitch:** Press the Concert Pitch button to highlight it.

You should ensure that the Concert pitch button is OFF before printing the main score or any parts.




#### Change staff transposition

Instrument transpositions are already set up in MuseScore. However, if you want a rare instrument or transposition that is not available in MuseScore, you may need to edit the instrument transposition manually.

1. Right-click an empty part of the instrument staff and select Staff/Part Properties...
2. At the bottom of the window, select the interval of transposition, any octave shifts, and whether the interval is "Up" (sounds higher than written) or "Down" (sounds lower than written).

You can also use the Change Instrument... button in the Staff/Part Properties window to automatically change the transposition to that of a different standard instrument.

### External links

- [How to transpose](#)  (MuseScore How-To)
- [Concert pitch or not?](#)  (forum discussion)
- [How to change enharmonic key signatures for transposing instruments](#)  (MuseScore How-To)

### Drum notation

Entering percussion notation is somewhat different to entering notation for pitched instruments (such as the piano or violin).

#### Percussion staff types

When you create a percussion staff using the New Score Wizard or the Instruments dialog, MuseScore automatically chooses the most appropriate staff type (1-, 3-, or 5-line) for the instrument: this can be changed, if required, using the "Staff type" column on the Choose instruments / Instruments page. Any additional changes (e.g. to a 2-line staff) can be made from the score itself (see Advanced Style Properties).

On a 5-line percussion staff, each instrument is assigned a vertical staff position (line or space) and a notehead shape. For a drumset, one or two voices can be used. If the latter, **voice 1** (the upper voice) usually contains (up-stem) notes played by the hands while **voice 2** (the lower voice) usually contains (down-stem) notes played by the feet (see image below).



## Note input methods

You can add notes to a percussion staff from any of the following:

- External MIDI keyboard;
- Piano keyboard (virtual);
- Computer keyboard;
- Mouse.

These methods can be used in any desired combination:

### MIDI keyboard

To add notes to a percussion staff from a **MIDI keyboard**:

1. Ensure that the MIDI keyboard is connected and functioning correctly.

**Note:** If you click on the percussion staff without entering note input mode, you can *demo* the percussion instruments from the MIDI keyboard.

2. Click on the note or rest where you want to start.
3. Enter note input mode.
4. Select the correct voice. For example, snares, sidesticks and all cymbals are normally added to voice 1; bass drum to voice 2.
5. Set note duration.
6. Press an instrument key to add a note to the score. To add another note at the same position, keep the first key held down while pressing the second key.

**Note:** Refer to a **GM2 drum map** for details about which MIDI keyboard key corresponds to which percussion instrument. Some keyboards (e.g., Casio) display percussion symbols next to the keys as an aid to the user.

### Piano keyboard

To add notes to a percussion staff from the virtual **Piano Keyboard**:

1. Ensure that the Piano keyboard is displayed. Press **P** (or select it from the menu, **View** → **Piano Keyboard**).

**Note:** If you click on the percussion staff without entering note input mode, you can *demo* the percussion instruments from the Piano keyboard.

2. Click on the note or rest where you want to start.
3. Enter note input mode.
4. Select the correct voice. For example, snares, sidesticks and all cymbals are normally added to voice 1; bass drum to voice 2.
5. Set note duration.
6. Click on a (virtual piano) key to add a note to the score.
7. To add another note to an existing one, press **Shift** and hold it while pressing the new note (in versions before 2.1, use **Ctrl** (Mac: **Cmd**)).

**Note:** Refer to a **GM2 drum map** for details about which piano key corresponds to which percussion instrument.

By default, the piano keyboard is docked at the bottom of the screen—to the left of the Drum input palette. However you can undock it by dragging, then dock the panel in several ways:

- Drag the panel downwards to the center and it will overlay the Drum input palette, full length. Both panels can then be accessed by **Tab**s.
- Drag the panel downwards to the right/left and it will dock to the right/left of the Drum input palette.

### Computer keyboard

To enter notes on a percussion staff using your computer keyboard:

1. Click on the note or rest where you want to start.
2. Enter note input mode. The Drum input palette now appears at the bottom of the screen (see [below](#)).
3. Select the desired note duration.
4. Press the shortcut key (A–G) for the instrument that you wish to enter—refer to the Drum input palette window.
5. If you wish to add another note to an existing one in that voice, press **Shift+[A–G]**.

**Note:** Voice allocation is determined by the color of the note in the drum input palette: blue for voice 1, green for voice 2.

#### Mouse

*To add a note to a percussion staff*

Use the following method to add *a new* note or to replace an *existing* chord.

1. Select the note or rest where you want to start. You can also select a measure.
2. Press **N** to enter note input mode. The Drum input palette now appears at the bottom of the screen (see [below](#)).
3. Set note duration.
4. Choose one of the following options:
  - Double-click a note in the Drum input palette.
  - Select a note (e.g. Bass drum, or Snare) in the Drum input palette, then click a note or rest in the score.

*To add a note to an existing chord in the percussion staff*

1. Ensure you are in note input mode.
2. Select a note duration equal to the note you are adding to.
3. Click on the new note in the Drum input palette.
4. Click above or below the existing note in the percussion staff.

**Note:** Voice allocation is determined by the color of the note in the drum input palette: blue for voice 1, green for voice 2.

#### Drum input palette

When a percussion staff is selected and note input mode is ON, a window opens at the bottom of the screen called the **Drum input palette**. This window is *essential* for mouse input, and displays shortcuts for computer keyboard input, but can be ignored if using a MIDI keyboard or the virtual Piano Keyboard.

Each note in the palette represents a percussion instrument: hovering the mouse pointer over the note displays the instrument name.



The letters A–G (shown above certain notes in the palette) are designated as shortcuts for entering particular instruments (bass drum, snare, closed hi-hat etc.), rather than referring to note pitches. They can be changed or reallocated as desired in the Edit Drumset window.

When the **Drum input palette** is open, double-clicking a note in the palette or entering a shortcut letter will add that instrument note to the percussion staff. The color of the note in the palette shows the voice allocated for that note—blue for voice 1, green for voice 2. This can be changed in the Edit Drumset dialog if required.

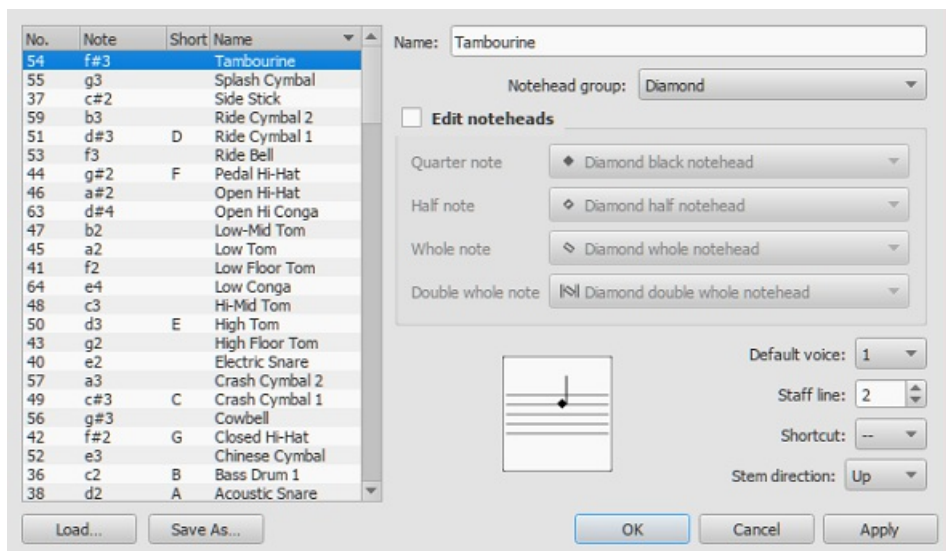
This voice allocation applies only to keyboard and mouse entry of notes: entry via a MIDI keyboard or the virtual Piano keyboard allows any voice to be used.

#### Edit Drumset

To open the **Edit Drumset** window, use one of the following options:

- Click on the **Edit Drumset** button at the left of the **Drum input palette**.
- Right-click on a percussion staff and select "Edit Drumset...".





The **Edit Drumset** dialog displays the percussion instruments available and the MIDI notes/numbers to which they are allocated. It also determines how each instrument is displayed on the staff— its name, position, notehead type and note-stem direction. *Any changes made here are automatically saved in the parent MuseScore file*

Clicking on a row in the left-hand column allows you to edit the display properties for that note as follows:

- Name:** The name you want displayed in the Drum input palette when you mouse over the note. Leave empty to remove this note from the Drum input palette.
- Notehead group:** Choose a notehead for that instrument from a drop-down list of options (*Note:* choosing "Custom" activates "Edit noteheads" (below).
- Edit Noteheads:** Allows you to customize the display further by specifying the noteheads for particular note durations.
- Default voice:** Assign to one of four voices. This does not affect input from a MIDI keyboard or the virtual Piano keyboard.
- Staff line:** This number indicates the staff line/space on which the note is displayed. "0" means that the note is displayed on the top line of the 5-line staff. Negative numbers move the note upwards step by step, while positive numbers move it downwards in the same way.
- Shortcut:** Assign a keyboard shortcut to enter that note.
- Stem Direction:** Auto, Up or down.

The customized drumset can be saved as a .drm file by pressing **Save As...** You can also import a customized drumset using the **Load...** button.

## Sticking

To enter sticking symbols (R, L):

1. Select a start note;
2. From the menu, select **Add → Text → Sticking**. Alternatively, set up a keyboard shortcut to do the same thing in **Preferences**;
3. Input the symbol just as you would normal text. To move forward or backwards to the next note, use the same keyboard shortcuts as for chord symbols.
4. To exit, press **Esc**, or click on a blank section of the score.

## Add drum roll

To create a drum roll, use a Tremolo.

## External links

- [How to create jazz drum notation](#) [MuseScore How-To]
- [Video tutorial: MuseScore in Minutes: Lesson 7 - Tablature and Drum Notation](#)
- [Drum Parts](#) [video]
- [Editing the Drum Palette in MuseScore 1.1](#) [video]
- [Saving Drumset Changes in MuseScore 1.1](#) [video]
- [Guide to Drum and Percussion Notation](#)

## Tablature

Music for fretted, stringed instruments is commonly notated using **tablature**, also known as **tab**, which provides a visual representation of the strings and fret numbers:

Tablature can also be combined with traditional staff notation:

### Create a new tablature staff

If you wish to create tablature as part of a new score, use the [New Score Wizard](#). If you want to add tablature to an existing score, use the [Instruments](#) dialog. Or, alternatively, you can [convert an existing standard staff](#). See below for details.

#### With the New Score wizard

To create tablature in a new score (for combined staff/tab systems see [below](#)):

1. Open the [New Score wizard](#).
2. Enter the score details (optional). Click **Next**.
3. On the **Choose template file** page, click on [Choose Instruments](#) under "General".
4. On the **Instruments** page, select the desired tablature in the "Strings – plucked" category, in the left-hand column. Then click **Add**.
5. Complete the rest of the New Score Wizard.

**Note:** If the desired tablature is not available in the **Choose Instrument** list, add a tablature staff anyway at step 4 (above). Then edit the tablature to your exact requirements using the [Staff/Part properties](#) dialog.

#### With the Instruments dialog

To add a single tablature staff to an existing score (for combined staff/tab system see [below](#)):

1. Open the **instruments** dialog (press **I**; or from the menu bar, select **Edit** → **Instruments...**).
2. Click on the staff to which you want to add another (linked or not).
3. Add the tab staff as described in [Add instruments](#) ("Create a new score").

#### By changing staff type

To convert an existing standard staff to tablature, or tablature to a standard staff:

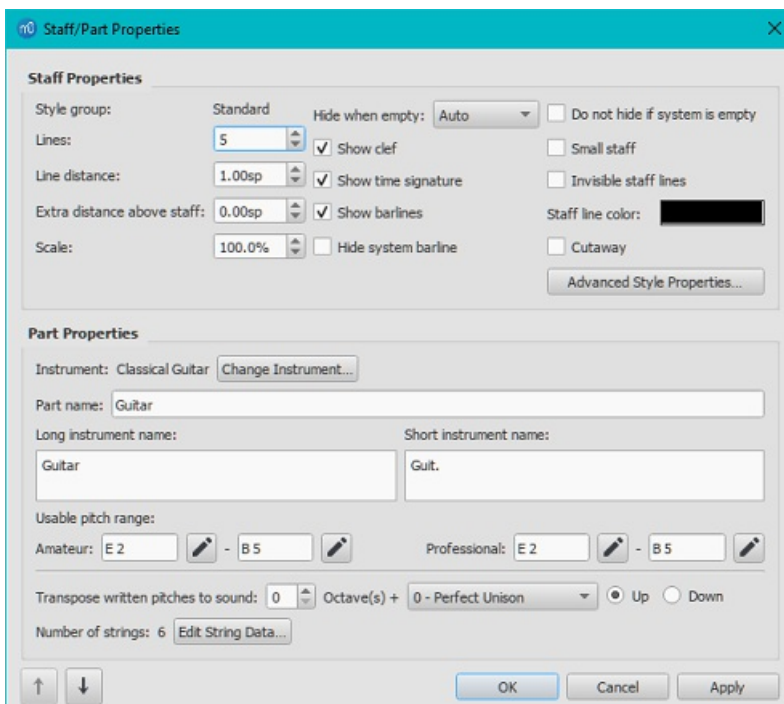
1. Right-click on the staff and select **Staff/Part Properties...** If "Instrument" is already set to a plucked-strings type, then go to step 3.
2. If "Instrument" is not a plucked-strings type, click on **Change instrument** and select an appropriate instrument from "Strings – Plucked."
3. Click on **Advanced Style properties**, select the appropriate tablature option from "Template", then press **<** **Reset to Template**. You can fine tune the display if necessary using the "Fret Marks" and "Note Values" tabs.
4. Click **OK** twice to exit.

### Edit string data

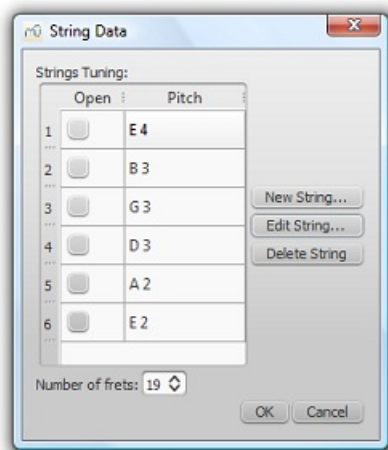
#### Change tuning

**Note:** If you only want to **view** (rather than change) the instrument tuning, follow steps 1 and 2 only.

1. Right-click on the staff and select **Staff/Part Properties...**



2. Press the Edit String Data... button at the bottom of the dialog box. The **String Data** dialog opens:



3. Click on a string pitch and select Edit String.... Or, alternatively, just double-click the string pitch.
4. Select a new pitch in the **Note Selection** box and click OK. Or, alternatively, just double-click the new pitch.
5. Click OK to close the "**String Data**" dialog box. Then click OK to close the "**Staff/Part Properties**" dialog.

**Notes:** (1) If tuning is changed when the tablature for that instrument already contains some notes, fret marks will be adjusted automatically (if possible); (2) Any change of tuning to a particular instrument applies *only* to the score at hand, and does not change any program default settings.

#### Add a string

1. Right-click on the staff, select Staff/Part Properties..., then press Edit String Data.
2. Click on a string pitch and select New String....
3. Select the new pitch and press OK—or, alternatively, just double-click the new pitch. The new string is inserted *below* the selected string.

**Note:** After adding a tablature string you will need to adjust the number of lines in the Staff/Part properties dialog.

#### Delete a string

1. Right-click on the staff, select Staff/Part Properties..., then press Edit String Data.
2. Click on a string pitch and select Delete String.

**Note:** After deleting a tablature string you will need to adjust the number of lines in the Staff/Part properties dialog.

#### Mark unfretted string "open"

This feature is used to mark a (bass) course as unstopped (i.e. like a harp string, only played in the open position): as on a Baroque lute or Theorbo etc. This means that only "0" (zero) or "a" is accepted as a fret mark: any other fret mark will be converted to 0/a.

1. Right-click on the staff, select *Staff/Part Properties...*, then press *Edit String Data*.
2. Check one or more boxes in the "Open" column.

#### Change number of instrument frets

This property defines the maximum fret number which can be entered on a tablature staff.

1. Right-click on the staff, select *Staff/Part Properties...*, then press *Edit String Data*.
2. Select or enter a new number in the **Number of frets** spin box.

#### Change tablature display

##### From Staff / Part Properties

To access the full range of tablature display options, use the **Staff / Parts Properties** dialog:

1. Right-click on the staff and select *Staff/Part Properties...*
2. Click on the *Advanced Style Properties...* button.

##### From the Instruments dialog

Some basic tablature display options are available from the *Instruments* dialogue:

1. Press the keyboard shortcut **I**; or from the menu bar, select *Edit → Instruments...*
2. Select a tablature type from the drop-down list under "Staff Type" in the right-hand pane:
  - **Simple**: Displays fretmarks only. Best for staff/tablature systems.
  - **Common**: Displays fretmarks, note stems and beams.
  - **Full**: Displays fretmarks, enhanced note stems, beams, and rests.
  - **Tab 6 str. Italian/French**: Historical tablature options for the lute.

The same options are available from the *Choose Instruments* page of the New Score Wizard.

#### Combine pitched staff with tablature

Plucked-string instruments—such as the guitar—are commonly notated using both a music staff and tablature (TAB) together. MuseScore gives you the option of having the two staves either **unlinked** or **linked**:

1. **Unlinked Staves**: The advantage of using this option is that each staff can be edited independently. To transfer music notation from one staff to the other, select the desired range and copy and paste it onto the other staff.
2. **Linked Staves**: The staves are "mutually updating": i.e. any change you make to the notation in one staff is immediately applied to the other staff as well.

**A note on fret mark conflicts**: When the same note is entered in two different voices, MuseScore tries to ensure that the fret marks do not overlap on the same string. Any overlaps which *do* occur are marked with red squares: these appear *only* in the document window and *not* on any printed copy. In almost all cases (e.g. frets 0 to 4 on the 6th string), overlapping is the desired result and no further adjustment is required. You can hide the red marks by selecting "View" and unticking "Show Unprintable."

#### Create a new staff/tablature pair with the New Score Wizard

1. Open the *New Score wizard*.
2. Enter the score details (optional). Click *Next*.
3. On the **Choose template file** page, click on *Choose Instruments* under "General".
4. Select a music staff (not tab) in the "Strings – Plucked" section of the left-hand column. Then click *Add*.
5. In the right-hand column, click on the newly-created line, labelled "Staff 1". This reveals the "Add Staff/Linked Staff" options in the centre column:
  - Click *Add Staff* to create an **unlinked** staff/tab pair.
  - Click *Add Linked Staff* to create a **linked** staff/tab pair.
6. In the **Staff type** column, click on the dropdown list for the newly-created staff and select a tablature option (this can be modified later, if required, on the score page—see *Staff/Part Properties*).
7. Change the staff order using the *↑* button if needed.
8. Complete the rest of the New Score Wizard, or click *Finish*.

*Note*: To create unlinked staves with separate mixer channels, instead of step "5" (above), select a Tablature staff in the left-hand column and click *Add*. Then continue with steps 6 and 7.

#### Create a new staff/tablature pair in an existing score

1. Open the **Instruments** editor (press **I**, or from the menu bar, select **Edit** → **Instruments...**).
2. Then follow steps 4–8 above.

### Create a staff/tablature pair from an existing staff

To add tablature to a plucked-string staff in the score (or vice versa):

1. Open the **Instruments** editor (press **I**, or from the menu bar, select **Edit** → **Instruments...**).
2. In the right-hand column, select the staff you want to create the staff/tab pair from, then follow one of the options shown in step 5 above.
3. Continue with steps 6–8 above.

### Enter notes in tablature

#### Using a computer keyboard

1. In **Normal mode**, select the measure or existing note from which you want to begin note entry.
2. Switch to note input mode (**N**): a short 'blue rectangle' appears around one tablature string: this is the *current string*.
3. Select the duration of the note or rest that you wish to enter (see [below](#)).
4. Press the up/down arrow keys to move the cursor to the desired string. Use the left/right arrow keys to navigate through the score.
5. Press 0 to 9 to enter a fret mark from 0 to 9 on the current string; to enter numbers with several digits press each digit in sequence. Keys A to K (skipping I) can also be used: convenient when working in French tablature. For L, M, N, use the alphanumeric keyboard and type respectively 10, 11, 12... (**Note:** You cannot enter a number higher than the "Number of frets" value set in the [Edit String Data](#) dialog).

Press ; (semicolon) to enter a rest of the selected duration.

6. You can enter notes in different [voices](#) if required—just as you would in a standard staff.

See also, [Edit notes](#) (below).

#### Historical tablature


Period notation for bass strings (lutes and sim.) is supported:

- **French tablature:** letters with prefixed slash-like strokes right under the tab body: i.e. 7th string: "a", 8th string: "/a", 9th string: "//a" and so on, all in the first position below the tab body.
- **Italian tablature:** numbers with 'ledger line'- like segment of string above the tab body: i.e. 7th string: "0" one position above the tab body with one 'ledger line'; 8th string: "0" two positions above the tab body with two 'ledger lines' and so on.

Input of fretmarks is via computer keyboard only: by moving the note entry cursor below (French) or above (Italian) the tab body, 'shadow' slashes or ledger lines will indicate the target string to which the fret mark will be applied; pressing one of the fret keys, will enter (and lay out) the note on that string.

#### Using a mouse

To enter notes into tablature with a mouse:

- Enter note input mode and select the note or rest duration (see [below](#)).
- Click on a string to create a note there. Notes are initially created on fret 0 (or a for French tablatures): to correct, type in the right number from the keyboard.
- You can also increase/decrease the fret mark using **Alt+Shift+↑** or **Alt+Shift+↓**.
- You can enter notes in different [voices](#)  if required—just as you would in a standard staff.

See also, [Edit notes](#) (below).

#### Select note duration

In note input mode, you can use any of the following methods to set note duration in tablature:

- Press **Shift+1** to **Shift+9**: Sets duration from a 128th note to a longa (availability of these shortcuts may depend on the platform and/or keyboard layout);
- Press **NumPad1** to **NumPad9**: Sets duration from a 128th note to a longa (if a numeric keypad exists and NumLock is on);
- Click on a note duration icon in the [Note Input toolbar](#) above the document window;
- Press **Q** to decrease the selected duration and **w** to increase it.

### Edit notes

## Change fret number

*In Note input mode:*

- Position the cursor above the fret mark and retype the desired number.
- Increment or decrement the fret mark using Alt+Shift+↑ or Alt+Shift+↓ (The fret mark automatically changes strings, if necessary, to achieve the lowest possible fret position).

*In Normal mode:*

1. Select one or more fret marks.
2. Use any of the following commands:
  - To increment or decrement, without changing the string: Press ↑ / ↓.
  - To increment or decrement, changing strings, when possible, to minimize the fret number: Press Alt+Shift+↑ / ↓.

**Note:** The fret mark cannot be higher than the "Number of frets" value set in the Edit String Data dialog.

## Change string number

To move the fret mark to an adjacent string without changing the pitch (if the string is free and can produce that note):

*In Note input mode:*

- Position the cursor over a fret mark, and press Ctrl+↑ / ↓ (Mac: Cmd+↑ / ↓).

*In Normal mode:*

- Select one or more fret marks, and press Ctrl+↑ / ↓ (Mac: Cmd+↑ / ↓).
- Drag a fret mark up or down to an adjacent string.

## Crosshead notes

To change a fret mark to a crosshead note:

1. Select one or more fret marks (in non-note-input mode).
2. Press Shift+X to toggle ghost noteheads on/off.

## Summary of keyboard commands

### Note input mode

<b>Type:</b>	<b>to get:</b>
↑	Select above string as current.
↓	Select below string as current.
Shift+1 to Shift+9	Select a duration (128th note to a longa)
NumPad 1 to NumPad 9	Select a duration (128th note to a longa)
Q	Decrease current input duration.
W	Increase current input duration.
0 to 9	Enter a fret digit / letter.
A to K	Enter a fret digit / letter ( excluded).
Alt+Shift+↑	Increase current fret mark.
Alt+Shift+↓	Decrease current fret mark.
;(semicolon)	Enter a rest

### Normal mode

<b>Type:</b>	<b>to get:</b>
0 to 9	Change <u>duration</u> of selected note or rest (128th note to longa)
Alt+Shift+↑	Increase the pitch of the selected note (MuseScore chooses the string).
↑	Increase the pitch without changing string.
Alt+Shift+↓	Decrease the pitch of the selected note (MuseScore chooses the string).
↓	Decrease the pitch without changing string.
Ctrl+↑ (Mac: Cmd+↑)	Move note to above string, keeping the pitch.
Ctrl+↓ (Mac: Cmd+↓)	Move note to below string, keeping the pitch.

Shift+X **Type:** Toggle the ghost notehead on/off **to get:**

## External links

- [Video tutorial: MuseScore in Minutes: Lesson 7 - Tablature and Drum Notation](#)

## Sound and playback

MuseScore has "Sound and playback" capabilities built-in. This chapter covers the playback controls and ways to extend the instrument sounds.

## External links

- [How to restore sound if playback stops working](#)

## Mid-staff instrument changes

When a musician is required to double on a different instrument for a section of a piece, the instruction to switch instruments is generally placed above the staff at the beginning of that section. A return to the primary instrument is handled in the same manner.

MuseScore enables users to insert a special class of text called **Change Instrument** text for this purpose. This class of text is different from either Staff or System text in that it links the text to the playback and changes the sound to the new instrument.

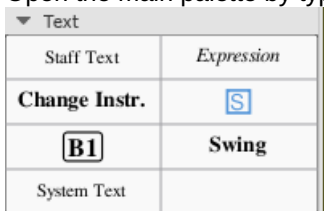
## Effect of instrument change

When an instrument change is made:

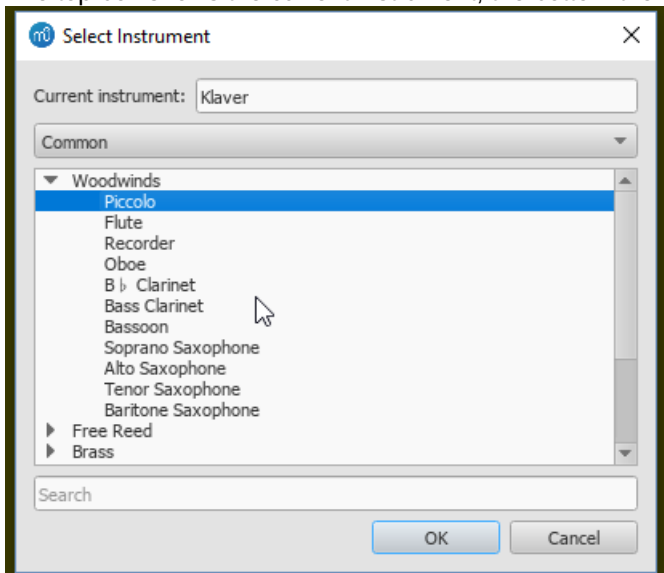
- The sound played will be changed to that of the new instrument from that point onward, but the mixer display remains unchanged.
- Subsequent notes are automatically adjusted to indicate the correct written pitch for the new instrument (but the new key signature still needs to be added manually—see below).
- The new instrument name will be displayed in front of the following systems.

## Add an instrument change

1. Select the start point of the change by clicking on a note or rest;
2. Open the main palette by typing F9 (or from the View menu), and click on **Text** to open the text sub-palette:



3. A click on the **Change Instr** text in the palette opens the dialog (double-click in versions prior to 3.4) The top box shows the current instrument, the bottom the list of selectable instruments;



4. Choose the instrument, then click OK. When an instrument is selected and the OK button is pressed, the text

indicating which instrument the player will use appears in the score.

5. Insert a new key signature, if required, at the change, for the staff in question.

**Note:** Mid-staff instrument changes are limited to the *same type of staff*. For example, you cannot change between a percussion staff and a pitched instrument staff or vice versa.

## See also

- [Change instrument](#)
- [Mid-staff sound change](#)

## External links

- [How to change instrument sound \(e.g. pizz., con sordino\) midway through score](#) (MuseScore HowTo)

## Mixer

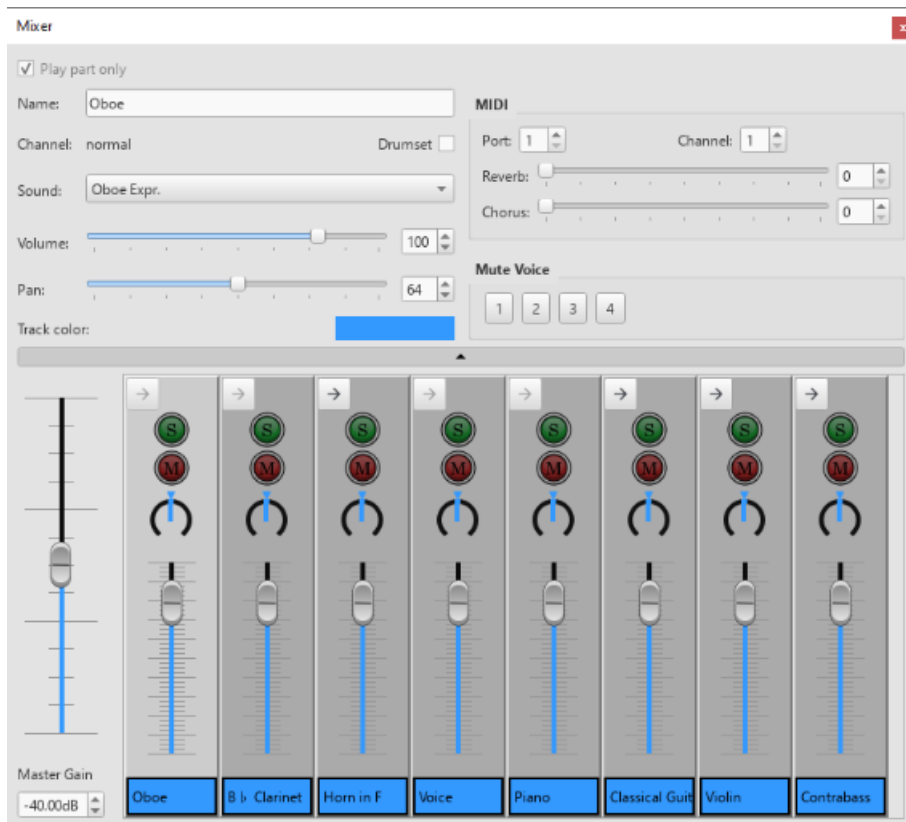
The Mixer allows you to change instrument sounds, adjust volume and panning, and make other adjustments to the playback for each staff.

### Opening the Mixer

To display/hide the mixer, use one of the following:

- Press F10 (Mac: Fn+F10).
- From the main menu, select View → Mixer.

The Mixer is split into a Details Area on the top and a Track Area below.

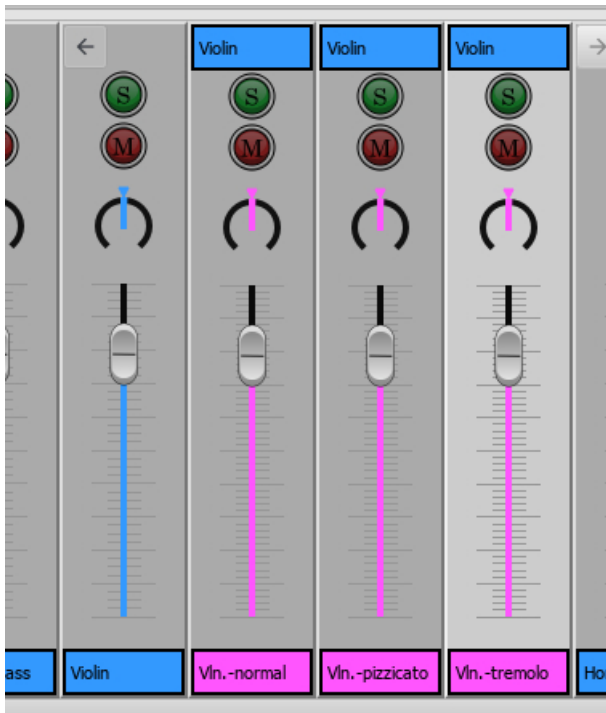


### Track Area

The track area is at the bottom and displays the Master Gain as well as a row of tracks. The Track Area displays allows you to adjust the volume of the instruments used by your staves. Clicking on one of the panels selects it, and also allows you to edit other instrument parameters, such as choice of instrument, name, pan, chorus, reverb, etc. in the Details area.

MuseScore creates one "part track" for each staff in your score. These part tracks can be further subdivided into "channel tracks" corresponding to the different sounds used within the staff. While many staves only need a single channel track, others require multiple channels so that the instrument can play more than one sound (e.g. a violin which can play in arco, tremolo or pizzicato voices); or because of a Mid-staff instrument change. These extra channel tracks can be shown or hidden by clicking the arrow button on top of the track control.





Expanded part track, showing the child tracks in pink.

### Master Gain

The Master Gain controls the overall output volume. To adjust it, click and drag the slider handle or enter a value in the box underneath.

### Channel display arrow

Every **part track** has a button on the top with an arrow on it, enabled, when that instrument has multiple channels, like e.g. violin (for arco, pizzicato, tremolo), disabled otherwise. When clicked, this will toggle whether the channel tracks of the staff are displayed next to it. **Channel tracks** do not have an arrow button. Instead, the name of the track they are a part of is displayed.

### Mute and Solo

At the top of each track is a green **solo** button and a red **mute** button: each can be toggled on or off. If any Solo button is checked then only tracks that have solo lit will play. If no solo is lit, all parts can potentially play. Mute does the opposite: any track that has mute lit will not play. By using a combination of mute and solo buttons, you can control which instruments are heard during playback.

### Pan

The dial below the mute button controls panning left and right. You can click and drag on the dial to change the pan value. **Note:** MuseScore does not yet support pan values for the part track, so the part track displays the pan value of the first channel instead. Setting the pan value of the part track will automatically set all of its children to the same value as well.

### Volume

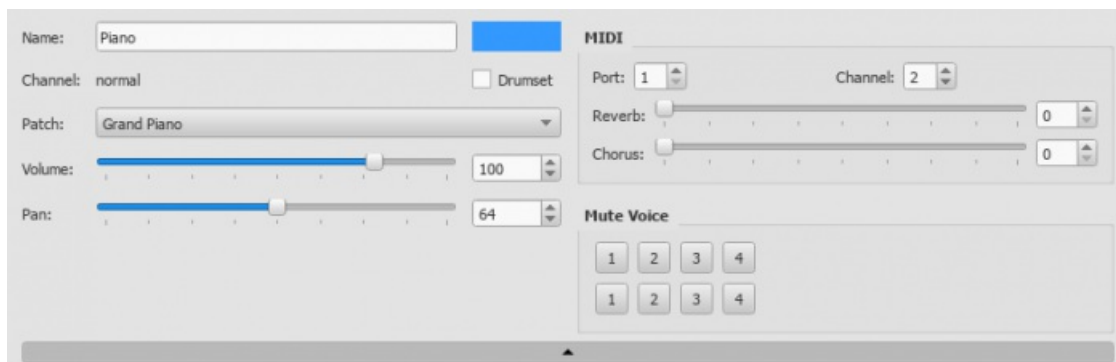
The slider in the middle of the track controls the playback volume. **Note:** MuseScore does not yet support volume values for the part track, so the part track displays the volume value of the first channel instead. Setting the volume value of the part track will automatically set all of its children to the same value as well.

### Track name

The text box at the bottom of the track contains the current name of the track's part or channel.

### Details Area

The details area displays and provides finer control of the currently selected track.



### Name

The name of the part this track is associated with. Both part tracks and channel tracks display the part name. **Note:** The part name is editable, but this only have effect for the Mixer. The channel name is not editable.

### Channel

If a channel track is selected, the channel name is displayed here.

### Drumset

Indicates if this part represents a melodic instrument or a drumkit. For regular melodic instruments, each pitch in the same patch usually has the same timbre, while drumkit patches usually have different timbres for each pitch.

### Sound (formerly Patch)

To change the sound in a track:

1. Click on the desired track so that its details appear in the [Details area](#).
2. Click on the "Sound" dropdown list and select another instrument.

The "Sound" drop-down menu lists every instrument supported by your current [SoundFont](#). If you have multiple SoundFonts loaded in the [Synthesizer](#), all the patches from all the SoundFonts (and/or SFZ files) will appear in the order set in the Synthesizer.

**Tip:** To find an instrument, click on the "Sound" list and type the first letter of the instrument name. Repeat as required.

### Volume

The overall loudness with which the sound is played.

### Pan

The panning applied to the part.

### Track color

To change the change the color of the track area:

- Click the colored rectangle to enter the color palette, and make the desired changes.

Setting the color of a part track will automatically change the colors of all its child tracks as well.

### MIDI controls

#### Port and Channel

The output MIDI port and channel the part is played on.

#### Reverb / Chorus

The reverb/chorus value sent to MIDI out. This is information sent to MIDI devices and will not affect MuseScore's built in audio playback

#### Mute Voice

This allows you to mute individual voices within each staff. Each row represents a different staff within a part. So pressing '2' on the top row will mute the second voice on the first staff of the part.

#### Hide Details Button

At the bottom of the detail area is a wide button with a tiny triangle on it. Clicking this button will hide the detail area to give you more room. Clicking on it again will restore the detail area.

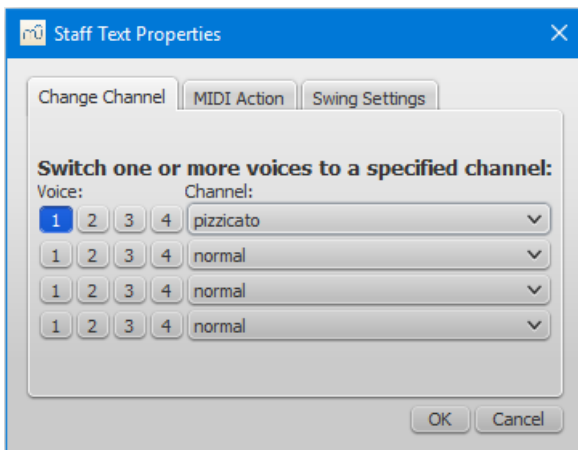
**Note:** From Preferences > Score it is possible to check the box Show MIDI controls in the Mixer to preset it expanded when opening the Mixer.

#### Mid-staff sound change (pizz., con sordino, etc.)

Some instruments come with multiple channels in the Mixer that can be used to change sounds midway through a score. For example, a staff for a stringed instrument (violin, viola, cello etc.) is allocated *three* channels: one for "arco" (or "normal"), another for "pizzicato" and another for "tremolo." A trumpet staff will have one channel for "normal" and another reserved for "mute," and so on.

The following instructions use pizzicato strings as an example, but the same principle can be applied to any other instrument staff that allows sound changes.

1. Select the first note of the section you want to be pizzicato;
2. From the main menu, choose Add → Text → Staff Text or use the shortcut Ctrl+T;
3. Type "pizz." This text is for visual reference only and does not affect playback;
4. Right-click on the applied staff text and select Staff Text Properties...;
5. In the "Change Channel" tab of the "Staff Text Properties" dialog, select one or more voices on the left;
6. From the dropdown menu, select pizzicato;



7. Click OK to return to the score.

Every note after the staff text you added now sounds pizzicato. To return to a normal strings sound later in the piece, follow the same guidelines as above except type "arco" in step 3 and select arco in step 6.

Most of the time it is far easier to just apply the corresponding text (pizz., tremolo, arco, mute, open, etc) from the Text Palette.

#### See also

- [SoundFont](#)
- [Synthesizer](#)
- [Change instrument](#)

#### External links

- [How to change instrument sound \(e.g. pizz., con sordino\) midway through score](#) (MuseScore HowTo)

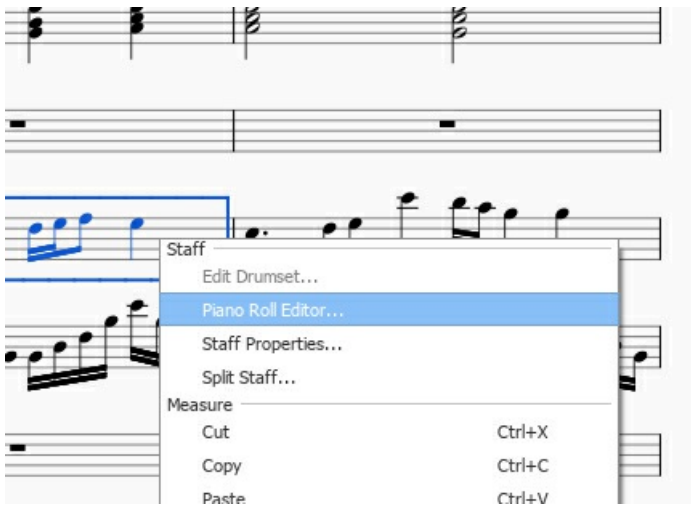
#### Piano Roll Editor

The Piano Roll Editor allows you edit individual notes and tweak aspects of their playback.

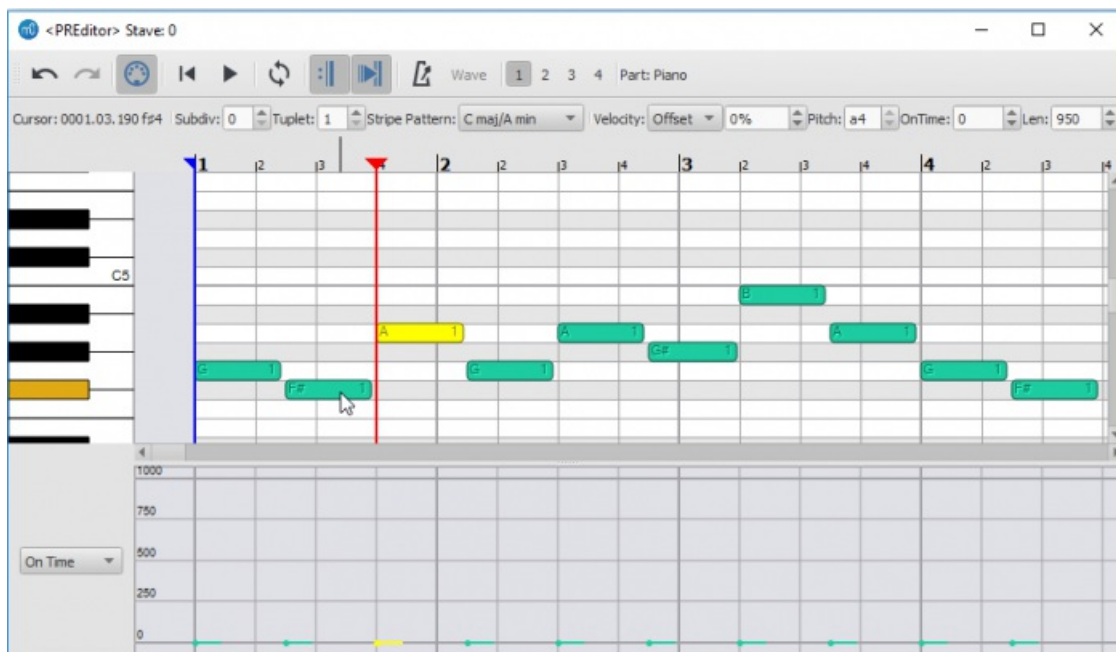
#### Opening the Piano Roll Editor

To open the Piano Roll Editor (PRE), right-click on a measure in the score and choose the Piano Roll Editor option from the context menu. The Piano Roll Editor will open showing the staff and measure where you clicked. If the Piano Roll

Editor is already open, it will be updated to show the new staff and measure you clicked on.



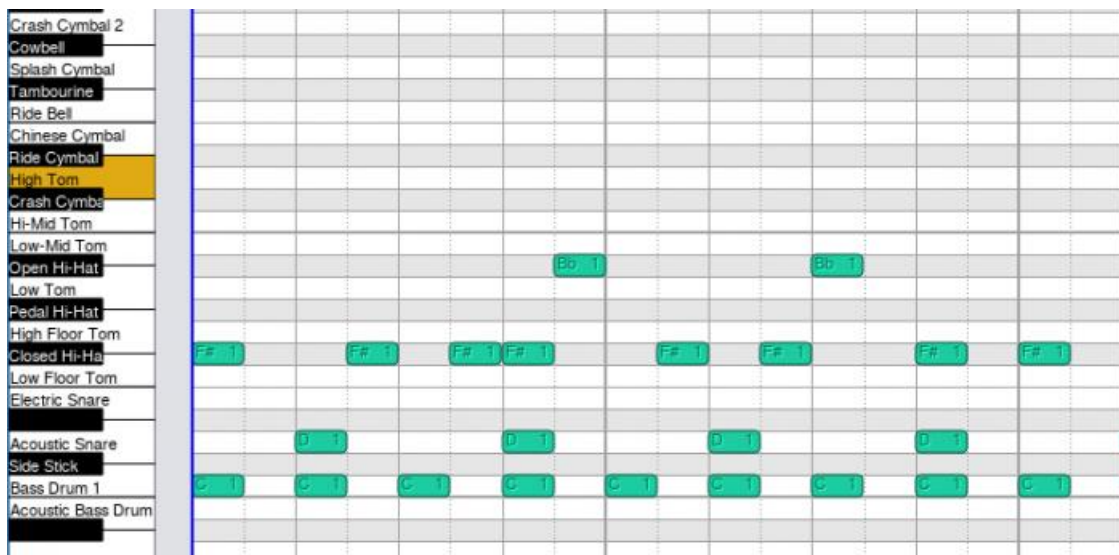
## Overview



The Piano Roll Editor is divided into several sections. At the very top is a row of buttons and controls that affect playback and can modify notes. The name of the part being edited is at the top right.

The central portion contains the **Note Display Area** which allows you to view and edit notes. Each note is displayed as a block, with yellow blocks representing selected notes, and darker green blocks representing unselected notes (these colors can be changes in the Preferences). Given sufficient space, each block will display its pitch on the left and the voice it is assigned to on the right. Changing the size of the note blocks is covered in the navigation section.

To the left of the Note Display Area is the **Keyboard**. By clicking on a key in the Keyboard, you can hear a sample of that note playing. As you move the mouse in either the Node Display Area or the Keyboard, a key on the keyboard will light, corresponding to the pitch you are over. You can also hover your mouse over a particular key to get more information about that pitch. If you are using a Drumkit, the keys of the keyboard will show the name of the drum assigned to that particular pitch. For instruments that are not concert C, the keyboard will be adjusted so that the C of the keyboard matches the C of the instrument.



Along the top of the Note Display Area is the **Measure Ruler** which displays the current position of the playback head, as well as the current looping range if it is set.

The bottom of the editor contains the **Levels Display Area**. It is a bar graph showing extra data values assigned to each note, such as its *velocity* or *cutoff* time. To the left of the Levels Display Area is a dropdown menu allowing you to select the type of data you wish to see displayed or edited.

## Navigation

There are several ways to move about in the Piano Roll Editor. First of all, you can click and drag on the scroll bars on the edges of the Note Display Area.

The mouse wheel can also be used to pan and zoom as follows:

- **Scroll vertically:** Mouse wheel.
- **Scroll horizontally:** Shift + mouse wheel.
- **Zoom vertically:** Ctrl + mouse wheel.
- **Zoom horizontally:** Ctrl+Shift + mouse wheel.

To jump to a particular measure, switch back to score view and find the measure you wish to see. Then right-click on the measure and select Piano Roll Editor. The Piano Roll Editor will scroll to center on the measure you clicked.

## Selecting Notes

In the Note Display Area, you can click on single notes or click and drag to select a group of notes. Holding down the modifier keys will affect how your selection changes:

- Shift: Invert existing selection: i.e. notes that were previously selected are deselected, and notes which were not selected are selected. Useful for toggling a note between selected and not selected.
- Ctrl: Add notes to selection.
- Ctrl+Shift: Subtract notes from selection.

## Editing Notes

**To change the pitch of a selection of notes** Drag a selected note up or down to a new pitch; or press the  $\uparrow$  or  $\downarrow$  arrows.  
*Note:* Dragging the note horizontally to change the start time is not supported at the moment.

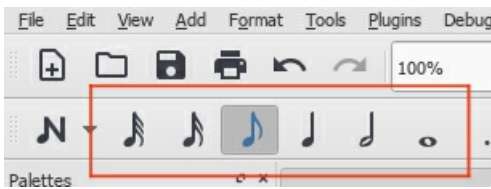
**To delete a selection of notes:** Press the Del key.

**To move a note selection to another voice:** Click the desired voice number button at the top of the editor.

**To add notes:**

Notes can be inserted by clicking in the Piano Note Area with the modifier keys held. These edit operations will use the beat or subbeat line to the left of the spot where you click as the point where a note is altered:

- Ctrl: A note of the current insert note duration will be added at the subbeat and pitch where you clicked. The note insert length is the same as the one you use to add notes in note entry mode in the score. If you wish to change the duration, you will need to select this in the Score View as the Piano Roll Editor does not currently have these buttons. If notes already exist in this location, a chunk will be cut out of them to make room for the note you are inserting, unless they happen to have the same start time and duration of the note you're adding, in which case the new note will simply be appended to the existing chord. Tuplets are currently not supported, and so will be ignored.

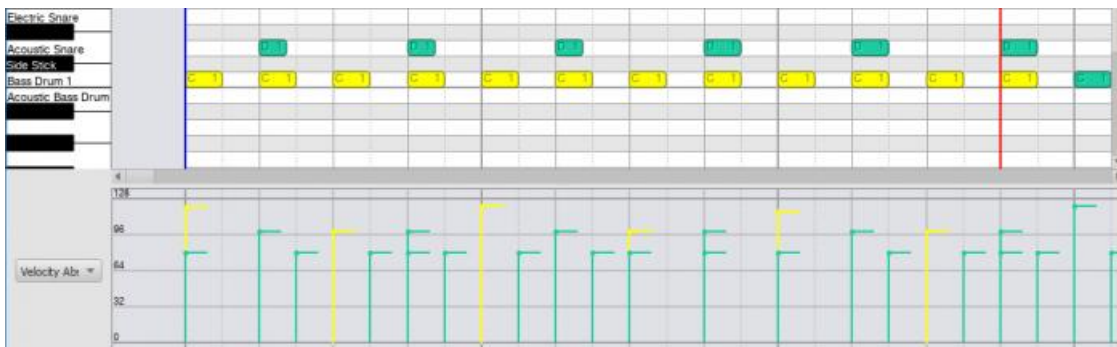


- Shift: Looks for a chord that already spans this subbeat line. If it finds one, appends a new pitch to the existing chord. Otherwise, this is a rest and the rest will be replaced with a note of equal start time and duration to the existing rest.
- Ctrl+Shift: Looks for a chord or rest that spans this subbeat. This chord will be cut in two at this subbeat line. Tuplets are currently not supported, and so will be ignored.

### To edit note event data:

Note event data can be changed in the Levels Display Area. To edit event data such as velocity or cutoff time, first select the notes you wish to edit in the note area. Then click in the Levels Display Area on the corresponding bar; the value of the level will be changed to correspond to the point where you clicked. You can also click and drag in this area to change the levels of several notes with a single gesture. If you want the levels to all be set to the same value, hold Shift while dragging. Only selected notes will have their value changed - this is to prevent you from accidentally changing the values of other notes.

The Levels area can display the same data in multiple ways. For example, velocity data can be displayed both as absolute (i.e., relative to the output midi volume) and relative (i.e., as an offset to the dynamics value). You can switch between these display modes as you see fit.



### Controls

From left to right the controls have these functions;

#### First Row

##### Undo

Undoes the last action

##### Redo

Redoes the last action

##### MIDI Toggle

Toggles MIDI input

##### Rewind

Rewind to start of score.

##### Play

Starts/stops playback.

##### Loop Playback

Sets the range of and toggles looping playback.

##### Play Repeats

Toggles whether repeats are played.

##### Pan Roll During Playback

If set, the window will automatically scroll to center on the playback head during playback.

##### Metronome

Toggle metronome.

##### Wave

Currently does nothing.

##### Voice Numbers

Moves selected notes to chosen voice.

##### Part

Name of part currently being viewed/edited.

#### Second Row

## Cursor

Provides feedback on the current measure and pitch of the position of the mouse within the Note Display Area.

## Subdiv

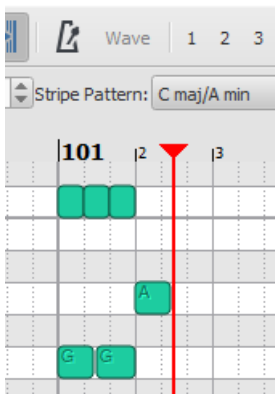
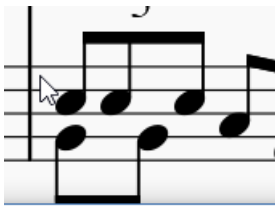
Subdivides the beat by adding extra divisions to the Note Display Area. The value indicated the number of time the beat will be subdivided. So for 4/4 time, a division of 2 will draw grid lines at every eighth note; a division of 3 at every sixteenth note, and so on. Setting the subdivision is necessary for some editing operations if you wish to place notes off the beat.

For larger numbers of subdivisions, you may need to be zoomed in to see the extra grid lines since grid lines are not drawn below a certain density. Combines with the tuplet control which also affects grid line placement.

## Tuplet

Adds additional grid lines, subdividing the beat to show the rhythmic placement of tuplets. For example, setting tuplets to 3 will show the beat subdivided into three parts. Combines with the subdiv control to show subdivisions of the tuplet. For example, setting tuplets to 3 and subdiv to 2 will draw grid lines showing the tuplet beats subdivided into two parts - i.e., the beat will be subdivided into 6.

Selecting a tuplet mode other than 1 will disable some of the note insertion tools for the Piano Roll Editor. For larger numbers of subdivisions, you may need to be zoomed in to see the extra grid lines since grid lines are not drawn below a certain density.



## Stripe pattern

Changes the pattern of stripes shown behind the notes in the Note Display Area. By default the pitches of C major are highlighted, but you can change this to highlight the pitches of a different key, or even scales such as the diminished or whole tone.

## Velocity

Shows the velocity of the currently selected note (only one note may be selected). Indicates the loudness of the note. This can be expressed as 'Offset' or 'User':

- Offset: Value is treated as a multiplier for the velocity already set by the dynamics.
- User: This is the raw value being sent to MIDI and overrides the dynamics value. Values are between 0 and 127, where 64 is "middle, neither loud nor soft".

When you switch from User to Offset or vice versa, the value will be recalculated to best match the value in the other system. This way you could, for example, switch to User mode to set the value as you would like it to sound in MIDI output and then switch to Offset so that this value respects the dynamic marking instead of overriding it. At the moment you switch back, the offset value will be recalculated to match the User value in loudness but will no longer act as an override so you may later change the dynamic.

## Pitch

Shows the pitch and octave of the selected note in text format (i.e. f#4).

The pitch will change if the note is dragged Up or down to a new pitch. Currently cannot be edited.

## OnTime

Shifts the start of the note in time, which can be used to modify the playing style. Negative values will make the note sound earlier, positive will make it sound later. The duration of the note corresponds to a value of 1000 (e.g. setting the value to 250 will make the note sound 1/4 of its duration later).

## Length



Set the time that the note is sounding, which may be used to modify the degree of "legato". Lower values will make the note sound more staccato, higher values will make it sound more legato. The duration of the note corresponds to a length of 1000, but the value can be set higher. 950 is usually considered "non-legato".

## Keyboard

Some keys are hooked up to perform special actions:

- ↑: Move selected notes up one semitone
- ↓: Move selected notes down one semitone
- Del: Delete selected notes
- Space: Start/stop playback

## Customization

The Piano Roll Editor will display in both normal mode and dark mode. If you wish to change the colors the Piano Roll Editor uses to display in these modes, they can be adjusted in the Preferences under the Advanced tab. All the Piano Roll Editor related properties begin with `ui/pianoroll/light` for light mode and `ui/pianoroll/dark` for dark mode.

## Play mode

### Playback toolbar

Basic playback functions are accessed from the **Play toolbar** located above the document window:



From left to right, the icons are:

- **Toggle 'Midi input':**
- **Rewind to start position:** Playback returns to the beginning of the score, or to the start of the loop (if one is set).
- **Start or stop playback:** See [Start/stop playback](#).
- **Toggle loop playback:** See [Loop playback](#).
- **Play repeats:** Turn off if you want playback to ignore repeats.
- **Pan score during playback:** Turn off if you want the score to remain stationary.
- **Play metronome:** Toggles metronome ON and OFF.

### Playback commands

#### Start/stop playback

To start playback:

1. Click on a note, rest or the blank part of a measure to establish the starting point. **Note:** If no selection is made, playback returns to the place it left off; or, if no previous playback, to the start of the score.
2. Press the **Play** button; or press `Space`.

During playback you can jump to a specific note or rest in the score by simply clicking on it.

To stop playback:

- Press the **Play** button; or press `Space`.

#### During playback

Once playback has started, the following commands are available:

- Go back to previous chord: ←
- Advance to next chord: →
- Go back to start of previous measure: `Ctrl+←` (Mac: `Cmd+←`)
- Advance to start of next measure: `Ctrl+→` (Mac: `Cmd+→`)
- Rewind to start of score: `Home` (Mac: `Cmd+Home`); or press the **Rewind** button (playback toolbar).

During playback you can still use [keyboard shortcuts](#) to open and close [panels](#), such as Play, Synthesizer, Mixer etc.

#### Loop playback

- Playback should be **off**, and the "Loop playback button" **on**.
- [Select](#) the desired region of the score for loop playback.
- Press the playback button.



Playback will now cycle within the region marked by the blue flags.

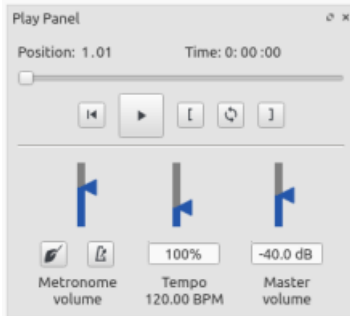
- Use the "Loop playback" button to toggle the loop on or off.

See also: [Play Panel](#) (below).

## Play panel

To open the Play Panel use one of the following options:

- Press F11 (Mac: Fn+F11).
- From the menu bar, select View → Play Panel.



The Play Panel allows you to make temporary changes to tempo and volume, to loop playback between specified points etc.

- **Loop playback:** Select a start note and click on the **Loop in** button; select an end note and click on the **Loop out** button. Press **Play** to hear the loop. The controls also work *during* playback.
- **Rewind, Play:** Playback controls.
- **Metronome:** Toggle metronome playback ON or OFF.
- **Count in:** (Conductor icon) Adds a count-in when you start playback at the start of a measure. Extra beats are added if you start mid-measure. Toggles ON and OFF.
- **Tempo:** Make temporary change to tempo. This is displayed as a percentage and as a bpm (beats per minute). Double-click to reset. (Note: Permanent changes to **tempo** should be made using [tempo text](#))
- **Volume:** Make temporary change to volume (resets when program is reopened). Note: To change the default **playback volume** of the score, see [Synthesizer](#).

## Playback: Chord symbols / Nashville numbers

As of MuseScore version 3.5, both [chord symbols](#) and [Nashville numbers](#) (but not [Roman numerals](#)) automatically sound when you play back the score.

As of MuseScore 3.5.1 this only happens with scores initially created with MuseScore 3.5 or later, for older scores you'd need to enable it, using the methods described [below](#).

### Turn playback on/off

*Note:* Settings made below also affect [Audio](#) and [MIDI export](#).

#### For all scores (as of version 3.5.1)

To enable or disable chord symbol playback for *all* scores:

- Select Edit (Mac: MuseScore) → Preferences... → Advanced); then the following options, as required:
  - **To disable/enable playback of pre-version 3.5 scores** Check/Uncheck score/harmony/play/disableCompatibility (default is checked—no playback)
  - **To disable/enable playback of version 3.5 or later scores** Check/Uncheck score/harmony/play/disableNew (default is unchecked, playback)

#### For the current score

As of version 3.5.1

*To turn playback of ALL chord symbols on/off*

- Tick/Untick Format → Style... → Chord Symbols → Play.

As of version 3.5

To turn playback of ALL chord symbols on/off

1. Select a chord symbol or Nashville number
2. In the "Chord Symbol" section of the [Inspector](#) check/uncheck the "Play" box.
3. Click on the associated "Set as style" button (to the right of that box, you may need to scroll a bit)

Alternatively, you can mute the playback track(s) in the [mixer](#)—see [below](#). This might be necessary, for example, when you have chord symbols on more than one staff and want to have playback for only one of them. Score [parts](#) need to be adjusted separately.

To turn playback of a SELECTION of chord symbols on/off

1. Select a [range](#) of symbols.
2. Right-click a chord symbol or Nashville number.
3. Click on Select → Select all similar elements in selected range , OK.
4. In the "Chord Symbol" section of the [Inspector](#) check/uncheck the "Play" box.

or

1. Click on first chord symbol or Nashville number in that range.
2. Shift+click on last chord symbol or Nashville number in that range.
3. In the "Chord Symbol" section of the [Inspector](#) check/uncheck the "Play" box.

**Note:** This does not affect the parts which need to be adjusted separately.

### Change playback sound

The default sound for chord symbols is "Grand Piano". As of version 3.5.1, scores created from Guitar solo [templates](#), use "Nylon String Guitar" instead.

To change the chord symbol playback sound:

1. Open the [Mixer](#) (shortcut: F10, Mac: Fn+F10)
2. In the [Track area](#) locate the **track** for the part in question.
3. Click on the "Show channels" arrow to display all the *child tracks* for that part.
4. Click on the track whose name contains the words "harmony" or "Chord syms." (may be truncated, should be the rightmost).
5. Select a new "Sound" in the [Sound](#) drop-down list.

This setting is shared between score and parts.

### Change playback volume / Mute track

1. Open the [Mixer](#) (shortcut: F10, Mac: Fn+F10)
2. In the [Track area](#) locate the **track** for the part in question.
3. Click on the "Show channels" arrow to display all the *child tracks* for that part.
4. Click on the track whose name contains the words "Chord syms." (may be truncated, should be the rightmost).
5. Adjust the volume slider; or press the "M" button to mute the track.

You'd need to do this for the score and/or the parts, separately.

### Turn symbol sound on/off when editing

To turn the sound of the symbols on/off when editing:

1. From the menu, select Edit (Mac: MuseScore) → Preferences... → Note input.
2. Check/Uncheck the "Play chord symbol when editing" option.

### Interpretation and voicing of chord symbols

If desired, you can adjust the playback properties of selected chord symbols as follows:

1. Select one or more chord symbols.
2. In the [Inspector](#) make changes as follows:
  - o **Interpretation.** The options are:
    - *Literal*;
    - *Jazz*. This adds color tones (e.g. the major 9th) but may also omit certain notes—this depends on both the chord itself and the context (the next chord in particular).
  - o **Voicing.** Options are:
    - *Auto*
    - *Root only* = Just the bass note;
    - *Close* = arranges the notes within the span of an octave;

- *Drop 2* = lowers the second highest note of the chord by one octave;
  - *Six Note*;
  - *Four Note* = 3rd, 5th, 7th and 9th intervals;
  - *Three Note*.
- Note:** All voicings include a bass note, 2 octaves below the root note of the chord.
- **Duration:** Options are
    - *Until next chord symbol*
    - *Until measure end*
    - *Chord/rest duration*.

The following shows how the Interpretation and Voicing options affect the playback of a C major seventh symbol (Cmaj7 or CM7).



**Note:** The "Close" and "Auto" Voicing options are the same for this particular chord, but this isn't necessarily the case for every chord. So if you specifically want "Close", it is best to make the option explicit.

## SoundFonts and SFZ files

Audio playback is provided by MuseScore's onboard [synthesizer](#), which houses a large selection of **virtual** (or **software**) **instruments**—including percussion and sound effects.

MuseScore supports virtual instruments in two formats:

- [SoundFont](#) (.sf2/.sf3): A single file containing one or more virtual instruments.
- [SFZ](#) (.sfz): A set of audio and definition files containing one or more virtual instruments.

## SoundFonts

MuseScore comes with its own GM ([General MIDI](#) [↗](#)) SoundFont, **MuseScore\_General.sf3**, containing over 128 instruments, sound effects and various drum/percussion kits.

GM (General MIDI) is a universal format, so once your score is set up for correct playback using MuseScore's native Soundfont, you should be able to [export](#) it in a [format](#) of your choice and have it play back on any other user's computer.

Many different Soundfonts are available on the Internet: some free, some commercial. For a list of free soundfonts, see [below](#).

### Install a SoundFont

After finding and decompressing a SoundFont (see [→below](#)), double-click to open it. In most cases, the SoundFont file type will already be associated with MuseScore, and MuseScore will start and a dialog will appear asking if you want to install the SoundFont. Occasionally an application other than MuseScore will be associated with the SoundFont file type; if this is the case, you will need to right-click or Ctrl-click on the file, so as to display a menu from which you can choose to open the file in MuseScore. In either case, when the dialog appears asking if you want to install the SoundFont, click "Yes" to place a copy of the SoundFont file in MuseScore's SoundFonts directory. This directory can be viewed or changed in MuseScore's Preferences, but the default location is:

- Windows: %HOMEPATH%\Documents\MuseScore3\Soundfonts
- macOS and Linux: ~/Documents/MuseScore3/Soundfonts

In contrast to user-added SoundFonts, the initial default SoundFont installed with MuseScore is located in a system directory, meant only for that purpose, which should *not* be modified. This directory and its default SoundFont file is:

- Windows x86 (32-bit) / MuseScore x86: %ProgramFiles%\MuseScore 3\sound\MuseScore\_General.sf3
- Windows x64 (64-bit) / MuseScore x86: %ProgramFiles(x86)%\MuseScore 3\sound\MuseScore\_General.sf3
- Windows x64 (64-bit) / MuseScore x86\_64: %ProgramFiles%\MuseScore 3\sound\MuseScore\_General.sf3
- macOS: /Applications/MuseScore 3.app/Contents/Resources/sound/MuseScore\_General.sf3
- Linux (Ubuntu): /usr/share/mscore-xxx/sounds/MuseScore\_General.sf3 (with xxx being the MuseScore version)

## Uninstall

To uninstall a SoundFont, simply open the folder where its file is installed and delete it.

## SFZ

An SFZ is a collection of files and directories, an SFZ file and a bunch of actual sound files in WAV or FLAC format, with the SFZ file being a text file that basically describes what sound file is located where and to be used for what instrument and pitch range.

### Install an SFZ

After downloading an SFZ (see [below](#)), you need to manually extract all the files that belong to the SFZ (the SFZ file(s) and all the sub-directories and other files) into the directory listed [above](#). Leave the sub-directories and their contents as they are. Note, however, that on occasion, an SFZ file in its folder may seek the actual WAV sound files inside the SFZ sub-directory itself, usually in a folder labeled "Libs". If the SFZ zip file you download has a Libs folder in it, move it into the main SFZ sub-directory.

## Uninstall

To uninstall an SFZ, simply open the folder where its files are installed (see [above](#)) and delete them all.

## Synthesizer

Once a SoundFont has been [installed](#) on your system, it also needs to be loaded into the [Synthesizer](#). See [To load a soundfont](#).

## Mixer

The Mixer allows you to easily change the sounds for each staff (even while the score is playing). For further details, see [Mixer](#).

## List of downloadable soundfonts

### GM SoundFonts

The following sound libraries conform to the General MIDI (GM2) standard. This specification gives you a sound set of 128 virtual instruments, plus percussion kits.

- [GeneralUser GS](#) [↗](#) (29.8 MB uncompressed)  
Courtesy of [S. Christian Collins](#) [↗](#)
- [Magic Sound Font, version 2.0](#) [↗](#) (67.8 MB uncompressed)
- [Arachno SoundFont, version 1.0](#) [↗](#) (148MB uncompressed)  
Courtesy of [Maxime Abbey](#) [↗](#)
- MuseScore 1 came with [TimGM6mb](#) [↗](#) (5.7 MB uncompressed)  
License: GNU GPL, version 2  
Courtesy of [Tim Brechbill](#) [↗](#)
- MuseScore 2 (up to version 2.1) came with [FluidR3Mono\\_GM.sf3](#) [↗](#) (13.8 MB).
- MuseScore 2 (as of version 2.2) and 3 come with [MuseScore\\_General.sf3](#) [↗](#) (35.9 MB) ([SF2 version](#) [↗](#) (208 MB)) and are being updated from time to time (see the [Changelog](#) [↗](#)).  
License: released under the [MIT license](#) [↗](#)  
Courtesy of [S. Christian Collins](#) [↗](#)  
MuseScore 3 on top offers an HQ version of that soundfont as an [extension](#)
- [Timbres of Heaven, version 3.2](#) [↗](#) (369 MB uncompressed)  
Courtesy of Don Allen
- [Soundfonts4U](#) [↗](#) (12MB up to 1GB, depending on which package you choose)  
Collection of beautifully sounding acoustic guitars as well as pianos, basses, strings, harps and many more.

### Orchestral soundfonts

- Sonatina Symphonic Orchestra (503 MB uncompressed)  
Downloads: [SoundFont](#) [↗](#) | [SFZ format](#) [↗](#)  
License: Creative Commons Sampling Plus 1.0
- [Aegean Symphonic Orchestra](#) [↗](#)  
Courtesy of [Ziya Mete Demircan](#) [↗](#) (352 MB uncompressed)

### Piano soundfonts

#### SF2 Pianos

-[Yamaha C5 Grand - A beautiful sounding 6 velocity-layer-sampled Yamaha Salamander C5 Grand](#)

- [Acoustic grand piano, release 2016-08-04](#)

Description: Yamaha Disklavier Pro Grand Piano, sf2 format, 36MiB compressed, 113MiB uncompressed, 121 samples, 5 velocity layers

More information: <http://freepats.zenvoid.org/> including other soundfonts.

License: Creative Commons Attribution 3.0

Courtesy of [Roberto Gordo Saez](#)

- [Salamander C5 Light](#)

Courtesy of [Ziya Mete Demircan](#) (24.5 MB uncompressed)

#### SFZ Pianos

- [Salamander Grand Piano](#)  
Downloads: [version 2](#) | [version 3](#)  
Description: Yamaha C5, 48kHz, 24bit, 16 velocity layers, between 80 MB and 1.9 GB uncompressed  
License: Creative Commons Attribution 3.0  
Courtesy of Alexander Holm
- [Detuned Piano](#) (244 MB uncompressed)  
License: Creative Commons Attribution-ShareAlike 3.0
- [Plucked Piano Strings](#)  
Description: 44.1kHz, 16bit, stereo, 168 MB uncompressed  
License: Creative Commons Attribution-ShareAlike 3.0
- [The City Piano](#)  
Description: Baldwin Baby Grand, 4 velocity layers, 696 MB uncompressed  
License: Public domain  
Courtesy of Big Cat Instruments
- [Kawai Upright Piano, release 2017-01-28](#)  
Description: 68 samples, 44kHz, 24bit, stereo, 2 velocity layers, 58MiB uncompressed  
License: GNU General Public License version 3 or later, with a [special exception](#)  
Courtesy of Gonzalo and Roberto

#### Unzipping downloaded soundfonts

Since soundfonts are large, they are often zipped (compressed) into a variety of formats, including .zip, .sfArk, and .tar.gz. You need to unzip (decompress) these files before they can be used.

- ZIP is standard compression format supported by most operating systems.
- sfArk is a compression format designed especially for compressing SoundFont files. To decompress it, use [Polyphone](#) (cross-platform software); or this online service: <https://cloudconvert.com/sfark-to-sf2>
- .tar.gz is a popular compression format for Linux. Windows users can use [7-Zip](#); Mac users can use [The Unarchiver](#), or macOS' built-in Archive Utility. Note that if using 7-Zip, you will need to apply decompression twice —once for GZip and once for TAR.

#### Troubleshooting

If the toolbar play panel is greyed out, or not visible, follow the instructions below to get your sound working again:

1. Right-click on the menu bar and make sure there is a check mark next to the Playback Controls menu item. If this step does not solve your problem, go to Step 2.
2. If the play panel disappears after changing the SoundFont, go to Edit → Preferences... → I/O tab and click OK without making any changes. After restarting MuseScore, the play panel should reappear.

If you are setting up a SoundFont for the first time, please use one of the recommended SoundFonts listed above.

If playback stutters, then your computer may not be able to handle the SoundFont being used. The following advice may help:

- Reduce the amount of RAM (memory) used by MuseScore by using a smaller SoundFont. See the [dist](#) above for suggestions.
- Increase the amount of RAM available for MuseScore by quitting all applications except MuseScore. If you still have problems and a large SoundFont is important to you, consider more RAM for your computer.

#### See also

- [Synthesizer](#)
- [Mixer](#)

#### External links

- [How to change the SoundFont or add another](#) (MuseScore HowTo)
- [The SFZ Format](#) (for details about the sfz specification)

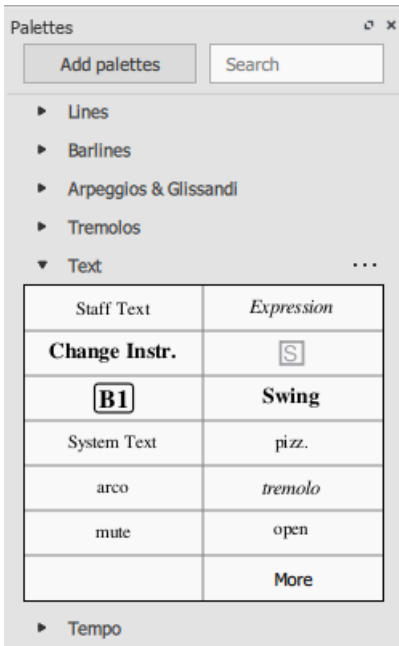
## Swing

MuseScore's **swing** feature allows you to change the playback of your score from a straight to a swing rhythm. Swing can be applied globally or only to a section of the score, and is fully variable.

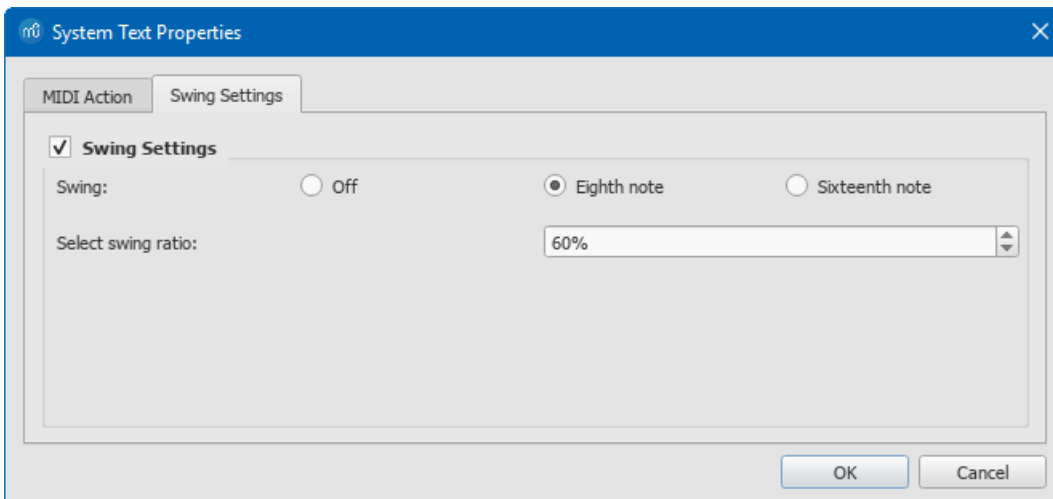
### Apply swing to a score section

To apply swing to *all* staves in a system:

1. Click on the note where you want swing to start;
2. Click **Swing** in the Text palette (double-click in versions prior to 3.4);



3. Edit the Swing text as required;
4. If you need to vary swing from the default setting, right-click the Swing text and select System text properties... Click on the "Swing Settings" tab and adjust note duration and "Swing ratio" as required.



To apply swing only to *specific* staves in a system:

1. Click on the note where you want swing to start;
2. Add Staff text;
3. Edit the appearance of the text as required;
4. Right-click on the text, select Staff Text Properties..., and click on the "Swing settings" tab. Modify as required;
5. Repeat steps 1–4 for other staves if needed.

Swing text can be edited and formatted just like any other text object.

## Triplet in tempo marking

Often this notation is used to indicate swing:



MuseScore does not have a way to include a triplet in text as a tempo marking, but there is an easy workaround:

1. Add Swing text as described [above](#) and make it invisible (shortcut v, or untick "Visible" in the [Inspector](#));
2. Add an appropriate [Image](#) of the required tempo marking to the score. These can be downloaded from the bottom of the "How To" page: [How to create a visual swing marking](#) ↗.
3. Resize and reposition the image as required.

## Return to straight rhythm

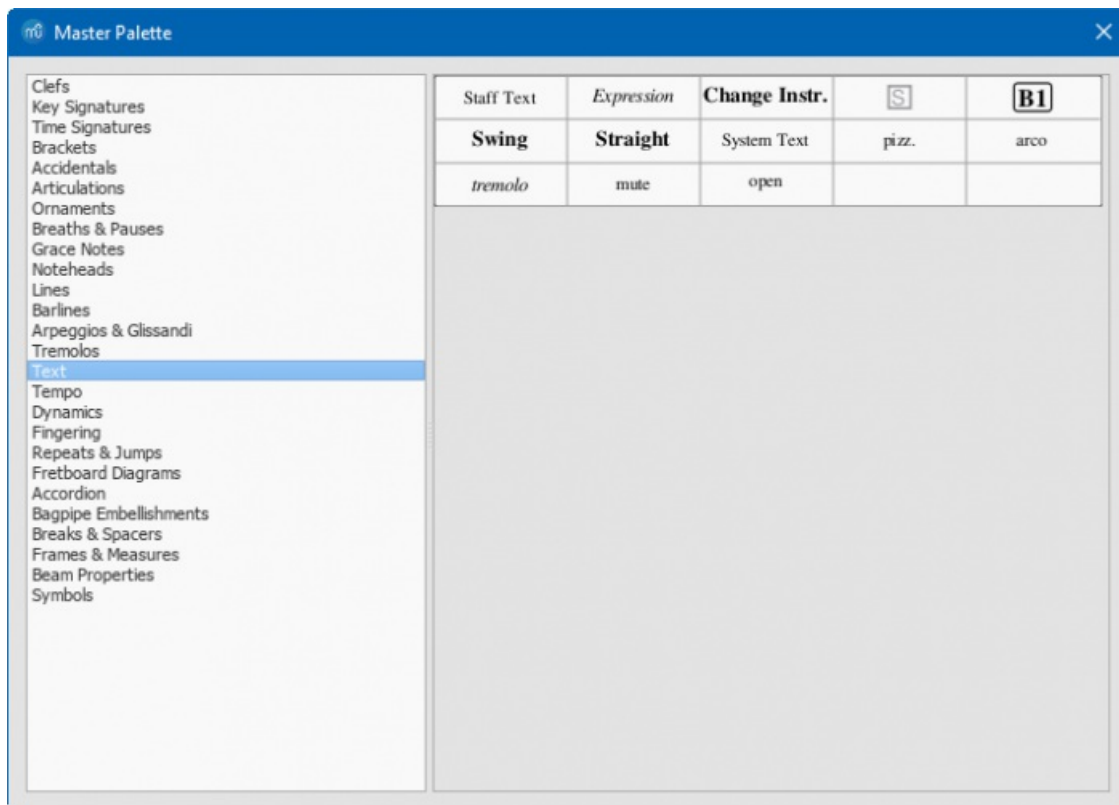
If you want playback to return to straight time after a swing section, use one of the following options:

**Use and modify** a Swing text. (prior to version 3.4).

1. Add **Swing** text to the first note or rest of the "straight" section (see [above](#)).
2. [Edit](#) the text to indicate a return to straight time: e.g. "Straight."
3. Right-click on the text and select System Text Properties.... Click on the "Swing Settings" tab and set "Swing to "Off."

**Use the Straight text** as per version 3.4.

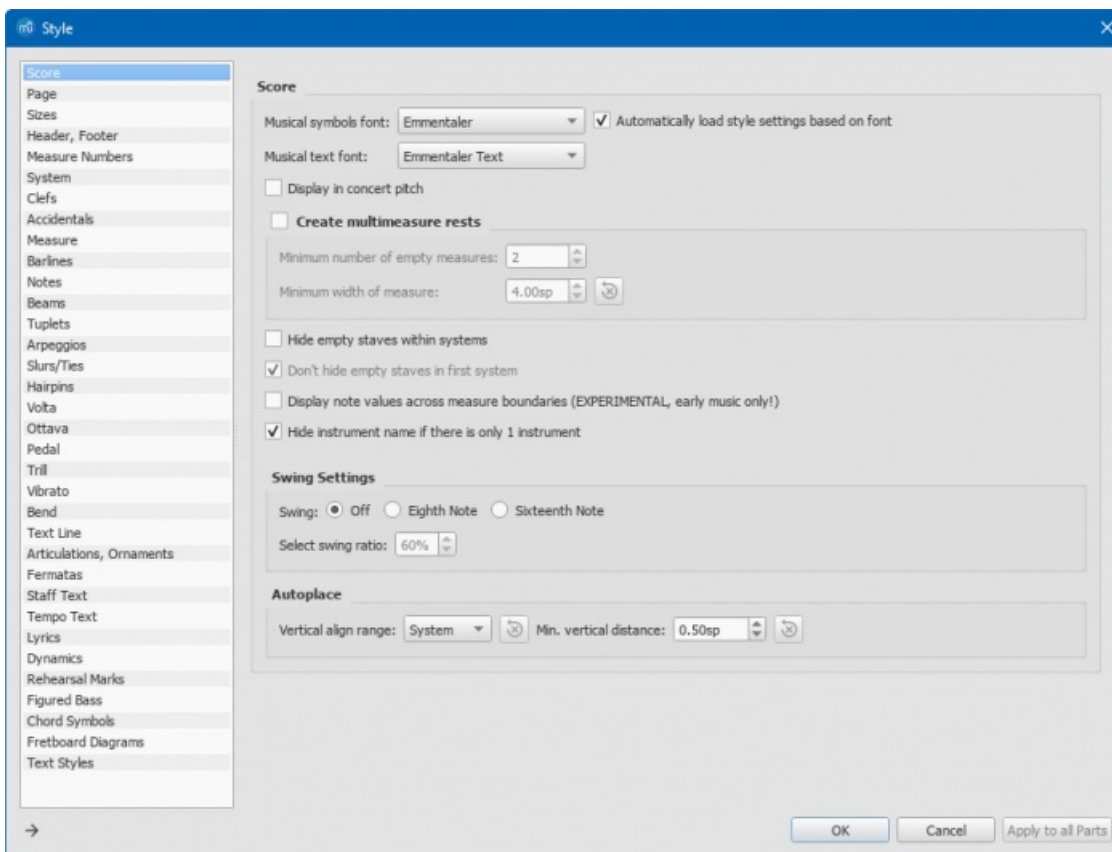
- Add **Straight** text from the [Master palette](#) text to the first note or rest of the "straight" section (see [above](#)).



## Apply swing globally

If you wish to apply swing to the whole score, you can do so from the menu:

1. Select Format → Style... → Score.
2. In the "Swing Settings" section, set the desired note value and "swing ratio."



## External links

- [How to create a visual swing marking](#) <sup>↗</sup> (MuseScore HowTo)
- [Swing \(jazz performance style\)](#) <sup>↗</sup> (Wikipedia)

## Synthesizer

### Overview

To display the **Synthesizer**: from the menu, select **View** → **Synthesizer**.

The Synthesizer controls MuseScore's sound output and allows you to:

- Load and organize different sound sample libraries to play back the music.
- Apply effects such as reverb and compression.
- Adjust overall tuning.
- Alter the output volume.
- Select Midi Continuous Controllers to use with Single Note Dynamics (versions 3.1 and above).

The Synthesizer window is divided into the following sections/tabs:

- **Fluid**: A software synthesizer that plays SF2/SF3 SoundFont sample libraries.
- **Zerberus**: A software synthesizer that plays SFZ format sample libraries.
- **Master Effects**: Used to apply multi-effects to the score.
- **Tuning**: Used to adjust overall playback tuning.
- **Dynamics** (versions 3.1 and above): Used to configure Single Note Dynamics Midi controllers.

### Save/Load Synthesizer settings

The buttons at the bottom of the Synthesizer window have the following functions:

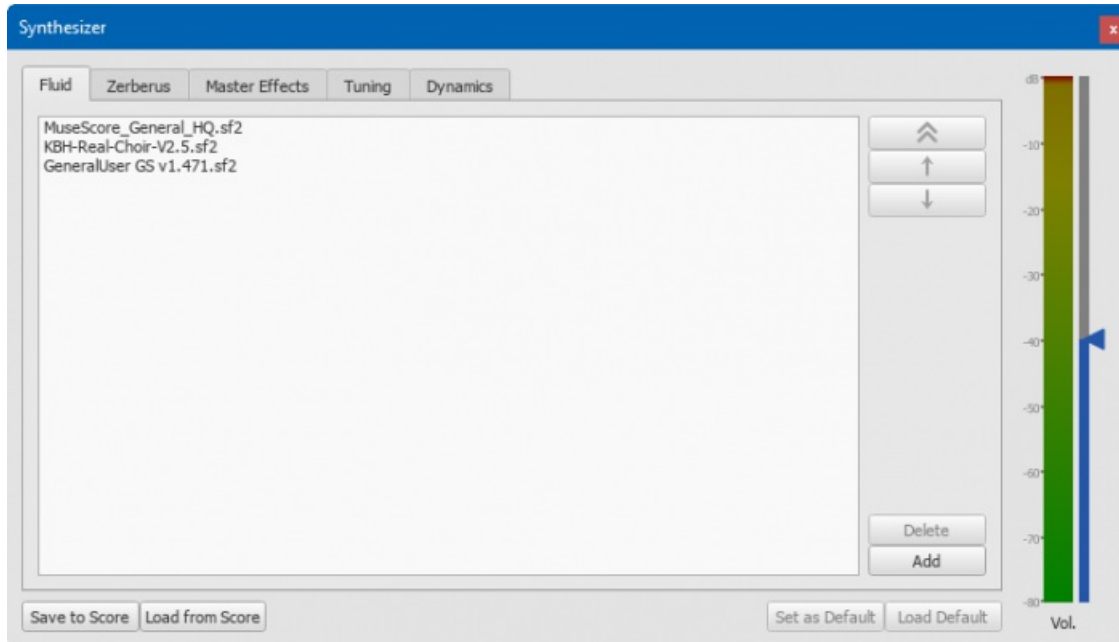
Button	Function
Set as Default	Saves <i>all</i> current synthesizer settings as the <i>default</i> settings. These are automatically applied to the Synthesizer when you open MuseScore.
Load Default	Loads the last saved <i>default</i> settings to the Synthesizer.
Save to Score	Saves <i>all</i> current synthesizer settings to the <i>current</i> score only.
Load from Score	Loads the settings from the <i>current</i> score to the synthesizer.



**Notes:** (1) "Synthesizer settings" include the order of SoundFonts and SFZ files, effects set-up, master tuning and volume. (2) Only one set of Synthesizer settings can be in effect at a time—i.e. if multiple scores are open at once, it is not possible to make changes to the Synthesizer in one score and leave other scores' settings untouched. (3) Changes to synthesizer settings will not be heard in exported audio files unless saved to the score first (see table, above). See also Tuning (below).

## Fluid

Click on the **Fluid** tab to access the control panel for SF2/SF3 SoundFont sample libraries. By default, the SoundFont MuseScore\_General.sf3 should already be loaded.



You can load, rearrange and delete soundfonts as required. Playback can be shared between any combination of different soundfonts (and/or SFZ files). The order of soundfonts in **Fluid** is reflected in the *default* order of instruments in the mixer.

### To load a soundfont

1. Click on the Add button
2. Click on a soundfont in the list.

To be able to load the soundfont, it first needs to be installed in your **Soundfonts folder**. This will ensure that it appears in the list in step 2 (above).

### To reorder the soundfonts

1. Click on a soundfont
2. Use the up/down arrows (on the right-hand side) to adjust the order.
3. Repeat with other soundfonts in the list if required.
4. Or use the double up arrow (on the top right-hand side) to move any SoundFont to the top of the list.

The order of virtual instrument sets in the Synthesizer is reflected in the order of instruments listed in the Mixer. So, if playback of a score depends on a mix of instrument sets, it is advisable to save the Synthesizer configuration to the score in question by pressing the **Save to Score** button. When you next wish to play back the score, press the **Load from Score** to load the same configuration. However, remember this only sets the *order* of instruments—not the instruments themselves, which should be in place on your computer.

### To remove a soundfont

1. Click on the name of the soundfont
2. Click on the Delete button.

This removes the soundfont from the synthesizer but does not uninstall it from the Soundfonts folder: it will still be available if you wish to reload it later.

## Zerberus

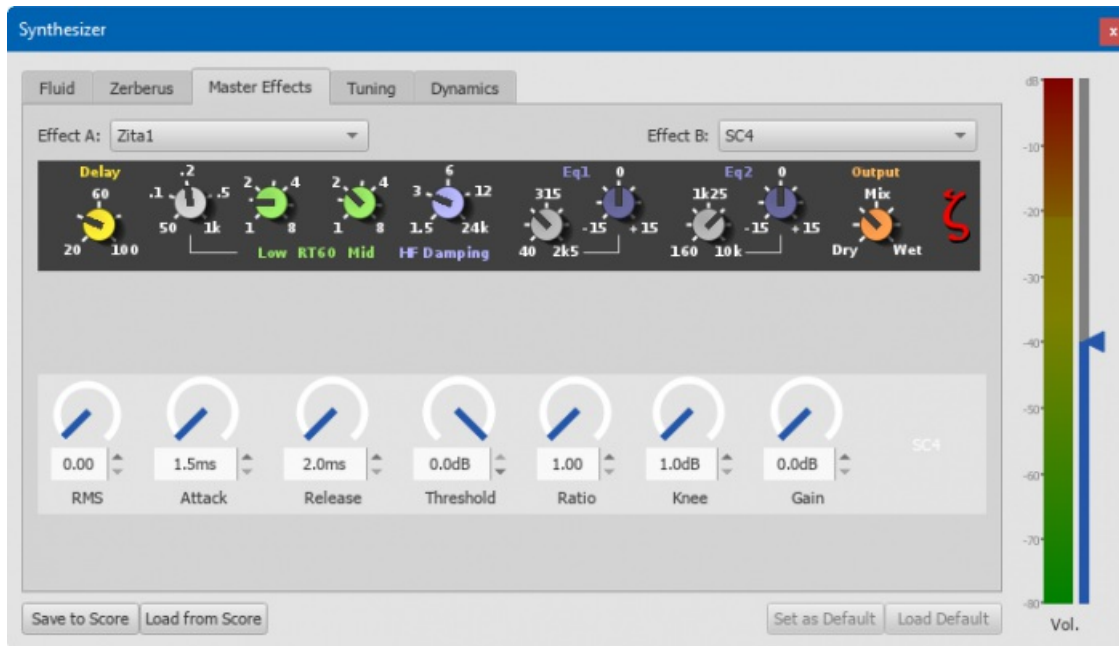
Click on the **Zerberus** tab to access the control panel for SFZ sound sample libraries. You can add, delete or reorder files in a similar way to the Fluid tab. Note that, as with Fluid, the SFZ files must first be installed in your **soundfonts** folder before they can be loaded into the synthesizer.

## Volume

The slider on the right of the Synthesizer controls the playback volume: any changes made here last only to the end of the session, unless saved to the score or set as the new default.

## Effects

The **Master Effects** tab of the Synthesizer allows you to add reverb and compression to your score.



Master Effects with Zita1 Reverb and SC4 Compressor.

To turn an effect on or off:

- Select an option from the drop-down list next to **Effect A** or **Effect B** (the effects are applied in series, A → B).

To store and load effects configurations, use the buttons at the bottom of the Synthesizer window. See [Synthesizer settings](#) (above) for details.

### Zita 1 reverb

The **Zita 1** stereo reverb module allows you to simulate the ambience of anything from a small room to a large hall. The pre-delay, reverb time and tone of the reverb can be finely tuned using the controls provided:

- **Delay:** Set a pre-delay for the reverb from 20-100 ms.
- **Low RT60** (Low frequency reverb time): Use the grey control to adjust the center frequency (50–1000 Hz) of the low frequency band which you want to affect: the green control adjusts the reverb time (1–8 secs) of this frequency band.
- **Mid RT60** (Mid-range reverb time): Adjust the reverb time (1–8 secs) of the mid-range frequency band.
- **HF Damping:** Adjusts the high frequency component of the reverb. Increasing this value increases the frequency of the cut-off point and makes the reverb appear brighter and longer.
- **EQ1:** Allows you to cut or boost (-15 to +15) a frequency band (center = 40 Hz - 2 KHz) in the *lower* part of the spectrum.
- **EQ2:** Allows you to cut or boost (-15 to +15) a frequency band (center = 160 Hz - 10 KHz) in the *higher* part of the spectrum.
- **Output:** Controls the amount of effect applied. "Dry" is no effect. "Wet" indicates 100% reverb. "Mix" is a 50/50 balance of wet/dry signal.

**Note:** EQ1 and EQ2 affect the tone of the reverb only, *not* the dry (unprocessed) signal.

To quickly set up an effects patch, set "Output" to "Mix" and adjust the "Mid RT60" control to the desired reverb time. Then fine tune the effect as explained above.

### SC4 compressor

The **SC4** stereo compressor gives you fine control over the playback's dynamic range, reducing the volume variation between loud and soft sounds. It offers the following controls:

- **RMS:** Adjusts the balance between RMS (0) and Peak (1) compression. In the former, the compressor responds to averaged-out levels in the signal; in Peak mode, the compressor responds to peak levels.
- **Attack:** (1.5–400 ms) The length of time it takes for compression to engage fully after the signal exceeds the

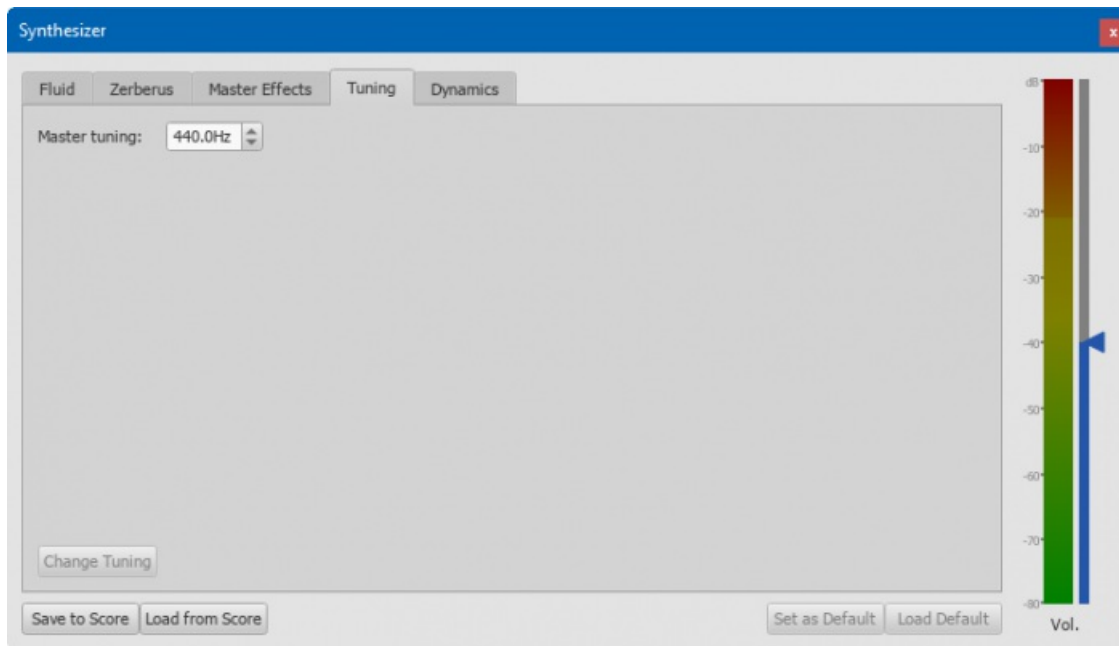
threshold level.

- **Release:** (2–800 ms) The time it takes for compression to return to zero after the signal falls below the threshold level.
- **Threshold:** (in dB) The signal level above which compression starts to take effect. Lowering the threshold increases the amount of signal that is compressed.
- **Ratio:** The amount of compression applied to the signal above the threshold. The higher the ratio, the greater the compression. Varies between 1:1 and 20:1.
- **Knee:** Allows you to select a range between "soft knee" and "hard knee". The softer the knee, the more gradual the transition between uncompressed and compressed signal.
- **Gain:** Compression tends to lower the volume, so use this control to boost the signal as required.

To quickly set-up, try setting RMS = 1, Threshold = -20 db, Ratio = 6. Increase Gain to restore the lost volume. Then fine-tune as explained above.

## Tuning

The **Tuning** tab is where you can adjust the program's **master tuning**. For Concert Pitch instruments, A4 = 440 Hz by default.



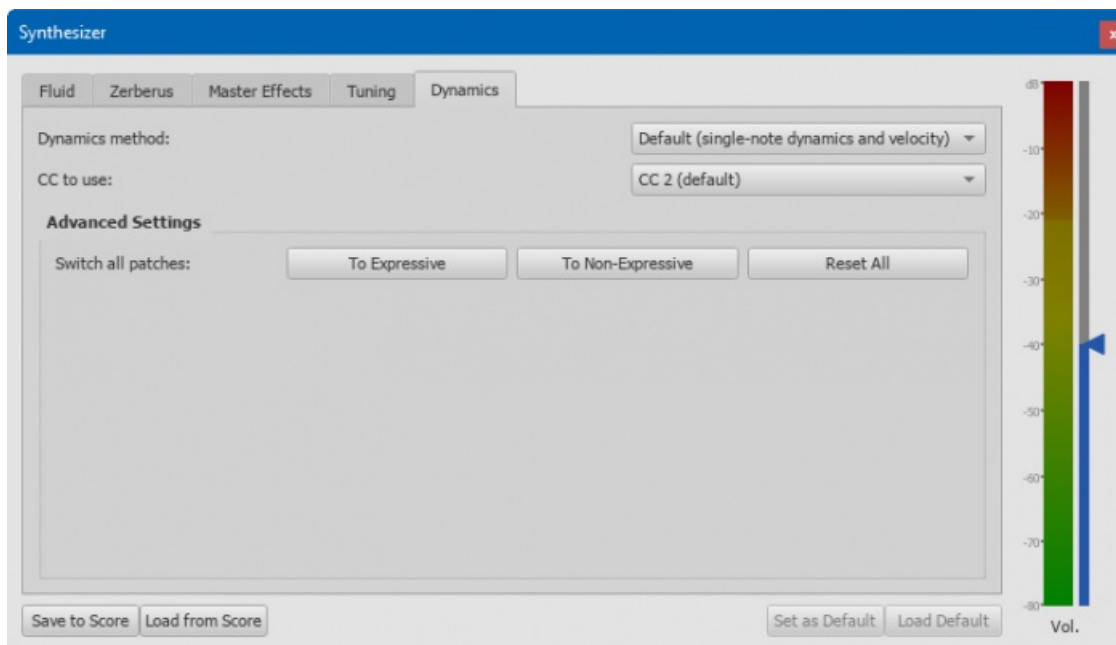
To change the Master tuning:

- Enter a new value in the **Master tuning** field, then press Change Tuning.

**Notes:** (1) This tuning applies to all scores in the *current* session only. To make this the program default or to store it to a particular score, see [Save/Load Synthesizer settings](#). (2) To apply the new tuning to exported audio files (WAV, MP3, OGG), press *Save to Score* before exporting.

## Dynamics (versions 3.1 and above)

Click on the **Dynamics** tab to access the control panel for Single Note Dynamics:



- **Dynamics method:** You can choose either between 1) Default (single-note dynamics and velocity), 2) Velocity only (no single-note dynamics), 3) CC events only (constant velocity).
- **CC to use:** Depending on the SoundFont you use, you may have to choose the Continuous Controller to use, 1) CC 1, 2) CC 2 (default), 3) CC 4, 4) CC 11.

In the **Advanced Settings** box, you can choose to enable or disable the Expression Controller for Instruments Sound:

- **Switch all patches:** Select 1) To Expressive (to enable for all instruments sounds), 2) To Non-Expressive (to disable for all instruments sounds), 3) Reset All (Reset all instruments sounds to defaults)

#### See also

- [SoundFont](#)
- [Mixer](#)

#### External links

- [How To: Using Single Note Dynamics \(SND\)](#) <sup>↗</sup> (MuseScore HowTo)

## Tempo

**Tempo markings** can be found in the [Tempo palette](#) of the Basic and Advanced [workspaces](#). They are supplied as metronome marks, but can be subsequently edited to display any tempo or expression you want. Playback tempo can be varied throughout the score by using multiple tempo markings, visible or invisible.

### Add a tempo marking

Use any of the following methods:

- Select a note or rest and press the **keyboard shortcut** Alt+Shift+T.
- Select a note or rest, and from the **menu bar** choose Add → Text... → Tempo Marking.
- Select a note or rest and click an appropriate metronome mark in the **Tempo palette** (double-click in versions prior to 3.4);
- Drag-and-drop a metronome mark from the **Tempo palette** directly onto a note or rest.

**Note:** If a tempo marking is applied from the menu or using a keyboard shortcut, the beat note automatically follows the time signature. The advantage of applying from a palette is that *you* can choose which beat note to use.

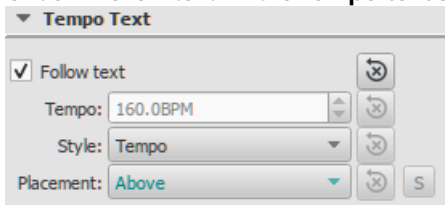
### Edit tempo

To change the tempo of an existing metronome mark in the score:

1. Go into [Edit mode](#) on the tempo mark in question;
2. Edit the metronome number and/or the beat note as required;
3. Exit Edit mode.

You can also override the tempo of an existing metronome mark from the [inspector](#):

1. Select the tempo mark;
2. Untick "Follow text" in the **Tempo text** section of the Inspector;



3. Set the desired playback tempo in the "Tempo" field underneath.

**Note:** Playback may be faster or slower if the tempo setting in the play panel is at a percentage other than 100%.

### Edit tempo text

Tempo marks can be edited and formatted just like any other text object. To set text properties or text style, see Text styles and properties.

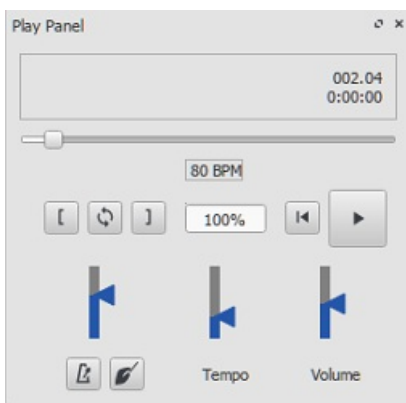
The tempo indicated by a metronome mark usually persists even if overwritten by an expression—such as Andante, Moderato etc. You can also *add* further text to a plain metronome mark. e.g.

**Andante** ♩ = 75

### Overriding the tempo marking

You can temporarily override the indicated tempo, and play the score back at any tempo you like using the play panel:

1. Display the play panel: View → Play Panel or F11 (Mac: Fn+F11):



2. Move the tempo slider up or down as required. The tempo is shown both as an absolute value and as a percentage of the currently indicated tempo mark. Double-click the tempo slider to reset it.

**Note:** BPM is always measured and displayed in quarter note beats per minute, regardless of the (denominator of the) time signature in effect.

### Ritardando and accelerando playback

You can simulate **ritardando** ("*rit.*") and **accelerando** ("*accel.*") playback by adding hidden tempo markings to the score. The printed indication to the musician should be added as staff/system text in addition.

In the example illustrated below, the tempo was originally 110 BPM (beats per minute). At the ritardando, the tempo decreases by 10 BPM on the first note of each measure. Each tempo change is made invisible by unchecking the **Visible** checkbox in the Inspector, so that only the ritardando shows on the printed score:



A plugin has been developed to automate this process: [TempoChanges](#) ↗

### Fermatas



Fermatas, available in the Articulations and Ornaments palette, have a **Time stretch** property that can be set via the Inspector. By default, this property is set to 1.00. To have MuseScore play back a fermata for twice its normal duration,

click on the fermata and set "Time stretch" to 2.00. This of course does not work for fermatas applied to barlines, as barlines don't have a duration to stretch.

## See also

- [Play mode](#)
- [Time signature](#)

## External links

- [How to create a visual swing marking](#)  (MuseScore HowTo)
- [Metrico: a font to create metronome marks, metric modulations and swing indications for music notation.](#) 

## Dynamics

**Dynamics** are symbols indicating the relative loudness of a note or phrase of music. They can be found in the Dynamics [palette](#) in either the Basic or Advanced [workspace](#).

<i>ppp</i>	<i>pp</i>	<i>p</i>	<i>mp</i>
<i>mf</i>	<i>f</i>	<i>ff</i>	<i>fff</i>
<i>fp</i>	<i>sf</i>	<i>sfz</i>	<i>fff</i>
<i>ffz</i>	<i>fp</i>	<i>fpz</i>	<i>rfz</i>
<i>rf</i>	<i>fz</i>	<i>m</i>	<i>r</i>
<i>s</i>	<i>z</i>	<i>n</i>	

Additional dynamics are available in the [Master Palette](#) (Shift+F9).

**Note:** if you wish to adjust the *overall* playback volume of the score, use the volume slider in the [Play Panel](#), or [Synthesizer](#).

### Add a dynamic

To apply a dynamic to the score, use one of the following methods:

- Select a note and click a dynamic symbol in a palette (double-click in versions prior to 3.4).
- Drag a dynamic symbol from a palette onto a note.

To create a crescendo or decrescendo, see [Hairpin](#).

### Adjust properties

The default dynamic of the score is *mf* (mezzoforte)—set at MIDI velocity 80 (out of 127). Depending on the dynamic governing a particular section of the score, velocity (and the resulting loudness) may be less than or greater than this.

#### To edit the velocity of a dynamic

- Select the dynamic and, in the **Dynamic** section of the [Inspector](#) edit the [Velocity](#) value—higher for louder, lower for softer.

#### To adjust the range

*Note:* Range = the staves in the system affected by the dynamic.

- Select the dynamic, and in the **Dynamic** section of the **Inspector**, choose an option from "Dynamic range". The default is "Part," which means that all staves for a particular instrument will be affected. "Staff" limits the effect to the staff attached to the dynamic. "System" means that all staves in the system will be affected by the dynamic.

#### To change the placement (above or below staff)

- For a single dynamic mark: select the dynamic, and type `x` to flip the placement or use the Inspector, see below.
- For all dynamic marks on a staff:
  1. Right-click on one dynamic, then choose *Select > All Similar Elements on Same Staff*
  2. In the **Dynamic** section of the **Inspector** choose the required option *Above* or *Below* from "Placement"
- For all dynamic marks in the score:

See above, then use the "Set as Style" button of Inspector

### Customize a dynamic

Dynamics can be edited just like any other text object. Special character shortcuts can be used to add the following symbols:





- Ctrl+Shift+P (Mac: Cmd+Shift+P): **Piano** *p*.
- Ctrl+Shift+F (Mac: Cmd+Shift+F): **Forte** *f*.
- Ctrl+Shift+M (Mac: Cmd+Shift+M): **Mezzo** *m*.
- Ctrl+Shift+R (Mac: Cmd+Shift+R): **Rinforzando** *r*.
- Ctrl+Shift+S: **Sforzando** *s*.
- Ctrl+Shift+N (Mac: Cmd+Shift+N): **Niente** *n*.
- Ctrl+Shift+Z (Mac: Cmd+Shift+Z): **Z z**.

You can also edit the velocity and range etc. (see above). If desired, you can save the result for future use in acustom palette.


## Single Note Dynamics (SND)

As of version 3.1, MuseScore supports single note dynamics. In addition to editing the velocity, you can also edit the velocity change in the inspector. Entering a number into this field will change the velocity of the note by approximately that amount after the initial velocity is played. A negative number can be used to lower the volume after the initial note and a positive number will make the note play louder after the initial volume. See links (below) for further details.

## External links

- [Video tutorial: Lesson 10 - Articulations, Dynamics and Text](#) 
- [Using Single Note Dynamics \(SND\)](#)  (MuseScore HowTo)
- [How to restore correct playback of dynamics and hairpins in an imported MIDI file](#)  (MuseScore HowTo)
- [Dynamics](#)  (Wikipedia)

## Capo playback

MuseScore allows you to transpose the playback of a staff, without affecting the music notation. This simulates the effect of a capo  (Wikipedia) on the instrument.

### Add capo to a single staff

1. Add staff text to the note/rest from which you want capo playback to start;
2. Click on "Properties" in the "Staff Text" section of the Inspector, or right-click on the staff text and select Staff Text Properties...; then click on the **Capo Settings** tab;
3. Check the "Capo Settings" checkbox, and set **Capo fret** to the fret number you wish to apply the capo at (each fret increases the pitch by a semitone);
4. Click ok to apply your changes;
5. Edit the wording of the text as desired.

### Add capo to linked staff/tablatre

- Same method as above, but in step 1, add the staff text to the music staff only.

### Add capo to unlinked staff/tablatre

- Same method as above, but apply the staff text to both staff and tablatre.

**Note:** Capo playback will apply from the note that the staff text is attached to, until either the next staff text with "Capo Settings" enabled, or until the end of the score.

## Remove capo

To remove capo playback from a staff, returning the instrument to its normal tuning:

- Add staff text with a "Capo fret" setting of "No capo".

## Text

There are many different kinds of text objects in MuseScore (see tables below); text may also be found incorporated into lines. This chapter shows you how to create, format and edit text objects, and also includes information about the following types of text:

Text type	Uses
<u>Staff text</u>	General purpose text attached to a single staff: appearing only in that instrument part.

<a href="#">System text</a>	General purpose text attached to a single staff: appearing in all instrument parts.
<a href="#">Chord symbols</a>	Display the chords associated with a melody: usually above the staff.
<a href="#">Fingering</a>	Numbers or letters attached to notes showing which fingers to use.
<a href="#">Lyrics</a>	Create lyrics attached to a melody.
<a href="#">Rehearsal marks</a>	Facilitate rehearsals, divide score into sections, bookmark passages etc.

For other types of text available in MuseScore, follow the links below:

Text type	Uses
<a href="#">Dynamics</a>	Indicate the loudness of a note or phrase.
<a href="#">Figured bass</a>	Period notation for keyboarders.
<a href="#">Frame text</a>	Title/composer/lyricist details at the start of a score; songsheet lyrics etc.
<a href="#">Headers/Footers</a>	Page numbers, copyright info etc. at the top/bottom of a page.
<a href="#">Instrument text</a>	Apply mid-staff instrument changes.
<a href="#">Repeats and jumps</a>	Da Capo, Dal segno, Fine etc.
<a href="#">Roman Numeral Analysis (RNA)</a>	A chord analysis system.
<a href="#">Sticking</a>	Letters (L and R) attached to (drum) notes showing which hand or foot to use.
<a href="#">Swing text</a>	Change from straight to swing time, and vice versa.
<a href="#">Tempo marks</a>	Apply metronome and/or expression marks.
<a href="#">Text-lines</a>	Voltas, ottavas, pedal lines, guitar barre lines etc.

## Text basics

### Add text

To add a text-based element to the score, use one of the following general methods:

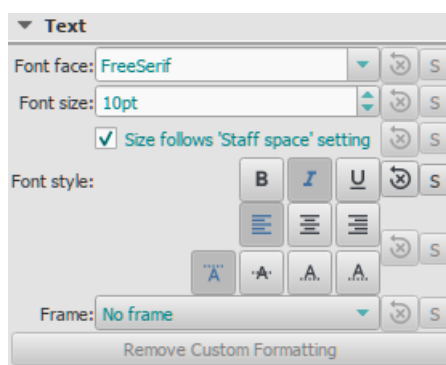
- **Keyboard shortcut:** For example, press Ctrl+T to enter [Staff text](#), Ctrl+L to enter [Lyrics](#), and so on.
- **Menu command:** Add → Text allows you to choose from a range of text-based elements.
- **Workspace:** Select a note and click an icon in one of the palettes (double-click in versions prior to 3.4); or, alternatively, drag a symbol from a palette onto the staff. E.g. [Swing text](#), [Tempo text](#) etc.

**Notes:** (1) The exact method depends on the type of text you are adding (see [Text](#)). (2) For general-purpose **text boxes** attached to staves, see [Staff and system text](#).

### Text formatting

When a [text object](#) is created in MuseScore, it assumes the corresponding [Text Style](#): all [staff text](#), for example, has a unique Text Style, as have tempo markings, dynamics, chord symbols etc. Each Text Style consists of a number of text properties (font-face, font-size, font-style etc.), which can be viewed, mainly, in the **Text Styles** dialog (Format → Style... → [Text Styles](#)).

A newly-created **text object** starts off with identical text properties to the Text Style. These can be viewed in the Inspector:



However, these text properties are *not* limited to those of the default Text Style: if need be, you can edit them in the Inspector *independently* of Text Style.

Finally, if you want to apply formatting to specific characters in a text object (font-face, font-size, Bold, Italic, Underline, superscript, subscript), you can do so in [text edit mode](#).

### Adjust position of text objects



To position a text object, use any of the following methods:

- Drag the object.
- Select the object and adjust the X or Y offset values in the [Inspector](#).
- Select the object and apply any of the following keyboard shortcuts:
  - ←: Move text left 0.1 staff space.
  - →: Move text right 0.1 staff space.
  - ↑: Move text up 0.1 staff space.
  - ↓: Move text down 0.1 staff space.
  - Ctrl+← (Mac: Cmd+←): Move text left one staff space.
  - Ctrl+→ (Mac: Cmd+→): Move text right one staff space.
  - Ctrl+↑ (Mac: Cmd+↑): Move text up one staff space.
  - Ctrl+↓ (Mac: Cmd+↓): Moves text down one staff space.

## Text anchors

When you apply a text element to the score, its [anchor](#) position will depend on the type:

- **Title, Subtitle, Composer, Poet:** Anchored to a frame.
- [Fingering](#): Anchored to note heads.
- [Lyrics](#): Anchored to a time position.
- [Chord symbol](#): Anchored to a time position.
- [Staff text](#): Anchored to a time position.
- [System text](#): Anchored to a time position.
- [Sticking](#): Anchored to a time position.

## Text editing

**Text edit mode** allows you to add or delete text, and apply formatting (e.g. **bold**, *italic*, underline etc.) to individual characters.



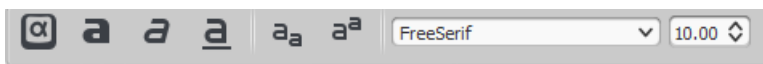
### Enter/exit text edit mode

To enter **Text edit mode** use one of the following methods:

- Double-click a text object.
- Click on an already selected text object.
- Right-click on a text object and select Edit element.
- Click on a text object and press Alt+Shift+E.

*Note:* Creating a new text object (see [Text basics](#)) also puts the program into text edit mode.

You can access the various formatting functions from the **Text toolbar**, which appears below the document window:



To exit **Text edit mode** use one of the following:

- Press Esc.
- Click on a part of the score outside the edit window.

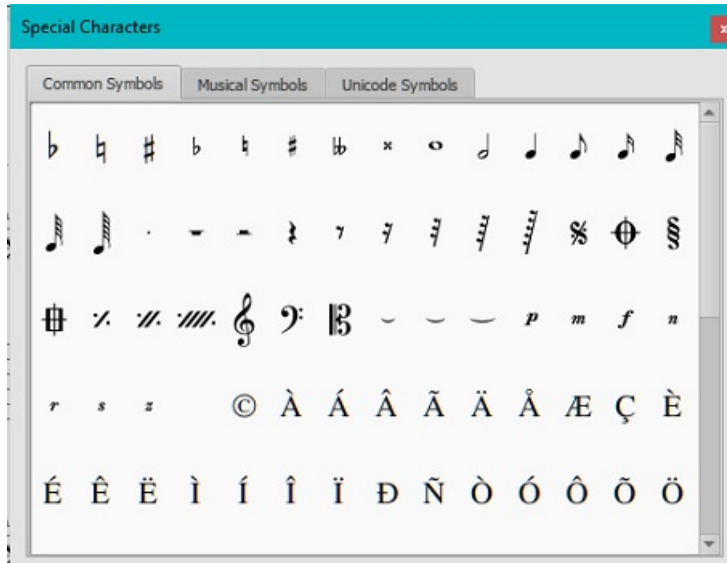
### Keyboard shortcuts

In **Text edit mode**, the following keyboard shortcuts are available:


- Ctrl+B (Mac: Cmd+B) toggles **bold face**.
- Ctrl+I (Mac: Cmd+I) toggles *italic*.
- Ctrl+U (Mac: Cmd+U) toggles underline.
- Home End ← → ↑ ↓ moves cursor.
- Backspace (Mac: Delete) removes character to the left of the cursor.
- Del (Mac: → Delete Or Fn+Del) removes character to the right of the cursor.
- ↵ starts new line.
- F2 (Mac: Fn+F2) Inserts special characters (see below).

## Symbols and special characters

You can use the **Special Characters** window to insert quarter notes, fractions, and many other kinds of special symbols or characters into your text. A few symbols can also be accessed by shortcut (see below).



To open **Special Characters**, use any of the following methods:

- Click on the  icon in the text toolbar (below the score window).
- Press F2 (Mac: Fn+F2).

**Note:** (1) This only works in Text edit mode; (2) The Special Characters dialog should not be confused with the menu item of the same name in the macOS version of MuseScore.

The dialog is divided into 3 tabs: Common symbols, musical symbols and unicode symbols. The musical and unicode tabs are further subdivided into alphabetically-arranged categories.

Double-clicking an item in the Special Characters dialog immediately adds it to the text where the cursor is positioned. Multiple items can be applied without closing the dialog box, and the user can even continue to type normally, delete characters, enter numerical character codes etc., with it open.

### Special character shortcuts

In **Text edit mode** the following keyboard shortcuts can be used to access certain special characters:

- Ctrl+Shift+# (Mac: Cmd+Shift+#): **Sharp** #. (*Note:* This may not work on every keyboard layout)
- Ctrl+Shift+B (Mac: Cmd+Shift+B): **Flat**  $\flat$ .
- Ctrl+Shift+H (Mac: Cmd+Shift+H): **Natural**  $\natural$ .
- Ctrl+Shift+P (Mac: Cmd+Shift+P): **Piano** *p*.
- Ctrl+Shift+F (Mac: Cmd+Shift+F): **Forte** *f*.
- Ctrl+Shift+M (Mac: Cmd+Shift+M): **Mezzo** *m*.
- Ctrl+Shift+R (Mac: Cmd+Shift+R): **Rinforzando** *r*.
- Ctrl+Shift+S (Mac: Cmd+Shift+S): **Sforzando** *s*.
- Ctrl+Shift+N (Mac: Cmd+Shift+N): **Niente** *n*.
- Ctrl+Shift+Z (Mac: Cmd+Shift+Z): **Z z**.
- Ctrl+Alt+- (Mac: Cmd+Alt+-): **Elision**  $\_$ .

### See also

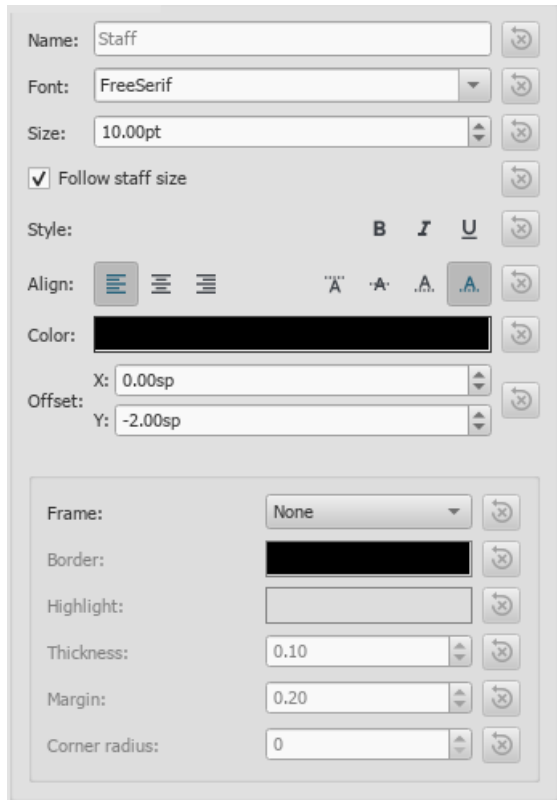
- [Chord symbol](#)
- [Lyrics](#)
- [Frame](#)
- [Edit mode](#)

## Text styles and properties

### Text styles

When you create a text object, it initially assumes the properties of the **Text Style** applicable to its class. *Staff text* objects, for example, have their own style, as do *tempo markings*, *lyrics*, *chord symbols*, and so on.

To view and edit any **Text Style**: select Format → Style... → Text Styles. This gives you access to the following properties:



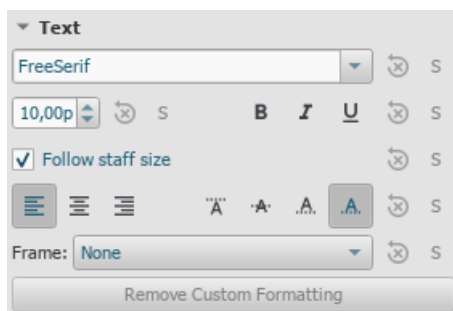
- **Name**: Change the name of a user style if desired.
- **Font face / Font size**: The name of the font (e.g. *Times New Roman*, *Arial* etc.) and its size in points.
- **Follow staff size**: Whether text size changes in proportion to score scaling.
- **Font style**: The font style to use, e.g. Italic, Bold or Underline.
- **Align**: Horizontal (left, center, right) and Vertical.
- **Color**: Color of the text.
- **Offset X/Y**: Horizontal and vertical offsets in sp. units.
- **Frame**: Choose to have a circular or square frame around the text.
- **Border**: Color of the frame border.
- **Highlight**: Color of the background within the frame.
- **Thickness**: Thickness of the line of the frame in space units.
- **Margin**: Inner frame margin in space units.
- **Corner radius**: For box frame, radius of rounded corner.

**Notes**: Opacity is set by the parameter "Alpha channel" in the "Select Color" dialog: a value between 0, transparent, and 255, opaque.

Alternatively, you can edit the properties of a **Text Style** by selecting an object of the desired style in the score, adjusting its properties in the Inspector, and clicking the **Set as style** buttons as you go. This will automatically update the **Text Style** and all relevant text objects in the score.

### Text objects

If you want to format a *particular text object* in the score differently to its Text Style, select it and adjust its text properties in the Inspector:



If you have made changes to a particular text property in the Inspector, but want to revert that property to the **Text Style** definition, press the "Reset to style default" button.

## Save and load text styles

Text Styles (together with all other styles in a document) can be saved as *astyle file* and loaded into other MuseScore files. See [Save and load style](#).

## See also

- [Text editing](#)
- [Header/Footer](#)
- [Behavior of applied text and lines](#)

## Staff and system text

**Staff Text** or **System Text** is invaluable as general purpose text. To apply to the score, use one of the following methods:

- Select a note or rest; then for **Staff text**, press Ctrl+T; or for **System text**, press Shift+Ctrl+T.
- Select a note or rest; then select the desired option from Add → Text.
- Select a note or rest, then click the desired text from a palette (double-click in versions prior to 3.4).
- Drag the desired text from a palette onto a note or rest.

This will create an empty bounding box for [text entry](#). Press Esc or click on an empty space outside the box to exit.

Apart from their indicative use, staff and system text also have optional playback properties: see below.

## Summary of differences:

Text style	Applies to?	Playback (if applicable)	Appears in Instrument parts?
<b>Staff text</b>	Staff only	Staff only	Staff instrument only
<b>System Text</b>	All system staves	All system staves	All instruments

## Staff text

**Staff Text** is applied to one [staff](#) (or Grand staff) in the score, and is indicative only for that staff; any playback effect associated with the text is limited in the same way. The text will appear in the corresponding instrument [part](#).

If you choose to [hide empty staves](#), any staff text belonging to an empty staff will also be hidden.

## Staff text properties

The regular properties of the text, such as font, size, italics etc, can be viewed and updated directly in the inspector, but staff text can also have properties related to playback.

Staff text can, for example, be used to apply indications such as *Solo* or *Pizzicato* to one staff in a score. Depending on what the instruction of the staff text is, playback of that staff at the text location can sometimes be altered to match the instruction. The playback properties of a staff text can be accessed in two ways:

- Select the staff text, and click on "Properties" in the "Staff Text" section of the Inspector.
- Right-click on the text and choose "Staff Text Properties," then click on the relevant tab.

The dialog window that opens contains tabs for the following playback properties:

### Change Channel.

This property can be used to change the sound of an instrument, such as switching between open and muted sound for a trumpet, or between arco and pizzicato for a violin. This only works for instruments which are defined to have more than one channel. You can check this by selecting the "Change Channel" tab and click on one of the option fields in the "Channel:" column. If there is only one option "normal", this instrument only has one channel. See [Mid-staff Sound Change](#) for more info.

### Swing Settings

To switch between playing with "straight" and "swing" feeling for just this staff/instrument. Note that you can also apply swing to all staves in the score or to the the complete score from start to finish. See [Swing](#) for more info.

### Capo Settings.

For stringed instruments you can apply a "capo", transposing the playback up by a number of frets/half-tone steps. See [Capo playback](#) for more info.

### MIDI Action

This tab does not do anything and can be ignored.

When staff text is copied and pasted elsewhere in the score, or if it is added to a [custom palette](#), the playback properties are also copied.

## System text

**System text** is applied to one staff in the score, but is indicative for every staff in the system. Any associated playback properties are applied to the whole system. The text will appear in all instrument parts.

System text is never hidden by the hide empty staves feature.

### System text properties

To add or edit Swing:

- Right-click on the text and choose **System Text properties**, then click on the **Swing Settings** tab.

### See also

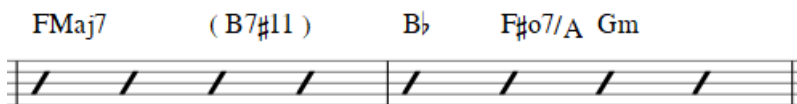
- Mid-staff sound change

### External links

- How to change instrument sound (e.g. pizz., con sordino) midway through score<sup>↗</sup> (MuseScore HowTo)

## Chord symbols

**Chord symbols** are an abbreviated way of representing musical chords (see Chord names and symbols <sup>↗</sup> (Wikipedia) for further details). For example:



**Note:** To fill measures with slashes, see Fill with slashes or Toggle rhythmic slash notation.

As well as conventional chord symbol notation, MuseScore as of version 3.3 also supports the Nashville Number System (NNS), and Roman Numeral Analysis (RNA).

### Enter a chord symbol

1. Select a start note or a slash;
2. Press Ctrl+K (Mac: Cmd+K);
3. The cursor is now positioned above the staff ready for input. Enter the chord symbol just like normal text, as follows:
  - **Root note:** A, B, C, D, E, F, G.
  - **Sharp:** # (hash symbol, Alt+3 on a UK keyboard).
  - **Flat:** b (small letter "b").
  - **Double sharp:** x (small letter "x") or ## (two hash symbols).
  - **Double flat:** bb (small letter "b" twice).
  - **Natural:** natural. *Note:* There should be no space *before* the word "natural", but any chord text following it should be separated by a space—the latter inserted using the command Ctrl+Space. Thus, to write **B:natural**: enter "Bnatural", then press Ctrl+Space, then type "natural". You can also use Ctrl+Shift+H. Note that neither of these transpose or play back (other than the root note), or export to MusicXML properly.
  - For other symbols, see Chord symbol syntax (below).
4. Move the cursor forward or backwards to continue entering or editing chord symbols (see Keyboard commands below);
5. Exit chord symbol mode by pressing Esc.

When you exit a chord symbol, the characters entered will automatically assume the correct format: by default **root note** typed in lower case will turn into upper case (for alternative options, see Automatic Capitalization); a "#", "b" or "natural" will turn into a proper sharp (♯), flat (♭) or natural (♮) and so on. Do not try to use actual flat, sharp and natural signs, as MuseScore will not understand those properly.

### Keyboard commands

The following commands are available during chord symbol entry:

- Space move Cursor to next note, rest, or beat
- Shift+Space move cursor to previous note, rest, or beat
- Ctrl+Space (Mac: Alt+Space) add a space to the chord name
- ; move cursor to next beat
- : move cursor to previous beat
- Tab move cursor to next measure
- Shift+Tab move cursor to previous measure

- Ctrl (Mac: Cmd) plus number (1 - 9) move Cursor by duration corresponding to number (e.g.; half note for 6)
- Esc exit.

### Chord symbol syntax

MuseScore understands most of the abbreviations used in chord symbols:

- **Major:** M, Ma, Maj, ma, maj, Δ (typed or ^ for the triangle)
- **Minor:** m, mi, min, -
- **Diminished:** dim, ° (entered with lowercase letter o, shows as ° if using the [Jazz style](#), as o otherwise)
- **Half-diminished:** ø (type o, zero). Alternatively, you can, of course, choose abbreviations such as mi7b5 etc.
- **Augmented:** aug, +
- The following abbreviations are also valid: *extensions* and *alterations* like b9 or #5, sus, alt, and no3; *inversions* and *slash chords*, such as C7/E; *commas*; *parentheses*, which can enclose part, or even all, of a chord symbol.

### Edit a chord symbol

An existing chord symbol can be edited in a similar way to ordinary text: See [Text editing](#).

### Transpose chord symbols

Chord symbols are automatically transposed by default if you apply the menu [Transpose](#) command to the containing measures. If this is not required, you can untick the "Transpose chord symbols" option in the same dialog.

### Chord symbol text

To adjust the appearance of *all* **chord symbol** text, use any of the following options:

- From the main menu, choose Format → Style → Text Styles → Chord Symbol. Then edit the text properties as required.
- Select a chord symbol and make changes in the [Inspector](#), pressing the "Set as style" buttons as you go.

### Chord symbol style

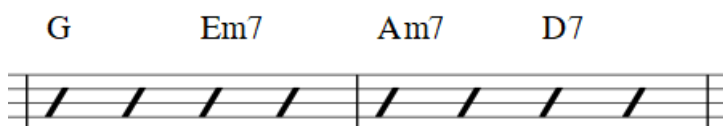
To access formatting options for **chord symbols**:

- From the menu, select Format → Style... → [Chord Symbols](#). Adjustable properties are listed under the following headings:

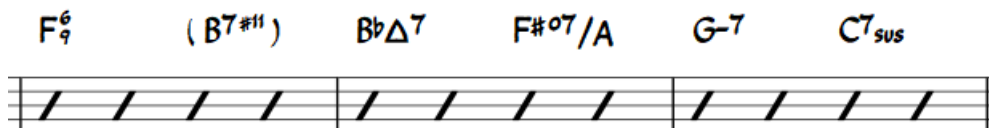
#### Appearance

Three options are possible: **Standard** and **Jazz** and **Custom**. You can select between these using the radio buttons.

- In the **Standard** style, chords are rendered simply, with the font determined by your [chord symbol text](#) style.



- In the **Jazz** style, the MuseJazz font is used for a handwritten look, with distinctive superscript and other formatting characteristics. The Jazz style is selected by default if you use any of the Jazz templates.



- The **Custom** style option allows you to customize the look of chord symbols (and also ensures compatibility with older scores). Select a customized **Chord symbols style file** in the field below: this can be created by copying and modifying one of the pre-existing files in the "styles" folder. Documentation can be found in the same folder. Note, however, that this is for advanced users only, and there is no guarantee these files will be supported in the future.

### Note spelling

By default, MuseScore uses letter names for chord symbols. For users in regions where other note naming schemes are used, MuseScore provides the following controls:

- **Standard:** A, B $\flat$ , B, C, C $\sharp$ ,...
- **German:** A, B $\flat$ , H, C, C $\sharp$ ,...
- **Full German:** A, B, H, C, C $\sharp$ ,...

- **Solfeggio:** Do, Do<sup>#</sup>, Re<sup>b</sup>, Re,...
- **French:** Do, Do<sup>#</sup>, Ré<sup>b</sup>, Ré,...

#### Automatic Capitalization

By default, MuseScore automatically capitalizes all note names on exit, regardless of whether you entered them in upper or lower case. However, you can also choose other automatic capitalization options:

- **Lower case minor chords:** c, cm, cm7,...
- **Lower case bass notes:** C/e,...
- **All caps note names:** DO, RE, MI,...

You can also turn off the automatic capitalization completely, in which case note names are simply rendered the way you type them.

#### Positioning

- **Distance to fretboard diagram:** If a fretboard diagram is present, this value is the height at which the chord symbol is applied *above* the diagram (negative values can be used).
- **Minimum chord spacing:** The space to leave between chord symbols.
- **Maximum barline distance:** Changes the size of the gap between the last chord symbol in the measure and the following barline. You only need to adjust this value if there is a continuous problem in the score with overlap between the last symbol in one measure and the first symbol in the next.

**Note:** In addition to the settings described here, the default position of applied chord symbols is also determined by settings in the [Text Styles](#) dialog. The effect is cumulative.

#### Capo

Enter the number of the capo position at which you want to display substitute chords, in brackets, after all chord symbols in the score.

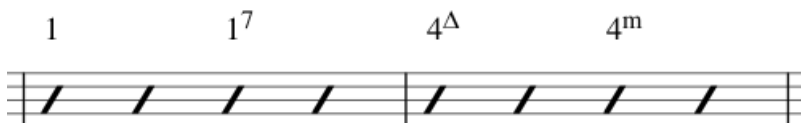
#### Nashville Number System

The Nashville Number System (NNS), available in MuseScore since version 3.3, is a shorthand way of representing chords based on scale degrees rather than chord letters. This allows an accompaniment to be played in any key from the same chord chart.

To start entering Nashville notation:

1. Select a start note;
2. From the menu, select Add → Text → Nashville Number.

Just as with standard chord symbols, you can type Nashville notation normally and MuseScore will do its best to recognize and format the symbols appropriately. The same shortcuts used for navigation when entering standard chord symbols (e.g. Space, see [above](#)) are available for Nashville notation as well.



#### Roman Numeral Analysis

As of MuseScore 3.3, the **Roman Numeral Analysis** system is supported—a type of musical analysis where chords are represented by upper and lower case Roman numerals (I, ii, III, iv etc.), superscripts, subscripts and other modifying symbols. It is used to notate and analyze the harmony of a composition independent of its key (see [External links](#) for further details).

**Note:** Unlike standard chord symbols and Nashville notation, which MuseScore formats using its own algorithms, RNA uses the free and open source [Campania font](#) to format the symbols. This allows MuseScore to format the symbols as you type, rather than applying the formatting only when you are done. Also, if you install the Campania font on your system normally, you can use it in other programs as well and benefit from the same formatting.

#### Enter RNA

1. Select a start note;
2. From the menu, select Add → Text → Roman Numeral Analysis. Alternatively, set up a keyboard shortcut to do the same thing in [Preferences](#);
3. Input the RNA symbols for the chord just like normal text, as follows;

- **Major chord:** Upper case roman numerals
  - **Minor chord:** Lower case roman numerals
  - **Diminished chord:** o (lower case)
  - **Half-diminished chord:** 0 (zero)
  - **Augmented chord:** +
  - **Chord inversions:** Enter up to 3 single-digit numbers, top note first
  - **Accidentals:** # (sharp), b (flat)
  - For other symbols, see the images below, ["Examples of RNA"](#).
4. Move the cursor forward or backwards to continue entering or editing symbols for other chords;
  5. When RNA is completed, exit by pressing Esc, or by clicking on a blank section of the score.

Just as with standard chord symbols, you can type Roman numeral analysis normally and MuseScore will do its best to recognize and format the symbols appropriately. The same shortcuts used for navigation when entering standard chord symbols are available for Roman numeral analysis as well (see [Keyboard commands](#) (above)).

#### Examples of RNA

Type this:



To get this:



#### Playback (as of version 3.5)

See [Playback: Chord symbols / Nashville numbers](#)

#### External Links

- [Nashville Number System](#) (Wikipedia)
- [Roman Numeral Analysis](#) (Wikipedia)
- [Campania font](#)
- [Chord Symbol Voicings for Playback](#)

## Fingering

Fingering symbols for various instruments are found in the [Fingering palette](#) in the Advanced workspace.

0	1	2	3	4	5
p	i	m	a	c	0
1	2	3	4	5	0
1	2	3	4	5	6
φ		·	..	...	

- **Keyboard** music employs the numbers 1–5 to represent fingers of the left or right hand.
- **Guitar** music uses the numbers 0–4 to represent left-hand fingering (T is occasionally used for the thumb). Right-hand fingering is indicated by the letters p, i, m, a, c. Circled numbers represent instrument strings.
- The last five symbols in the palette are used for **lute** fingering in historical music.

**Note:** To enable the display of fingering in tablature, right-click on the TAB, and select Staff/Part Properties... → Advanced Style Properties; then check the box labelled "Show fingering in tablature".

#### Add fingering to a single note

Use any of the following methods:

- Select a note and click one of the fingering symbols in a Palette (double-click in versions prior to 3.4).



- Drag and drop a fingering symbol from a palette onto a note

When fingering is added to a note, the focus immediately shifts to the symbol, so you can adjust it right away.

### Add fingering to several notes

1. Select the desired notes;
2. Click a fingering symbol in a palette (double-click in versions prior to 3.4).

### Easy fingering input mode (version 3.1 and above)

This special feature allows you to add fingering quickly and easily to successive notes.

1. Choose one of the following options:
  - Add the first fingering symbol using one of the methods shown above: this can be a "Left Hand Guitar Fingering", "Fingering" or "String Number";
  - For "Fingering" only: select a note and press the keyboard shortcut for "Add fingering," then type the desired number.  
*Tip:* Create a shortcut for this command in Preferences: Shortcuts: Ctrl+Alt+F, for example.
2. Choose one of the following options:
  - To move the cursor to the **next note**: Press Space, or Alt+→;
  - To move the cursor to the **previous note**: Shift+Space, or Alt+←;
3. Type the desired number;
4. Repeat steps 2 and 3 as required;
5. Press Esc, or click on an empty space in the document window, to exit.

### Adjust position of fingering

#### Single fingering

To change the position of *one* symbol, use any of the following methods:

- For fine adjustments (0.1 sp) use the arrow keys; For larger adjustments (1 sp) use Ctrl+← → ↑ ↓.
- Change X and Y offsets in the Inspector [↗](#).
- Drag the symbol using your mouse.

#### Multiple fingering

To change the position of multiple symbols:

1. Select the desired fingering symbols;
2. Adjust using the X and Y offsets in the Inspector [↗](#).

To restore a symbol to its default position, select it and press Ctrl+R.

### Edit fingering text

Fingering symbols are text objects and can be edited in the usual way. Text properties and overall style can be adjusted in the Inspector.

## Lyrics

### Enter a lyrics line

#### First line

1. Enter the notes of the melody line;
2. Select the note where you want to start entering lyrics;
3. To enter **lyrics mode**, type Ctrl+L (Mac: Cmd+L); or from the main menu, select Add → Text → Lyrics;
4. Type a syllable;
5. Use the following options to continue entering lyrics:
  - **Go to the next syllable**: Press Space (or Ctrl+→ (Mac: Alt+→)) at the end of a syllable.
  - **Hyphen** (to connect syllables): Press - at the end of a syllable.
  - **Go to the previous syllable**: Press Shift+Space (or Ctrl+← (Mac: Alt+←)).
  - **Move left**: Press ← (left arrow). If the cursor is at the beginning of a syllable, it will jump to the previous one.
  - **Move right**: Press → (right arrow). If the cursor is at the end of a syllable, it will jump to the next one.
  - **Move to the syllable below**: Press ↓ (down arrow).
  - **Move to the syllable above**: Press ↑ (up arrow).
  - **Start new lyrics line**: Press ↵ (Return) at the end of an existing lyrics syllable (*Note*: Don't use the Enter key from the numeric keypad!).

6. To exit **lyrics mode**, press Esc or click outside of the text box.

### Subsequent lines

If you want to add another lyrics line to an existing one (e.g. a 2nd or 3rd verse etc.):

1. Choose one of the following options:
  - Select the note where you want to start the new lyrics line. Enter **lyrics mode** as shown in step 3 (above). The cursor moves to a new (blank) line.
  - Enter **text edit mode** on an existing syllable, go to the end of the syllable and press ↵ (Return). The cursor moves to the next line.
2. Continue entering lyrics from step 4 (above).

### Example:



A musical score in 4/4 time with a key signature of two sharps (F# and C#). The melody is written on a treble clef staff, and the bass line is on a bass clef staff. The lyrics are: A - des - te, fi - del - es, Can - tet nunc hym - nos Er - go qui na - tus. The syllables are aligned with the notes: 'A' under the first note, 'des' under the second, 'te,' under the third, 'fi' under the fourth, 'del' under the fifth, 'es,' under the sixth, 'Can' under the seventh, 'tet' under the eighth, 'nunc' under the ninth, 'hym' under the tenth, 'nos' under the eleventh, 'Er' under the twelfth, 'go' under the thirteenth, 'qui' under the fourteenth, 'na' under the fifteenth, and 'tus' under the sixteenth.

### Special characters

In most cases, lyrics can be edited just like normal text. However, special keyboard shortcuts are required to enter the following characters:

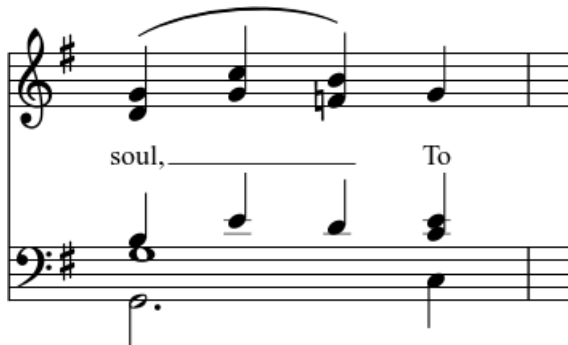
- **Space character:** Ctrl+Space (Mac: Alt+Space).
- **- (hyphen):** Ctrl+- (Mac: Alt+-) or AltGr+-.
- **Line feed:** Ctrl+↵ (Mac: Alt+Return) or Enter (from the numeric keypad).

### Verse numbers

To number verses, simply type the number (e.g. 1.) and a space before the first syllable. MuseScore will automatically align the numbers and first syllable correctly.

### Melisma

A **melisma** is a syllable or word that extends over two or more notes. It is indicated by an underline extending from the base of a syllable to the last note of the melisma. The underline is created by positioning the cursor at the end of a syllable and pressing Shift+\_ : once for each note in the melisma. See the image below:



A musical score in 4/4 time with a key signature of one sharp (F#). The melody is written on a treble clef staff, and the bass line is on a bass clef staff. The lyrics are: soul, \_\_\_\_\_ To. The word 'soul,' is underlined with a long horizontal line that extends across four notes. The word 'To' is underlined with a shorter horizontal line that extends across two notes.

The above lyric was created in the following manner:

1. Type the letters, soul,.
2. At the end of the word, press Shift+\_.
3. Type the letters To, then press Esc.


For non-last syllables to extend, just use additional dashes-, usually only one of them will show (more when the distance between the syllables is large enough), and the syllable will right-align to the first note, similar to last syllables that got notated with a melisma, see above.

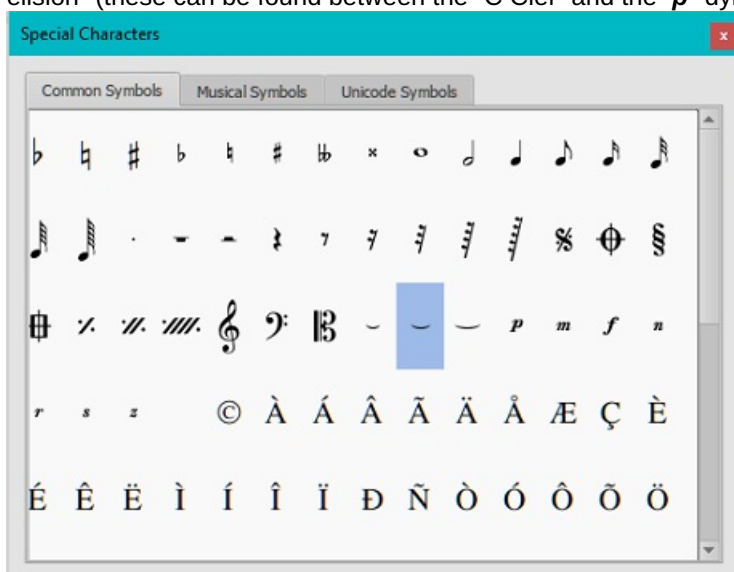
## Elision (Lyric) slur / Synalepha

Two syllables under a note can be joined with an **elision slur**, also known as a "lyric slur" or "synalepha". For example:




To create the example lyric text, starting with the syllable text "te":

1. Type te;
2. Click on the keyboard icon  in the bottom-left corner of the screen, or press=F2 to open the Special Characters palette;
3. Use one of the following options:
  - Double-click one of the three elision slurs in the "Common Symbols" tab: "Narrow elision", "Elision", or "Wide elision" (these can be found between the "C Clef" and the "p" dynamic—see image below):



- Double-click the elision slur found after the 7/8 fraction in the "Common Symbols" tab (next to last character in the image above). Depending on the font, add one or more spaces before/after the slur using Ctrl+Space (Mac: Alt+Space).

**Note:** Not all fonts include the "undertie" character (U+203F  "undertie", present in "Special Characters" mainly for compatibility with MuseScore 1.x scores). To find out which fonts on your computer support it, see "[fontlist](#) 

4. Type A.

As of 3.6: Ctrl+Alt+- (Mac: Cmd+Alt+-).

## Edit Lyrics

1. Enter text edit mode on an existing syllable;
2. Use standard text editing commands to make changes;
3. Continue entering lyrics (see above); or exit **lyrics mode** by pressing Esc.

## Adjust properties of lyrics

To make global adjustments to the properties of all lyrics in the score:

1. From the menu, select Format → Style... → Lyrics;
2. Edit Placement, Line height, Margins, Dash and Melisma properties as required.

## Adjust position of individual lyrics lines

To adjust the position of a *particular* lyrics line:

1. Select the lyrics line: i.e. right-click on a word in the line, and (from the menu) choose Select → More...; then check the relevant options, which should include "Same system";
2. Adjust the X and Y offsets in the Inspector.

## Copy lyrics to clipboard

To copy *all* lyrics to the clipboard:

- From the menu bar, select Tools → Copy Lyrics to Clipboard.

## Paste lyrics from clipboard

To copy and paste lyrics from a text file (say) into a score:

1. Enter the notes in the score to which the lyrics will be attached.
2. Set up your lyrics in a text file, with appropriate spaces, hyphens, line-breaks etc.
3. Copy the lyrics from the text-file into the clipboard.
4. Select the start note in MuseScore, and press Ctrl+L (Mac: Cmd+L) (step 3 under [Enter lyrics in a score](#)).
5. Repeatedly applying paste will enter successive words of the lyrics. You may need to enter melismas and make other corrections as you go along.

## See also

- [Text](#)
- [Chord symbol](#)

## External links

- [How to insert Lyrics](#) ↗ (MuseScore HowTo)
- [How to move lyrics](#) ↗ (MuseScore HowTo)
- [How to add a block of text to a score](#) ↗ (MuseScore HowTo)
- [How to copy lyrics, or lyrics with rhythm](#) ↗ (MuseScore HowTo)
- [How to add lyrics in columns](#) ↗ (MuseScore HowTo)
- [Video tutorial: MuseScore in Minutes: Lesson 6 - Text, Lyrics and Chords](#) ↗

## Rehearsal marks

**Rehearsal marks** can be used in a number of ways:

- To identify specific points in a score to facilitate rehearsing.
- As bookmarks in the score to which you can instantly navigate—using the [Find/Search](#) command.
- To mark the various sections in the score.

Typically, **rehearsal marks** consist of one or more letters and/or numbers, and appear in sequence in the score—e.g. A, B, C..., or 1, 2, 3... etc. Alternatively, they may display measure numbers (usually larger than standard measure numbers, boldface and/or enclosed in boxes). Multimeasure rests are automatically broken before and after rehearsal marks.

Rehearsal marks can be added to the score (i)*automatically*—which ensures that they are named in sequence—or (ii) *manually*, allowing you to name them as you wish.

### Add a rehearsal mark

#### Manual Placement

To create a rehearsal mark manually:

1. Click on a note (or rest) at the desired location;
2. Select one of the following options:
  - Press Ctrl+M (Mac: Cmd+M);
  - From the menu, choose Add → Text → Rehearsal Mark;
3. Enter the desired text.

#### Automatic placement

##### Add an alphanumeric rehearsal mark

Use either of the following options:

- Click on a note (or rest) at the desired location, then click the [B1] rehearsal mark icon in the "Text" [palette](#) (double-click in versions prior to 3.4).
- Drag and drop the rehearsal mark from the "Text" palette onto the score.

**Notes:** (1) By default, marks are added in the sequence, A, B, C etc. (2) To change the format of subsequently-added

marks (to lower case letters, or numbers), edit the previous rehearsal mark accordingly. (3) Marks added between existing rehearsal marks append a number or letter to the previous mark: it is a good idea to apply the [Resequence](#) command afterwards (see below).

#### Add a measure-number rehearsal mark

1. Add the first rehearsal mark in the series as an alphabetical one; then [edit](#) it to read the *same* as the number of the measure it is attached to;
2. Add subsequent marks as shown [above](#). They will automatically adopt the measure-number format.

#### Automatically resequence rehearsal marks

MuseScore allows the user to automatically re-order a series of rehearsal marks if they have got out of sequence for any reason. Use the following method:

1. Before making a selection, you can, if desired, establish a new format for the rehearsal marks (lower/upper case, number, or measure number) by manually altering the first mark in the range accordingly.
2. Select the range of measures you wish to apply the **Resequence** command to (if there is no selection then the program assumes you wish to resequence all measures).
3. From the menu, select Tools → Resequence Rehearsal Marks.

MuseScore automatically detects the sequence based on the *first rehearsal mark* in the selection—all rehearsal marks in the selection are then altered accordingly. The following sequences are possible:

- A, B, C etc.
- a, b, c etc.
- Numerical: 1, 2, 3 etc.
- Numerical: according to measure numbers. This requires the number of the first mark in the series to be equal to the number of the measure it is attached to.

#### Text style

Rehearsal marks are a variety of [system text](#), appearing both on the score and on every [part](#). By default, they are in a large bold font, and enclosed in frames. All aspects of their appearance can be changed globally via the rehearsal mark [Text style](#).

#### Search for a rehearsal mark

See [Find](#) (Viewing and navigation).

#### See also

- [Text properties](#)

#### External links

- [Rehearsal Letter](#) [↗](#) (Wikipedia article)

## Formatting

### Layout and formatting

Layout and formatting options for the score are accessed from the **Format** menu.

#### Ways to affect layout

The *main* commands and dialogs affecting score layout are listed immediately below. Other formatting options are covered further down the page (but for text, see [Text styles and properties](#)).

- [Page Settings](#): Adjust the overall dimensions of your score such as page size, page margins, and scaling.
- [Increase/Decrease Layout Stretch](#): Adjust the score spacing by stretching or squashing selected measures.
- [Score](#): Set overall score details, such as music font, display of multimeasure rests, and whether to hide empty staves.
- [Page](#): Adjust staff and system spacing, score and lyric margins etc.
- [Measure Style](#): Set the measure spacing, which affects the number of measures per line.

- **Sizes:** Set the default size of "small" and grace notes, small staves and small clefs.

Other commands:

- **Add/Remove System Breaks:** Set the number of measures per system.
- **Breaks and spacers:** Apply system, page or section breaks. You can also add extra space between *particular* systems or staves where needed.

## Style

The **Style** submenu contains dialogs which allow you to adjust the global formatting of many score elements. To open **Style** use any of the following options:

- From the menu, select Format → Style...
- Right-click on a space in the document window and select style....
- Use a keyboard shortcut (see [Shortcuts](#)).

The **Style** dialogs are as follows:

### Score

To open the **Score** dialog, select Format → Style... → Score.

This dialog allows you to set global properties, such as the music font, display of multimeasure rests, whether or not to hide empty staves, swing playback etc.

- **Musical symbols font:** Choice of display in Emmentaler, Bravura or Gonville fonts. Tick the box to "automatically load style settings based on font."
- **Musical text font:** Choice of display in Emmentaler, Bravura, Gonville or MuseJazz fonts.
- **Display in concert pitch:** Tick this option to display the score at concert pitch. If unticked the score is displayed at written pitch.
- **Create multimeasure rests:** Tick to display multimeasure rests.
- **Minimum number of empty measures:** The default is 2.
- **Minimum width of measure:** The default width is 4 sp.
- **Hide empty staves within systems:** This option saves space by hiding those staves in a system which consist of only empty measures. Used for *condensed scores*.
- **Don't hide empty staves in first system** Always display staves in first system even if they consist of empty measures.
- **Always show brackets which span to single staff**
- **Display note values across measure boundaries:** A feature useful for notating early music. See [Unbarred notation](#).
- **Hide instrument name if there is only one instrument** You don't usually need to display the instrument name in this case.
- **Swing settings** allows you to control the degree of swing for the whole score.
  - **Swing:** Choice of OFF (default) / Eight Note / Sixteenth note.
  - **Select swing ratio:** The default is 60%.

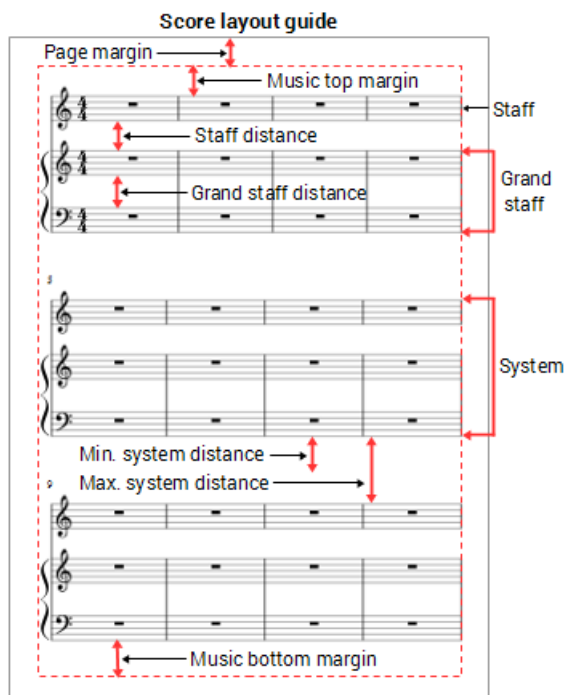
If you prefer to set swing on the score page, see [Swing](#).

### Page

To open the **Page** dialog, select Format → Style... → Page.

This dialog allows you to adjust the overall layout of your score by changing the spacing of margins, systems, staves, lyrics lines, and frames. You can also control the display of key signatures, time signatures, and clefs.

The diagram below is a guide to various parameters under the control of this dialog:



- **Music top margin:** The distance between the top staff line of the first staff on the page and the top page margin.
- **Music bottom margin:** The distance between the bottom staff line of the last staff on the page and the bottom page margin.
- **Staff distance:** The space between staves which are not part of a grand staff (see below).
- **Grand staff distance:** The space between staves that share the *same* instrument—such as the piano, organ, or those of a guitar staff/tab pair.

*Note:* To alter the space above *one particular* staff see Extra distance above staff (Staff properties).

- **Min. system distance:** The minimum distance allowed between one system and the next.
- **Max. system distance:** The maximum distance allowed between one system and the next.
- **Vertical frame top margin:** The default margin height *above* a vertical frame.
- **Vertical frame bottom margin:** The default margin height *below* a vertical frame.
- **Last system fill threshold:** If the last system is longer than this percentage of the page width, it gets stretched to fill that width.

The following check boxes allow you to control the display of clefs, time signatures, and key signatures—including the courtesy kind.

- Create clef for all systems / Create key signature for all systems / Create courtesy clefs / Create courtesy time signatures / Create courtesy key signatures.

#### Sizes

To open the **Sizes** dialog, select Format → Style... → Sizes.

Sets the proportional size of "small" notes and grace notes, as well as small staves and small clefs. Changing this would be unusual.

#### Header, Footer

To open the **Header, Footer** dialog, select Format → Style... → Header, Footer.

This allows you to add header and footer text using meta tags (see Score properties)—such as page numbers, page headers, copyright information etc. For example, you can create different Headers and Footers for even and odd pages, such as putting page numbers on the right for odd-numbered pages and on the left for even-numbered pages.

If you hover with your mouse over the Header or Footer text region, a list of macros will appear, showing their meaning, as well as the existing meta tags and their content.

To create a header or footer for an individual part, that part needs to be the active tab. To create a header or footer for a score with linked parts, make sure the main score is in the active tab.

### Measure Numbers

To open the **Measure Numbers** dialog, select Format → Style... → Measure Numbers.

This allows you to specify whether measure numbers will appear in the score, and, if so, at what intervals.

- **Measure numbers:** Tick to turn on automatic measure numbers.
- **Show first:** Tick if you want the first measure to display a number.
- **All staves:** Tick to display numbers on all staves of a system. Untick if you want the number to appear on the top staff of the system only.
- **Every system:** Select this option to place measure numbers at the start of each system.
- **Interval:** To specify that measure numbers should appear at a measure interval shown by the number. For example, an interval of 1 numbers every measure; an interval of 5 numbers every fifth measure.

### System

To open the **System** dialog, select Format → Style... → System.

This dialog allows you to adjust certain properties of all systems.

Brackets:

- **System bracket thickness:** Set the *width* of system brackets.
- **Brace thickness:** Set the *width* of system braces.
- **System bracket distance:** Set the *distance* between system brackets and the start barlines.
- **Brace distance:** Set the *distance* between system braces and the start barlines.

See also [Brackets](#).

Dividers:

- **Left / Right:** Specify whether to show system dividers, what types, and apply global positioning offset values.

### Clefs

To open the **Clefs** dialog, select Format → Style... → Clefs.

Choose the style of the default tablature clef: **Standard** or **Serif**.

### Accidentals

To open the **Accidentals** dialog, select Format → Style... → Accidentals.

Allows you to specify how the score displays key signature accidentals at key changes. See [Naturals on key signature changes](#).

### Measure

To open the **Measure** dialog, select Format → Style... → Measure.

For details, see [Measure](#).

### Barlines

To open the **Barlines** dialog, select Format → Style... → Barlines.

- **Show repeat barline tips ("winged repeats")**
- **Barline at start of single staff:** Whether to show barlines at the beginning of a staff.
- **Barline at start of multiple staff:** Whether to show barlines at the beginning of multiple staves.
- **Scale barlines to staff size:** Affects "small" staves only.

Other properties allow you to set the thickness of "thin," "thick" and double barlines, the distance between double barlines, and the repeat barline to dot distance.

### Notes

To open the **Notes** dialog, select Style → General... → Notes. The dialog can also be opened direct from the score by right-clicking on any note and selecting "Style..."



Here you can adjust the distance and thickness of note-related objects (stems, ledger lines, dots, accidentals). Changing these would be unusual.

## Beams

To open the **Beams** dialog, select Style → General... → Beams.

This allows you to set the overall properties of note beams in the score:

- **Beam thickness**
- **Beam distance:** The vertical distance between beams.
- **Broken beam minimum length:** Affects secondary beams where they do not fully extend from note to note.

Ticking the **Flatten all beams** option means that all note beams will be horizontal only—not sloped.

## Tuplets

To open the **Tuplets** dialog, select Format → Style... → Tuplets.

Vertical Distance from Notes:

- **Maximum slope:** Limit the slope of tuplet brackets.
- **Vertical distance from stem:** Refers to tuplet numbers and brackets.
- **Vertical distance from notehead:** Refers to tuplet numbers and brackets.

Horizontal distance from notes:

- **Distance before stem of first note:** Sets default position of start of tuplet bracket when above/below note stems.
- **Distance before head of first note:** Sets default position of start of tuplet bracket when above/below noteheads.
- **Distance after stem of last note:** Sets default position of end of tuplet bracket when above/below note stems.
- **Distance after head of last note:** Sets default position of end of tuplet bracket when above/below noteheads.

Brackets:

- **Bracket thickness:**
- **Bracket hook height;** Sets the default length of the vertical hooks at the ends of tuplet brackets

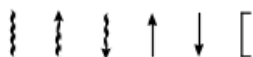
Properties:

- **Direction / Number type / Bracket type**

## Arpeggios

To open the **Arpeggios** dialog, select Format → Style... → Arpeggios.

Here you can change the distance to note, line thickness, and hook length of the following arpeggio and strum symbols:



## Slurs/Ties

To open the **Slurs/Ties** dialog, select Format → Style... → Slurs/Ties.

- **Line thickness at end**
- **Line thickness middle**
- **Dotted line thickness**
- **Minimum tie length**
- **Autoplace min. distance**

## Hairpins

To open the **Hairpins** dialog, select Format → Style... → Hairpins.

Here you can set the default properties of hairpins (crescendo and decrescendo lines):

- **Placement:** Whether to place above or below the staff.
- **Position above/below:** Set a numerical value in sp. units.
- **Height:** The width of the mouth of the hairpin.
- **Continue height**
- **Autoplace distance to dynamics**
- **Line thickness**

## Volta

To open the **Volta** dialog, select Format → Style... → Volta.

Here you can set the default properties of voltas:

- **Default position:** Set X- and Y-offsets.
- **Hook height:** The length of descending lines at the ends of voltas.
- **Line thickness**
- **Line style:** A solid line is the default option, but there are dotted and dashed alternatives.

## Ottava

To open the **Ottava** dialog, select Format → Style... → Ottava.

Here you can set the default properties of ottavas (octave lines):

- **Numbers only:** If unticked, the ottava also displays "va" or "vb" after the number.
- **Position above/below:** Set the X- and Y-offsets for the ottava.
- **Hook height above/below:** The length of the ascending/descending line at the end of the ottava.
- **Line thickness**
- **Line style:** A dotted line is the default option, but there are solid, dotted and dashed alternatives.

## Pedal

To open the **Pedal** dialog, select Format → Style... → Pedal.

Here you can set the default properties of pedallines:

- **Placement:** Below or above the staff.
- **Position above/below:** Set the exact default position using offset values.
- **Line thickness:**
- **Line style:** solid is the default but there is a range of dashed and dotted options.

## Trill

To open the **Trill** dialog, select Format → Style... → Trill.

Here you can set the default placement of Trilllines:

- **Placement:** Below or above the staff.
- **Position above/below:** Set the exact default position using offset values.

## Vibrato

To open the **Vibrato** dialog, select Format → Style... → Vibrato.

Here you can set the default placement of Vibratolines:

- **Placement:** Below or above the staff.
- **Position above/below:** Set the exact default position using offset values.

## Bend

To open the **Bend** dialog, select Format → Style... → Bend.

Here you can set the display properties of Bends. This includes the line thickness, arrow width and font properties.

## Text Line

To open the **Text Line** dialog, select Format → Style... → Text Line.

Here you can set the default placement of text lines:

- **Placement:** Below or above the staff.
- **Position above/below:** Set the exact default position using offset values.

## Articulations, Ornaments

To open the **Articulations, Ornaments** dialog, select Format → Style... → Articulations, Ornaments.

This dialog allows you set the default placement distances and size (as a percentage) of articulations and ornaments.

## Fermatas

To open the **Fermatas** dialog, select Format → Style... → Fermatas.

This dialog allows you set the default placement of **fermatas**.

## Staff Text

To open the **Staff text** dialog, select Format → Style... → Staff Text.

This dialog allows you set the default placement and autoplacement properties of staff text.

## Tempo Text

To open the **Tempo text** dialog, select Format → Style... → Staff Text.

This dialog allows you set the default placement and autoplacement properties of tempo text.

## Lyrics

To open the **Lyrics** dialog, select Format → Style... → Lyrics.

The screenshot shows the 'Lyrics' dialog box with three main sections: 'Lyrics Text', 'Lyrics Dash', and 'Lyrics Melisma'. Each section contains various settings with input fields and buttons for resetting to defaults.

- Lyrics Text:** Placement (Below), Position above (X: 0.00sp, Y: -2.00sp), Position below (X: 0.00sp, Y: 3.00sp), Line height (100.00%), Min. top margin (1.0sp), Min. bottom margin (2.0sp), and a checked 'Align verse number' option.
- Lyrics Dash:** Min. dash length (0.40sp), Max. dash length (0.80sp), Max. dash distance (16sp), Dash thickness (0.15sp), Dash pad (0.05sp), Dash Y position ratio (0.67), and a checked 'Always force dash' option.
- Lyrics Melisma:** Melisma thickness (0.10sp), Melisma pad (0.10sp), and an 'Align' section with four buttons for different alignment styles.

### Lyrics Text

- **Placement:** Default position of lyric lines in relation to the staff; Above or Below.
- **Position above / Position below:** The X and Y offsets for "Placement."
- **Line height:** Default distance between lyric lines.
- **Min. top margin:** Minimum distance between the lyric lines and the parent staff's *skyline*.
- **Min. bottom margin:** Minimum distance between the lyric lines and the *skyline* of the next staff.
- **Min. distance:** Minimum distance between lyrics syllables.
- **Align verse number:**

### Lyrics Dash

- **Min. dash length:** Minimum length of inter-syllable dashes.
- **Max. dash length:** Maximum length of inter-syllable dashes.
- **Max. dash distance:** Maximum distance allowed between dashes. Reducing this value allows more dashes to form between syllables where possible—and vice versa.
- **Dash thickness:** The (vertical) thickness of the dash.
- **Dash pad:** The distance between the - and the syllable
- **Dash y position ratio:** Affects the vertical placement of the dash.
- **Always force dash:** Tick to ensure that a dash is always visible between syllables.

### Lyrics melisma

- **Melisma thickness:** The (vertical) thickness of the melisma.
- **Melisma pad:** The distance between the \_ and the syllable
- **Align:**

See also, [Melismas](#).

### Dynamics

To open the **Dynamics** dialog, select Format → Style... → Dynamics.

This dialog allows you set the default placement and autoplacement properties of [dynamics](#).

### Rehearsal Marks

To open the **Rehearsal Marks** dialog, select Format → Style... → Rehearsal Marks.

This dialog allows you set the default placement and autoplacement properties of [rehearsal marks](#).

### Figured Bass

To open the **Figured Bass** dialog, select Format → Style... → Figured Bass.

This allows you to set the default font, style, alignment and position of [figured bass](#).

### Chord Symbols

To open the **Chord Symbols** dialog, select Format → Style... → Chord Symbols.

This section allows you to adjust the format and positioning of [chord symbols](#):

Appearance:

- Choose a default chord symbol style—Standard, Jazz or Custom.

Note spelling:

- Choose the spelling convention for chord symbols and whether to use capital or small letters.

Positioning:

- **Distance to fretboard diagram:** The distance (in sp. units) from a chord symbol to a fretboard diagram when both are applied to the same location on a staff. This value overrides the above "Default vertical position" setting. The user can choose to place a chord symbol below a fretboard diagram by entering a negative value.
- **Minimum chord spacing:** The minimum space to allow between chord symbols.
- **Maximum barline distance:** Increases the distance between the final chord symbol in a measure and the following barline. You *may* wish to adjust this value if there is a recurring problem in the score with overlap between the final chord symbol in one measure and the following chord symbol.

Capo:

- **Capo fret position:** Enter the number of the capo position at which you want to display substitute chords, in brackets, for all chord symbols in the score.

### Fretboard Diagrams

To open the **Fretboard Diagrams** dialog, select Format → Style... → Fretboard Diagrams.

This section allows you to adjust the format and positioning of [Fretboard diagrams](#).

- **Default vertical position:** the distance in sp. units from a newly applied fretboard diagram to a staff. A negative value may be used.
- **Scale:** Increase or decrease the size of the fretboard diagram in the score.
- **Fret offset number font size:** Increase or decrease the size of a fret number displayed next to a diagram.
- **Position Left/Right:** Display fret number to the left or right of the fretboard diagram.
- **Barre line thickness:** Make barre lines in fretboard diagrams thicker or thinner.

### Text Styles

To open the **Text Styles** dialog, select Format → Style... → Text Styles.

This dialog allows you to set the formatting of *all* text styles. Individual text styles can also be set from the [Inspector](#).

### OK / Cancel / Apply buttons

Any changes made in the **Style** dialog are immediately applied to the score, but can be rescinded at any time by pressing Cancel—which also exits the dialog. Press OK to save your changes to the score and close the window.

If you are making formatting adjustments in an instrument part, use the **Apply to all Parts** button to apply all changes to *all* parts in the score.

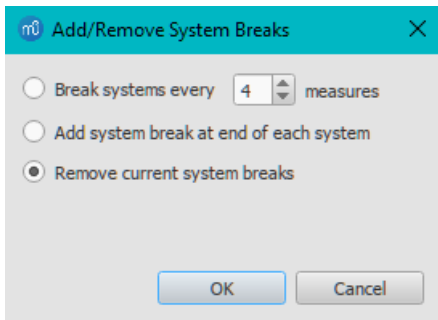
## Page Settings...

See [Page settings](#).

## Add / Remove System breaks

This tool adds or removes system breaks over *all* or *part* of the score:

1. Select a range of measures: if no selection is made, the command is applied to the whole score.
2. Choose **Format** → **Add/Remove System Breaks...** The following dialog appears.



3. Choose one of the following options:
  - Break systems every X (select number) measures;
  - Add system break at end of each system;
  - Remove current system breaks;
4. Press **OK**.

## Stretch

Used to increase, decrease or reset the horizontal spacing of notes within selected measures.

### Increase / Decrease layout stretch

1. Select a range of measures. Or use **Ctrl+A** to select the whole score.
2. Choose one of two options:
  - To **increase stretch**:
    - Use the shortcut **}** (right curly bracket) (Mac: **Ctrl+Alt+9**).
    - Or from the menu bar, select **Format** → **Stretch** → **Increase Layout Stretch**.
  - To **decrease stretch**:
    - Use the shortcut **{** (left curly bracket) (Mac: **Ctrl+Alt+8**).
    - Or from the menu bar, select **Format** → **Stretch** → **Decrease Layout Stretch**.

### Reset stretch

To reset stretch to the default spacing of 1:

1. Select a range of measures. Or use **Ctrl+A** to select the whole score.
2. From the menu, select **Format** → **Stretch** → **Reset Layout Stretch**.

See also [Measure Properties: Layout stretch](#). This allows you to set the stretch more precisely.

## Reset Style

To reset *all* text styles to the "factory" default settings:

- From the menu, select **Format** → **Reset Style**.

## Reset Beams

To restore beams to the mode defined in the local time signatures:

1. Select the section of the score you want to reset. If nothing is selected, the operation will apply to the whole score;
2. Select **Format** → **Reset Beams**.

See also [Beams](#).

## Reset Shapes and Positions

The **Reset Shapes and Positions** command restores the default positions, note stem directions and shapes (slurs, ties etc.) for selected score elements. To apply:

1. Select the elements or the region of the score that you wish to reset. Or use `Ctrl+A` to select the whole score.
2. Press `Ctrl+R`; or, from the menu, select `Format → Reset Shapes and positions`.

## Load / Save style

It is easy to transfer a complete set of styles (all General Style settings, all [text styles](#), and [page settings](#)) from one score to the other using the **Load/Save Style** feature.

To **load** a customized style:

1. Go to `Format → Load Style...`
2. Navigate to and select the Style file (.mss) and click `Open` (or double-click on the file).

All existing styles in the score should update automatically.

To **save** a customized style:

1. Go to `Format → Save Style...`
2. Name and save the **style file** (the default folder is set in your [Preferences](#)). Styles are stored as \*.mss files.

**Note:** You can also define a preferred style for scores and parts in the [Score](#) section of MuseScore's Preferences.

## See also

- [To edit spacing between notes](#)
- [Upgrading from MuseScore 1.x, local layout](#)

## External links

- [Creating Modified Stave Notation in MuseScore](#) [↗](#) (MuseScore Tutorial)
- [MuseScore in 10 Easy Steps: Part 10A Layout and Formatting \(a video tutorial\)](#) [↗](#)
- [MuseScore in 10 Easy Steps: Part 10B Layout and Formatting \(a video tutorial\)](#) [↗](#).

## Measure

To open the **Measure** dialog, select `Format → Style... → Measure`.

This allows you to adjust the distance between various items within measures.

### Introduction

If you change a **measure style** property, MuseScore automatically adjusts the score to maintain the correct spacing between notes and rests according to best music engraving practice. It will also correctly reposition any *elements* attached to notes or rests, such as fingerings, dynamics, lines etc.

All settings related to measure width and note spacing are *minimum* values. Measures are automatically stretched, if necessary, to maintain existing [page margins](#).

All the properties listed below use the **staff space** (abbreviated to "sp") as the basic unit of measurement. See [Page settings: Scaling](#) for more details.

### Options

- **Minimum measure width:** Sets the minimum horizontal length of measures. In measures containing very little content (e.g., a single whole note or whole measure rest), the measure will only shrink as far as this minimum.
- **Spacing (1=tight):** Condenses or expands the space *after* notes or rests. This setting thus affects not only space between notes but also between the last note and the ending barline. For the space between the *beginning* of the measure and the first note or rest, see **Note left margin** (below).
- **Note left margin:** Sets the distance from the start barline to the first note.
- **Barline to grace note distance:** Sets the distance between a barline and a grace note that occurs before the first actual note in a measure (independently of the "Note left margin" setting).

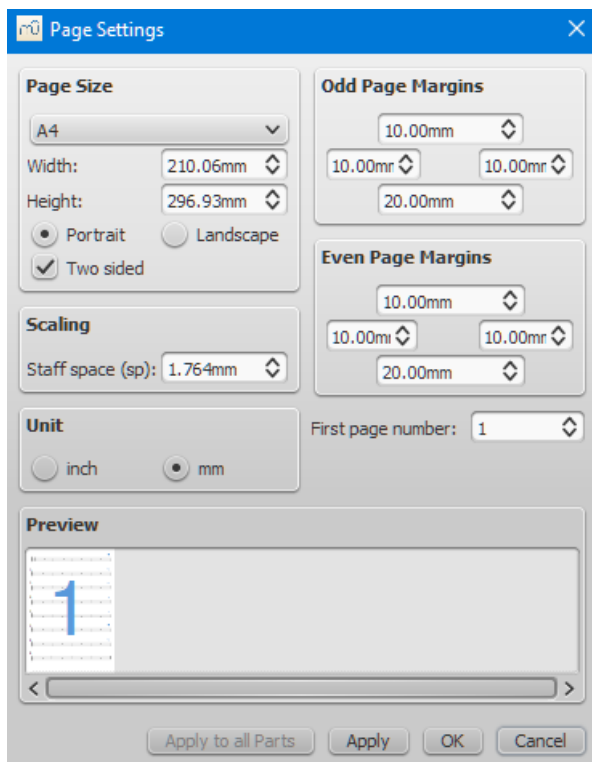
- **Barline to accidental distance:** Sets the distance between a barline and an accidental placed before the first note in a measure (independently of the "Note left margin" setting).
- **Note to barline distance:** Sets the distance from the last note to the following barline.
- **Minimum note distance:** Specifies the smallest amount of space MuseScore will allow after each note (depending on other factors, *more* space may be allowed).
- **Clef left margin:** Sets the distance between the very beginning of each line and the clef. (This option is rarely needed.)
- **Key signature left margin:** Sets the distance between the beginning of the measure and a key signature.
- **Time signature left margin:** Sets the distance between the beginning of the measure and a time signature (if there is no key signature in between).
- **Time signature to barline distance:** To be added
- **Clef/key right margin:** Sets the distance between a mid-staff clef or key signature and the following note or rest.
- **Clef to barline distance:** Sets the distance between a barline and a clef change preceding it.
- **Clef to key distance:** Sets the distance from the clef to a key signature following it.
- **Clef to time signature distance:** Sets the distance from the clef to the time signature following it (if there is no key signature in between).
- **Key to time signature distance:** Sets the distance from a key signature to the following time signature.
- **Key to barline distance:** To be added..
- **System header distance:** Sets the distance from a clef or key signature at the beginning of a system to the first note or rest.
- **System header with time signature distance:** Sets the distance from a time signature at the beginning of a system to the first note or rest.
- **Multimeasure rest margin:** Sets the distance between a multimeasure rest and the barlines on either side.
- **Staff line thickness:** Sets the thickness of the lines of the staff, which allows you to make the staff thicker and darker, if you need greater visibility on your printouts.

**Note:** Changes to an individual measure's **Stretch** (using Format → Stretch → Increase/Decrease Layout Stretch) are calculated after, and proportional to, the global **Spacing** setting.

## Page settings

**Page settings** allows you to adjust the *overall* dimensions of your score such as page size, page margins, and scaling. It is one of the main layout tools in MuseScore—along with the options available from Format → Style...

To open the **Page settings** dialog: from the menu, select Format → Page Settings....



## Page size

Here you can select the paper format, either by standard name (e.g., Letter or A4), or by specifying the height and width in either mm or inches (use the radio buttons to choose which unit of measurement to use). The initial default page size depends on your localization—in the United States, Letter size paper is standard.

You can also choose to format your music in **Landscape** or **Portrait** orientation using the radio buttons. You can optionally use **Two sided** layout (i.e., book format, with mirror left and right margins for even and odd pages—see [below](#)).

## Odd/Even Page Margins

The **Even Page Margins** and **Odd Page Margins** settings allow you to define the printable area of your pages. Aside from changing the margins around the music on the page, other settings, such as the positions of headers and footers, are calculated relative to the margins defined here.

If the "Two sided" checkbox under "Page Size" is selected, you can set margins differently for mirroring odd and even pages. Otherwise, only one set of margins can be modified, but will apply to all pages.

To display page margins in your score on screen (though not in print), go to **View** → **Show Page Margins**.

## Scaling

The **Scaling** property allows you to increase or decrease the size of your score.

In MuseScore, the sizes of score elements, such as note heads, note stems, accidentals, clefs etc., are defined in terms of a unit of measurement called a **staff space**—abbreviated to **sp.** (see [Glossary](#)). As you change the "Staff space" setting, *all* score elements follow suit and thus correct proportions are maintained. The exception is **Text** in which you can set an *absolute* value, independent of "Scaling."

**Note:** Changing the "Scaling" does not always change the number of systems per page, because system distance can vary between limits set under "Min system distance" and "Max system distance" (see **Format** → **Style...** → **Page**).

## Unit

Here you can choose to display the values in Inches or millimeters.

## First page number

Sets the number of the first page of the particular score. Page numbers below 1 won't get printed—e.g., setting the first page number to -1 would result in the first and second page showing no page number, and page number 1 appearing on the third page.

## Apply to all Parts



The Apply to all Parts button is available when modifying a **part**, rather than the main score (see [Part extraction](#)). If you change the page settings of one part and want the rest of the parts to have the same settings, this button will apply the change to all parts in one go.

## Breaks and spacers

The **Breaks & Spacers** palette contains the following non-printing symbols:



The first three symbols are called breaks; the vertical lines are known as spacers.

### Breaks

A **break** can be applied to either a measure or a frame. There are three types:

- **System break**: Forces the next part of the score to start in a new system.
- **Page break**: Forces the next part of the score to start on a new page.
- **Section break**: Forces the next part of the score to start in a new system and starts a new section (see below). It can be combined with a page break if required.

**Notes:** (1) Break symbols are visible on the screen, but do not appear on printouts. (2) To add (or remove) system breaks over *all* or *part* of the score, see [Add/Remove System breaks](#). (3) To split a measure, see [Measure operations: Split and join](#).

#### Add a break to a measure

Breaks can be added using either (1) a *keyboard shortcut*; or (2) a *break symbol* from a palette.

##### Using a keyboard shortcut

To add a **System break** or a **Page break** only:

1. Select any one of the following:
  - Barline;
  - Measure;
  - Notehead;
  - Text element associated with a staff (e.g. lyric syllable, chord symbol, staff text etc.);
  - Range of measures (if you choose this option, a break will be applied before and after the selection);
2. Choose one of the following options:
  - **System break**: Press  $\leftarrow$  (toggle).
  - **Page break**: Press  $\text{Ctrl}+\leftarrow$  (Mac:  $\text{Cmd}+\leftarrow$ ) (toggle).

##### Using a palette break symbol

Any break can be added from a workspace palette:

1. Select any one of the following:
  - Barline;
  - Measure;
  - Notehead;
  - Text element associated with a staff (e.g. lyric syllable, chord symbol, staff text etc.);
  - Range of measures (if you choose this option, a break will be applied before and after the selection);
2. Click a break symbol in a palette (double-click in versions prior to 3.4). Repeat to toggle off.
  - Alternatively, *drag* any break symbol from a palette onto a measure.

#### Add a break to a frame

To add a break to a frame, use one of the following options:

- Drag a break from a palette onto a frame.
- Select a frame then click a palette break symbol (double-click in versions prior to 3.4).

#### Delete breaks

Use one of the following options:

- Select one or more breaks and press  $\text{Del}$ .

See also: [Add / Remove System breaks](#)

### Move a break

Although breaks are not visible on printed output, you can reposition one, if required, by entering [edit mode](#) on it and using the keyboard arrow buttons (see [Adjust position of text objects](#)).

### Section break

A **Section break**, as the name suggests, is used to create separate sections within a score. Like a **system break**, it forces the next measure or frame to begin a new system, and can also be used in association with a **page break** if required. A section break could be used, for example, to divide a piece into separate movements.

Each section can have its own measure numbering independent of the rest of the score. By default, the first measure of a section is numbered "1" (see image below), though like the first measure of the score itself, the number is not displayed unless configured in the [measure properties](#) dialog. The same dialog can be used to change the numbering according to your preference.

If you change Time signature or Key signature at the beginning of the new section, there will be no courtesy signature at the end of the previous section. See example below:



When you play back the score, the program adds a short pause between each section. In addition, the *first end repeat barline* in a section always sends the playback cursor to the beginning of the section, so a *start repeat barline* is optional.

The following properties can be adjusted in the [Inspector](#) after selecting the section break:

- *Pause*: Length of pause, in seconds, at end of the section.
- *Start new section with long instrument names* (checkbox).
- *Start new section with measure number one* (checkbox).
- *Start new section with first system indentation* (checkbox, as of 3.6).

Prior to version 3.4, the same properties are accessed by right-clicking the break and selecting [Section Break Properties](#).

### Spacers

There are three types of **spacers**:

- **Staff spacer up**: An up-pointing arrow. For adding space *above* a staff.
- **Staff spacer down**: A down-pointing arrow. For adding space *below* a staff.
- **Staff spacer fixed down**: Looks like a capital letter "I." For fixing the distance between two staves (useful to override style or autoplace settings in one spot only). Negative values are possible.

**Note**: Spacers cannot be applied to a frame.

### Add a spacer

Use either of the following options:

- Select a measure, then click a [palette](#) spacer symbol (double-click in versions prior to 3.4).
- Drag a spacer symbol from a palette onto a measure.

Spacer symbols are visible on the screen, but do not appear on printouts.

**Note**: Spacers are designed for *local* adjustments only. If you wish to adjust the space between staves across the *whole* score, use the settings in [Format → Style... → Page](#) instead.

### Adjust a spacer

To adjust the height of a **spacer**, choose one of these options:

- Click the spacer and drag the blue end-handle up and down (double-click in versions prior to 3.4).
- Click the spacer and use the ↑↓ keys and/or [Ctrl+↑↓](#) to move the end-handle up and down (double-click in versions prior to 3.4).

- Click on the spacer and adjust the height property in the Inspector.

#### Delete a spacer

- Click on the spacer and press the Del key.

#### See also

- [Add/Remove System breaks](#)

## Frames

A **Frame** is a rectangular container for empty space, text or pictures in the score. It can be one of three types:

- **Horizontal:** Used to create a break in a particular system. Can contain one or more text objects and/or images.
- **Vertical:** Inserted above a system or appended to the last system. Can contain one or more text objects and/or images.
- **Text:** Inserted above a system or appended to the last system. Can contain one text object only.

### Horizontal frame

A **horizontal frame** is used to create a break in a system. For example, you can:

- Create a coda, with an adjustable gap separating it from the rest of the score (as in the example below).



- Create an offset at the beginning of the score, where there is no staff name to perform the same function.
- Create an adjustable right margin at the end of a system.
- Create space for some text or image(s).
- Create a space between a 'historical incipit' and the beginning of the modern edition.

#### Insert/append horizontal frame

See [Create a Frame](#) (below).

#### Adjust width of horizontal frame

Use one of the following methods:

- Click (double-click prior to version 3.4) the frame and drag the handle to the right or left.
- Select the frame and adjust "Width" in the Inspector.

#### Add text or image to horizontal frame

- **To add text:** Right-click on the frame and select Add → Text.
- **To add an image:** Right-click on the frame and select Add → Picture.

### Vertical frame

A **vertical frame** can be inserted above a system or appended to the last system. It can contain one or more text objects and/or images. The height is adjustable and the width equals the system width.

It can be used, for example, to:

- Create an area at the head of a score for Title/Subtitle/Composer/Lyricist text etc. (see [below](#)).
- Create a title page (see [below](#)).
- Add single- or multi-column lyric text (at the end of a score).
- Create subtitles and other annotations between systems.

#### Insert/append vertical frame

See [Create a Frame](#) (below).

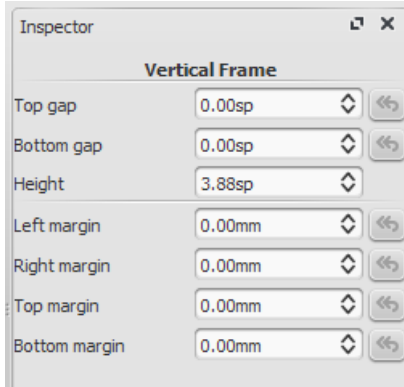
## Adjust height of vertical frame

Use one of the following methods:

- Click (double-click prior to version 3.4) the frame and drag the handle up or down.
- Select the frame and adjust "Height" in the [Inspector](#).

## Edit vertical frame properties

Selecting the frame allows you to adjust various parameters in the Inspector:



**Top Gap:** Adjusts distance between frame and element above.

**Bottom Gap:** Adjusts distance between frame and element below.

**Height:** Adjusts height of the frame.

**Left Margin:** Moves left-aligned text objects to the right.

**Right Margin:** Moves right-aligned text objects to the left.

**Top margin:** Moves top-aligned text objects downwards (see also [Format](#) → [Style...](#) → [Page](#)).

**Bottom Margin:** Moves bottom-aligned text objects upwards (see also [Format](#) → [Style...](#) → [Page](#)).

## Add text or image to vertical frame

- **To add text:** Right-click on the frame, select [Add](#), and choose one of the text options.
- **To add an image:** Right-click on the frame and select [Add](#) → [Picture](#).

You can create as many objects as you like within a frame. Their positions can be adjusted independently by dragging or, more accurately, by altering the offset values in the Inspector. To format text objects, see [Text editing](#) and [Text styles and properties](#).

## Insert horizontal frame in vertical frame

- Right-click on the frame and select [Add](#) → [Insert Horizontal Frame](#).

The [horizontal frame](#) is automatically *left-aligned* and fills the entire vertical frame. To *right-align* it:

1. Reduce the [width](#) of the horizontal frame.
2. Deselect the frame then drag it to the right. To restore left-alignment, drag the frame to the left.

## "Title" frame

A vertical frame is automatically created at the beginning of a score, showing the title, subtitle, composer, lyricist etc., when you fill in the information fields provided on page 1 of the [New Score Wizard](#).

If the score does not have a vertical frame at the beginning, you can create one as follows:

1. From the menu, select [Add](#) → [Text](#) → [Title/Subtitle/Composer/Lyricist](#);
2. Type the desired text;
3. Press [Esc](#), or click on an empty space, to exit.

## Text frame

A **Text frame** looks like a [vertical frame](#), but is specialized for text input: *one* text object is allowed per frame. The height automatically expands to fit the content and there is no height adjustment handle.

A text frame can be used, for example, to:

- Create lyric text at the end of a score.

- Create subtitles and other annotations between systems.
- Create and insert an empty [blank] page anywhere in the score, including at the beginning.

#### Insert/ append text frame

See [Create a Frame](#) (below).

#### Edit text frame properties

Selecting the frame allows you to adjust various parameters in the Inspector:

**Top Gap:** Adjusts distance between frame and element above.

**Bottom Gap:** Adjusts distance between frame and element below.

**Height:** Not applicable to text frames.

**Left Margin:** Moves left-aligned text objects to the right.

**Right Margin:** Moves right-aligned text objects to the left.

**Top margin:** Moves top-aligned text objects downwards.

**Bottom Margin:** Moves bottom-aligned text upwards.

#### Create a frame

##### Insert a frame into the score

##### From the menu:

1. [Select](#) a measure;
2. From the menu select Add → Frames → Insert Horizontal/Vertical/Text Frame.

##### From a measure:

1. Right-click on a measure;
2. Select Add → Insert Horizontal/Vertical/Text Frame.

##### From a palette:

See [Apply symbols from a palette](#).

##### Append a frame to the score

- From the menu select Add → Frames → Append Horizontal/Vertical/Text Frame.

#### Delete a frame

Use one of the following:

- Select the frame boundary and press `Del`.
- Select the frame boundary, then right-click on the frame and select `Delete`.

#### Apply a break




System, page or section [breaks](#) can be applied to frames as well as measures. Use one of two methods:

- Select a frame and click (double-click prior to version 3.4) [palette](#) break symbol (for example, in the Breaks & Spacers palette).
- Drag a break symbol from a palette onto a frame.

#### See also

- [Text Properties](#): to put a visual frame (border) around text.
- [Insert measures](#): to insert measures before a frame.

#### External links

- [How to add a block of text to a score](#)  (MuseScore HowTo)
- [How to create a blank or title page at the beginning of a score](#) 
- [Page Formatting in MuseScore 1.1 - 1. Frames, Text & Line Breaks](#)  [video]

#### Images

You can use **Images** to illustrate scores, or to add symbols that are not included in the standard [palettes](#). MuseScore

supports the following formats:

- PNG (\*.png)
- JPEG (\*.jpg and \*.jpeg)
- SVG (\*.svg) (MuseScore currently does not support SVG shading, blurring, clipping or masking.)

## Add image

Use one of the following options:

- Drag-and-drop an image file (from outside MuseScore) either into a vertical or horizontal frame, or onto a note or rest in the score.
- Right-click on a frame, select Add → Picture, then pick an image from the file selector.

Once it has been imported into a score, an image (just like other score elements) can be beadded to a palette if required.

## Cut/copy and paste image

1. Click on an image in the score.
2. Apply any of the standard copy/cut commands.
3. Click on a note, rest or frame.
4. Apply any of the standard paste commands.

## Modify image

To modify the width/height of an image, double-click it and drag any of the handles. If you want to adjust width or height separately, untick "Lock aspect ratio" first in the Inspector.

You can adjust the position of an image by simply dragging it.

## See also

- [Image capture](#)
- [Custom palettes](#)


## External links

- [How to create an ossia with image capture](#) ↗ (MuseScore HowTo)
- [How to create an ossia with another staff](#) ↗ (MuseScore HowTo)

## Image capture

MuseScore's **image capture** feature allows you to save a snapshot of any part of the score window. PNG, PDF and SVG formats are supported.

### Save a snapshot

1. Click on the **Toggle image capture** button, .
2. Press shift + drag, to create a new selection rectangle.
3. Fine tune the rectangle position, if required, by dragging it and/or changing the "Position" values in the "Image Capture" section of the Inspector.
4. Fine tune the rectangle area, if required, by dragging the handles, and/or changing the "Size" values in the Inspector.
5. Right-click on the selection rectangle to open the **Image Capture** menu. Select the desired option:
  - **Save As (Print Mode)**. This saves an image of the selection area as it would look if printed, e.g.



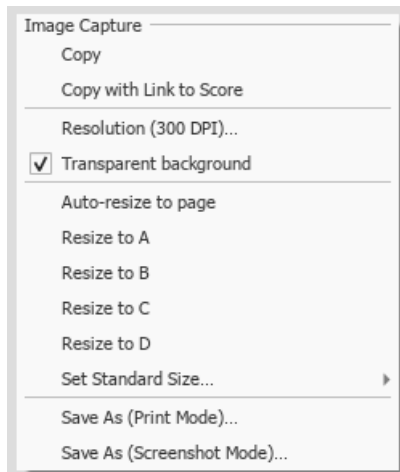
- **Save as (Screenshot Mode)**. This saves a selection of the actual screen, including any line break symbols, invisible elements etc., e.g.



You can save the image in either PNG (default), SVG or PDF format.

## Image capture menu

Right-clicking on the selection rectangle opens the **Image Capture** menu (Mac: ctrl + click, or 2-finger-tap):



- **Copy:** Choose this to copy an image before pasting it in the same or another MuseScore file.
- **Copy with Link to Score:** Choose this to copy an image including a link to the MuseScore file. When pasting this into a program that supports this, you can click on the image to open the MuseScore file.
- **Resolution:** Set the resolution, and hence the size of the saved or copied image. Try 100 dpi to start with, if you are unsure.
- **Transparent background:** Turn image transparency on or off.
- **Auto re-size to page:** Adjusts the selection rectangle to fit the page.
- **Resize to A/B/C/D:** Choose a customized selection rectangle (as set below).
- **Set Standard Size:** Resize the selection rectangle, then choose "Set size A/B/C/D" to store it.

## See also

- [Image](#)

## External links

- [Create an ossia with image capture](#) ↗ (MuseScore HowTo)
- [How to create an ossia with another staff](#) ↗ (MuseScore HowTo)

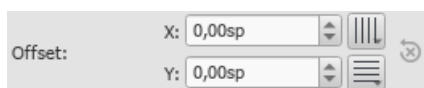
## Align elements

While dragging an element:

- To constrain movement to the **horizontal** only: Click and hold on the element, press **ctrl**, then drag the element left or right.
- To constrain movement to the **vertical** only: Click and hold on the element, press **shift**, then drag the element up or down.

## Snap to grid

**Snap to grid** is a feature which allows you to *drag* an element in precise steps—useful for exact positioning.



To enable snap to grid, select an element and click one or both of the snap to grid buttons, located to the right of the X (horizontal) and Y (vertical) offset fields in the [Inspector](#). You can then *drag* the element in steps equal to the **grid**

**spacing.** The default value is 0.5 sp.

To change the **grid spacing**:

1. Right-click on any of the snap to grid buttons in the Inspector, and select Configure Grid.
2. Set values for the horizontal and vertical grid spacing as required. Note that this is a fractional setting.

## Advanced topics

### Accessibility

#### Introduction

This document is written for blind and visually impaired users of MuseScore 3. It is not intended to provide a full description of all of the features of MuseScore; you should read this in conjunction with the regular MuseScore documentation.

MuseScore comes with support for the free and open source [NVDA screen reader](#) for Windows. You can also [install a script](#) to enable support for [JAWS](#), or [install a script](#) for [Orca](#) on Linux.

Eventually we hope to support other screen readers such as [VoiceOver](#) and [Narrator](#). Currently, unsupported screen readers will usually read menus and dialogs, but reading the score note by note currently requires one of the supported screen readers.

Beginning with MuseScore 3.3, most of the features of MuseScore are fully accessible, it is viable both as a score reader and editor. Previous versions were more limited with respect to editing.

#### Initial setup

When you run MuseScore for the first time, you will be asked some questions on startup. We recommend you accept the defaults, but answer "no" to the question about showing tours, since these unfortunately are not yet accessible.

When MuseScore starts, the first thing you normally see is the [Start Center](#) window. This shows you a list of recent scores that you can access via Shift+Tab and then using the left and right cursor keys. You may find it easier to open scores directly from the File menu, however so you can press Esc to close the Start Center if you prefer. In fact you may want to permanently disable it. After closing the Start Center, open the Edit menu (Alt+E), choose Preferences, and in the General tab, uncheck Show Start Center, then close the Preferences window.

MuseScore includes keyboard shortcuts for many of its commands, and others that do not have shortcuts defined by default can be customized later, in Edit, Preferences, Shortcuts.

#### Finding your way around

The user interface in MuseScore works much like other notation programs or other document-oriented programs in general. It has a single main document window within which you can work with a score. MuseScore supports multiple document tabs within this window. It also supports a split-screen view to let you work with two documents at once, and you can have multiple tabs in each window.

In addition to the score window, MuseScore has a menu bar that you can access via the shortcuts for the individual menus:

- File: Alt+F
- Edit: Alt+E
- View: Alt+V
- Add: Alt+A
- Format: Alt+O
- Tools: Alt+T
- Plugins: Alt+P
- Help: Alt+H

Hint: once you have opened a menu, it may take several presses of the Up or Down keys before everything is read properly. Also, if at any point the screenreader stops responding, a useful trick to kickstart it again is to press Alt to move focus to the menu bar, then Esc to return to the score. Sometimes switching to another application then back can help as well.

In addition to the menu bar, there are also a number of toolbars, palettes, and sub-windows within MuseScore, and you can cycle through the controls in these using Tab (or Shift+Tab to move backwards through this same cycle). When you first start MuseScore, or load a score, focus should be in the main score window.

If nothing is selected (press Esc to clear any selection), pressing Tab takes you to a toolbar containing a series of buttons for operations like New, Open, Play, and so forth. Tab will skip any buttons that aren't currently active. The names and shortcuts (where applicable) for these buttons should be read by your screen reader.



Once you have cycled through the buttons on the toolbar, the next window Tab will visit is the Palettes. This is used to add various elements to a score (dynamics, articulations, and so forth).

If an element is selected in the score, the first window visited by Tab is the Inspector, which is used for making various manual adjustments in your score. Many of these features are based on the visual appearance of the score (although a few relate to playback).

If you have opened one of the additional optional windows, such as the Selection Filter, the Tab key will also visit these. You can close windows you do not need by going to the View menu and making sure none of the first set of checkboxes is selected (the windows that appear before the Zoom settings). By default, only the Palettes and Inspector should be selected. See [Initial Setup](#) for instructions for disabling the Start Center. F9 can be used to toggle the Palettes while F8 will toggle the Inspector.

To return focus to the score window after visiting the toolbar, or a subwindow, press Esc. If something was selected before visiting the other window, the selection is left intact, but pressing Esc once focus is in the score window clears the selection. The selection is automatically restored when you commence navigation using the accessibility commands described below.

## The score window

When you first start MuseScore 3 an empty example score is loaded by default. If you wish to experiment with editing features, this would be a good place to begin. Otherwise, you will probably want to start by loading a score. MuseScore uses the standard shortcuts to access system commands like Ctrl+O (Mac: Cmd+O) to open a file, Ctrl+S (Mac: Cmd+S) to save, Ctrl+W (Mac: Cmd+W) to close, etc.

If you press Ctrl+O (Mac: Cmd+O) to load a score, you are presented with a fairly standard file dialog. MuseScore can open scores in its own format (MSCZ or MSCX) as well as import scores in the standard MusicXML format, in MIDI format, or from a few other programs such as Guitar Pro, Capella, and Band-in-a-Box. Once you have loaded a score, it is displayed in a new tab within the score window. You can move between the tabs in the score window using Ctrl+Tab (does not apply for Mac). Hint: if the name of the score in the current tab is not read, ask your screen reader to read the title bar.

To read the score note by note, see below, but there are a few other interesting things you can do with a loaded score. You can press Space to have MuseScore play the score for you. You can use File / Export to convert to another format, including PDF, PNG, WAV, MP3, MIDI, MusicXML, etc. And of course, you can print it via File / Print or Ctrl+P (Mac: Cmd+P).

If a score contains multiple instruments, it may already have linked parts generated. Linked parts are presented as part tabs within score tabs, but currently, there is no way to navigate these part tabs using the keyboard. The parts would not normally contain information different from the score; they would just be displayed differently (each part on its own page). If a score does not already have parts generated, you can do so through File / Parts, and that dialog is accessible. If you wish to print the parts, you can work around the inability of accessing part tabs individually by using the File / Export Parts dialog, which automatically exports PDF's (or other formats) for all parts in one step.

## Score reading

When you first load a score, the score window has the keyboard focus, but there will be nothing selected. The first step to reading a score is to select something, and the most natural place to begin is with the first element of the score. After a score is loaded, Alt+Right (Mac: Alt+Right) will select the literal first element, which is likely the title; Ctrl+Home (Mac: Cmd+Home) will select the first "musical" element (usually a clef or an initial barline).

As you navigate between elements, your screen reader should give the name of the selected element. You will hear it read the name of the element (for example, "Treble clef") and also give position information (for example, "Measure 1; Beat 1; Staff 1; Violin"). The amount of information read is optimized to not repeat information that has not changed. Pressing Shift currently interrupts the reading, which might also be useful.

Most navigation in MuseScore is centered around notes and rests only—it will skip clefs, key signatures, time signatures, barlines, and other elements. So if you just use the standard Right and Left keys to move through your score, you will only hear about notes and rests (and the elements attached to them). However, there are two special accessibility commands that you will find useful to gain a more complete summarization of the score:

- Next element: Alt+Right (Mac: Alt+Right)
- Previous element: Alt+Left (Mac: Alt+Left)

These commands include clefs and other elements that the other navigation commands skip, and also navigate through all voices within the current staff, whereas other navigation commands such as Right and Left only navigate through the currently selected voice until you explicitly change voices. For instance, if you are on a quarter note on beat 1 of measure 1, and there are two voices in that measure, then pressing Right will move on to the next note of voice 1—which will be on beat 2—whereas pressing Alt+Right (Mac: Alt+Right) will stay on beat 1 but move to the note on voice 2. Only once you have moved through all notes on the current beat on the current staff will the shortcut move you on to the next beat. The intent is that this shortcut should be useful for navigating through a score if you don't already know what the contents are.

When you navigate to an element, your screen reader should read information about it. For notes and rests, it will also read information about elements attached to them, such as lyrics, articulations, chord symbols, etc. The accessibility

commands will also navigate through those elements individually.

One important note: Up and Down by themselves, with Shift, or with Ctrl / Cmd are not useful shortcuts for navigation! Instead, they change the pitch of the currently selected note or notes. Be careful not to inadvertently edit a score you are trying to read. Up and Down should only be used with Alt if your intent is navigation only. See the list of navigation shortcuts below.

If you should lose track of your place in the score - or if you lose the selection completely - press Shift+L ("location") to get the current location.

#### **Moving forwards or backwards in time**

The following shortcuts are useful for moving "horizontally" through a score:

- Next element: Alt+Right
- Previous element: Alt+Left
- Next chord or rest: Right
- Previous chord or rest: Left
- Next measure: Ctrl+Right
- Previous measure: Ctrl+Left
- Go to measure: Ctrl+F
- First element: Ctrl+Home
- Last element: Ctrl+End

#### **Moving between notes at a given point in time**

The following shortcuts are useful for moving "vertically" through a score:

- Next element: Alt+Right
- Previous element: Alt+Left
- Next higher note in voice, previous voice, or staff above: Alt+Up
- Next lower note in voice, next voice, or staff below: Alt+Down
- Top note in chord: Ctrl+Alt+Up
- Bottom note in chord: Ctrl+Alt+Down

The Alt+Up and Alt+Down commands are similar to the Alt+Right and Alt+Left commands in that they are designed to help you discover the content of a score. You do not need to know how many notes are in a chord, how many voices are in a staff, or how many staves are in a score in order to move vertically through the score using these commands.

#### **Filtering score reading**

Excluding certain elements like lyrics, or chord names while reading the score is possible by using the Selection filter(F6). Uncheck those elements you don't want to read. However, this feature may not currently be implemented.

#### **Score playback**

The Space bar serves both to start and stop playback. Playback will start with the currently selected note if one is selected; where playback was last stopped if no note is selected; or at the beginning of the score on first playback.

MuseScore supports looped playback so you can repeat a section of a piece for practice purposes. To set the "in" and "out" points for the loop playback via the Play Panel (F11):

1. First select the note in the score window where the loop should start;
2. Go to the Play Panel and press the Set loop In position toggle button;
3. Back to the score window, navigate to the note where you want the loop to end;
4. Switch again to Play Panel, and press the Set loop Out position toggle button;
5. To enable or disable the loop, press the Loop Playback toggle button.

You can also control the loop playback and control other playback parameters, such as overriding the basic tempo of a score, using the View / Play Panel (F11).

#### **Score creation and editing**

While some advanced score editing techniques require visual inspection of the score, and a small number of commands may require the mouse, as of MuseScore 3.3 most score editing features are fully accessible.

You can enter music into the default empty score (a score with one staff, using a piano sound), or edit an existing score that you have opened already, or you can create a new score with the set of instruments you want.

#### **Creating a new score**

To create a new score, use File, New or Ctrl+N. A wizard then walks you through the score creation process.

The first screen of the wizard has fields to enter the title, composer, and other information. The second allows you to select a template (predefined scores for common ensembles like choral SATB or jazz big band) or to select instruments. The third allows you to select an initial key signature and tempo. Sometimes this screen gets skipped, so if this happens, press the Back button to go back. To select a key, use Up and Down. The key signature control does not work well with some screenreaders, but if you give the "read current line" command (e.g., NVDA+L), it may read the currently-selected key. The next and final screen of the wizard allows you to select an initial time signature, pickup (anacrusis), and the number of measures to start with.

Once you have a score, you can begin editing it.

### Note input

To enter notes, you need to be in note input mode. First, navigate to the measure in which you would like to enter notes, then press N. Almost everything about note input is designed to be keyboard accessible, and the standard documentation should be good to help you through the process. Bear in mind that MuseScore can either be in note input or normal mode, and it won't always be clear which mode of these you are in. When in doubt, press Esc. If you were in note input mode, this will take you out. If you were in normal mode, you will stay there, although you will also lose your selection.

The basic process of note input is to first select a duration (for example, using shortcuts 4-5-6 for eighth, quarter, half), then enter a note by typing its letter name. Once a duration is selected you can enter multiple notes of the same duration. Press 0 to enter a rest.

The Up and Down keys raise or lower the pitch by a half step, adding or removing accidentals as necessary. To change enharmonic spelling of a note, press J.

To enter a tie, select the duration of the tied note then press+. To create triplets, select the total duration for the triplet, then press Ctrl+3 (similarly for quadruplets and other tuplets). To enter music in multiple voices on a single staff, pressing Ctrl+Alt plus a number from 1 to 4 will switch to that voice (keep in mind, the first voice for each staff is always voice 1).

There is much more to note input in MuseScore. See for [this section on Note Input in the Handbook](#) ↗.

### Selection

MuseScore supports the usual keyboard shortcuts for selection. Navigating is the same as selecting for single elements. To select a range of elements, navigate to the first, press and hold Shift, then navigate to the second. Ctrl+A will select the entire score.

### Palettes

As mentioned previously, many symbols other than notes are entered from the palettes window. The basic use model is, first select the element or elements in the score you want to apply the palette item to, then apply the palette element. There are a few different ways to select the palette element.

The simplest method to use at first is to simply browse the palettes window by keyboard. To reach the palettes window, press Shift+Tab. The screenreader may not specifically tell you that you are in the palettes window, but you will discover that you are as you navigate. Depending on whether you have used the palettes before, focus may be where you left off, or at the top. Press Tab a few times to get to the first palette within the window (Clefs). You can browse the list of palettes using the Up and Down cursor keys. The Right cursor key opens a palette, and then all four cursor keys can be used to navigate through the elements (they are arranged in a table). You can also use Tab to navigate the palette names and contents.

Once you have found a palette item you want to apply, press Enter to apply it to the currently-selected score elements and return focus to the score. The next time you press Shift+Tab to return to the palettes, the last-used palette item will still be selected, so Enter will apply it again. The screenreader may stop responding after applying a palette item, even though focus has returned to the score, but the trick of pressing Alt followed by Esc should get it working again.

You can also use the palette search facility to quickly find a palette item. The search box is one of the first elements at the top of the palette, so you can navigate to it, or you can define a shortcut (Edit, Preferences, Shortcuts) for the "Palette search" command, which will subsequently take you directly to the search box. Once you are in the box, type the first few characters of a search term, and only palette items matching that search will be shown. You can then navigate to the search results and find the element you want. The Down cursor will take you directly to the first search result, then you can use Right after that. However, on some systems MuseScore may crash when using the palette search function with a screen reader enabled.

Another way to reach the palettes window is with the F9 shortcut, which toggles the palettes window on and off. By default, the palettes window is open, so pressing F9 will close it, but then pressing it again opens the window and puts the cursor in the search box.

There is one other useful technique for palette accessibility, and that is the "Apply current palette element" command (for which you can define a shortcut). If you are in the score, this will apply the last-used palette element automatically (the equivalent of Shift+Tab followed by Enter).

## Menus and Shortcuts

Some elements can be added or edited via menu commands or keyboard shortcuts. The Edit menu has standard copy and paste commands (and the usual shortcuts work too). The Add menu has commands to add notes, tuplets, measures, frames, text, and some lines. The Format menu has commands relating mostly to the visual appearance of the score (e.g., page and staff size, position and size of symbols, fonts used for text), which can be extremely useful in producing large print a.k.a. "modified stave notation" scores (see below). The Tools menu has a number of other useful commands, including ones to remove measures or other selected ranges, to transpose a selection, to join and split measures, and more. Any of these commands have shortcuts defined by default that should be read by a screenreader. You can define custom shortcuts for most of the rest in Edit, Preferences, Shortcuts.

There are also shortcuts for a number of palette items, and the possibility to define others (although many palette items currently do not support this). Some useful shortcuts to remember include:

Ctrl+T: staff text  
Alt+Shift+T: tempo  
Ctrl+L: lyrics  
Ctrl+K: chord symbol  
Ctrl+M: rehearsal mark

S: slur  
Shift+S: staccato  
Shift+V: accent  
Shift+N: tenuto  
Shift+O: marcato  
slash: grace note  
less than: crescendo  
greater than: diminuendo





## Customization

You can customize the keyboard shortcuts by opening the Edit menu, selecting Preferences, then navigating to the Shortcuts tab. Once there, Tab will take you to the list of shortcuts, and you can navigate the list directly with the Up and Down cursor keys, but it is a very long list. You can instead hit Tab a few more times to reach the Search box, then type the first few characters of the command to filter the list, then navigate back to the list.

Once you have found the command you wish to customize, press Enter. You can then press the key combination you wish to be the shortcut. It can be a single key, a key with Shift, Ctrl, and/or other modifiers, or even a sequence of two or more keys pressed in succession. After entering the shortcut you wish, press Tab to get to the Add or Replace button (Tab is the only key that won't be interpreted as part of a shortcut sequence). If you reach Cancel without ever seeing Add or Replace, it means the shortcut you choose conflicts with another. Navigate back to the where you typed the shortcut and it will tell you the name of the command it conflicts with. Hit Tab to get to the Clear button to clear it, then try again with a different shortcut.

At some point, we may provide a set of special accessibility-optimized shortcuts. There is already a facility in the shortcut dialog to save and load shortcut definitions, so it is possible to share shortcut definitions with other users.

## External links

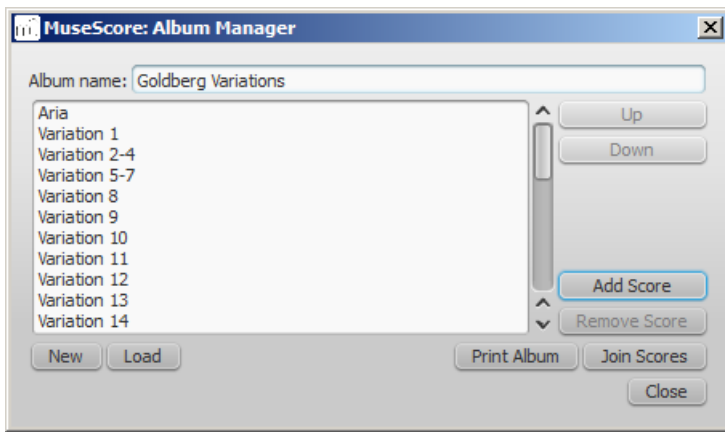
- [MuseScore Accessibility Demo \(YouTube\)](#) 
- [Creating a New Score in MuseScore with NVDA](#)  (MuseScore Tutorial)
- [Inputting notes in MuseScore with NVDA](#)  (MuseScore Tutorial)
- [Creating Modified Stave Notation in MuseScore](#)  (MuseScore Tutorial)

## Albums

**The Album feature has been disabled for 3.x. It will come back in 4.0.**

The Album Manager allows you to prepare a list of multiple scores and save the list as an album file ("\*.album"), print all the scores as one long print job with consistent page numbers, or even join the scores into a single new MSCZ score. This is ideal for preparing an exercise book or combining multiple movements of an orchestration.

To open the Album Manager, go to File → Album...



## Create album

1. To create a new album, click the **New** button. Fill in a title in the "Album Name:" box at the top.
2. To add scores to the album, click **Add Score**. A file selection dialog will appear and let you choose one or multiple scores from your file system. Click **OK**.
3. The scores you add will appear in a list in the Album Manager. You can rearrange their order by selecting a score and clicking the **Up** or **Down** button.

## Load album

If you have previously created an album, you can open it through the Album Manager by clicking the **Load** button. A file selection dialog will appear to let you load the .album file from your file system.

## Print album

To print an album as if it were a single document, click **Print Album**. The scores loaded into the Album Manager are printed in the order they are listed in with the correct page numbers, ignoring the page number offset values in **Layout → Page Settings...** → **First page number** for all but the first score. As the album is printed in one print job, double-sided printing (duplex printing) also works as expected.

## Join scores

To combine multiple scores into a single .mscz file, click **Join Scores**. The scores are combined in the selected order into one single score. If not already present, **line-** and **section breaks** are added to the last measure or **frame** of each score in the combined file.

All style settings are taken from the first score, different style settings from subsequent score are ignored.

All the scores should have the same number of parts and staves for this to work correctly, ideally with the same instruments in the same order. If the scores have the same total *number* of instruments but not the same ones, or not in the same order, then the instrument names from the first score will overwrite ones from subsequent scores. If some of the scores have fewer instruments than the first score, then empty staves will be created for those sections. **Any part or staff that is not present in the first score will be lost in the joined score.**

## Save album

Upon clicking the **Close** button, you will be prompted to save your album as a .album file. This file is not the same as a **joined score**; it simply consists of the list of scores. Album files can be loaded into the Album Manager as described **above**.

## Automatic placement

MuseScore's **automatic placement** (AP) feature ensures that, in most cases, elements are correctly spaced and do not collide or overlap with each other.

*Note:* When you create an element, AP is automatically enabled, but can be turned off if required (see **Disable automatic placement**).

## Default position

A newly-created element, such as **staff text** or **fingering**, assumes a default position on the **staff** specified by "positional" properties contained in the **Style** menu. These "positional" properties may include things such as:

- **Placement:** Whether the element appears above or below the staff.
- **Offset:** For elements with no "Placement above/below" properties, this specifies the default position. See **Offset X/Y**.

- **Autoplace min distance:** Minimum distance from other elements when autoplace is enabled.

For details of the settings available for each element type, see [Layout and formatting: Style](#).

#### Change the default placement of an element

Use one of the following methods:

- From the menu, select **Format** → **Style**; choose an element type and then adjust the placement/position settings.
- Select a relevant element in the score and change the placement/position settings in the [Inspector](#); then press the **Set as style** button (s) to update the [Style](#) settings.

#### Manual adjustments

##### Adjust position of element

Use one of the following methods:

- **Select the element and adjust the X and Y offsets in the Inspector** (see [X and Y offsets](#)).
- **Move the element using the arrow buttons.** Change to **edit mode** first, if necessary.
- **Drag and drop the element using the mouse** Use this method in preference to the above, if you want to *move an element across another one* (e.g. fingering across a slur). Once located on the other side you can use the X/Y offsets in the Inspector, or the keyboard arrow keys to fine tune the position.

##### Place element above/below staff

Elements with a "Placement" property available in the [Inspector](#) can be easily moved from *above* the staff to *below* it, and vice versa:

1. Select one or more elements.
2. Use one of the following methods:
  - Change the "Placement" setting in the Inspector.
  - Press x to toggle between above/below.

**Note:** When automatic placement is enabled for an element, you cannot position it in a way that causes a collision with other elements.

#### Disable automatic placement

- Select the element and uncheck the "Automatic placement" box in the [Inspector](#).

The element reverts to its default position. It can be repositioned as desired and is no longer avoided when placing other elements.

#### Stacking order

To change the value for **Stacking order**:

- Select the element and change the "Stacking order" value in the [Inspector](#).

In cases where elements are allowed to overlap, **Stacking order** controls the order in which they are placed on top of each other. The element with the lower value will be placed behind.

#### Cross-staff notation

In piano scores, it is common to write a musical phrase extending across both staves—bass and treble. This can be entered in MuseScore as follows:

1. Enter the notation in one staff to begin with. e.g.



2. Select a note and press **Ctrl+Shift + ↓/↑** (Mac: **Cmd+Shift + ↓/↑**). This moves all the notes in that [voice](#) down/up to the other staff. e.g.



Note: If you only want to move certain notes in a chord you need to ensure that they are in a separate voice.

- To adjust the beam, double-click it to show the handles. Use the keyboard arrows or drag the handles to change the beam angle and height:



### See also

- [Barlines](#): How to extend barlines over multiple staves.
- [Beams](#): How to adjust beam angle and height.

### External links

- [How to span a chord or stem over two staves](#) ↗ (MuseScore HowTo)

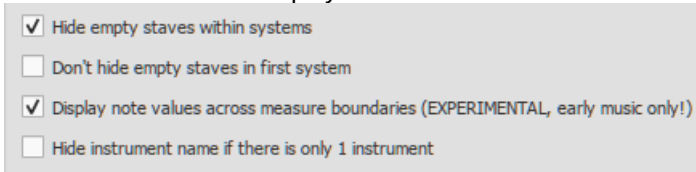
## Early music features

MuseScore offers several specialized functions to create engravings of early music (particularly medieval and renaissance) akin to commercial editions from the 20th century onwards.

### Unbarred (or unmetred) notation

In MuseScore, notes lasting longer than the duration of a measure are normally tied across barlines. However MuseScore has a special feature which allows it to display the note values intact, without splitting and tying them in this way. This enables you to notate music which is unbarred (i.e. not divided into measures), such as that of the **renaissance**:

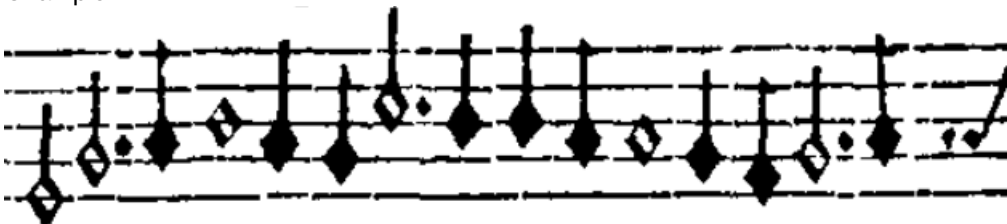
- From the menu bar, select Format → Style... → Score.
- Tick the box labelled "Display note values across measure boundaries ... ."



- Click "OK" or "Apply." The existing score is immediately updated.

### Example

- The example below shows an excerpt from the original score of "De Profundis Clamavi" for 4 voices by Nicolas Champion:



- The same excerpt displayed in MuseScore:



- And after activating "Display note values across measure boundaries ... ."



- To get rid of the barlines, just untick the "Show barlines" box in the Staff / Part properties dialog. See also [Mensurstrich](#) (below).

**Note:** The feature is still in development and may contain bugs. The longest supported note value is the longa (a dotted longa is still broken up and tied over).

## Mensurstrich

Since a complete lack of barlines could make performing the music more difficult for current musicians, many modern engravers settled on a compromise called *Mensurstrich*, where barlines are drawn between, but not across, staves.



To place barlines between staves:

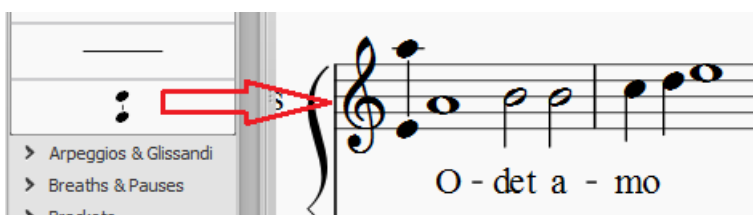
- In the lowest staff (usually the bottom staff of a system) where the proposed *Mensurstriche* is required, uncheck "Show barlines" in the [Staff/Part Properties](#) dialog;
- In the staff above where you want the *Mensurstriche*, click on one barline;
- In the **Barline** section of the [Inspector](#), tick the "Span to next staff" option;
- In the **Barline** section of the Inspector, adjust the "Span from" value so that the top of the barline meets the bottom line of the staff (e.g., set to 8);
- Click the "Set as staff default" button.

## Ambitus

Before there was the concept of an absolute pitch, performers were required to transpose vocal music to a singable range for their ensemble "on the fly." To aid them, an **ambitus** was sometimes included, marking the entire range of a voice at the beginning of the piece.

To apply an ambitus, use one of the following methods:

- Drag the ambitus symbol (from the [Lines](#) palette of the Advanced workspace) onto a clef.
- Select one or more clefs, then click (double-click prior to version 3.4) the ambitus symbol (in the [Lines](#) palette of the Advanced workspace).



When applied, the ambitus automatically displays the note range of the score: if there is a [section break](#) then *only* the note range of the section is displayed. Beyond the section break a new ambitus may be applied.

The note range of the ambitus can be adjusted manually by selecting it and changing the "Top note" and "Bottom note" values in the [Inspector](#). For automatic adjustment click the [Update Range](#) button in the inspector.

## Mensural time signatures

In the mensural notation system, time signatures did not define the length of a measure, but the length of breves and semibreves. MuseScore supports mensural time symbols as a display method in the Time signature properties dialog rather than as symbols, but they are just for show, as the proportion of e.g. half notes per whole notes cannot be modified.

One way to make use of these symbols is to replicate when composers of the renaissance had multiple voices in different time signatures simultaneously without using tuplets. Edit the time signature on a per-staff basis, as long as the beginning and end of a measure in all staves match up. If they do not, then consider increasing the size of the measures to the lowest common denominator.





*De Profundis Clamavi for 5 voices by Josquin Des Prez*

## Period tablature

Authentic-looking period tablature is possible for instruments such as the lute, theorbo etc. The various historical styles are well supported by a choice of fretmark and note symbol fonts, optional “upside-down” tablature, and special symbols for bass-string notes. See [Tablature](#).

## See also

- [Measure Operations: Split and join](#)

## Figured bass

### Adding a new figured bass indication

1. Select the note to which the figured bass applies;
2. Press the **Figured Bass** shortcut. The default is Ctrl+G (Mac: Cmd+G): this can be changed in [Preferences: Shortcuts](#) if desired;
3. Enter the text in the editor 'blue box' as required (see below);
4. Use one of the following options as required:
  - Press Space to move to the next note ready for another figured bass indication (or click outside the editor box to exit it). The editor advances to the next note, or to the rest of the staff to which figured bass is being added. (To move to a point in between, or to extend a figured bass group for a longer duration, see [Duration](#) (below)).

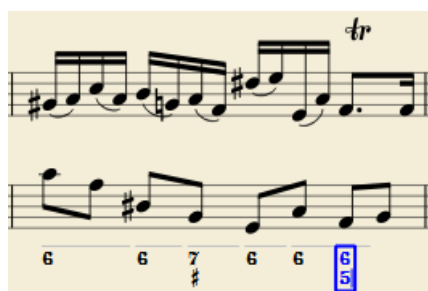


- Shift+Space moves the editing box to the previous staff note or rest.
- Tab advances the editing box to the beginning of the next measure.
- Shift+Tab moves the editing box to the beginning of the previous measure.

## Text format

### Digits

Digits are entered directly. Groups of several digits stacked one above the other are also entered directly in a single text, stacking them with Enter:



## Accidentals

Accidentals can be entered using regular keys:

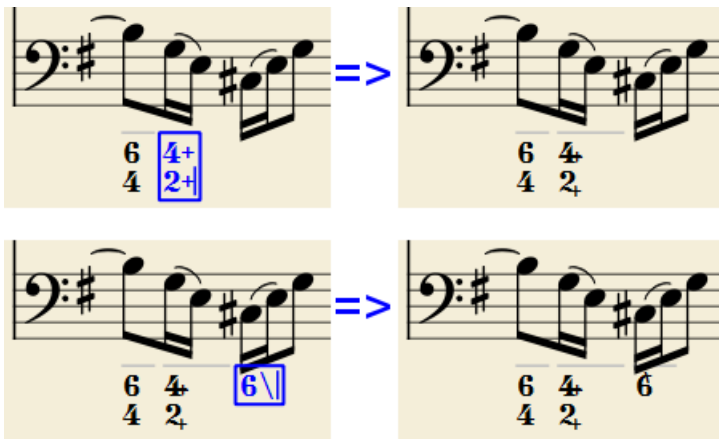
**To enter: type:**

double flat bb  
 flat b  
 natural h  
 sharp #  
 double sharp ##

These characters will automatically turn into the proper signs when you leave the editor. Accidentals can be entered before, or after a digit (and of course, in place of a digit, for altered thirds), according to the required style; both styles are properly aligned, with the accidental 'hanging' at the left, or the right.

**Combined shapes**

Slashed digits or digits with a cross can be entered by adding , / or + after the digit (combining suffixes); the proper combined shape will be substituted when leaving the editor:



The built-in font can manage combination equivalence, favoring the more common substitution:

1+, 2+, 3+, 4+ result in **1+** **2+** **3+** **4+** (or **1<sub>+</sub>** **2<sub>+</sub>** **3<sub>+</sub>** **4<sub>+</sub>**)

and 5\, 6\, 7\, 8\, 9\ result in **5\** **6\** **7\** **8\** **9\** (or **5<sub>\</sub>** **6<sub>\</sub>** **7<sub>\</sub>** **8<sub>\</sub>** **9<sub>\</sub>**)

Please remember that / can only be combined with 5; any other 'slashed' figure is rendered with a question mark.

+ can also be used before a digit; in this case it is not combined, but it is properly aligned ('+' hanging at the left side).

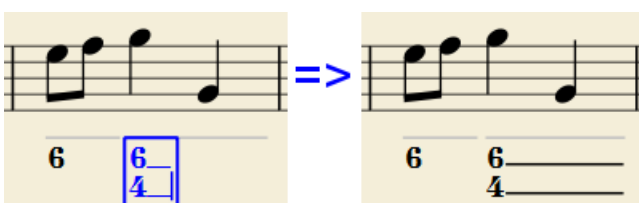
**Parentheses**

Open and closed parentheses, both round: '(', ')' and square: '[', ']', can be inserted before and after accidentals, before and after a digit, before and after a continuation line; added parentheses will not disturb the proper alignment of the main character.

*Notes:* (1) The editor does not check that parentheses, open and closed, round or square, are properly balanced. (2) Several parentheses in a row are non-syntactical and prevent proper recognition of the entered text. (3) A parenthesis between a digit and a combining suffix ('+', '\', '/') is accepted, but prevents shape combination.

**Continuation lines**

Continuation lines are input by adding an '\_' (underscore) at the end of the line. Each digit of a group can have its own continuation line:



Continuation lines are drawn for the whole duration of the figured bass group.

**'Extended' continuation lines**

Occasionally, a continuation line has to connect with the continuation line of a following group, when a chord degree has to be kept across two groups. Examples (both from J. Boismortier, *Pièces de viole*, op. 31, Paris 1730):



In the first case, each group has its own continuation line; in the second, the continuation line of the first group is carried 'into' the second.

This can be obtained by entering several (two or more) underscores "\_\_\_" at the end of the text line of the first group.

### Duration

Each figured bass group has a duration, which is indicated by a light gray line above it (of course, this line is for information only and it is not printed or exported to PDF).

Initially, a group has the same duration of the note to which it is attached. A different duration may be required to fit several groups under a single note or to extend a group to span several notes.

To achieve this, each key combination in the table below can be used to (1) advance the editing box by the indicated duration, and (2) set the duration of the previous group up to the new editing box position.

Pressing several of them in sequence without entering any figured bass text repeatedly extends the previous group.

<b>Type:</b>	<b>to get:</b>
--------------	----------------

Ctrl+1	1/64
--------	------

Ctrl+2	1/32
--------	------

Ctrl+3	1/16
--------	------

Ctrl+4	1/8 ( <i>quaver</i> )
--------	-----------------------

Ctrl+5	1/4 ( <i>crochet</i> )
--------	------------------------

Ctrl+6	half note ( <i>minim</i> )
--------	----------------------------

Ctrl+7	whole note ( <i>semibreve</i> )
--------	------------------------------------

Ctrl+8	2 whole notes ( <i>breve</i> )
--------	--------------------------------

(The digits are the same as are used to set the note durations)

Setting the exact figured bass group duration is only mandatory in two cases:

1. When several groups are fit under a single staff note (there is no other way).
2. When continuation lines are used, as line length depends on the group duration.

However, it is a good practice to always set the duration to the intended value for the purposes of plugins and MusicXML.

### Editing existing figured basses

To edit a figured bass indication already entered use one of the following options:

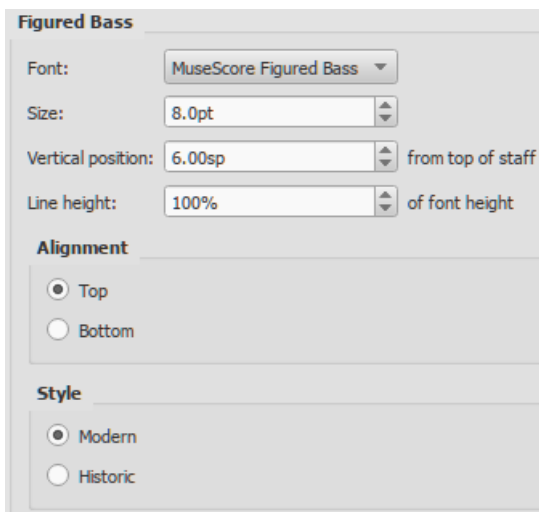
- Select it, or the note it belongs to and press the same *Figured Bass* shortcut used to create a new one.
- Double-click it.

The usual text editor box will open with the text converted back to plain characters ('b', '#', and 'h' for accidentals, separate combining suffixes, underscores, etc.) for simpler editing.

Once done, press Space to move to a next note, or click outside the editor box to exit it, as for newly created figured basses.

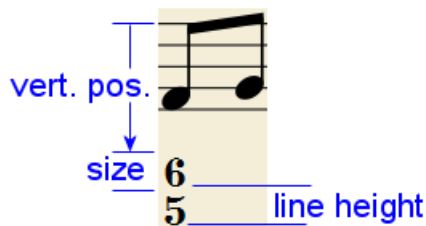
### Style

To configure how figured bass is rendered: from the menu, select `Format` → `Style...` → `Figured Bass`.

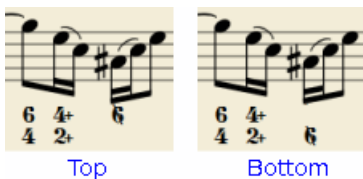


- **Font:** The dropdown list contains all the fonts which have been configured for figured bass. A standard installation contains only one font, "MuseScore Figured Bass," which is also the default font.
- **Size:** Select a font-size in points. *Note:* This value is also modified by any change made to Scaling (Format → Page Settings...), or Scale ("Staff properties").
- **Vertical Position:** The distance (in spaces) from the top of the staff to the top margin of the figured bass text. Negative values go up (figured bass above the staff) and positive values go down (figured bass below the staff: a value greater than 4 is needed to step over the staff itself).
- **Line Height:** The distance between the base line of each figured bass line, as a percentage of font size.

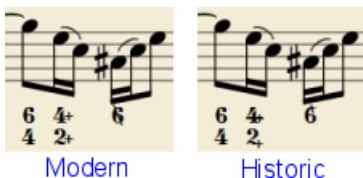
The following picture visualizes each numeric parameter:



- **Alignment:** Select the vertical alignment: with *Top*, the top line of each group is aligned with the main vertical position and the group 'hangs' from it (this is normally used with figured bass notation and is the default); with *Bottom*, the bottom line is aligned with the main vertical position and the group 'sits' on it (this is sometimes used in some kinds of harmonic analysis notations):



- **Style:** Choose between "Modern" or "Historic." The difference between the two styles is shown below:



## Proper syntax

For the relevant substitutions and shape combinations to take effect and for proper alignment, the figured bass mechanism expects input texts to follow some rules (which are in any case, the rules for a syntactical figured bass indication):

- There can be only one accidental (before or after), or only one combining suffix per figure;
- There cannot be both an accidental **and** a combining suffix;
- There can be an accidental without a digit (altered third), but not a combining suffix without a digit.
- Any other character not listed above is not expected.

If a text entered does not follow these rules, it will not be processed: it will be stored and displayed as it is, without any layout.

## Summary of keys

<b>Type:</b>	<b>to get:</b>
Ctrl+G	Adds a new figured bass group to the selected note.
Space	Advances the editing box to the next note.
Shift+Space	Moves the editing box to the previous note.
Tab	Advances the editing box to the next measure.
Shift+Tab	Moves the editing box to the previous measure.
Ctrl+1	Advances the editing box by 1/64, setting the duration of the previous group.
Ctrl+2	Advances the editing box by 1/32, setting the duration of the previous group.
Ctrl+3	Advances the editing box by 1/16, setting the duration of the previous group.
Ctrl+4	Advances the editing box by 1/8 ( <i>quaver</i> ), setting the duration of the previous group.
Ctrl+5	Advances the editing box by 1/4 ( <i>crochet</i> ), setting the duration of the previous group.
Ctrl+6	Advances the editing box by a half note ( <i>minim</i> ), setting the duration of the previous group.
Ctrl+7	Advances the editing box by a whole note ( <i>semibreve</i> ), setting the duration of the previous group.
Ctrl+8	Advances the editing box by two whole notes ( <i>breve</i> ), setting the duration of the previous group.
Ctrl+Space	Enters an actual space; useful when figure appears "on the second line" (e.g., 5 4 -> 3).
BB	Enters a double flat.
B	Enters a flat.
H	Enters a natural.
#	Enters a sharp.
##	Enters a double sharp.
_	Enters a continuation line.
__	Enters an extended continuation line.

Note: For Mac commands, Ctrl is replaced with Cmd.

## File formats

MuseScore can import and export a wide variety of file formats, allowing you to share and publish scores in the format that best meets your needs.

### MuseScore native format

MuseScore saves files in the following native formats:

- **\*.mscz**: The default MuseScore file format. Being compressed it takes up relatively little disk space.
- **\*.mscx**: An uncompressed MuseScore file format, mainly used for debugging or storing in a versioning system
- **.\*.mscz, / \*.mscx**: These are backup files. Notice the point (full stop) added before the file name, and the comma added to the file extension.

**A note about fonts:** *MuseScore does not embed text fonts in saved or exported native format files. If you want your MuseScore file to be viewed by other MuseScore users, make sure you are using the built-in Edwin (since version 3.6), FreeSerif, or FreeSans font families for your text, or a font that the other parties have installed too. If a system does not have the fonts specified in your original file, MuseScore will use a fallback option, which may cause your score to appear differently.*

#### MuseScore format (\*.mscz)

MSCZ is the standard MuseScore file format and recommended for most uses. A score saved in this format takes up very little disk space, but preserves all the necessary information. The format is a ZIP-compressed version of .mscx files and includes any images the score may contain and a thumbnail.

#### Uncompressed MuseScore format (\*.mscx)

MSCX is the uncompressed version of the MuseScore file format. A score saved in this format will retain all information, except images. It can be opened with a text editor, allowing the user access to the file's source code.

#### MuseScore backup file (\*.mscz,) or (\*.mscx,)

Backup files are created automatically and saved in the same folder as your normal MuseScore file. The backup copy contains the previously saved version of the MuseScore file and can be important if your normal copy becomes corrupted,

or for looking at an older version of the score.

The backup file adds a period to the beginning of the file name (.) and a comma (,) to the end (e.g. if your normal file is called "untitled.mscz", the backup copy will be ".untitled.mscz,"), and the period and comma need to be removed from the name in order to open the backup file in MuseScore. As it is stored in the same folder as your normal MuseScore file, you may also need to give it a unique name (e.g. changing ".untitled.mscz," to "untitled-backup1.mscz").

**Note:** In order to see the MuseScore backup files, you may need to change your system settings to "Show hidden files". See also [How to recover a backup copy of a score](#).

## Graphic files (export only)

MuseScore can export a score as a graphic file in either PDF, PNG or SVG format.

### PDF (\*.pdf)

**PDF** (Portable Document Format) files are ideal for sharing your sheet music with others who do not need to edit the content. This is a very widely-used format and most users will have a PDF viewer of some kind on their computers.

To set the resolution of exported PDFs:

1. From the menu bar, choose Edit → Preferences... (Mac: MuseScore → Preferences...), and select the "Export" tab;
2. Set the resolution in the "PDF" section.

### PNG (\*.png)

**PNG** (Portable Network Graphics) files are based on a bitmap image format, widely supported by software on Windows, Mac OS, and Linux, and very popular on the web. MuseScore creates PNG images as they would appear if printed, one image per page.

To set the resolution of exported PNG images:

1. From the menu bar, choose Edit → Preferences... (Mac: MuseScore → Preferences...), and select the "Export" tab;
2. Set the resolution and transparency in the PNG/SVG section.

**Note:** If you want to create images that show only parts of the score (with or without screen-only items such as frame boxes, invisible notes, and out-of-range note colors), use [Image capture](#) instead.

### SVG (\*.svg)

SVG (Scalable Vector Graphics) files can be opened by most web browsers (except Internet Explorer before version 9) and most vector graphics software. However, most SVG software does not support embedded fonts, so the appropriate MuseScore fonts must be installed to view these files correctly. SVG is the current format for all scores saved on MuseScore.com.

To set resolution and transparency of exported SVG files, see the instructions under PNG (above). Note that MuseScore does not (yet) support gradients on export (although it does for images in a score).

## Audio files (export only)

MuseScore can create *normalized*, stereo audio of the score in any of the following formats WAV, MP3, OGG VORBIS, FLAC. To export an audio file:

1. From the menu, select File → Export...;
2. Choose the desired format from the dropdown menu, then press Save.

You can adjust the **sample rate** of all audio formats as follows:

1. From the menu bar, select Edit → Preferences... (Mac: MuseScore → Preferences...), and click on the Export tab;
2. Set "Sample rate" in the "Audio" section.

### WAV audio (\*.wav)

WAV (Waveform Audio Format) is an *uncompressed* sound format. This was developed by Microsoft and IBM, and is widely supported by software for Windows, OS X, and Linux. It is an ideal format for use when creating CDs, as full sound quality is preserved. For sharing via email or the internet, use a compressed alternative such as MP3.

### MP3 (\*.mp3)

**MP3** is a very widely-used compressed audio format. MP3 files are ideal for sharing and downloading over the internet due to their relatively small size.

## To set the MP3 bitrate:

1. From the menu bar, choose Edit → Preferences... (Mac: MuseScore → Preferences...), and select the "Export" tab;
2. Set the MP3 bitrate in the "Audio" section.

### FLAC audio (\*.flac)

[Free Lossless Audio Codec](#) (FLAC) is compressed audio format. FLAC files are approximately half the size of uncompressed audio and just as good quality. Windows and OS X do not have built-in support for FLAC, but software such as the free and open source [VLC media player](#) can play FLAC files on any operating system.

### Ogg Vorbis (\*.ogg)

[Ogg Vorbis](#) is intended as a patent-free replacement for the popular MP3 audio format (which MuseScore also supports—see above). Like MP3, Ogg Vorbis files are relatively small (often a tenth of uncompressed audio), but some sound quality is lost. Windows and OS X do not have built-in support for Ogg Vorbis. However, software such as [VLC media player](#) and [Firefox](#) can play Ogg files on any operating system.

## Share with other music software

MuseScore can [import](#) and [export MusicXML](#) and [MIDI](#) files; it is also able to import a variety of native format files from other music notation programs.

### MusicXML (\*.musicxml, \*.xml)

[MusicXML](#) is the universal standard for sheet music. It is the recommended format for sharing sheet music between different scorewriters, including MuseScore, Sibelius, Finale, and more than 100 others. MuseScore imports \*.xml and \*.musicxml, exports \*.musicxml, and the outdated \*.xml (since version 3.5) because the program you want to import it needs that, in previous MuseScore version you need to rename it yourself after the export.

### Compressed MusicXML (\*.mxml)

Compressed MusicXML creates smaller files than regular MusicXML. This is a newer standard and isn't as widely supported by older scorewriters, but MuseScore has full import and export support.

### MIDI (\*.mid, \*.midi, \*.kar)

**MIDI** (Musical Instrument Digital Interface) is a format widely supported by sequencers and music notation software. For details of the protocol see the [MIDI Association](#) website.

MIDI files are very useful for playback purposes but contain little in the way of score layout information (formatting, pitch spelling, voicing, ornaments, articulations, repeats, key signatures etc.). To share files between *different* music notation software, [MusicXML](#) is recommended instead.

For details about how to import MIDI files see [MIDI import](#).

### MuseData (\*.md) (import only)

[MuseData](#) is a format developed by Walter B. Hewlett beginning in 1983 as an early means of sharing music notation between software. It has since been eclipsed by MusicXML, but several thousand scores in this format are still available online.

### Capella (\*.cap, \*.capx) (import only)

CAP and CAPX files are created by the score writer, [Capella](#). MuseScore imports version 2000 (3.0) or later fairly accurately.

### Bagpipe Music Writer (\*.bww) (import only)

BWW files are created by the niche score writer, [Bagpipe Music Writer](#).

### BB (\*.mgu, \*.sgu) (import only)

BB files are created by the music arranging software, [Band-in-a-Box](#). MuseScore's support is currently experimental.

### Overture (\*.ove) (import only)

OVE files are created by the score writer [Overture](#). This format is mainly popular in Chinese-language environments, such as Mainland China, Hong Kong, and Taiwan. MuseScore's support is currently experimental and seems to support

Overture 3 and later only.

#### Guitar Pro (various—import only)

MuseScore can open [Guitar Pro](#) [↗](#) files with the following extensions: \*.gtp, \*.gp3, \*.gp4, \*.gp5, \*.gpx, and, as of version 3.5, \*.gp.

#### Power Tab Editor (\*.ptb) (import only)

PTB files are created by [Power Tab Editor](#) [↗](#). MuseScore's support is currently experimental.

#### See also

- [Open/Save/Export/Print](#)
- [Recovered files](#)

#### External links

- [How to recover a backup copy of a score](#) [↗](#) (MuseScore HowTo)

## Fretboard diagrams

**Note:** *This page applies to MuseScore 3.1 and above only. Users of versions prior to 3.1 should go to [Fretboard diagrams \(prior to version 3.1\)](#).*

### Fretboard Diagrams overview

MuseScore allows the use and creation of **fretboard** (or **chord**) **diagrams**. They usually appear above the staff on lead sheets and piano scores. They are commonly used for guitar chords, but MuseScore permits the creation of diagrams for any instrument.

Below is a simple example of Fretboard Diagrams use.

The image shows a musical score for the piece "Home on the Range". At the top, the title "Home on the Range" is written. Below the title, four fretboard diagrams are shown for the chords C, C7, F, and (Fm). Each diagram is a six-string guitar fretboard with dots indicating finger positions. The C chord diagram shows the 1st fret on the 2nd, 3rd, and 4th strings, and the 3rd fret on the 5th string. The C7 chord diagram shows the 1st fret on the 2nd, 3rd, and 4th strings, the 3rd fret on the 5th string, and the 2nd fret on the 6th string. The F chord diagram shows the 1st fret on the 2nd, 3rd, and 4th strings, and the 2nd fret on the 5th and 6th strings. The (Fm) chord diagram shows the 1st fret on the 2nd, 3rd, and 4th strings, and the 2nd fret on the 5th and 6th strings. Below the diagrams is a musical staff with a treble clef and a 3/4 time signature. The melody consists of quarter notes: G4, A4, B4, G4, F4, E4, D4. The bass line consists of quarter notes: G2, G2, G2, G2, G2, G2, G2.

(Note: Fretboard Diagrams are an alternative to and quite different from [Tablature](#), which is a specialized notation form that is preferred by some string instrument players.)

The Fretboard Diagram mechanism can be used in several different ways.

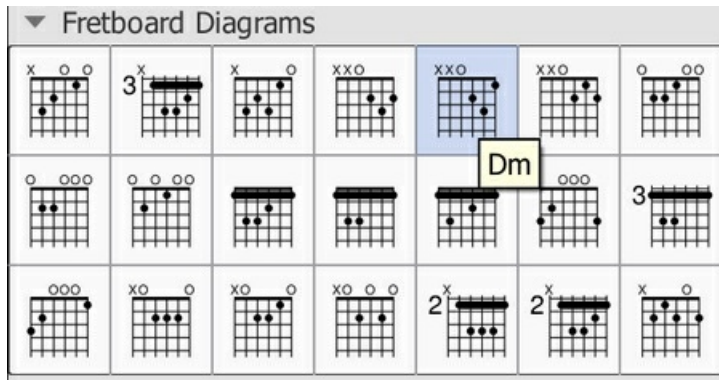
1. **Standard chords.** A set of 21 common chord diagrams for the guitar are found in the Fretboard Diagrams [palette](#) in the Advanced Workspace. These consist of a single example of a major, minor, and seventh chord for each diatonic scale tone (CDEFGAB). These 21 chords are adequate for many simple pop or folk music scores. See the [overview of this palette](#) below.
2. **Modified chords.** In many cases, the standard chords from the Fretboard Diagrams palette are used as a starting point for creating modified chord diagrams, via the [Inspector](#). This technique enables chord extensions, alterations, different voicings, different positions, etc. to be applied to the 21 standard diagrams. There are literally thousands of guitar chords in general use, making a comprehensive palette or dictionary impractical. See [How to use Fretboard Diagrams for custom/complex chords](#) [↗](#) for examples.
3. **"Freehand" chords.** More advanced guitarists often prefer to start from a blank chord grid, and then draw the specific chord tones desired. See [How to use Fretboard Diagrams for custom/complex chords](#) [↗](#) for examples.

*Note:* Many aspects of music notation follow well-established engraving standards. Guitar chord diagrams are an exception. Usage has varied widely from year to year, from publisher to publisher, from teacher to teacher, and from arranger to arranger. Many inconsistent practices persist today, and distinct styles of chord notation are preferred in different musical genres and regions. For this reason, the MuseScore Fretboard Diagram interface supports diagrams of various types. Users are free to choose their preferences.



## Overview of the standard guitar chord palette

The Fretboard Diagrams palette in the Advanced Workspace provides 21 diagrams, comprising a single major, minor, and seventh chord for each diatonic scale tone (CDEFGAB). The name of each diagram appears when the cursor hovers over the entry.



*Note:* This range of chord diagrams, or indeed any selection of 21 chords, would not typically be sufficient for publication purposes. Arrangers must consider many other voicings, positions, and chord qualities. This palette is also an example of the diverse diagram formats in use, as discussed above. These 21 chords happen to incorporate **open/mute string indicators** (the X and O symbols above the diagrams). Although those symbols *do* often appear in published scores, their usage varies by context. For example, jazz arrangements generally omit mute string indicators, unless contextually important, and rarely use open strings.

Additional palettes that contain a broader range of standard chords are expected to be available in the future. These would try to address the needs of specific musical genres and situations.

## Overview of creating modified or custom chords

Modified Fretboard Diagrams are created by adding and then editing an existing diagram from the palette. By modifying standard chords, it is possible to create Fretboard Diagrams for *any* playable chord, and to reflect fingering on *any* Western fretted stringed instrument, regardless of tuning, number of strings, or number of frets. Most of the material below deals with the process of modifying diagrams and creating new ones.

Custom diagrams can be saved to a custom palette if desired for future use. Modified diagrams can of course be copied/pasted within a score in the usual ways.

## To add a Fretboard Diagram

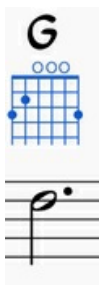
To add a Fretboard Diagram to the score, use one of the following methods:

- Select a note in voice 1 and double-click a Fretboard Diagram from the palette.
- Drag and drop a Fretboard Diagram from a palette to the desired position in the score.

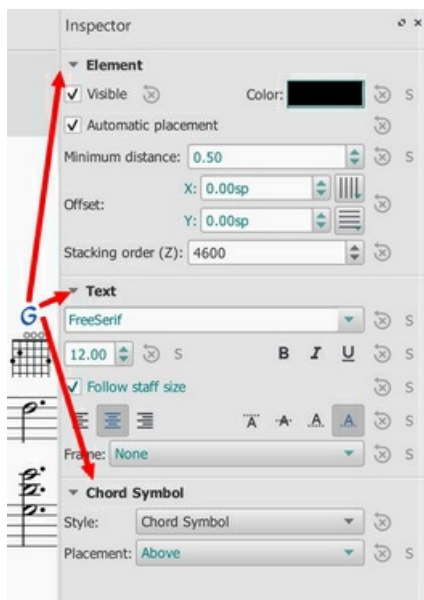
As the cursor hovers over the chosen diagram within the palette, its name will appear as a **pop-up hint** (see the example in the overview).

## Chord Symbols linked to Fretboard Diagrams

When adding a Fretboard Diagram to a score, a chord symbol is also automatically created. The chord symbol is normally placed above the diagram, and uses the chord name from the chord's palette cell. Automatic placement and formatting of a diagram's chord symbol is controlled by style settings (see style settings, below).



A Fretboard Diagram's generated chord symbol can be selected, moved, and modified like any other text element. It behaves generally like the normal **chord symbols** that are added using Add → Text → Chord Symbol or the shortcut Ctrl+K.



**Note 1:** A field on the **Chord Symbols** style page (Style submenu: select Format → Style... → Chord symbols) – rather than on the **Fretboard Diagrams** style page – controls the chord symbol's "**Distance to Fretboard Diagram**". This value interacts with the Element "**Minimum distance**" field, within the Inspector, to control automatic placement of the chord symbol relative to the diagram. Note also that the Fretboard Diagram's "top edge" includes the blank space where **open/mute string indicators** would appear, even if that area is empty. This may leave a larger gap than is desired. As usual, manual placement can be used to override the automatic settings.

**Note 2:** Automatic chord symbols generated for Fretboard Diagrams are not completely integrated with normal Chord Symbols that may be directly associated with notes on the staff. Specifically, focus does not flow from a Fretboard Diagram's chord symbol back to the sequence of other symbols on the page when using Space to move through the chord symbols. This minor issue will be addressed in a future update.)

#### Use of Chord Symbols with Fretboard Diagrams

- **Add a diagram's Chord Symbol** automatically simply by adding a Fretboard Diagram as described above.
- **Delete a diagram's Chord Symbol** by selecting the symbol and deleting it, as with any text item.
- **Add a new Chord Symbol to a diagram without one** by selecting the Fretboard Diagram and using Add → Text → Chord Symbol or the shortcut Ctrl+K.

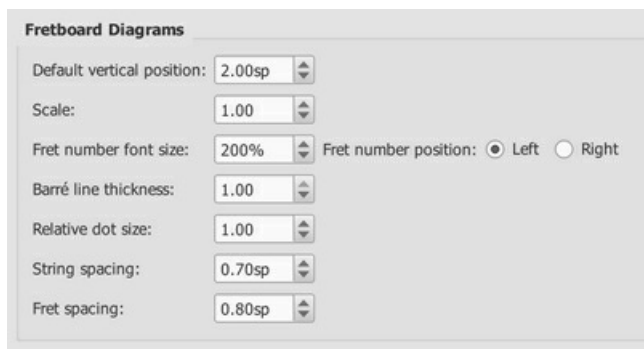
#### To adjust a Fretboard Diagram's element properties (position, color, stacking order...)

The **position** of a Fretboard Diagram can be adjusted using the keyboard arrows in Edit mode; or with the X- and Y-offsets in the "Element" section at the top of the Inspector.

**Visibility**, **Color** and **Stacking order** can also be adjusted in the "Element" section: see the diagram under editing.

#### To adjust global/default Fretboard Diagram style properties

Certain default and global properties of Fretboard Diagrams (see diagram below) can be adjusted from the Style submenu: select Format → Style... → Fretboard Diagrams. Some of these properties are subject to override via the Inspector; but most affect all Fretboard Diagrams in the score.



- **Default vertical position** specifies the default placement of the diagram relative to the staff. (Subject to override via Inspector).
- **Scale** specifies the default scale (i.e. diagram size). (Subject to override via Inspector).
- **Fret number font size** and **...position** control placement of fret numbers on all diagrams. (Global).
- **Barre line thickness** controls how large a line is used to represent a barre on all diagrams. By default, this is the

same thickness as the solid dots. A smaller line will allow dots to be visible under the barre, for situations where that is desirable. (Global).

- **Relative dot size** controls the size of dots on all diagrams, relative to the size of the scaled grid. (Global).
- **String spacing** controls the spacing between strings, and thus the total width of all diagrams. (Global).
- **Fret spacing** controls the spacing between frets, and thus the total height of all diagrams relative to the number of frets they each display. (Global).

Most Fretboard Diagram properties exposed by the [Inspector](#) offer "reset to style default" and "save as style default" buttons. These values do not typically appear on the style page, but are manipulated via the Inspector.

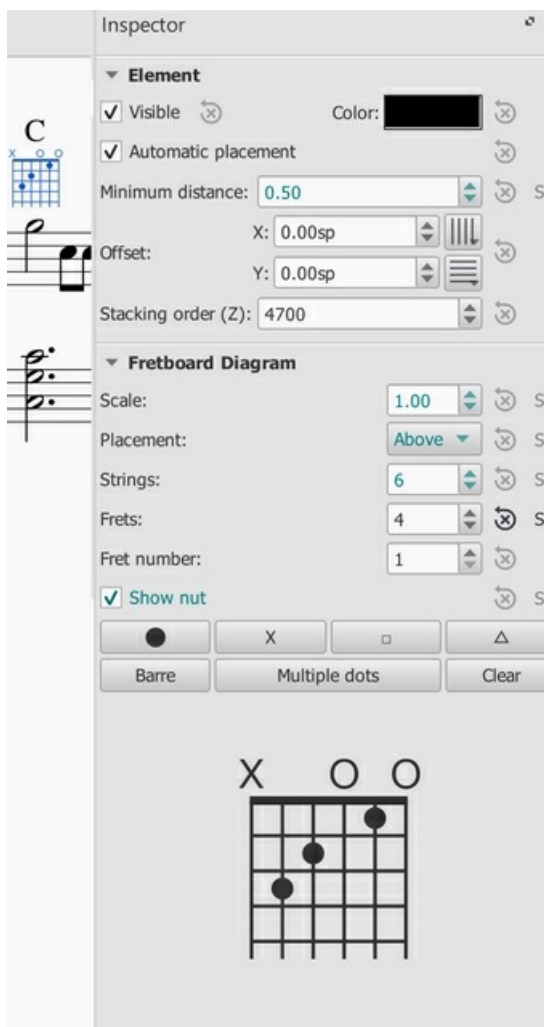
### To edit a Fretboard Diagram

When a Fretboard Diagram is selected, it can be edited in the [Inspector](#) as follows:

The [Inspector](#) displays three sections related to the Fretboard Diagram:

- An Element section that controls the Fretboard Diagram's visibility, placement, color, and other aspects that are used in common with other MuseScore elements; see [adjust element properties](#) and the [Inspector](#) for details.
- A Fretboard Diagram section, with control fields and buttons that define the appearance of this diagram.
- A magnified version of the Fretboard Diagram, showing its details and allowing editing.

Below is an example of the [Inspector](#) with a Fretboard Diagram selected.



### Editing Fretboard Diagram properties

(See Inspector properties above in the [editing](#) example.)

- To adjust the **scale (size)** of the diagram: Use **Scale**.
- To adjust the diagram's **placement relative to the staff**: Use **Placement**.
- To adjust the **number of instrument strings**: Use **Strings**. Strings are added/removed from the left side of the diagram.
- To adjust **how many frets to display** (i.e. the height of the diagram): Use **Frets**. Frets are added/removed from the bottom of the diagram.
- To adjust the **first fret position**: Use **Fret number**. A digit is shown next to the first visible fret.
- To specify **thickening of the nut** (a heavy line above the first fret): Use **Show nut**.
- Place the **finger dots** as described below.

## Finger dot editing (basic use)

(See Inspector properties above in the [editing](#) example.)

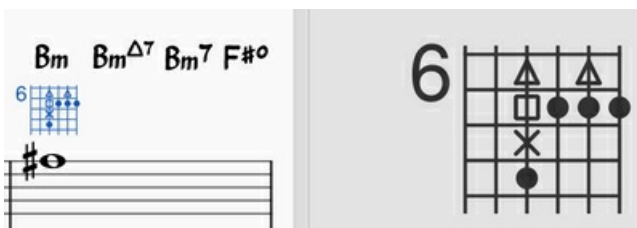
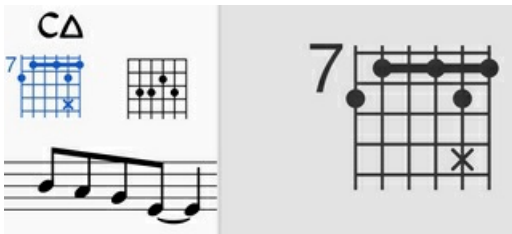
- To **remove all current dots**, use the "Clear" button above the diagram. (Note: you could save a blank grid in a custom palette, as a starting point for custom diagrams.)
- To **create a dot**, click on a fret in the diagram at the bottom of the inspector; click again to remove the dot.
- To **move a dot**, clear its current position by clicking on it; then create the desired dot.
- To **create a barre or partial barre**: Click the "Barre" button above the diagram; then click at the leftmost position desired for the barre. The barre will extend to the right edge of the fretboard. **Keyboard shortcut**: Holding the shift key, click on the string where you want a barre to begin.
- To **end a barre before the rightmost string**: Click the "Barre" button above the diagram; then click at the rightmost position desired on an existing barre. The barre will end at that string. **Keyboard shortcut**: Holding the shift key, click on the string where you want a barre to end.
- To **delete a barre**: Click the "Barre" button above the diagram; then click at the leftmost position of the barre. It will be removed. **Keyboard shortcut**: Holding the shift key, click on the leftmost position of the barre.
- To **create multiple barres**: Use the above steps to create one than one barre, e.g. to show the third finger covering two strings.
- To **adjust the barre thickness**: Use the Style options (Format->Style->Fretboard Diagrams) to adjust the barre line thickness relative to the dots. This will allow dots to be visible on the barre, for cases where that is desired.
- To **Indicate open and mute strings** (optional). Click just above the diagram to toggle a string between:
  - Open (o)
  - Mute/unplayed (x)
  - No indication

## Finger dot editing (advanced use)

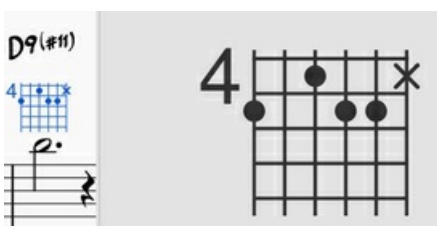
Some arrangers and educators use a more advanced form of Fretboard Diagram that a) incorporates multiple types of "dot", and that b) allows multiple dots per string.

This technique is particularly associated with the many books and arrangements published by **Ted Greene** and his successors. (Note: No other notation software currently supports this diagram style.)

- **Multi-dot notation style**. With this approach, the round dots are played first. Then, on successive beats, the notes represented by the other dots are then played in order. This allows a single diagram to represent several beats of music. (The usual sequence is: dot → X → square → delta. Usage varies however.) Here are two examples of multi-dot diagrams.

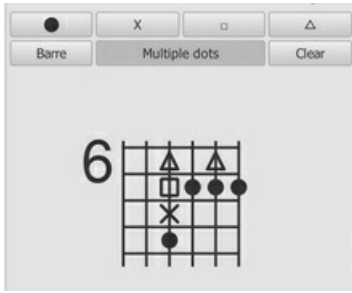


- **Optional-note notation style**. Another use of multiple dots per string allows other symbols to show optional notes, rather than delayed notes. Typically, a related chord voicing is shown, such as an optional extension or an optional rootless chord version. Here is an example of an optional extension.



MuseScore Fretboard Diagrams allow the creation of these and other types of multi-symbol diagrams. A chord is first created and edited using the [basic steps](#) described above. Then, the **multiple dot buttons** above the diagram are used to

add secondary notes.



1. To **begin adding multiple dots (i.e. symbols)** to a diagram, click '**Multiple dots**'.
2. To **add another dot to a string**, click above or below an existing symbol. The next symbol in sequence will be placed at that position, e.g. if there is already a dot, an X will appear next.
3. To **remove any symbol from a diagram**, click on it.
4. To **enter a particular symbol out of sequence**, click on the button with that symbol before adding the dot; e.g. to enter an X on a string with no current dots, because that note should be played after the rest of the chord, click on the X and then place it as desired.

(Note: Experienced users of **Ted Greene** style diagrams will find that several secondary features from Ted's diagrams are not yet supported in MuseScore. These include: a. Displaying the fret number on a higher fret than the first visible fret. b. Allowing the note symbols to include digits, not just the four dot styles currently supported. c. Allowing the creation of annotation on and between diagrams, such as circling a particular note, or drawing lines linking notes in adjacent diagrams. However, MuseScore does provide many tools for drawing and annotation that can serve in place of these techniques.)

(Note: Because multi-note symbols are not standardized, even within the **Ted Greene** community, users must be careful to indicate how they are being used within a given score.)

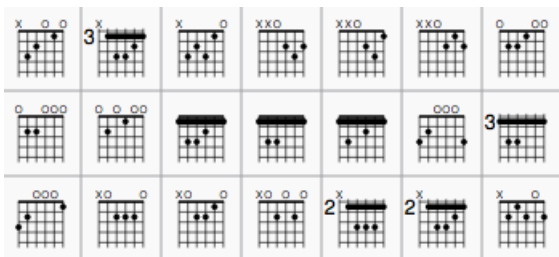
### External links

- [How to use Fretboard Diagrams for custom/complex chords](#) (MuseScore HowTo)
- [Palette with fretboard diagrams for Mandolin](#) (Forum article)
- [Palette with fretboard diagrams for Ukulele](#) (Forum article)

### Fretboard diagrams (prior to version 3.1)

**Note:** This page applies to versions of MuseScore prior to 3.1 only. Users of MuseScore 3.1 and above should go to [Fretboard diagrams](#).

A range of **fretboard** (or **chord**) **diagrams** for the guitar are provided in the [Fretboard Diagrams palette](#) in the Advanced Workspace.



You can create a chord diagram for any fretted, stringed instrument by [editing](#) an existing one. It can be saved to a [custom palette](#) for future use if required.

### Add a fretboard diagram

To add a fretboard diagram to the score, use one of the following methods:

- Select a note in voice 1 and double-click a fretboard diagram from a [palette](#).
- Drag and drop a fretboard diagram from a palette to the desired position in the score.

As the cursor hovers over the chosen diagram within the palette, its name will appear as a **pop-up hint**.

### Edit a fretboard diagram

When a fretboard diagram is selected, it can be edited in the [Inspector](#) as follows:

- To adjust the **number of instrument strings**: Use **Strings**.

- To adjust the **fret position number**: Use **Offset**.
- To adjust how many frets to display (height-wise): Use **Frets**.
- To **place the finger dots**: Click on a fret to establish a dot; click again to remove the dot.
- **To create a barre or partial barre**: First make sure that the desired fret position is clear of black dots (click on a dot to remove it). Then, holding the **Shift** key, click on the string where you want the barre to begin. (Note: Only one barre can be applied per diagram; a partial barre must end on the first string).
- **To delete a barre**: Click on the black dot where the barre begins.
- **To Indicate open and mute strings** (if applicable): Click just above the diagram to toggle a string between:
  - Open (**o**)
  - Mute/unplayed (**x**)
  - No indication.
- To adjust the size: Use the **Scale** property.

### To adjust a diagram's element properties

The **position** of a Fretboard Diagram can be adjusted using the keyboard arrows in **Edit mode**; or with the X- and Y-offsets in the "Element" section at the top of the **Inspector**.

**Visibility**, **Color** and **Stacking order** can also be adjusted from the "Element" section.

### To adjust a diagram's style properties

Certain default and global properties of Fretboard Diagrams (e.g. barre thickness, vertical position, scale, fret-number font-size and position) can be adjusted from the **Style** submenu: select **Format** → **Style...** → **Fretboard Diagrams**. Some of these properties are subject to override via the **Inspector**; but most affect all Fretboard Diagrams in the score.

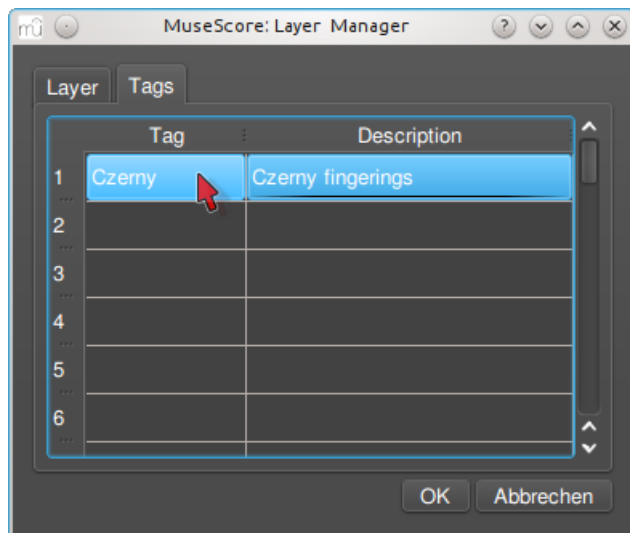
### Layer (experimental)

This feature is still experimental and only visible if MuseScore is started using the '-e' option, see [Command line options](#)

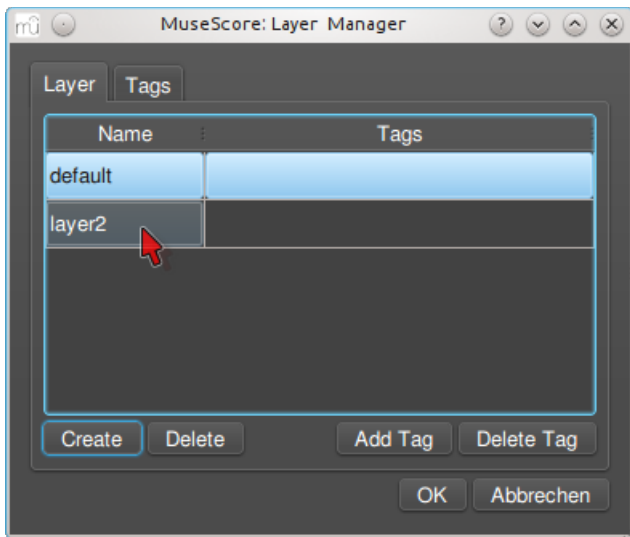
For the Open-Goldberg project, the ability to create different versions of the score was needed. One version is the "Urtext", a score which is close to the original version of Bach. A second version could be a Czerny variation, which in addition to the Urtext, contains fingerings.

The layer feature allows creating different versions out of one score file. If you want to add fingerings, you have to create a layer and tag the fingering elements with the layer name.

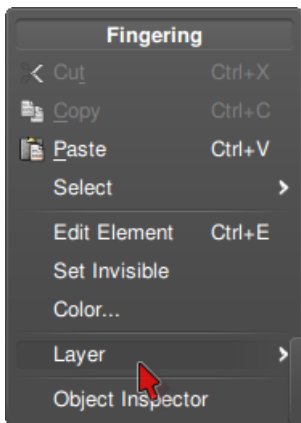
First, create layers:



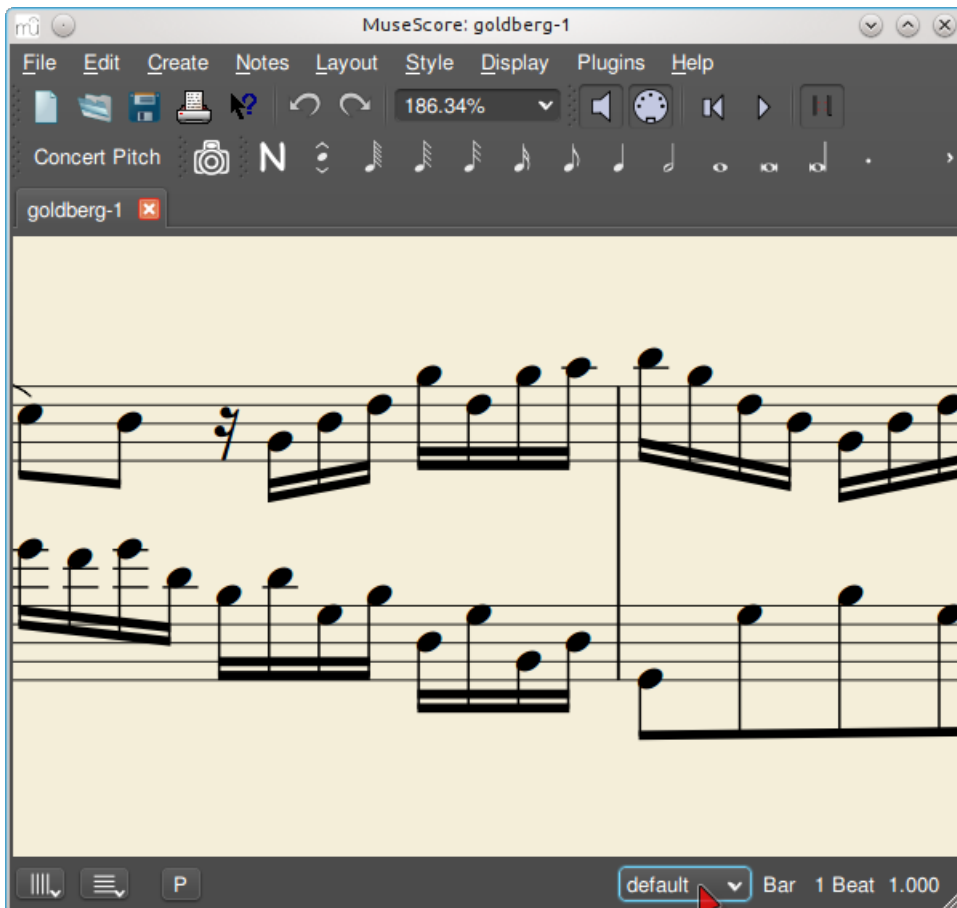
Second, create a score variant:



Add the visible layer to the score variant, then select all fingerings and tag them with the name of the score variant:

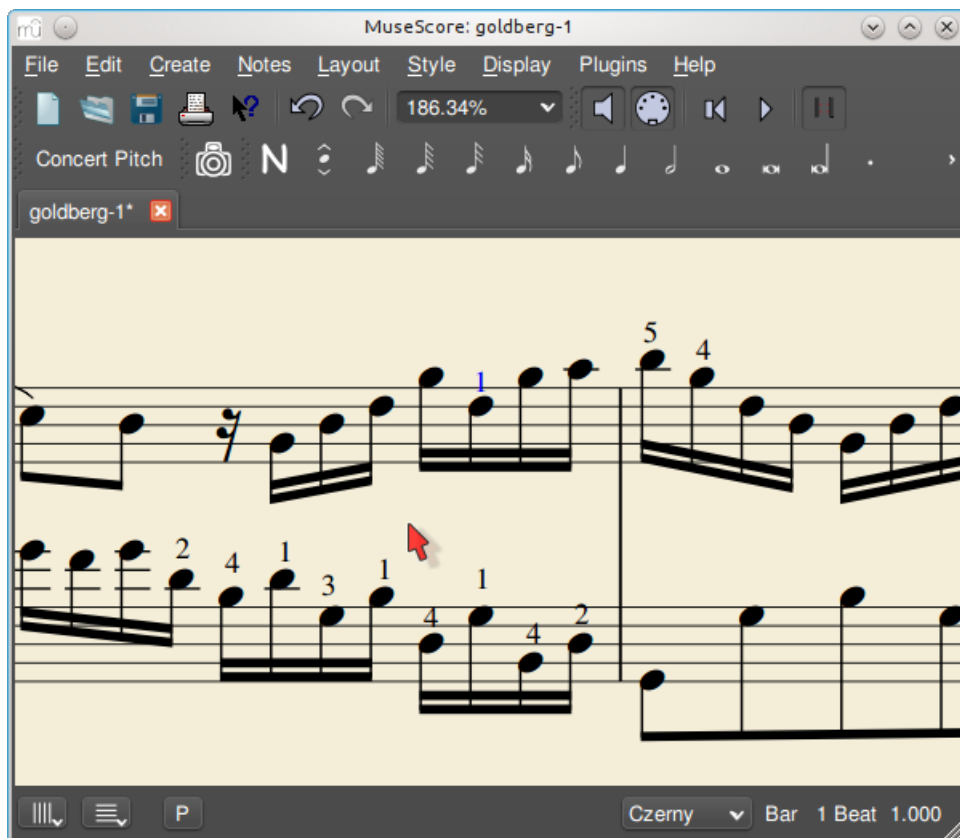


Default layer:



Czerny layer:





## See also

- [Command line options](#)

## MIDI import

MuseScore can import [MIDI](#) files (.mid/.midi/.kar) and convert them into music notation.

- **To import a MIDI file**, use the standard [Open](#) command. This converts the MIDI file into a MuseScore file (.mscz) and applies the default quantization settings.

The **MIDI Import Panel** appears at the bottom of the screen: you can expand this by dragging the interface with the document window upwards. The panel shows all the tracks in the file (only those with note events are shown) and allows you to adjust parameters affecting the conversion process. *If there are multiple tracks*, then one more track is added at the top of the list to select all tracks at once.

Import	Sound	Max. quantization	Max. voices	Tuplets	Is human performance	Split staff	Clef changes	Simplify durations	Show staccato	Dotted notes	Show tempo text	Recognize pickup measure	Detect swing
All	<input checked="" type="checkbox"/>	16th	4	3, 4, 5, 7, 9	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	None (1:1)
1	<input checked="" type="checkbox"/>	Trumpet	16th	4	3, 4, 5, 7, 9	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	None (1:1)
2	<input checked="" type="checkbox"/>	Alto Sax	16th	4	3, 4, 5, 7, 9	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	None (1:1)
3	<input checked="" type="checkbox"/>	Tenor Sax	16th	4	3, 4, 5, 7, 9	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	None (1:1)

- **To accept the default conversion:** Simply press the "X" symbol on the top-left of the Import Panel to close it. The panel can be re-opened at any time during the session by pressing "Show MIDI import panel" at the bottom of the document window.
- **To reimport the file:** Adjust the desired parameters in the Import Panel ([see below](#)) and press Apply. If you have made changes to the Import Panel but wish to UNDO them, press Cancel. To close the Import Panel, press the "X" symbol at the top-left of the panel.  
If you reimport the file after making changes to the temporary generated result score, MuseScore will prompt you what should happen with that modified score: Save it somewhere, Discard it or Cancel. The Save option will save the modified score as a Musescore file in your *lbin* directory without modifying the original MIDI file. It will then reimport the original MIDI file and apply the import panel settings. The import panel settings are NOT applied to the saved file. The Discard option will UNDO your changes to the Musescore file, then reimport the original MIDI file and apply the new settings. The Cancel option will reimport the original MIDI file in the first tab and apply any import panel setting then create a new tab with your modified score but without applying any import panel settings. The second tab is the same as hitting SAVE, then opening the saved file. Therefore, you cannot apply import panel settings to a user modified score. You must first apply the import panel settings, make any changes to the score, then save the score using the standard [Save](#) command.

**Mouse wheel scrolling** (MIDI Import Panel): Vertical scrolling is the default. For horizontal scrolling, press Shift or Ctrl



while using the wheel.

## Available operations

### *MuseScore instrument*

Assign a MuseScore instrument (listed in instruments.xml or in specified custom xml file in Preferences) that defines staff name, clef, transposition, articulations, etc.

### *Quantization*

Quantize MIDI notes by some regular grid. The grid MAX resolution can be set via the drop-down menu:

- Value from preferences (default) - quantization value is taken from the main Preferences dialog of MuseScore (in the "Import" tab)
- Quarter, Eighth, 16th, 32nd, 64th, 128th - user-defined values

However, the actual quantization grid size is adaptive and reduces when the note length is small, so for each note the quantization value is different. But there is an upper limit for the quantization value, and that value can be set by the user as "max. quantization".

For example, if some note is long - say, half note, and the max. quantization is set to 8th, then the note will be quantized with the 8th-note grid, not the half- or quarter-note grid as it supposed to be by the algorithm.

Such quantization scheme allows to quantize all notes in the score (with different lengths!) adequately.

### *Max. voices*

Sets maximum count of allowed musical voices.

### *Search triplets*

When enabled, this option attempts to detect triplets and applies the corresponding quantization grid to the triplet chords.

### *Is human performance*

If enabled, this option reduces the accuracy of MIDI-to-score conversion in favor of readability. It is useful for unaligned MIDI files, when no regular quantization grid is provided. For such files the automatic beat tracking algorithm is used which tries to detect the bar positions throughout the piece.

### *2x less measure count*

The option is active for unaligned MIDI files (when "Is human performance" is checked by default). It halves measure count obtained in the internal beat tracking operation. It may be convenient when the beat tracking gives 2x more frequent bar subdivision than necessary.

### *Time signature*

The option is active for unaligned MIDI files. The user can choose an appropriate time signature for the whole piece if the default detected value is wrong. The option is useful because it handles imported triplets correctly unlike the direct time signature setting from the palette.

### *Split staff*

This option is suited mainly for piano tracks - to assign notes to the left or right hand of the performer. It uses constant pitch separation (the user may choose the pitch via sub-options) or floating pitch separation (depending on the hand width - sort of a guess from the program point of view).

For drum tracks ("Percussion" sound in the track list) it splits the staff into multiple staves, each of which gets only one drum pitch (i.e. drum sound). There is also a sub-option (i.e. allow/disallow the application of the square bracket for the newly created set of drum tracks).

### *Clef changes*

Small clefs can be inserted within a staff to keep chords closer to the 5 staff lines. Clef changes depend on the average pitch of the chord. Tied groups of notes are not broken by the clef insertion (if it occurs, one can report a bug for algorithm in `importmidi_clef.cpp`). This option is available for non-drum tracks only.

### *Simplify durations*

Reduces number of rests to form more "simple" note durations. For drum tracks this option can remove rests and lengthen notes as well.

### *Show staccato*

Option to show/hide staccato markings in the score.

### *Dotted notes*

Controls whether MuseScore will use dotted notes or ties.

### *Show tempo text*

Shows/hides tempo text markings in the score.

### *Show chord names*

Shows/hides chord names in the score, if any, for XF MIDI file format.

### *Recognize pickup measure*

When enabled, this option doesn't change the time signature of the first bar that is shorter than the second bar. It is also called anacrusis. This option is only available for all tracks at once.

### *Detect swing*

MuseScore tries to detect swing, and automatically replace a pattern of 4th + 8th notes in triplets (for the most common swing feel, 2:1), or a dotted 8th + 16th pattern (for shuffle, 3:1), with two straight 8ths and a "Swing" or "Shuffle" text at the beginning.

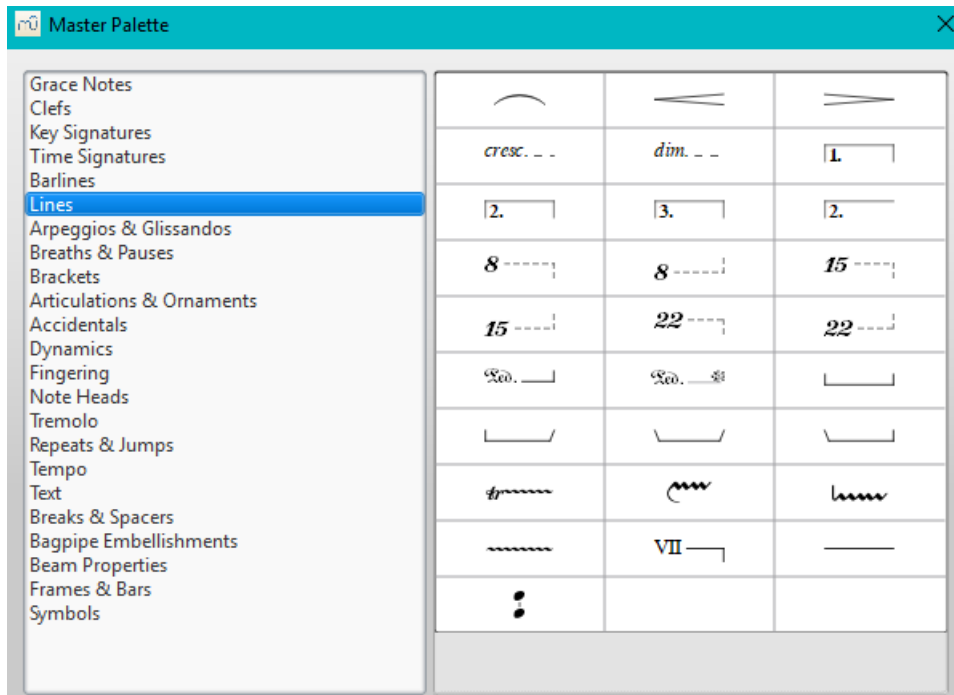
## Master palette

The **Master Palette** is a repository of symbols used to populate the workspaces (Basic, Advanced, and Custom). It is also

used to create new Time Signatures and Key Signatures.

To open, use either of the following options:

- Press Shift+F9 (Mac: fn+Shift+F9).
- From the menu, select View → Master Palette.



The Master palette is divided into sections based on symbol type. Hovering the mouse over an item shows **atool tip** (a short definition in black on yellow background).

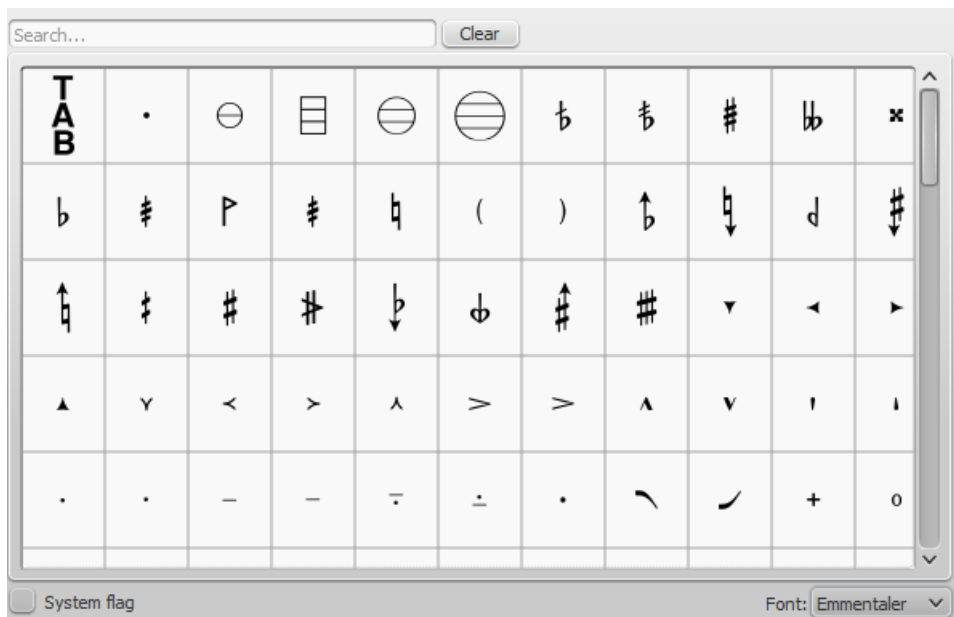
To transfer a Master palette item to a custom palette:

- Drag the symbol from the Master Palette window into a custom palette.

**Note:** Except for the Symbols section (below), it is not usual to add items directly to the score from the Master palette: use the workspace palettes instead. However, if desired, items can be added directly using either (i) drag-and-drop or (ii) by selecting one or more notes/rests and double-clicking the item.

## Symbols

The **Symbols** section of the Master Palette is a large repository of hundreds of musical symbols in addition to those found in the preset workspaces. You can open it from the Master Palette, or directly from the score by using the shortcut.



Find a symbol

The **Symbols** subcategories can be displayed by clicking on "Symbols". Use the **font menu** on the bottom right of the box to specify Emmentaler-, Gonville- or Bravura-specific symbols. You can search for a particular symbol by entering a keyword in the **search box**.

### Apply a symbol

To add an item to the score from the Symbols section, use any of the following options:

- Drag and drop a symbol onto a staff.
- Select a note or rest and double-click a symbol.

The position of the symbol can be adjusted by dragging or by changing the horizontal / vertical offsets in the [Inspector](#). Color and visibility can also be adjusted in the Inspector.

**Note:** Elements from the Symbols section do not follow any positioning rules (in many cases unlike identical elements from other sections of the Master Palette), nor do they affect score playback.

### Connect symbols

Elements from the Symbols section can be connected to each other on the score page, so that they can be moved as one unit:

1. Apply first symbol to the score. Adjust position as required.
2. Double-click, or drag-and-drop, a second element onto the first symbol. Adjust position as required.

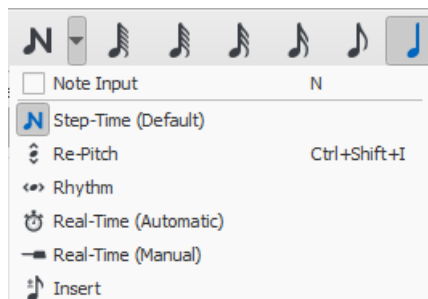
Drag the first element and the attached element will follow.

### See also

- [Palettes and workspaces](#)
- [Symbols and special characters](#) (add musical symbols to text objects)

## Note input modes

MuseScore allows you to choose from any of several note input modes. [Step-time](#) (see below) is the default, but others can be accessed by clicking the small dropdown arrow next to the note entry button on the [note input toolbar](#).



### Step-time

This is the default method of note input and involves entering notes one at a time: first by selecting a note duration using the mouse or computer keyboard, then choosing a pitch using the mouse, computer keyboard, MIDI keyboard or [virtual piano keyboard](#).

For details see [Basic note entry](#).

### Re-pitch

Re-pitch mode allows you to correct the pitches of a sequence of notes while leaving their durations unchanged (not to be confused with [Accidental: Respell pitches](#)).

1. Select a note as your starting point;
2. Select the **Re-Pitch** option from the **Note input** drop-down menu; or use the keyboard shortcut, Ctrl+Shift+I (Mac: Cmd+ Shift+I).
3. Now enter pitches using the computer keyboard, MIDI keyboard or [virtual piano keyboard](#).

You can also use the **Re-pitch** function to create a new passage from an existing one of the same sequence of durations —by copying and pasting the latter, then applying Re-pitch.

### Rhythm

Rhythm mode allows you to enter durations with a single keypress. Combining Rhythm and Re-pitch modes makes for a very efficient method of note entry.

1. Select your starting point in the score and enter Rhythm mode.
2. Select a duration from the note input toolbar, or press a duration shortcut (numbers 1-9) on your computer keyboard. A note will be added to the score with the selected duration. In contrast to [Basic note entry](#), pressing the . key will toggle dotting or not dotting all subsequent durations. All following rhythms will be dotted until the . key is pressed again. Unlike [Basic note entry](#), the dot is to be pressed prior to entering the rhythm.
3. Entering rests is similar to adding dotted notes. Press the 0 key to toggle entering rests. All rhythms entered will be rests until the 0 key is pressed again. This can be used concurrently with dotted notes.
4. Continue pressing duration keys to enter notes with the chosen durations.
5. Now use [Re-pitch mode](#) to set the pitches of the notes you just added.

### Real-time (automatic)

The Real-time modes basically allow you to perform the piece on a MIDI keyboard (or MuseScore's [virtual piano keyboard](#)) and have the notation added for you. However, you should be aware of the following limitations which currently apply:

- It is not possible to use a computer keyboard for Real-time input
- You cannot enter tuplets or notes shorter than the selected duration
- You cannot enter notes into more than one voice at a time

However, these restrictions mean that MuseScore has very little guessing to do when working out how your input should be notated, which helps to keep the Real-time modes accurate.

In the automatic version of Real-time input, you play at a fixed tempo indicated by a metronome click. You can adjust the tempo by changing the delay between clicks from the menu: Edit → Preferences... → Note Input (Mac: MuseScore → Preferences... → Note Input).

1. Select your starting position in the score and enter Real-time (automatic) mode.
2. Select a duration from the note input toolbar.
3. Press and hold a MIDI key or virtual piano key (a note will be added to the score).
4. Listen for the metronome clicks. With each click the note grows by the selected duration.
5. Release the key when the note has reached the desired length.

The score stops advancing as soon as you release the key. If you want the score to continue advancing (e.g. to allow you to enter rests) then you can use the [Real-time Advance shortcut](#) to start the metronome.

### Real-time (manual)

In the manual version of Real-time input, you have to indicate your input tempo by tapping on a key or pedal, but you can play at any speed you like and it doesn't have to be constant. The default key for setting the tempo (called "Real-time Advance") is Enter on the numeric keypad (Mac: Fn+Return), but it is highly recommended that you change this to a MIDI key or MIDI pedal (see [below](#)).

1. Select your starting position in the score and enter Real-time (manual) mode.
2. Select a duration from the note input toolbar.
3. Press and hold a MIDI key or virtual piano key (a note will be added to the score).
4. Press the Real-time Advance key. With each press the note grows by the selected duration.
5. Release the note when it has reached the desired length.

### Real-time Advance shortcut

The Real-time Advance shortcut is used to tap beats in manual Real-time mode, or to start the metronome clicks in automatic Real-time mode. It is called "Real-time Advance" because it causes the input position to move forward, or "advance", through the score.

The default key for Real-time Advance is Enter on the numeric keypad (Mac: Fn+Return), but it is highly recommended that you assign this to a MIDI key or MIDI pedal via MuseScore's MIDI remote control. The MIDI remote control is available from the menu: Edit → Preferences... → Note Input (Mac: MuseScore → Preferences... → Note Input).

Alternatively, if you have a USB footswitch or computer pedal which can simulate keyboard keys, you could set it to simulate Enter on the numeric keypad.

When the notes are entered they will be placed just before the selected starting element, which will be highlighted with a square blue marker. The start element and any subsequent notes or rests within the same measure will be shifted forward. You can move the insertion point forward and backward using the arrow keys → or ←, and the new insertion point will then be highlighted.

### Insert

**Insert** Input mode (called **Timewise** in versions prior to 3.0.2) allows you to insert and delete notes and rests within measures, automatically shifting subsequent music forwards or backwards. Measure duration is automatically updated as you go.

1. Make sure you are in Note input mode, and that you have the element selected where you want to start inserting notes/rests;
2. Click on the arrow next to the Note input icon, and select **Insert** (or if Insert is the current default, just press **N**);
3. Enter a note or rest as you would in Step-Time mode. Each note is inserted before the current cursor position;
4. Move the cursor forward and backward if required (using the arrow keys), to change the insertion point.

Alternatively, if you have only one or two notes to insert, you may prefer to use a shortcut:

- Press **Ctrl+Shift** (Mac: **Cmd+Shift**) while adding the note by Mouse-click or keyboard shortcut (A-G).

If, at any time, the total duration of the notes and rests within the measure does not match the time signature, a small + or - sign will be shown above the measure.



See also: Remove selected range (Tools).

### Normal mode

To leave Note Input mode, click on the Note Input tool button, press **N**, or press **Esc**. This puts you in **Normal mode**, in which you can change durations and delete notes or rests as follows:

- If you select a note and press **Del** the note will be replaced by a rest of the same duration.
- If you select a note or rest and press **Ctrl+Del** the note/rest will be deleted, and subsequent notes moved backward (see Remove selected range).
- If you reduce the duration of a note or rest the remaining duration will be filled with rests.
- If you increase the duration of a note or rest it will subtract duration from the subsequent notes/rests to make up the duration. If this is done on the last note/rest in the measure, a note or rest with the required duration will be inserted in the start of the following measure, and the two will be tied together.

### See also

- Note input
- Copy and paste

### External links

- Video: Semi-Realtime MIDI Demo Part 1: New note entry modes
- Introduction to the new Repitch Mode (YouTube)

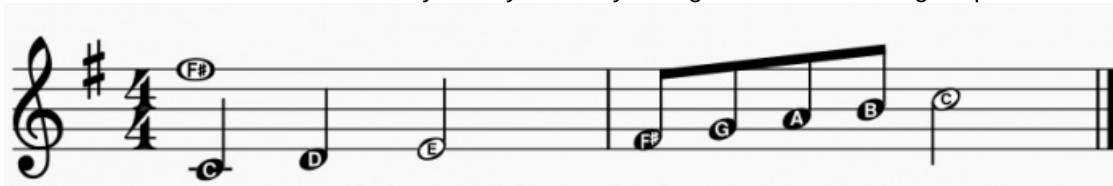
### Notehead schemes

You can choose choose any one of nine **notehead schemes** for a standard staff. To set a notehead scheme:

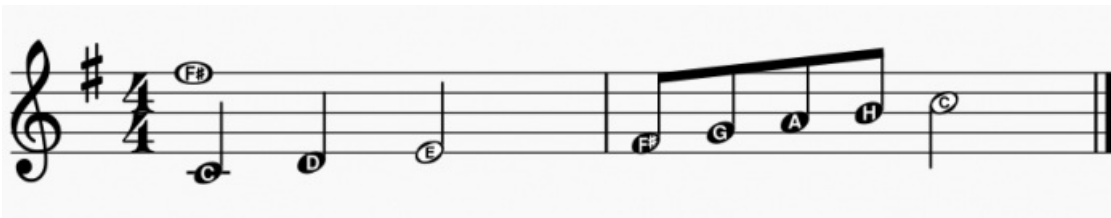
- Right-click on a staff and select Staff/Part Properties...; click on Advanced Style Properties... and choose from the "Notehead scheme" dropdown list.

The schemes are as follows:

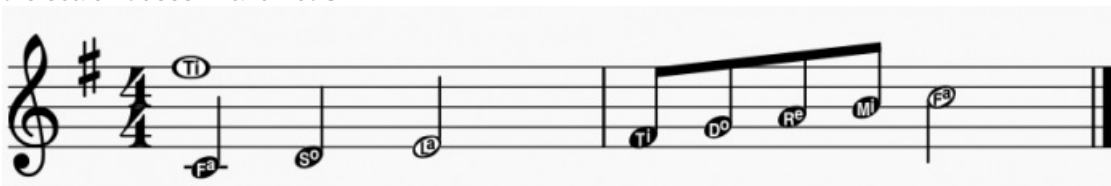
- **Normal**: This is the default scheme and the one the vast majority of people will use: it is also the only scheme in MuseScore 1 and 2. It uses normal noteheads which can be changed via the Noteheads palette or the Inspector.
- **Pitch name**: Noteheads automatically and dynamically change to include the English pitch name in the notehead.



- **German pitch name**: Just like the previous one but B will be replaced by H, and Bb by B.



- **Solfège Movable Do** (also called **Tonic Solfa**) [↗](#): Noteheads include the solfège syllable, depending on the degree in the scale. It uses Ti and not Si.



- **Solfège Fixed Do** [↗](#): Noteheads include the solfège syllable for the note name. As used in France, Italy, Spain, etc... It uses Si and not Ti.



- **4 Shape (Walker)**: Noteheads follow the four-shape system used in books such as William Walker's *Southern Harmony* (1835).



- **7 Shape (Aikin)**: Noteheads follow the seven-shape system used in books such as Jesse B. Aikin's *The Christian Minstrel* (1846), and books by the Ruebush & Kieffer Publishing Company. It's the most used 7-shape system.



- **7 Shape (Funk)**: Noteheads follow the seven-shape system used in books such as Joseph Funk's *Harmonia Sacra* (1851).

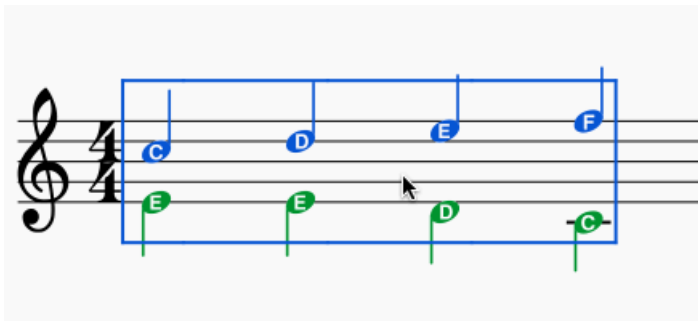


- **7 Shape Walker**: Noteheads follow the seven-shape system used in books such as William Walker's *Christian Harmony* (1867).



(For more info about the different variant of shape notes, see the [SMuFL specification](#) [↗](#))

The setting applies to a given staff and the notehead will be used when entering and editing notes. Here is an example.



## Noteheads

A range of alternative noteheads can be accessed via the **Note Heads** palette of the [Advanced workspace](#), or the [Inspector](#) (see [Change notehead group](#), below).

**Note:** The design of the notehead may vary depending on the music font selected (Leland, Emmentaler, Gonville, Bravura, MuseJazz, Petaluma). Those in the palette are displayed as half notes in Bravura font.

## Notehead groups

MuseScore supports a range of notehead styles:

- **Normal:** A standard notehead.
- **Crosshead** (Ghost note): Used in percussion notation to represent cymbals. It also indicates muted and/or percussive effects in stringed instruments such as the guitar.
- **Diamond:** Used to indicate harmonic notes in instruments such as the guitar, violin etc.
- **Slash:** Used to notate rhythms (e.g. guitar strums).
- **Triangle up/down:** Used in percussion notation.
- **Shape notes:** Do, Re, Mi, Fa, Sol, La, Ti.
- **Circle cross:** Used in percussion notation.
- **Circled noteheads**
- **Slashed notehead:** A notehead with an oblique line through it.
- **Plus noteheads**
- **Alt. Brevis:** Used in early music notation.
- **Brackets** (Parentheses): applied around an existing note (or accidental).

## Change notehead group

To change the *shape* of one or more noteheads in the score, use one of the following:

- Select one or more notes and click a notehead in a palette (double-click in versions prior to 3.4).
- Drag a notehead from a palette onto a note in the score.
- Select one or more notes and change the notehead in the [Inspector](#), using the drop-down list under **Note** → **Head group** (not supported for drum staves).

## Change notehead type

Occasionally you may need to change the *apparent* duration of a notehead—i.e. *notehead type*—without altering its *actual*, underlying duration:

1. [Select](#) one or more notes.
2. Choose one of the following options from the [Inspector](#) under **Note** → **Head type**:
  - **Auto:** Automatic, i.e. apparent duration = actual duration.
  - **Whole:** Whole notehead, regardless of actual duration.
  - **Half:** Half notehead, regardless of actual duration.
  - **Quarter:** Quarter notehead, regardless of actual duration.
  - **Breve:** Breve notehead, regardless of actual duration.

## Shared noteheads

When two notes in *different voices*, but of the same written pitch, fall on the same beat, one of two things may happen:

- The notes may *share* the same notehead.
- The notes may be *offset*: i.e. arranged side by side.

MuseScore uses the following rules:

- Notes with stems in the same direction do not share noteheads.
- Dotted notes do not share noteheads with undotted notes.

- Black notes do not share noteheads with white notes.
- Whole notes never share noteheads.

**Note:** If two unison notes occur in the same voice they are always offset.

#### Change offset noteheads to shared

To turn *offset noteheads* in opposite voices into *shared noteheads* :

- Make the smaller-value notehead invisible by selecting it and using the keyboard shortcut V (or unchecking the "Visible" option in the Inspector).

In a small minority of cases (where the smaller value note is dotted) this workaround is not applicable, so use the following alternative:

- Select the smaller value notehead and, in the "Note" section of the Inspector, change "Head type" to match that of the larger value note in the opposite voice.

#### Examples of notehead sharing

1. In the first example below, the notes of voices 1 and 2 share noteheads by default, because they are all black, undotted notes:

2. By contrast, in the next example, white notes cannot share noteheads with black notes, so are offset to the right:

To create a shared notehead, change the black eighth note's head type to match that of the white note or, pre-3.5, make it invisible (as explained above):

#### Remove duplicate fret marks

In certain cases, a shared notehead, when pasted to a tablature staff, may result in two separate fret marks on adjacent strings. To correct this, make any extraneous tablature notes invisible by selecting them and using the keyboard shortcut v (or by unchecking the "visible" option in the Inspector).

#### External links

- [Shape notes](#) at Wikipedia.
- [Ghost notes](#) at Wikipedia.

#### Parts

MuseScore allows you to not only create and print a full score but also to generate individual player's **parts** from it.

A part can be created from a specific instrument staff in the main score or even from a specific voice within a staff. This



allows you to display multiple parts (e.g. Flute 1 & 2) on a single staff in the score but to extract them as separate parts.

## Part Playback

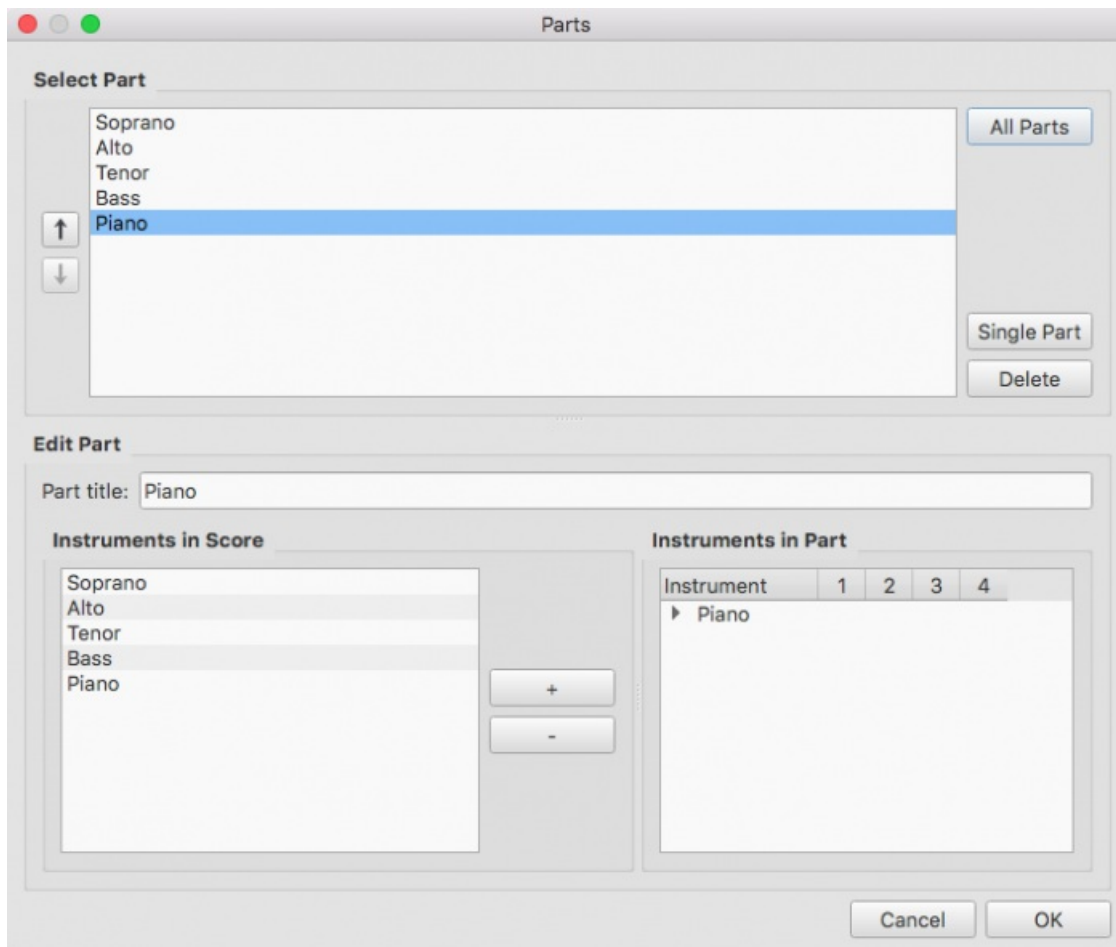
Musescore "solos" the Part you're viewing during playback—i.e. no other Parts sound. This is because the Mixer's "Play Part Only" box is checked by default.

Simply uncheck the "Play Part Only" checkbox if you want hear all play enabled tracks while viewing a Part. Additionally you can use the Mixer's mute and solo buttons to achieve various partial mixes of all available tracks. This can prove quite helpful because it allows you to proofread, arrange and compose within any Part while hearing other tracks for context.

## Create all parts

The most straightforward method is to create all parts at once. Parts are generated on a one-to-one basis from the corresponding Instruments in the score:

1. From the menu, select File → Parts....
2. Click All Parts (MuseScore 3.2-3.3.4: Generate; prior to MuseScore 3.2: New All) (parts are named with the instrument name, and a number added to differentiate parts that have the same label in the main score).



3. Click OK.

The parts can now be accessed by clicking on tabs above the document window.

## Create specific parts

This method allows you to generate *specific* parts for only selected instruments (rather than all-at-once):

1. In the Parts window click Single Part (prior to MuseScore 3.4 New) to create a part;
2. In the center pane, type the words you want to use for the "Part title" (this also serves for the corresponding part of the filename when exporting);
3. Pick the instrument that you want to appear in your part from the "Instruments in Score" pane, and press + to add it to the "Instruments in Part" pane.

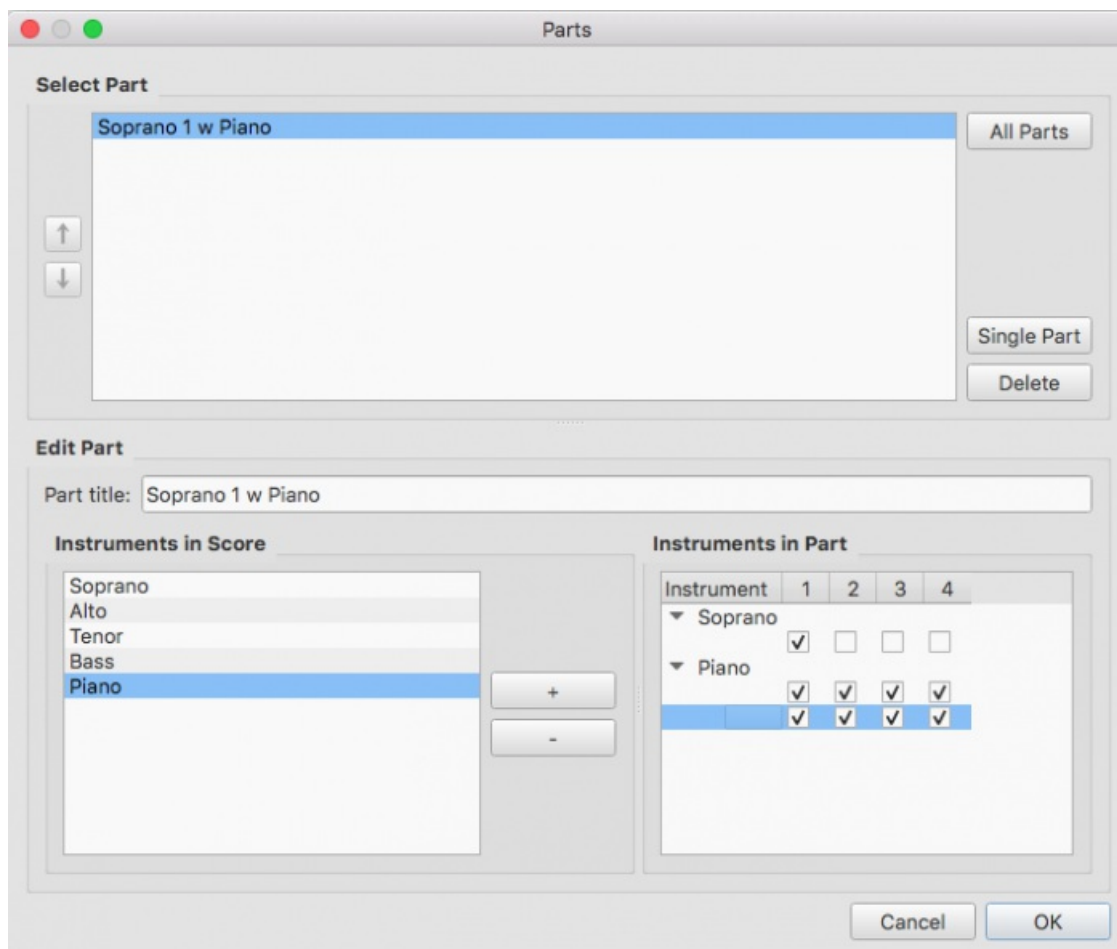
If you wish to create more parts, repeat steps 1 through 3 (above) for each part.

4. Click OK to save the parts.

You have now finished setting up the parts. You do not need to do this again, unless you add or remove an instrument from your full score.

## Customize parts

Once you have generated a part (or all parts), you can select any part at the top and use the controls at the bottom to control not only what instrument is in the part, but also which staves and voices within the instrument are included.



### Add instruments to a part

To add instruments to an existing part:

1. Select the part in the "Parts" pane.
2. Select the instrument from the "Instruments in Score" pane.
3. Press + to add it to the "Instruments in Part" pane.

### Remove instruments from a part

To remove instruments from an existing part:

1. Select the part in the "Parts" pane.
2. Select the instrument from the "Instruments in Part" pane.
3. Press - to remove the instrument.

### Select staves for an instrument

To select the staves of an instrument to include in the part:

1. Select the part in the "Parts" pane.
2. Click the arrow next to the instrument in "Instruments in Part" to expand the listing to show all staves and voices of the instrument.
3. Select the staff to be removed.
4. Press - to remove it from the instrument.

### Select voices for an instrument

1. Select the part in the "Parts" pane.

2. Click the arrow next to the instrument in "Instruments in Part" to expand the listing to show all staves and voices of the instrument.
3. Uncheck the voices to be removed.

**Note:** If you select only voice 1 for a given staff, then only the content in voice 1 for that staff will be included in the part. Thus, in order to share flute 1 & 2 on the same staff, you will need to enter all notes onto both voices, even in passages where they share content. You also cannot enter the two parts as chords in the passages where they share rhythms.

### Delete a Part

1. Open the Parts dialog (File → Parts...);
2. Select the relevant Part in the "Parts" pane;
3. Press Delete.

### Export parts

In order to be able to export parts, those need to have been created first, see [above](#)

1. From the menu, select File → Export Parts...;
2. Navigate to the place you want them to be exported to and select the file format (PDF is the default);
3. For filename just enter whatever prefix is useful for all parts, or leave the default (the filename of your score);
4. Click OK.

This will generate files with the names "<title>" + "-" + "<part name>.<extension>". In addition, when exporting as PDF, this will also generate "<title>" + "-Score\_And\_Parts.pdf".

### Save parts

Parts and score are "linked", which means that any change to the content in one will affect the other, but changes to the layout will not. When you have the parts created, they are saved along with the score (if you open the score you have tabs for the score and every part you created).

However, if you wish to save a part individually:

1. Make sure the part is "active." Select its tab if not;
2. From the menu, select File → Save As...


### Print a part

1. Make sure the part is "active." Select its tab if not;
2. From the menu, select File → Print to open the print dialog.

## Plugins

### What are Plugins?

Plugins are small pieces of software that add a particular feature to MuseScore. By enabling a plugin, a new menu option is appended to the **Plugins menu**: subsequently, when this option is selected, the plugin performs a particular task in the score.

Some plugins come pre-installed with MuseScore—see [Plugins installed by default](#) (below). You can find many more plugins in the [plugin repository](#) : some work with MuseScore 3, others only with older versions of MuseScore, and some work with either. To tell one from the other: MuseScore 3.x and 2.x plugin code files have an extension of .qml; for older versions, it is .js.

**Warning:** Plugins can potentially contain bad or malicious code, which can compromise or damage your scores or system. Plugins are entirely unvetted (except for those that are [installed by default](#)). You either need to trust the author or check the code yourself.

### Installation

**Note:** Some plugins may require the installation of other components (fonts, e.g.) to work. Check the plugin's documentation for more information.

Most plugins are provided as ZIP archives: download the plugin's .zip file and uncompress (unzip) it to one of the directories mentioned below (depending on your OS). If the plugin is provided directly as an uncompressed .qml file, simply download it and place into one of the same directories.

Once a plugin is installed, it needs to be enabled in the **Plugin Manager** in order to use it—see [Enable/disable Plugins](#).

### Windows

On Windows, new plugins should be installed into %HOMEPATH%\Documents\MuseScore3\Plugins. Alternatively, specify a different folder in MuseScore's [Preferences](#).

[Pre-installed plugins](#) can be found in %ProgramFiles%\MuseScore 3\Plugins (Or %ProgramFiles(x86)%\MuseScore 3\Plugins for the 32-bit versions) and in %LOCALAPPDATA%\MuseScore\MuseScore 3\plugins on Windows 7 and later. These folders should not be modified.

#### macOS

On macOS, new plugins should be installed into ~/Documents/MuseScore3/Plugins. Alternatively, specify a different folder in MuseScore's [Preferences](#).

[Pre-installed plugins](#) can be found in the MuseScore bundle in /Applications/MuseScore 3.app/Contents/Resources/plugins (to reveal files in the app bundle, right-click on MuseScore 3.app and choose "Show package contents"), and in ~/Library/Application Support/MuseScore/MuseScore 3/plugins. These folders should not be modified.

#### Linux

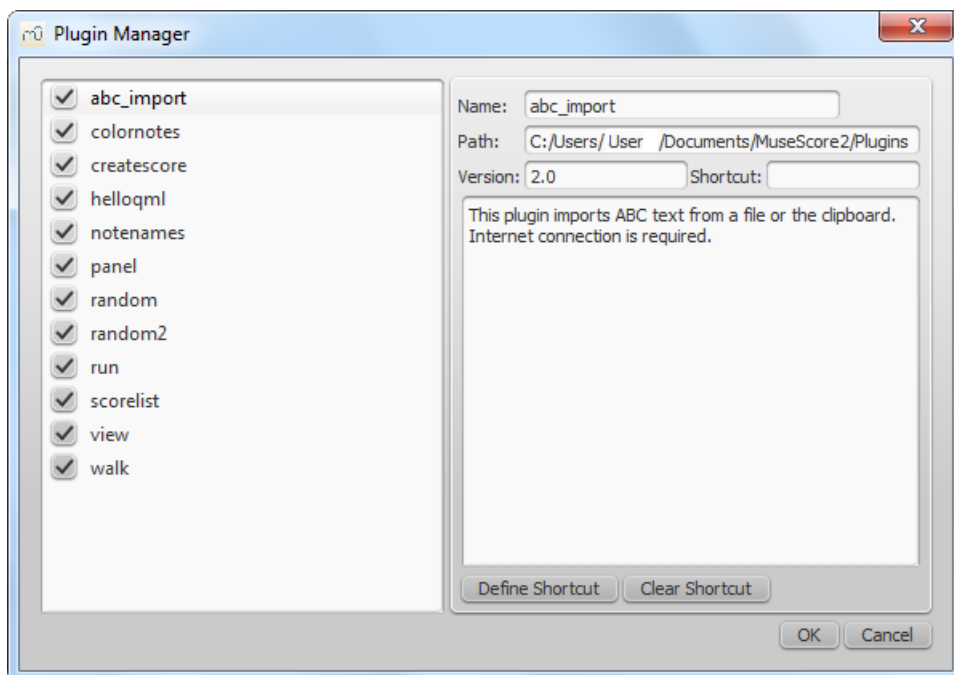
On Linux, new plugins should be installed into ~/Documents/MuseScore3/Plugins. Alternatively, specify a different folder in MuseScore's [Preferences](#).

[Pre-installed plugins](#) can be found in /usr/share/mscore-3.x/plugins and in ~/.local/share/data/MuseScore/MuseScore3/plugins. These folders should not be modified.

The directory names might be slightly different, depending on your operating system's language.

### Enable/disable plugins

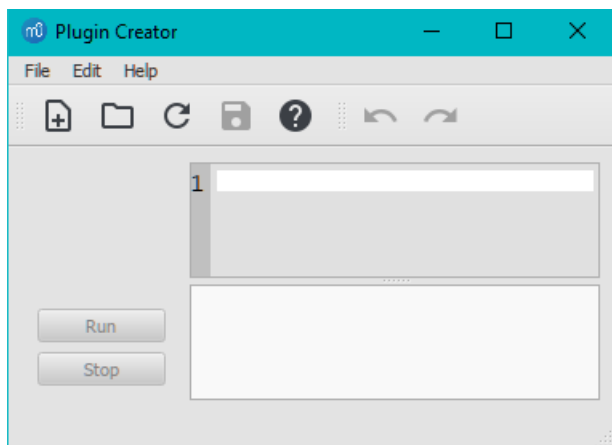
To be able to access the installed plugins from the Plugins menu, they need to be enabled in the **Plugin Manager**:



You do this simply by checking the appropriate tick box. This adds the name of the plugin to the list in the **Plugins menu**.

### Create/edit/run plugins

It is possible to create new or edit existing plugins and run them via the **Plugin Creator**:



Documentation of all available elements can also be found [here](#).

## Plugins installed by default

Some plugins come pre-installed with MuseScore, but they are not enabled by default. See [Enable/disable plugins](#) (above) to enable plugins.

### ABC Import

This plugin imports [ABC](#) text from a file or the clipboard and converts it to [MusicXML](#). Internet connection is required, because it uses an [external web-service](#) for the conversion.

### Notes → Color Notes

This demo plugin colors notes in the selected range (or the entire score), depending on their pitch. It colors the note head of all notes in all staves and voices according to the Boomwhackers convention. Each pitch has a different color. C and C# have a different color. C# and D $\flat$  have the same color.

To color all the notes in black, just run that plugin again (on the same selection). You could also use the ['Remove Notes Color' plugin](#) for this.

### Create Score

This demo plugin creates a new score. It creates a new piano score with 4 quarter notes: C, D, E, F. It's a good start to learn how to make a new score and add notes from a plugin.

### helloQml

This demo plugin demonstrates some basic tasks.

### Notes → Note Names

This plugin names notes in a selected range or for the entire score. It displays the names of the notes ([as staff text](#)) according to MuseScore's [language settings](#): voices 1 and 3 notes above the staff; voices 2 and 4 notes below the staff; and chord notes in a comma separated list, starting with the top note.

### Panel

This demo plugin creates a GUI panel.

### random/random2

Creates a random score.

### run

This demo plugin runs an external command. Probably this will only work on Linux.

### scorelist

This test plugin iterates through the score list.

### ScoreView

Demo plugin to demonstrate the use of a ScoreView


## Walk

This test plugin walks through all elements in a score

## See also

- [Tools](#)

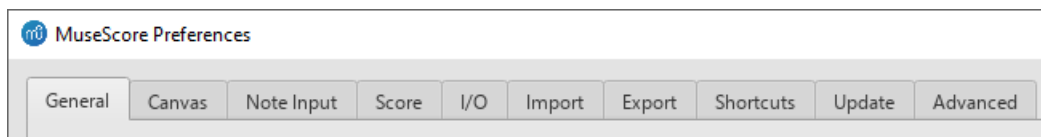
## External links

- [Plugins for 3.x](#) 

## Preferences

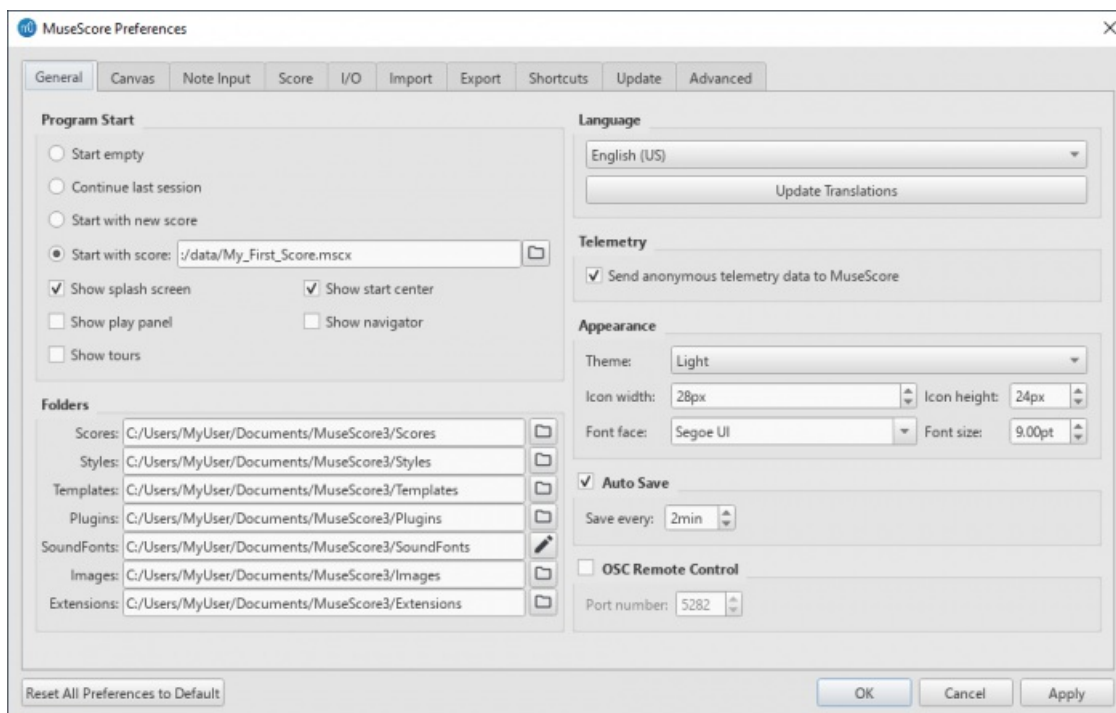
You can customize many of MuseScore's default behaviors via the menu **Edit** → **Preferences...** (Mac: **MuseScore** → **Preferences...**).

The Preferences dialog has multiple tabs:




Reset All Preferences to Default will reset all preferences to the ones MuseScore had when you installed it. Ok will save the settings and close the dialog. Cancel will close the dialog without applying changes. Apply will make changes take effect without closing the dialog.

## General



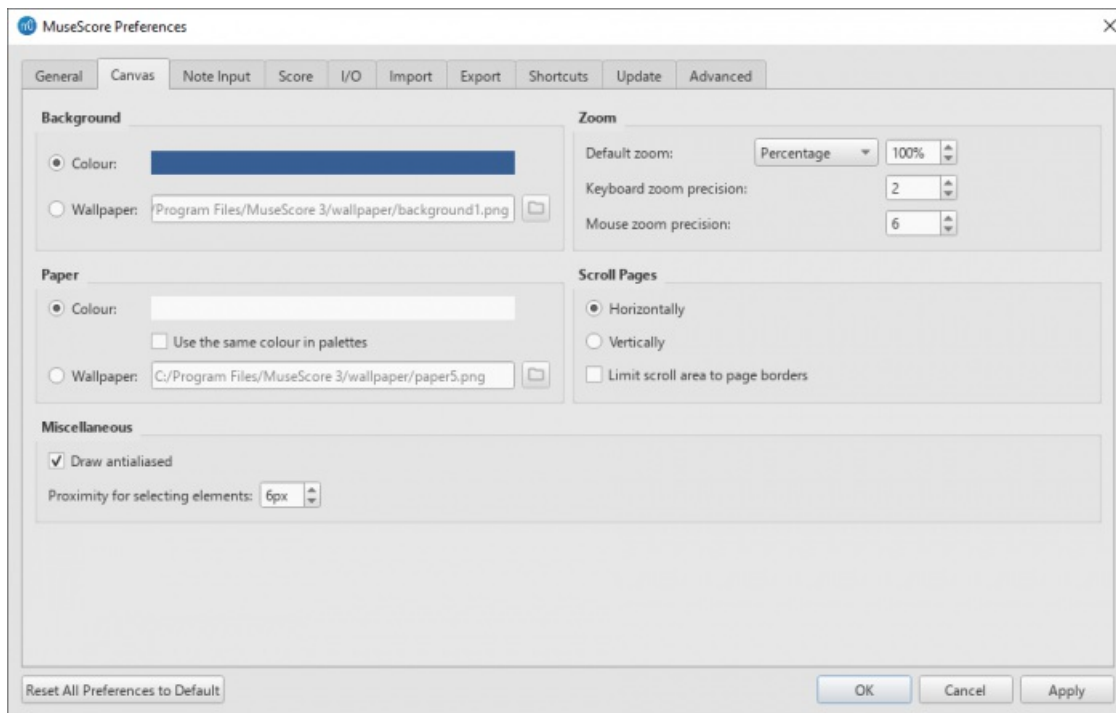
Here you can define:

- **Program Start:** Specify whether to start the session empty or to display a score. The options are one of the following: *Start empty* (no score) / *Continue last session* / *Start with new score* (i.e. New Score Wizard automatically opens) / *Start with score* (the program default, or one of your own choosing). You can also choose which panels to display. This can be any combination of: *Splash screen*, *Play Panel*, *Navigator*, or *Start Center*. Also select if *Tours* will be active.
- **Folders:** Specify the default folders for score files, style files, custom score templates, plugins, additional SoundFonts, images, and extensions.
- **Language:** Choose the language used by the program. Translations may be updated from here too. Note that language translation updates can also be done via the menu: **Help** → **Resource Manager**.
- **Telemetry:** Tick/untick to authorize MuseScore to collect usage data. The type of data collected is listed, and updated as needed, in [telemetry](#) .
- **Appearance:** Specify a dark or light theme, and the width and height of icons. Set display "Font face" and "Font

size".

- **Auto Save:** How frequently the program autosaves.
- **OSC Remote Control**

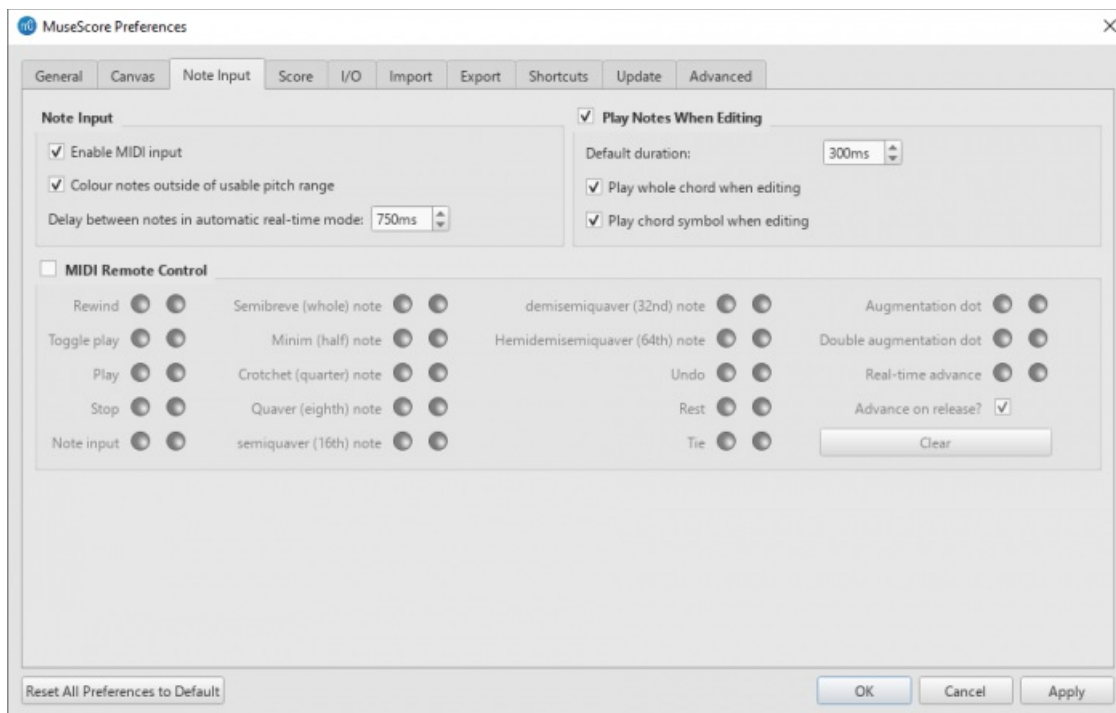
## Canvas



Use Canvas to set your preferred color and wallpaper for the score background and paper. The default "Background" is dark blue (RGB 20, 36, 51; Alpha 255) and the default "Paper," white.

- **Background:** Use this to set the color or background *around* the score pages. Select "Color" then click on the bar to the right and make a choice from the color picker; or select "Wallpaper," click on the file icon and set a background image.
- **Paper:** Sets the color or background of the score pages. Controls identical to "Background" (above). You can also tick/untick "Use the same color in palettes".
- **Zoom:** This defines the Default zoom level and keyboard/mouse zoom precision.
- **Scroll Pages:** This defines the way that the pages are laid out in the score. Choose "Horizontally" for a row layout, or "Vertically" for a column layout. To limit scrolling, tick "Limit scroll area to page borders".
- **Miscellaneous:** "Draw antialiased" (the default option) makes diagonal lines and edges of shapes look smoother. "Proximity for selecting elements" controls the distance the mouse may be from an object and still act on it. Smaller numbers require more precision, making it harder to click on small objects. Larger numbers are less precise, making it harder not to click on nearby objects unintentionally. Choose a comfortable working value.

## Note input



On this tab there are note input and MIDI remote control preferences. Here the following can be set:

#### Note Input

- **Enable MIDI Input:** Leave checked to allow MIDI input of notes.
- **Color notes outside of usable pitch range:** For details, see [Coloring of notes outside an instrument's range](#) and [Usable pitch range](#) (Staff properties: all staves).
- **Delay between notes in automatic real-time mode:** See [Real-time \(automatic\)](#).
- **Play notes when editing:** When ticked, MuseScore *sounds* the note when it is entered or selected. Tick "Play whole chord when adding note," if you want to hear *all* the notes of a chord when it is added to. You can also edit the "Default duration".

#### MIDI Remote Control

**Midi Remote Control** allows you to use certain keys on your MIDI keyboard to enter notes and rests and to select note durations, without involving the computer mouse or (computer) keyboard. The default setting is off.

#### To assign a command to a MIDI key:

1. Ensure that "MIDI Remote Control" is checked (your MIDI keyboard should be connected before opening the program).
2. Click the red button next to the option you wish to assign a MIDI key to: the red button now lights up.
3. Press a MIDI keyboard key. The red button becomes unlit and the green button lights up instead. The MIDI key has now been assigned to the desired option.
4. Repeat "2" and "3" to assign other keys.

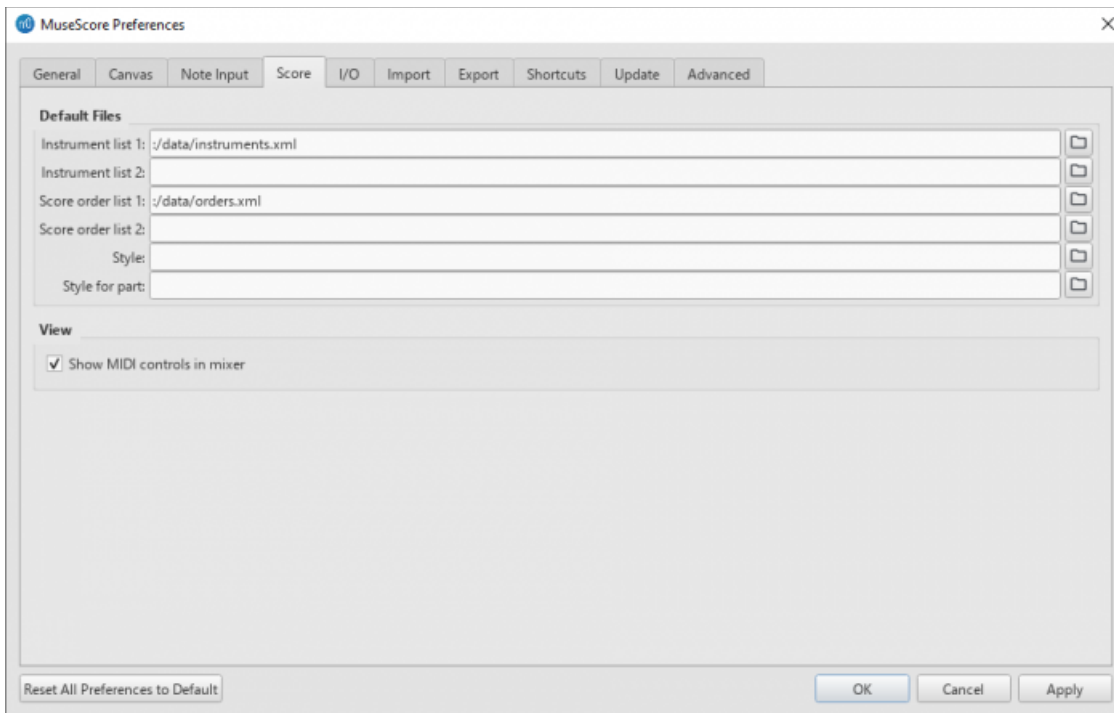
Once you have defined your key settings you can use the MIDI keyboard to control note input operations. You can verify your key settings by observing the MuseScore [Note Input toolbar](#) while pressing the MIDI keys.

To temporarily deactivate Midi Remote Control: uncheck "Midi Remote Control": all MIDI input key action buttons are now greyed out. *Note:* Your key assignments are always saved between MuseScore sessions and are not affected by deactivation.

**Notes:** (1) The "Clear" option turns off all the green buttons for the *current* MuseScore session but all the user-recorded MIDI key settings are retained and will be reloaded on the next session. (2) A MIDI key setting that is activated cannot afterwards be turned off, and the green button will always remain lit: however it can be overwritten with a different MIDI key by using the red button again. (3) If the same MIDI key is accidentally assigned to more than one option, then all the associated green buttons remain lit although only one will work. To fix, see "(2)".

#### Score





Score preferences include:

#### Default Files

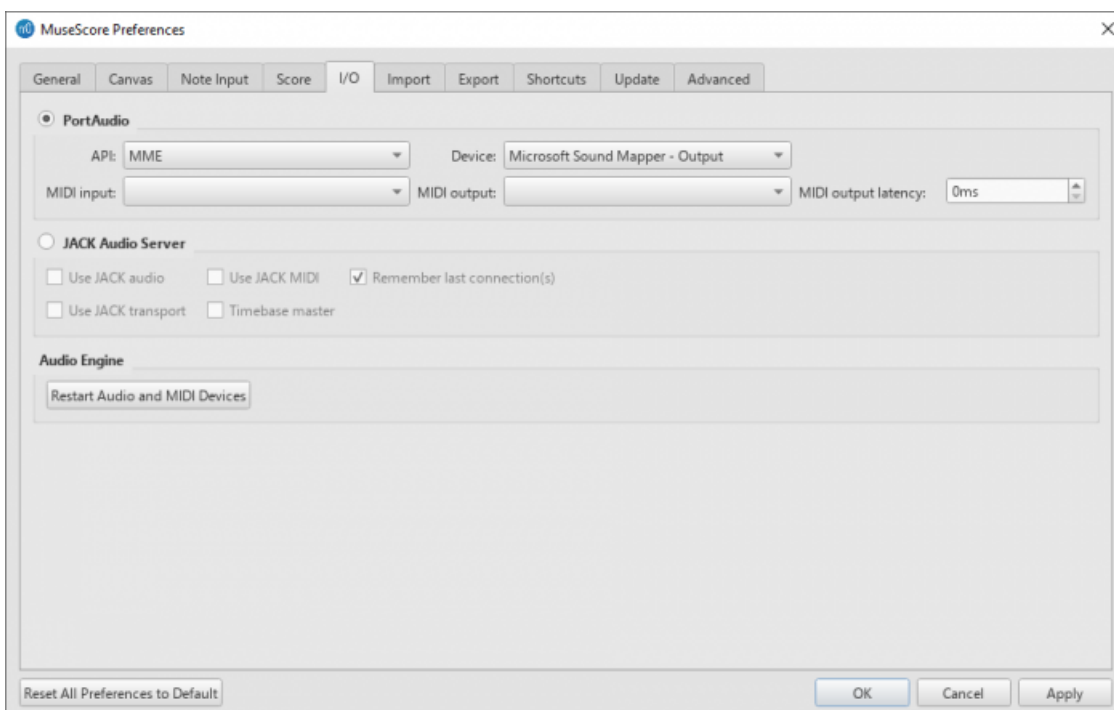
- **Instrument list 1:** Default instrument list file one
- **Instrument list 2:** Default instrument list file two
- **Score order list 1:** Default score order list file one (used for instrument ordering)
- **Score order list 2:** Default score order list file two
- **Style:** Default style for score
- **Style for part:** Default style for parts

See also [Load/Save Style](#)

#### View

- **Show MIDI controls in mixer:** Enable this option to show MIDI controls by default in the mixer.

#### I/O



**PortAudio (API / Device)**

This enables you to set the audio interface (API) and specify the device to be used for audio playback: e.g. built-in speakers/headphones, USB headset, wireless, etc.

### MIDI Input/Output/Output Latency

When an external MIDI input device is connected, its identifier appears in **MIDI Input**. When the device is connected *for the first time*, you also need to select the correct **MIDI Output** option in order to enable note input and correct audio playback (e.g. in Windows, this might be "MMS<device name>"): then close and reopen the program to confirm the changes.

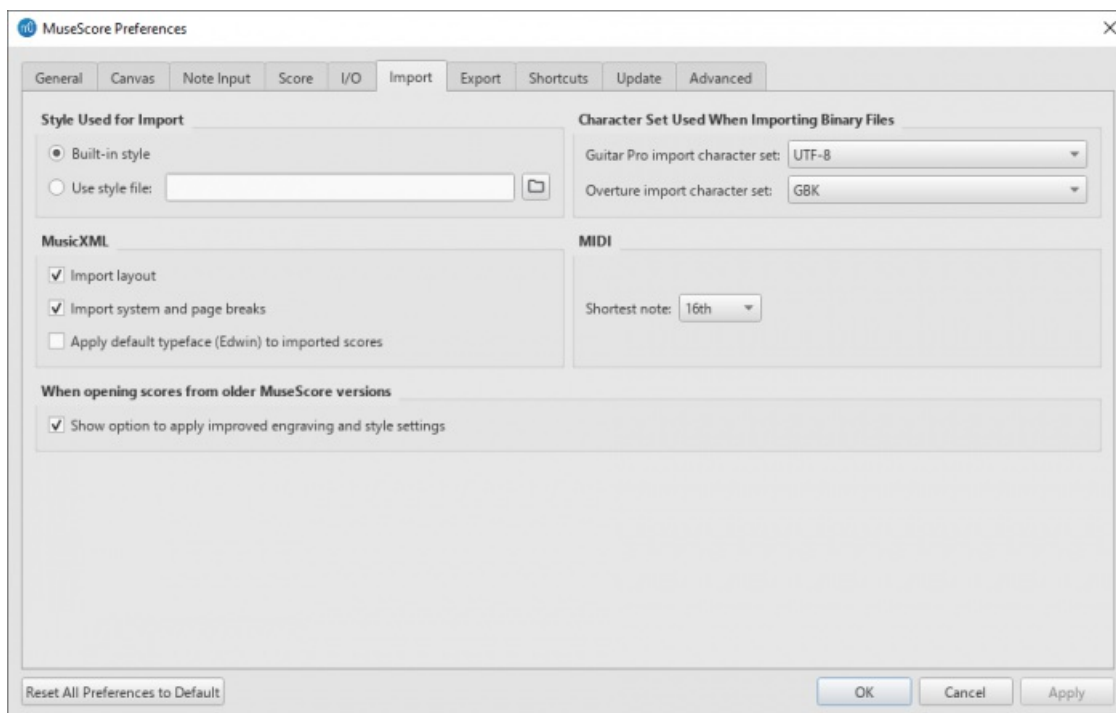
### Jack Audio Server

Check these options as required if using the [JACK](#)  Audio Connection Kit.

### Audio Engine

In case of lost communication between your audio device or your MIDI keyboard and MuseScore (no sound output or MIDI action), click on Restart Audio and MIDI Devices to restore them.

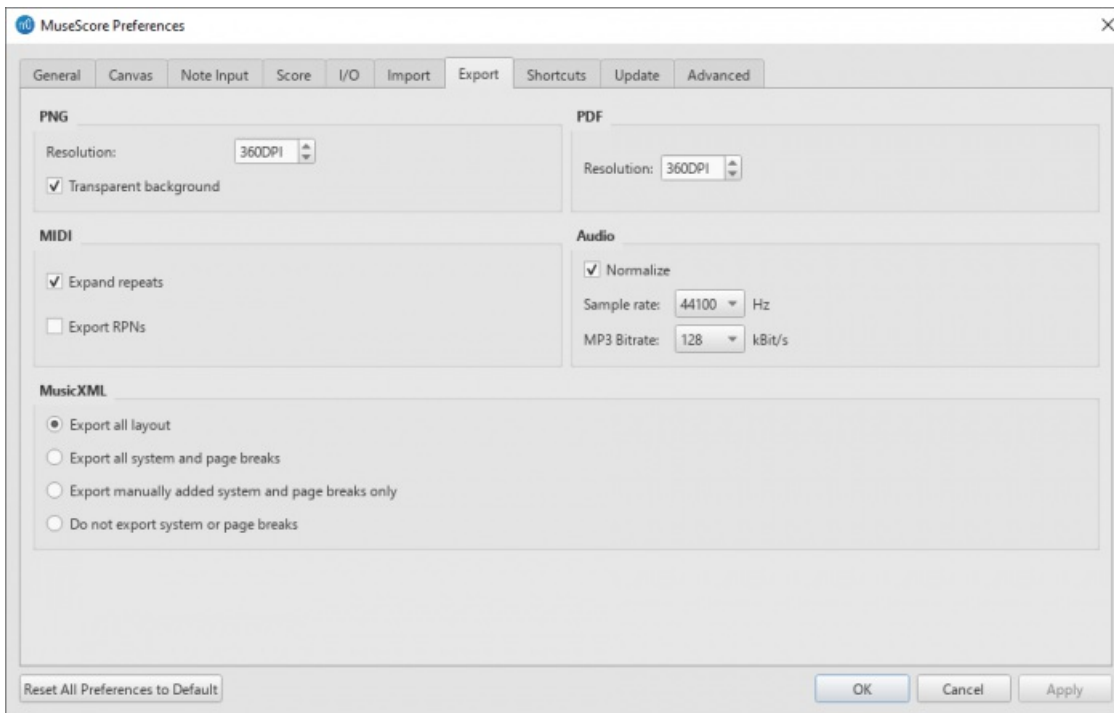
## Import



These settings determine how files from other sources are imported:

- **Style Used for Import**: Use either the built in MuseScore style or a style you choose (see [Load/Save Style](#))
- **MusicXML**: Set the MusicXML import options
- **Character Set Used When Importing Binary Files**: Character Set used for Binary Files (Guitar Pro and Overture character sets)
- **MIDI**: Define the shortest note when importing MIDI files
- **When opening scores from older MuserScore versions**: When enabled, you will be prompted if you want to apply the new default engraving and style settings or not when opening a score created with a version before 3.6.

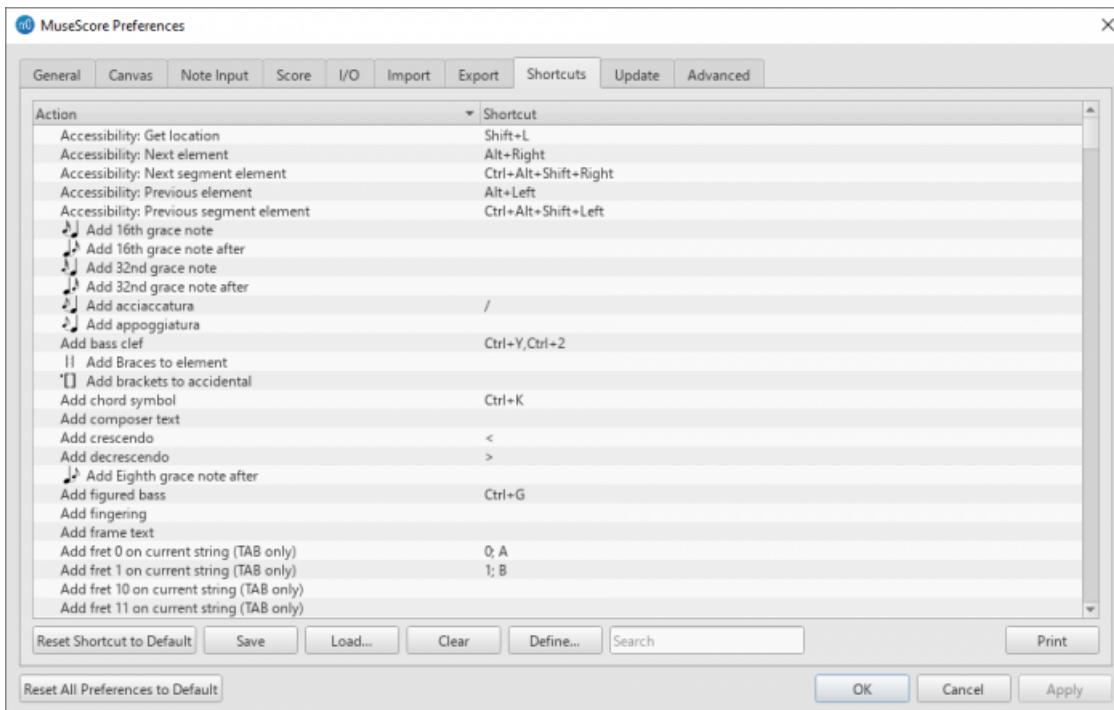
## Export



These settings determine how various files are exported from MuseScore:

- **PNG**: PNG/SVG image resolution (in DPI) and whether to use transparent background.
- **MIDI**: Whether to expand repeats in exported MIDI files.
- **PDF**: PDF resolution (in DPI).
- **Audio**: Set audio sample rate, MP3 bitrate, and whether to "normalize" exported audio.
- **MusicXML**: Whether to export the layout and how to export system and page breaks to MusicXML.

## Shortcuts



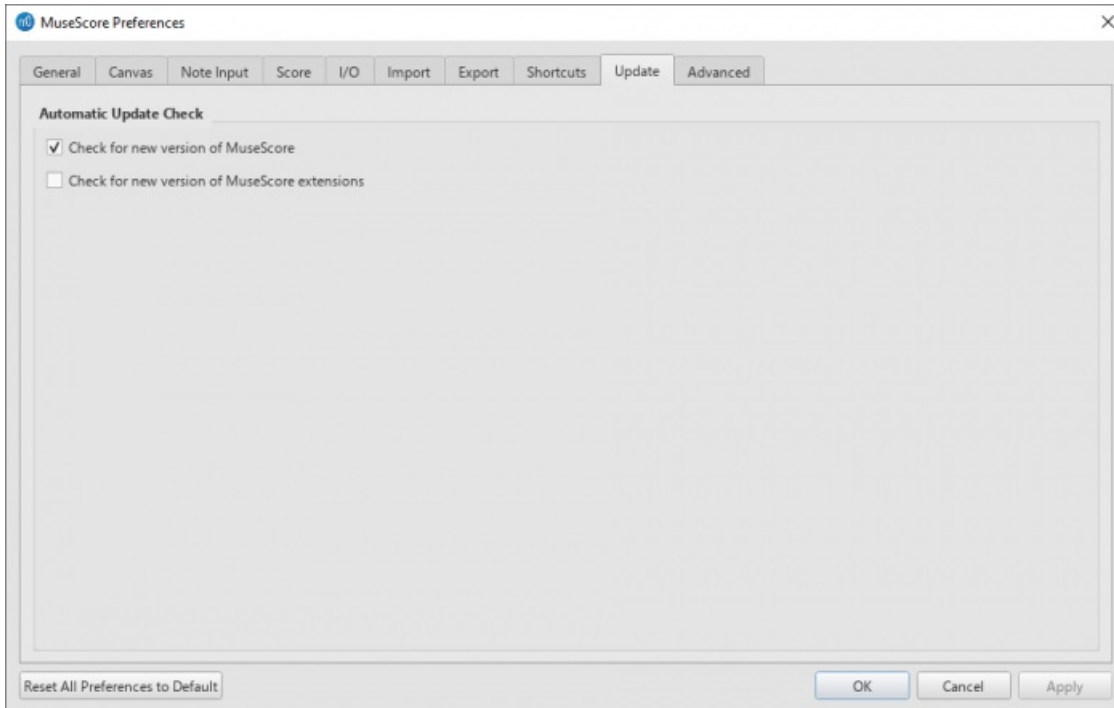
This tab lists all the commands in MuseScore and any keyboard shortcuts associated with them. Shortcuts listed in preferences also appear next to their associated commands in the menus.

- **To search for a particular command**: Enter its name in the "Search" box near the bottom of the window.
- **To create a new shortcut for a command**
  1. Select an existing entry in the list.
  2. Click Define...; or just double-click the entry.
  3. Enter the new shortcut using up to four keys. Press **Clear** if you need to re-enter the shortcut.
  4. Press **Replace** to change the existing shortcut; or **Add**, to keep the old shortcut *and* add the new one.

**Note:** Some shortcuts, including default ones, may not work with some keyboards.

- **To reset a shortcut to its system default** Select a command in the list and press **Reset Shortcut to Default**.
- **To save the shortcuts list:** Press **Save** and save to a file name of your choice.
- **To load a saved shortcut list:** Press **Load** etc.
- **To clear all shortcuts for an entry:** Select the entry and press **Clear**.
- **To print out the shortcuts list** (incl. export to pdf): Press **Print** etc.

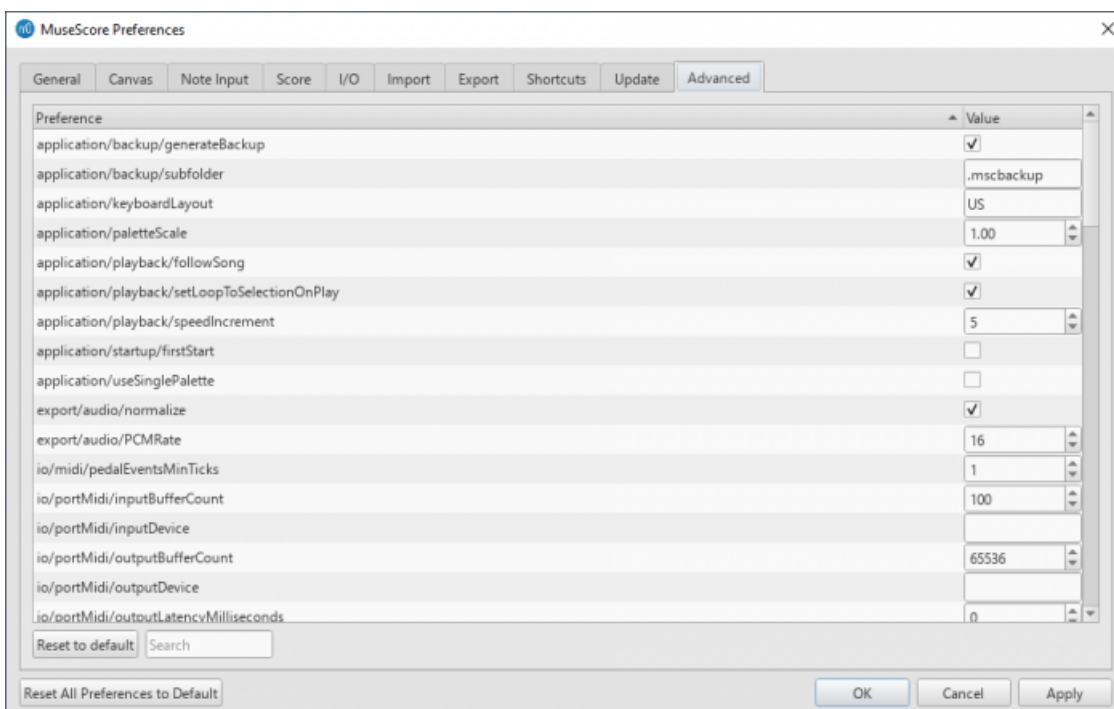
## Update



This sets whether MuseScore will check for updates and extensions at startup.

Updates may be checked manually in **Help** → **Check for updates**.

## Advanced



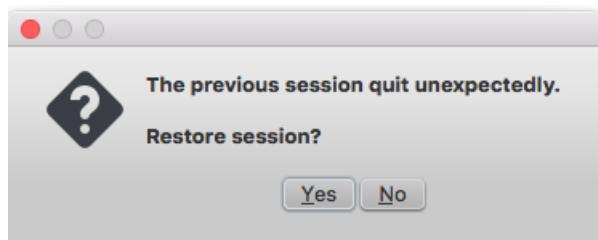
Allows you to control specific settings for "application", "export", "i/o" and "user interface", as well as color settings.

## See also

- [Keyboard shortcuts](#)
- [Language settings and translation updates](#)
- [Update checking](#)

## Recovered files

If MuseScore or your computer should crash, or if power is lost, a pop-up message upon restarting MuseScore will ask if you wish to restore the previous session:



Click Yes, to initiate attempted recovery of files from the interrupted session. Or click No to ignore message.

## Saving after session recovery

When MuseScore recovers files after a crash, it renames them with the full path name added in front of the original file name. This very long name will appear in the tab(s) above the active score window.

*To ensure that the file is saved in its original location* You should immediately save the restored file using the "Save As..." option: this will open a window to allow you to navigate to the correct folder and directory. If you use the "Save" command instead, the file will be saved in its current location which is unlikely to be the original one.

## Finding recovered files

In the event that "Save" is used instead of "Save As..." with a recovered file, you will have to find the files in your computer. The actual location of those files will vary, depending on your operating system, and in which directory MuseScore is installed.

For Windows 7, with a default installation of MuseScore to the program files directory, recovered files are auto-saved to C:\Program Files\MuseScore 3\bin (actually %ProgramFiles%\MuseScore 3\bin).

For Windows 10, look in C:\Users\[User Name]\AppData\Local\VirtualStore\Program Files\MuseScore 3\bin (actually%LOCALAPPDATA%\VirtualStore%\ProgramFiles:~3%\MuseScore 3\bin).

You may need to run a system-wide search in order to find files saved directly after a session recovery. Use keywords from the original file name as well as wildcards, and specify the date modified.

## See also

[Save/Export/Print](#)

## External links

[How to recover a backup copy of a score](#) <sup>↗</sup> (MuseScore HowTo)

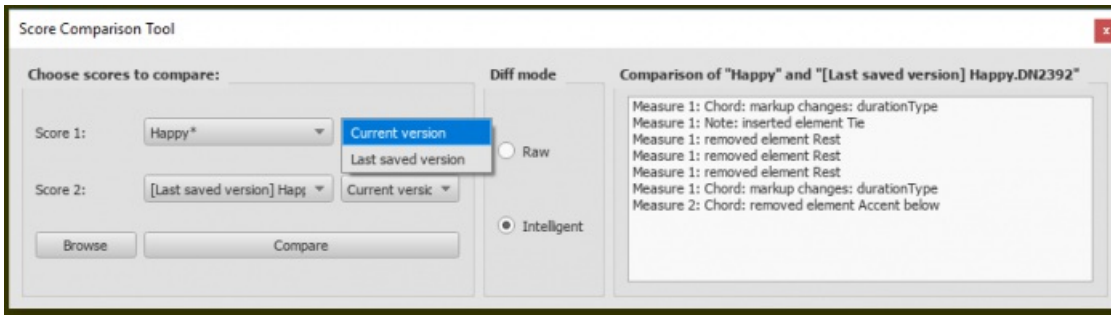
## Score Comparison

The **Score Comparison Tool** allows you to compare two versions of a score to find the differences between them.

### Introduction

To open the Score Comparison Tool:

- From the menu, select View → Score Comparison Tool.



The dialog opens below the document window and consists of three sections (left to right):

- **Choose scores to compare:** Select the scores you want to compare.
- **Diff mode:** Select how to view the comparison.
- **Comparison:** A line by line comparison of the scores is displayed.

### Select score

The first step is to select the score. Use the combo box next to "Score 1" to choose between the currently open scores, or click on the Browse button to open the File Explorer and select a score from disk. Secondly, use the next combo box on the right to choose whether the first score should be the current version, or the last saved version. Score 2 is set to the same score you selected for Score 1, but you may choose another of the open scores.

When you have selected the scores and versions press Compare to do the comparison.

### Choose view

"Intelligent comparison" is the default option in **Diff mode**: this displays the differences between the scores in a human-readable format (e.g. "Measure 1: Note: property pitch changed from B4 to C5"). Change the **Diff Mode** selection to "Raw" if you prefer to see the results displayed in XML code.

### View comparison

When you press Compare a list of differences will be displayed to the right, and the score view will automatically change to Documents Stacked. In the **Comparison** section, double-click on a difference from the list and both score views will automatically pan to show you the changed element, which will also be highlighted.

### Leave comparison

To exit the Score Comparison tool, turn off the two options "Score Comparison Tool" and "Documents Stacked" in the view menu.

### Example

Below you will see two small scores with a few differences between them.

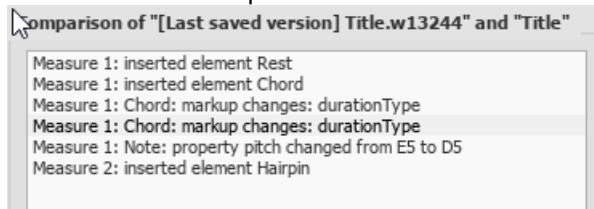
Last saved:



Current:



The result of the comparison will look like this:



## Score properties

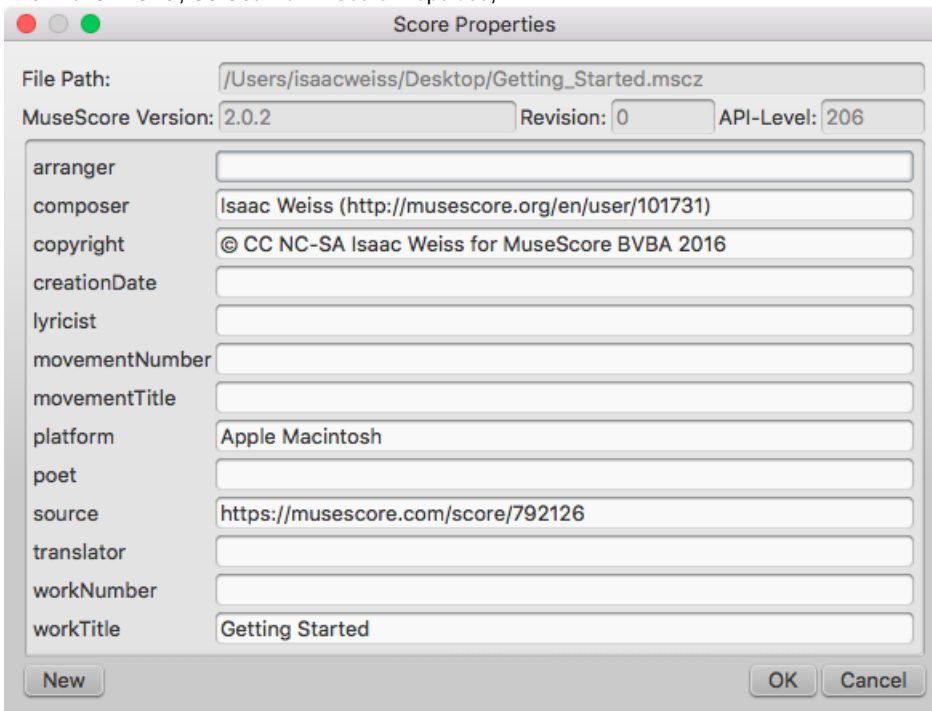
The **Score Properties** dialog contains document meta tags such as "workTitle," "Composer," "Copyright" etc. To view the dialog:

1. Make sure that the applicable score or instrument part is the active tab;
2. From the menu, select File → Score Properties.

Several meta tags are generated automatically when you create a score using the [New Score Wizard](#), and others may be added later. Meta tags can also be incorporated into a header or footer if required—see [below](#).

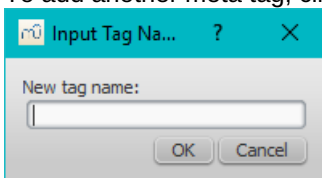
### Edit meta tags

1. Make sure that the applicable score or instrument part is the active tab;
2. From the menu, select File → Score Properties;



The screenshot shows the 'Score Properties' dialog box. At the top, it displays the file path: '/Users/isaacweiss/Desktop/Getting\_Started.mscz'. Below this, it shows 'MuseScore Version: 2.0.2', 'Revision: 0', and 'API-Level: 206'. A list of meta tags follows, each with a text input field: 'arranger' (empty), 'composer' (Isaac Weiss (http://musescore.org/en/user/101731)), 'copyright' (© CC NC-SA Isaac Weiss for MuseScore BVBA 2016), 'creationDate' (empty), 'lyricist' (empty), 'movementNumber' (empty), 'movementTitle' (empty), 'platform' (Apple Macintosh), 'poet' (empty), 'source' (https://musescore.com/score/792126), 'translator' (empty), 'workNumber' (empty), and 'workTitle' (Getting Started). At the bottom, there are 'New', 'OK', and 'Cancel' buttons.

3. Edit the text of the various meta tags as required;
4. To add another meta tag, click on the New button. Fill in the "New tag name" field and press OK;



The screenshot shows a small dialog box titled 'Input Tag Name'. It contains a text input field labeled 'New tag name:' and two buttons at the bottom: 'OK' and 'Cancel'.

### Pre-existing meta tags

Every score displays the following fields in **Score Properties**:

- **File Path**: The score file's location on your Computer.
- **MuseScore Version**: The version of MuseScore the score was last saved with.
- **Revision**: The revision of MuseScore the score was last saved with.
- **API-Level**: The file format version.
- **arranger**: (empty)
- **composer**: This is initially set to the same text as "Composer" on the first page of the [New Score Wizard](#).
- **copyright**: This is initially set to the same text as "Copyright" on the first page of the [New Score Wizard](#) (if you need a copyright symbols, copy/paste this: ©).
- **creationDate**: Date of the score creation. This could be empty, if the score was saved in test mode (see [Command line options](#)).
- **lyricist**: This is initially set to the same text as "Lyricist" on the first page of the [New Score Wizard](#).
- **movementNumber**: (empty)
- **movementTitle**: (empty)
- **originalFormat**: This tag exists only if the score is imported (see [file formats](#)).
- **platform**: The computing platform the score was created on. This might be empty if the score was saved in test mode.
- **poet**: (empty)
- **source**: May contain a URL if the score was downloaded from or [saved to MuseScore.com](#).
- **translator**: (empty)

- **workNumber**: (empty)
- **workTitle**: This is initially set to the same text as "Title" on the first page of the New Score Wizard.

#### Entering Work / Movement / Part metadata

- **workNumber** is the number of the larger work (e.g. 8—for "The Four Seasons," Op. 8, by Vivaldi).
- **workTitle** is the title of the larger work (e.g. "The Four Seasons,").
- **movementNumber** is the number of the movement in the larger work (e.g. 3 for Autumn).
- **movementTitle** is the title of the movement in the larger work (e.g. "Autumn").

It is customary, when using the New Score Wizard, to create a work with the **movementTitle** as title (even though it ends up in **workTitle** then) and, directly after creating the score, amending this information in the Score Properties dialogue.

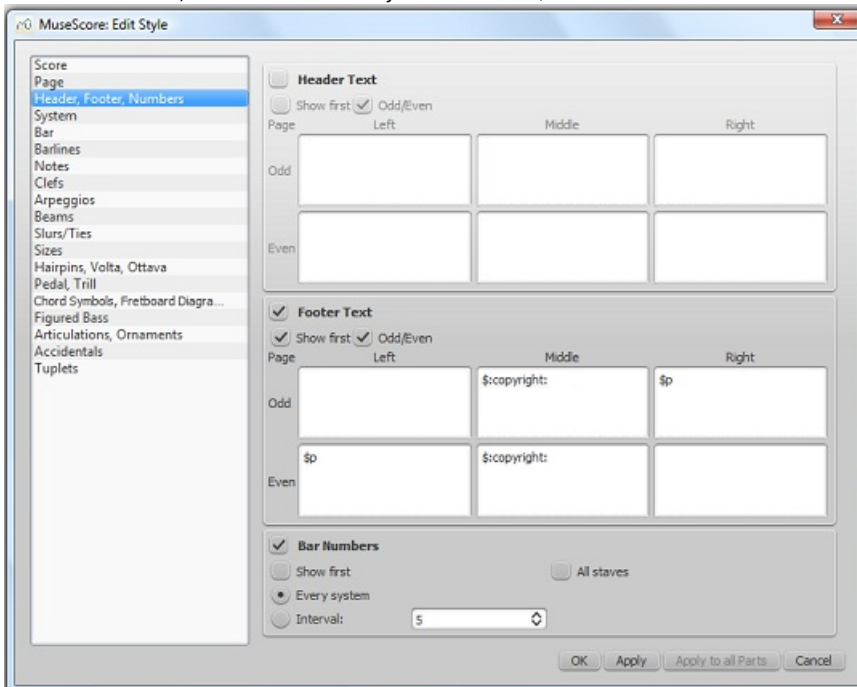
Every **part** additionally has the following meta tag, generated and filled on part creation:

- **partName**: The name of the part as given on part creation (which is also used to fill the corresponding part name text in the top vertical frame—*be aware that later changes to one are not reflected in the other*).

#### Header/Footer

To show the content of one or more meta tags in a header or footer for your score/part:

1. Make sure that the correct score or instrument part is the active tab;
2. From the menu, select **Format** → **Style...** → **Header, Footer**:



If you hover with your mouse over the Header or Footer text region, a list of macros will appear, showing their meaning, as well as the existing meta tags and their content.



Special symbols in header/footer	
\$p	- page number, except on first page
\$N	- page number, if there is more than one page
\$P	- page number, on all pages
\$n	- number of pages
\$f	- file name
\$F	- file path+name
\$d	- current date
\$D	- creation date
\$m	- last modification time
\$M	- last modification date
\$C	- copyright, on first page only
\$c	- copyright, on all pages
\$S	- the \$ sign itself
\$:tag	- meta data tag, see below
Available meta data tags and their current values:	
arranger	-
composer	-
copyright	-
creationDate	- 2016-05-02
lyricist	-
movementNumber	-
movementTitle	-
platform	- Microsoft Windows
poet	-
source	-
translator	-
workNumber	-
workTitle	- Test

3. Add tags (e.g. \$:workTitle:) and macros (e.g. \$M) to the appropriate boxes, as required;
4. Click Apply to see how the header or footer looks in the score. Make corrections to the dialog if required;
5. If an instrument part is in the active tab, clickApply to all parts, if you want to apply these settings to all the score parts;
6. Click OK to assign the header or footer and exit the dialog.

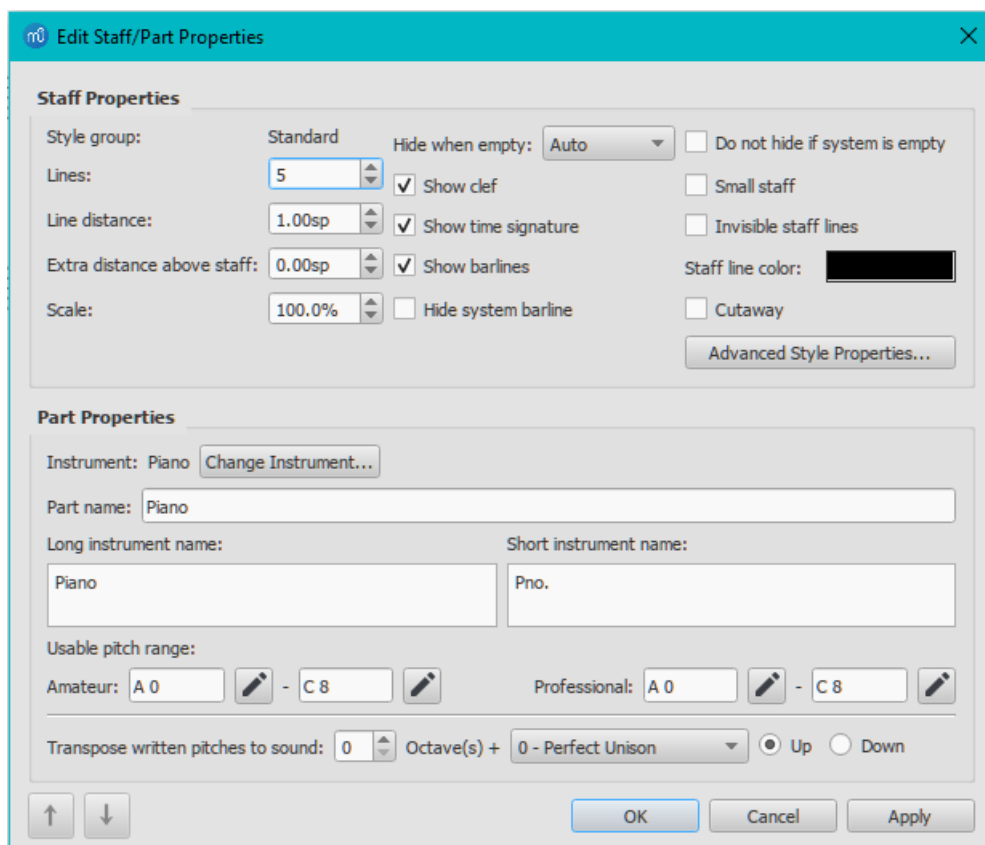
### See also

- [Layout and formatting: Header and footer](#)
- [Command line options: Test mode](#)

## Staff / Part properties

The **Staff / Part Properties** dialog allows you to make changes to the display of **astaff**, adjust its tuning and transposition, change instrument etc. To open:

- Right-click onto either an empty area in a staff, or the instrument name, and select Staff/Part Properties....



Staff / Part Properties dialog, as of version 3.0.

## Staff Types

For practical purposes, there are four different types of staff:

- 1a. **Standard staff I.** A pitched staff used for most instruments except fretted, plucked-string ones.
- 1b. **Standard staff II.** A pitched staff containing a *fretted, plucked-string instrument*, with options to set the number of instrument strings and tuning.
2. **Tablature staff.** A staff containing a *fretted, plucked-string instrument*, which displays music as a series of fret-marks on strings. Also contains options to set the number of instrument strings and tuning.
3. **Percussion staff.** A pitched staff for percussion instruments.

It is possible to change one type of staff into another using the [Instruments](#) dialog, as long as the original staff is loaded with the right instrument. For example, in order to change a standard staff to tablature, it must contain a plucked-string instrument. Similarly, to change a standard staff to a percussion staff you need to ensure that it has an appropriate percussion instrument loaded and so on.

Most options in the Staff / Part properties dialog are common to all staves, but each type also has one or two specific options of its own.

### Staff / Part Properties: all staves

The following Staff Properties options are common to *all* staves:

#### Lines

The number of lines making up the staff.

#### Line Distance

The distance between two staff lines, measured in [spaces](#) (abbr.: [sp.](#)). **Note:** It is *not* recommended to change this value from the default shown. If you need to make the staff larger or smaller, use the [Page Settings](#) dialog instead.

#### Extra distance above staff

Increases or decreases the distance between the selected staff and the one above *in all systems*. **Note:** This setting does not apply to the top staff of a system, which is controlled by the minimum/maximum system distance (see [Layout and formatting: Format → Style ... → Page](#)).

**Notes:** To alter the spacing above just *one* staff line in a particular system, see [Breaks and Spacers](#).

#### Scale

Changes the size of the *selected* staff and all associated elements, as a percentage (to adjust the *overall* score size, use [Scaling](#) from the [Format → Page Settings...](#) menu).

#### Hide when empty

Together with the "Hide empty staves" setting in [Format → Style ... → Score](#), this determines if the staff will be hidden when it is empty.

Possible values:

- **Auto** (default): The staff will be hidden if it is empty and "Hide empty staves" is set.
- **Always:** The staff will be hidden when empty, even if "Hide empty staves" is not set.
- **Never:** The staff will never be hidden when empty.
- **Instrument:** For instruments containing multiple staves, the staff is hidden only if all staves for that instrument are empty.

#### Show clef

Whether the staff clef will be shown.

#### Show time signature

Whether the staff time signature(s) will be shown or not.

#### Show barlines

Whether the staff barlines will be shown.

#### Hide system barline

Show/hide barline at left-hand edge of the staff.

#### Do not hide if system is empty

Never hide this staff, even if the entire system is empty. This overrides any "Hide empty staves" setting in [Format → Style ... → Score](#).

#### Small staff

Create a reduced-size staff. You can set the default from the menu in [Format → Style ... → Sizes](#).

#### Invisible staff lines

Make staff lines invisible.

## Staff line color

Use a color picker to change the color of the staff lines.

## Cutaway

Used to create a cutaway staff in which only measures containing notes are visible (e.g. [ossias](#) [↗](#) (Wikipedia); or cutaway scores). This can be used independently of "Hide when empty" or "Hide empty staves".

## Instrument

The instrument loaded in the **Instruments** (I) or [Select Instrument](#) dialog. The sound associated with this instrument can be changed, if desired, in the [Mixer](#).

*Note:* The properties below (i.e. *Part Name*, *Long Instrument Name* etc.) are set to the default values defined in the MuseScore [instruments.xml](#) [↗](#) file.

## Part name

The name of the [part](#). This is also displayed in the [Mixer](#) and the [Instruments](#) dialog (I). Any edits you make to the Part name affect only that particular instrument and no other.

*Note:* The Part name is defined by the value of the *trackName* element in the [instruments.xml](#) [↗](#) file. If *trackName* has not been defined, the value of *longName* (i.e. "Long instrument name"—see below) is used instead.

## Long instrument name

Name displayed to the left of the staff in the first system of the score. The long instrument name may also be edited *directly* as a *text object* (see [Text editing](#)).

## Short instrument name

Name displayed to the left of the staff in subsequent systems of the score. The short instrument name may also be edited *directly* as a *text object* (see [Text editing](#)). Editing affects *all* occurrences in the score.

## Usable pitch range

- **Amateur:** Notes outside this range will be colored olive green/dark yellow in the score.
- **Professional:** Notes outside this range will be colored red in the score.

**To disable out-of-range coloration of notes:** From the menu, select [Edit](#) → [Preferences...](#) (Mac: [MuseScore](#) → [Preferences...](#)), click on the "Note Input" tab, and uncheck "Color notes outside of usable pitch range."

See also, [Coloring of notes outside an instrument's range](#).

## Transpose written pitches to sound

This option ensures that the staves of transposing instruments display music at the correct written pitch. Set the transpose in term of a musical interval (plus octave if required) up or down.

## Use single note dynamics (as of version 3.1)

Leave ticked to allow playback of [single note dynamics](#) (such as **sfz** etc.) and hairpins, diminuendo and crescendo lines on single (or tied) notes.

## Navigation arrows

Use the [↑](#) and [↓](#) buttons, at the bottom left of the Staff Properties window, to navigate to the previous or next staff.

## Staff / Part Properties: plucked strings only

Staves of fretted, plucked-string instruments have a few extra options in addition to those listed [above](#),

### Number of strings

Displays the number of instrument strings.

### Edit String Data...

This button opens a dialog box which allows you to set the number and tuning of strings. See [Change string tuning](#).

## Advanced Style Properties

Clicking the [Advanced Style Properties...](#) button opens a window giving access to advanced display options for the staff. These will vary depending on the [staff type](#) chosen: see the relevant sections below for details.

### Template

At the bottom of the Advanced Style Properties dialog there are a number of buttons which allow you to easily change the following:

- *The number of lines displayed by a percussion staff*
- *The staff type of a plucked-string instrument* For example, you can change from standard staff to tablature and vice versa, or select from a number of tablature options.

1. Make a selection from the drop-down list labelled "Template";
2. Press < Reset to Template;
3. Press OK to accept the changes and exit the dialog (or Cancel to cancel the operation).

#### Standard and Percussion staff options

#### Show clef / time signature / barlines / key signature / ledger lines

Option to turn the display of these elements ON or OFF.

#### Stemless

If checked, staff notes will have no stem, hook or beam.

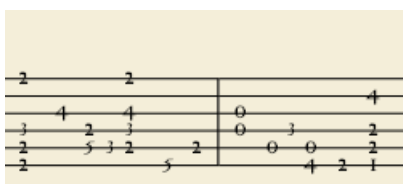
#### Notehead scheme

See [Notehead scheme](#).

#### Tablature staff options

#### Upside down

If not checked, the top tablature line will refer to the highest string, and the bottom tablature line to the lowest string (this is the most common option). If checked, the top tablature line refers to the lowest string, and the bottom tablature line to the highest line (e.g. Italian-style lute tablatures). For example:



'Upside down' tablature.

#### Tablature staff options: Fret Marks

**Fret marks** are the numbers or letters used to indicate the location of notes on the fingerboard. The following group of properties define the appearance of fret marks:

#### Font

The font used to draw fret marks. 8 fonts are provided supporting all the necessary symbols in 8 different styles (modern Serif, modern Sans, Renaissance, Phalèse, Bonneuil-de Visée, Bonneuil-Gaultier, Dowland, Lute Didactic).

#### Size

Font size of fret marks in typographic points. Built-in fonts usually look good at a size of 9-10pt.

#### Vertical offset

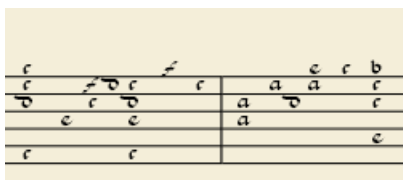
MuseScore tries to place symbols in a sensible way and you do not usually need to alter this value (set to 0) for built-in fonts. If the font has symbols not aligned on the base line (or in some other way MuseScore does not expect), this property allows you to move fret-marks up (negative offsets) or down (positive offsets) for better vertical positioning. Values are in *sp*.

#### Marks are

Choice of **Numbers** ('1', '2'...) or **Letters** ('a', 'b'...) as fret marks. When letters are used, 'j' is skipped and 'k' is used for the 9th fret.

#### Marks are drawn

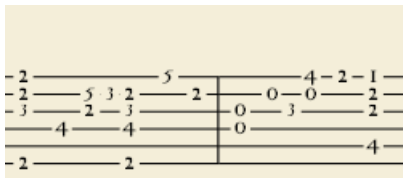
Choice of placing fretmarks **On lines** or **Above lines**. For example:



Fretmark letters placed above line.

#### Lines are

Choice of **Continuous** (lines pass through fret marks) or **Broken** (a small space appears in the line where the fretmark is displayed). For example:



Tablature with lines broken.

### Show back-tied fret marks

If unticked, only the first note in a series of tied notes is displayed. If ticked, all notes in the tied series are displayed.

### Show fingering in tablature

Tick to allow the display of fingering symbols applied from a [palette](#).

### Tablature staff options: Note Values

This group of properties defines the appearance of the symbols indicating note values.

#### Font

The font used to draw the value symbols. Currently 5 fonts are provided supporting all the necessary symbols in 5 different styles (modern, Italian tablature, French tablature, French baroque (headless), French baroque). Used only with the *Note symbols* option.

#### Size

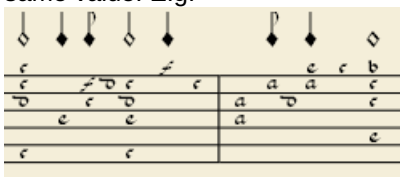
Font size, in typographic points. Built-in fonts usually look good at a size of 15pt. Used only with the *Note symbols* option.

#### Vertical offset

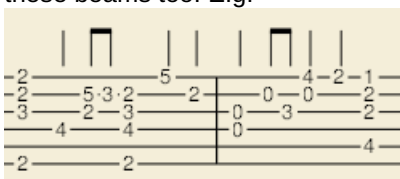
Applies only when *Note symbols* is selected (see below). Use negative offset values to raise the note value symbols, positive values to lower them.

#### Shown as:

- *None*: No note value will be drawn (as in the examples above)
- *Note symbols*: Symbols in the shape of notes will be drawn above the staff. When this option is selected, symbols are drawn **only** when the note value changes, without being repeated (by default) for a sequence of notes all of the same value. E.g.



- *Stems and beams*: Note stems and beams (or hooks) will be drawn. Values are indicated for each note, using the same typographic mechanics as for a regular staff; all commands of the standard Beam Palette can be applied to these beams too. E.g.



#### Repeat:

If several notes in sequence have the same duration, you can specify if and where to repeat the same note symbol. i.e.

- *Never*
- *At new system*
- *At new measure*
- *Always*

**Note:** This option is only available if "*Shown as: Note symbols*" is selected (see above).

#### Stem style:

- *Beside staff*: Stems are drawn as fixed height lines above/below the staff.
- *Through staff*: Stems run through the staff to reach the fret marks.

**Note:** This option is only available when "*Shown as: Stems and Beams*" is selected (see above).

#### Stem position:

- *Above*: Stems and beams are drawn above the staff.

- *Below*: Stems and beams are drawn below the staff.

**Note:** This option is only available when 'Shown as: Stems and Beams' and "Stem style: Beside staff" is selected (see above).

#### Half notes:

- *None*
- *As short stems*
- *As slashed stems*

**Note:** This option is only available when 'Shown as: Stems and Beams' and "Stem style: Beside staff" is selected (see above).

#### Show rests

Whether note symbols should be used to indicate also the rests; when used for rests, note symbols are drawn at a slightly lower position. Used only with the *Note symbols* option.

#### Preview

Displays a short score in tablature format with all the current parameters applied.

#### Change instrument

You can change any instrument in a score to a different instrument at any time. The following method updates instrument sound, staff name, and staff transposition all at once.

1. Right-click on an empty part of any measure OR on the instrument name and choose *Staff Properties...*;
2. Click on *Change Instrument...* (under "Part Properties");
3. Choose your new instrument and click *OK* to return to the *Staff Properties* dialog;
4. Click *OK* again to return to the score.

Not to be confused with [Mid-staff instrument change](#).


#### External links

- [How to create an ossia with another staff](#) ↗ (for MuseScore 2, still works for MuseScore 3, but here the *Cutaway* option might be the better choice)
- [How to create an ossia using image capture](#) ↗ (for MuseScore 2, still works for MuseScore 3, but here the *Cutaway* option might be the better choice)

#### Staff Type Change

You can change the appearance of a staff mid-score by adding a **Staff type change** element to a measure, and adjusting its properties in the [Inspector](#).

#### Add a Staff Type Change

1. Select a measure in the score and, in the "Text" [palette](#), click (double-click prior to version 3.4) the "Staff type change" symbol, ; alternatively, drag the "Staff type change" icon onto a measure;
2. Select the symbol, and adjust its properties (see below) in the [Inspector](#) as required.

#### Staff type change properties

When you alter a **Staff type change** property in the *Inspector*, the new value takes precedence over the value shown in the global *Staff properties* dialog. Only those property values in "Staff Properties" that cannot be changed in the "Staff type change" dialog will be valid throughout the score.

The properties that can be altered in the **Staff type change** dialog in the *Inspector* are:

##### Offset

How far the changed staff shall be moved up or down: measured in *spaces* (abbr.: *sp*) .

##### Small

Tick the box to create a reduced-size staff.

##### Scale

Changes the size of the staff and all associated elements, as a percentage.

##### Lines

The number of lines making up the staff.

### Line distance

The distance between two staff lines, measured in *spaces* (abbr.: *sp*).

### Step offset

How many steps up or down the notes in the staff are offset.

### Show barlines

Whether the staff barlines will be shown.

### Show ledger lines

Whether ledger lines will be shown for notes above/below the staff lines.

### Slash style

Whether the notes shall be shown in standard or slash style.

### Notehead scheme

Allows selection of how noteheads are displayed.

### Generate clefs

Whether the staff clef will be shown.

### Generate time signatures

Whether the staff time signature(s) will be shown or not.

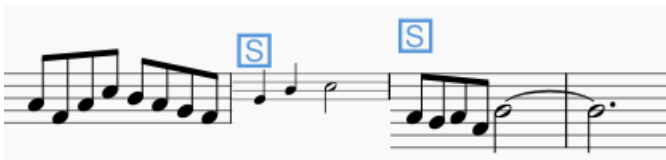
### Generate key signatures

Whether the staff key signatures will be shown or not.

## Example

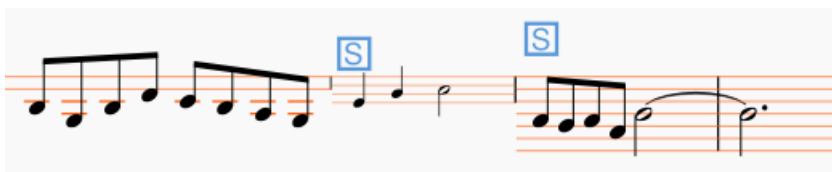
To illustrate the use of **Staff type change**, the staff shown below was created using the following steps:

1. Add a Staff type change to measure 2.
2. Set size to "Small".
3. Set "Lines" to 4.
4. Add a second Staff Type Change to measure 3.
5. Change "Lines" to 7,



Afterwards the global Staff Properties are changed using [Staff properties](#):

- 1 Set "Lines" to 2.
2. Change "Staff Line Color".



As can be seen, the change in "Lines" is only effective up to the first staff type change, whereas the change to "Staff Line Color" is effective throughout the score.

## Timeline

### Introduction

The timeline was developed as part of the Google Summer of Code 2017, and is included for the first time in MuseScore 3.0.

### Overview

The timeline is a navigation tool that displays an abstraction of the score to the order of measure numbers and instrument names. There are four parts to the timeline:

#### Meta labels

This is found in the top left corner of the timeline. These are the names of the meta rows.

### Instrument labels

This is found in the bottom left corner of the timeline. These are the names of the rows in the main grid.

### Meta rows

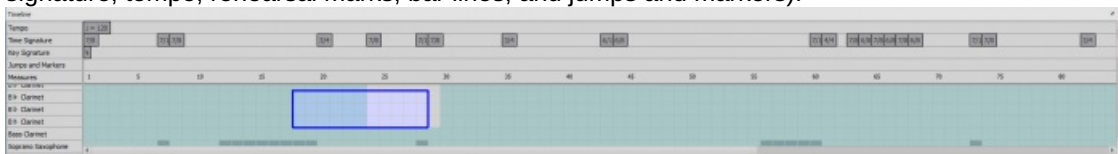
This is found in the top right corner of the timeline. These hold the meta values of the score.

### Main grid

This is found in the bottom right corner of the timeline. This holds multiple 'cells' (a specific measure and staff in the score represented as a square)

### Meta

Meta are elements found on the score that are not notes, but are still important to the score (key signature, time signature, tempo, rehearsal marks, bar lines, and jumps and markers).



## Basic interaction

### Select a measure

To select a measure in the timeline, press the mouse button on the cell. A blue box will appear around the selected cell and the respective measure in the score will be selected. The score view will place the selected measure in view.

### Select multiple measures

#### Drag selection

Holding **Shift** and holding the left mouse button and dragging the mouse over the main grid will create a selection box. Upon releasing the mouse button, all the cells underneath the selection box will be selected, as well as all the measures in the score.

#### [Shift] selection

If a cell is already selected, holding **Shift** and selecting another cell in the timeline will stretch the selection to that new cell, similar to how the score does

#### [Ctrl] selection

If no cells are currently selected, holding **Ctrl** and selecting a cell will select the entire measure

### Clearing selection

To clear selection, holding **Ctrl** and clicking anywhere on the grid or the meta rows will clear any current selection.

### Meta values selection

Selecting the meta values on the timeline will attempt to select the respective meta values in the score.

## Scrolling

### Standard scrolling

Scrolling the mouse wheel up or down will move the grid and instrument labels down or up respectively. The meta labels and rows do not move.

### [Shift] scrolling

Holding **Shift** and scrolling the mouse wheel up or down will move the grid and meta rows left or right respectively. The meta labels and instrument labels do not move.



## [Alt] scrolling

Holding Alt and scrolling the mouse wheel up or down will move the grid and meta rows left or right respectively, faster than Shift scrolling. The meta labels and instrument labels do not move.

## Dragging

To drag the contents of the timeline, hold the left mouse button and move it around.

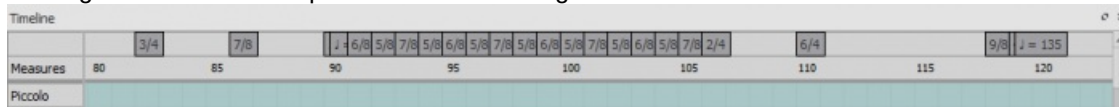
## Labels interaction

### Rearranging meta labels

All meta labels besides the measures meta may be rearranged in any way. By moving the mouse cursor onto one of the meta labels, small up and down arrows will appear. Click the left mouse button on the up arrow to swap the meta label with the one above it. Click the left mouse button on the down arrow to swap the meta label with the one below it.

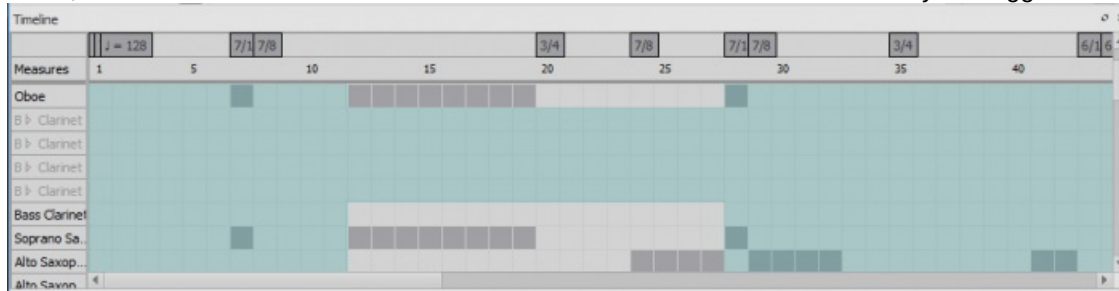
### Collapsing the meta labels

In order to hide all the meta labels while keeping all the meta information on the timeline, there is an arrow that appears on the measures meta when the mouse is over it. Click the left mouse button on the large up arrow to collapse all the currently visible meta rows into one row, where the meta values are staggered in that row. Click the left mouse button on the large down arrow to expand the meta rows again.



### Hiding instruments

All instruments--hidden or not--will be displayed on the timeline. To start this interaction, the mouse cursor is moved over an instrument label. A small eye will appear on the right side of the label that is open if the instrument is visible on the score, and closed if the instrument is hidden. Click the left mouse button on the eye to toggle between the two options.



## Zooming

To zoom in or out of the score, hold Ctrl and scroll the mouse wheel up or down respectively (Mac:Cmd + scroll).

## Context menus

To bring up a context menu, right-click on the timeline. There are three context menus found in these locations: meta labels, instrument labels, and meta rows.

### Meta labels context menu

Upon clicking the right mouse button on the meta labels, a context menu appears that displays all possible meta labels as well as two options: "Hide all" and "Show all." Next to each meta label in the menu, there is a check box that shows if the meta label is currently being shown on the timeline. To show or hide one of the meta labels, select the box of the meta label in the context menu. Selecting "Hide all" will hide all meta labels except for the measures meta. Selecting "Show all" will display all meta labels.

### Meta rows context menu

Clicking the right mouse button on the meta rows will display the same context menu as the meta labels.

### Instrument context menu

Clicking the right mouse button on the instrument labels will display a context menu with the option to "Edit Instruments." Selecting this will bring you to the same dialog as Edit > Instruments... or pressing I for the shortcut.

## Tools

A number of useful commands can be found in the **Tools** menu.

### Transpose

This opens the **Transpose** dialog with various options for transposing passages of music.

See [Automatic transposition](#).

### Explode

The **explode** command allows you to select a passage of music in a *single staff* and split (explode) the chords into their constituent notes or voices as follows:

- If the passage is all in voice 1, the top note of the chord is retained on the top staff, while the lower notes are moved to subsequent staves.
- If the passage contains multiple voices, voice 1 notes are retained on the top staff, while other voices are moved to subsequent staves. All exploded voices are now in voice 1.

#### To explode a section of the score:

1. Ensure that there are enough staves underneath the source staff to receive the exploded notes. Create extra staves if necessary using the **Instruments** dialog.
2. Choose one of two options:
  - **Select** a range of measures in the source staff: this allows all notes to be exploded if there are enough staves available.
  - **Select** a range of measures that includes both the source staff and also extends downwards to include one or more destination staves: This limits the number of exploded notes/voices to the number of selected staves.
3. Choose **Tools** → **Explode**.

**Notes:** (1) If the selection is all in voice 1, MuseScore will discard the lowest note(s) of any chord that contains more notes than the number of staves in the selection. (2) If the selection is all in voice 1, and if a given chord has fewer notes than the number of destination staves, then notes will be duplicated as needed so that every staff receives a note. (3) Any existing music in the destination staves is overwritten. (4) If you select a partial measure, the explode command will automatically expand it to a full measure.

### Implode

The **implode** command works in the opposite way to "explode":

- With *one staff* selected, all notes in voices 1–4 are combined into voice 1.
- With *multiple staves* selected, the notes in the *second staff* are copied to the first available voice in the *top staff*, the notes in the *third staff* are copied to the next available voice in the *top staff* and so on.

#### Apply implode to a single staff

1. **Select** a range of measures in the desired staff.
2. Choose **Tools** → **Implode**.

All selected notes in the staff are now displayed in voice 1.

#### Apply implode to multiple staves

1. Ensure that there is only one voice in each staff.
2. **Select** a range of measures in the *destination staff* and extend this selection downwards to include the other staves to be imploded.
3. Choose **Tools** → **Implode**.

## Voices

This allows you to swap the voices of a selected measure-range of notes. See [Exchange voices](#).

## Measure

Join or split measures. See [Measure operations: Split and join](#).

## Remove selected range

This command is used to completely *remove* an element, or range of elements from the score.

### To remove measures (including partial measures):

1. Select a range of notes/rests, or a range of measures;
2. Use one of the following methods:
  - o Press Ctrl+Del (Mac: Cmd+Del).
  - o Select Tools → Remove selected range.

**Note:** If the selected range includes only *part* of a measure, the result will include a measure of smaller duration than the indicated Time Signature. This is indicated by a small - (minus) sign just above the system.

### To join measures:

1. Select (i.e. click on) a barline;
2. Use one of the following methods:
  - o Press Ctrl+Del (Mac: Cmd+Del).
  - o Select Tools → Remove selected range.

The following table is a comparative summary of the *Delete* and *Remove selected Range* commands when applied to *single* elements:

Selected Element	Apply Delete	Apply Remove selected range
Note	Replaces with rest	Removes score section
Rest (voice 1)	No effect	Removes score section
Rest (voices 2-4)	Deletes rest	Removes score section
Barline	No effect	Deletes barline and joins measures
Measure	Replaces contents with rest	Removes measure

**Note:** To *insert* notes, see Insert.

### Fill with slashes

This command fills the selection with slashes, one per beat:

1. Select one or more measures;
2. From the menu, select Tools → Fill With Slashes.

If a measure is empty the slashes are added to voice 1, full-sized and centered on the middle line of the staff:



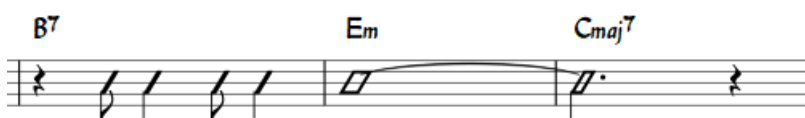
**Notes:** (1) If there are already notes in a measure in the selection, the command will put the slashes into the *first available empty voice*. (2) Voice 2 slashes are full-sized and centered on the middle line of the staff; voices 3 slashes appear *small and above* the staff; voice 4 slashes are *small and below* the staff. (3) If a measure contains notes in all 4 voices, voice 1 will be overwritten. (4) All slashes are set to not transpose or playback.

### Toggle rhythmic slash notation

This command toggles selected notes between normal notes and rhythmic slash notation:

1. Select a range of notes or measures (**Note:** use the selection filter if you need to exclude certain voices);
2. From the menu, select Tools → Toggle Rhythmic Slash Notation.

The selected noteheads are changed to *slash noteheads* which do not transpose or playback.



Slash-notehead notes in *voices one or two* are fixed to the middle staff line; those in *voices three or four* are small ("accent" notation) and fixed above or below the staff:



In *percussion staves*, notes in voices 3 and 4 are not converted to small slashes but to small notes above or below the staff.



### Respell pitches

Corrects accidentals to fit in with the current key signature. See [Accidentals: Respell pitches](#).

### Regroup Rhythms

This option corrects note [ties](#), durations and [beaming](#) so that they are grouped according to standard music notation practice. For example:

Before:



After:



Any notes that are tied and are the same length as a dotted note will be changed to the dotted note with two limitations. (i) Only the last note of a group of tied notes will have a single dot. Notes with more than one dot are not produced using this option. (ii) Dotted notes will not span from one group of beamed notes to another unless their duration is the same as all of the beam groups it covers. Any notes with more than one dot will be regrouped according to the above rules.

To apply:

1. [Select](#) the section of the score you want to reset. If nothing is selected, the operation will apply to the whole score;
2. Select Tools → Regroup Rhythms.

**Note:** This is an experimental feature and there are known bugs. Articulations and ornaments are deleted and some pitches respelled. Ties across barlines may be lost on UNDO.

### Resequence rehearsal marks

The **Resequence Rehearsal Marks** command allows you to re-order the numbering/lettering of [rehearsal marks](#) if, for any reason, they have got out of sequence. For details see [Automatically resequence rehearsal marks](#).

### Unroll Repeats (version 3.1 and above)

This command creates a copy of the score (in a new tab), eliminates the [repeat barlines](#) and notates the repeat sections in full instead.

### Copy lyrics to clipboard

This command copies *all* the lyrics of the score to the clipboard:

- From the menu, select Tools → Copy Lyrics to Clipboard.

### Image capture

Take a snapshot of a selected part of the document window. PNG, PDF and SVG formats are supported. See [image capture](#).

### Remove empty trailing measures

This automatically removes any blank measures at the end of the score.

### See also

- [Breaks and spacers](#)
- [Rehearsal marks](#)

## External links

- [How to merge/combine/implode two staves in one with two voices](#) (MuseScore HowTo)

## Support

This chapter describes how to find help using MuseScore: the best places to look, the best way to ask a question on the forums, and tips for reporting a bug.

## Helping to improve translations

You can help translate the MuseScore software and documentation into your own language, as mentioned in [Development / Translating](#).

### Software translation

1. Ask in the [forum to improve translation](#)
2. Connect to Transifex/MuseScore <http://translate.musescore.org>, which will redirect you to <https://www.transifex.com/projects/p/musescore>
3. Select the language and then the section you want to help with (MuseScore, Instruments, Start Center or tours)
4. Click on the "translate" button (the button text will depend on your language...)
5. Search for "strings" (informational meaning) you want to translate (you could filter "already translated items")

Here is a technical explanation: [Continuous translation for MuseScore 2.0](#)

### Website and handbook translation

See [Translation instructions](#)

### See also

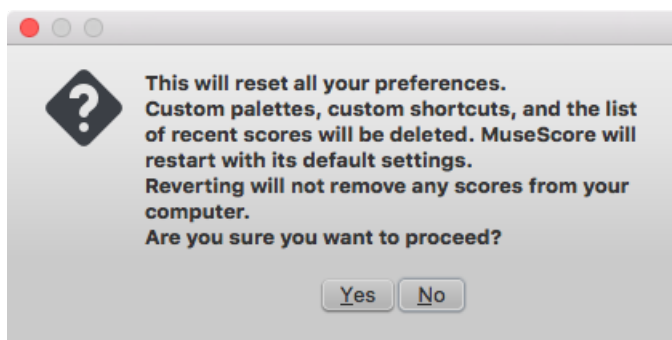
- [Language Settings and Update Translation, Update Translation](#)

## Revert to factory settings

MuseScore has the option to revert back to the standard built-in presets or "factory-settings". This can be necessary if your settings are corrupted. **Warning:** Reverting to factory settings removes any changes you have made to the preferences, palettes, or window settings. This is not a commonly needed procedure; consult the forums first, as there may be a way to solve your problem without resetting everything.

### Via menu

If MuseScore still starts, it is possible to revert from within MuseScore. Go to Help → Revert to Factory Settings. A warning dialog will appear:



Clicking Yes resets all MuseScore's settings as if the program was installed for the first time, and MuseScore will immediately restart. No will safely cancel the revert.

### Via command line

If MuseScore does not start, you must run this process via the [command line](#).

## Instructions for Windows

1. If you have MuseScore open, you need to close it first (File → Quit)
2. Type `Win+R` to open the Run dialog. Alternatively select "Start" using your mouse and type "run," then click the "Run" program.
3. Click Browse...
4. Look for MuseScore3.exe on your computer. The location may vary depending on your installation, but it is probably something similar to My Computer → Local Disk → Program Files → MuseScore 3 → bin → MuseScore3.exe
5. Click Open to leave the Browse dialog and return to the Run dialog. The following text (or something similar) should display in the Run dialog

`C:\Program Files\MuseScore 3\bin\MuseScore3.exe` (actually `%ProgramFiles%\MuseScore 3\bin\MuseScore3.exe`)

For the 32-bit version of MuseScore in a 64-bit version of Windows, the location is

`C:\Program Files (x86)\MuseScore 3\bin\MuseScore3.exe` (actually `%ProgramFiles(x86)%\MuseScore 3\bin\MuseScore3.exe`)

For the Windows Store version (Windows 10), it is pretty well hidden, search for it via Windows Explorer

6. Click after the quote and add a space followed by a hyphen and a capital F: `F:`
7. Press OK

After a few seconds, MuseScore should start and all the settings reverted to "factory settings".

For advanced users, the main preference file is located at:

- `C:\Users\[USERNAME]\AppData\Roaming\MuseScore\MuseScore3.ini`  
(actually `%APPDATA%\MuseScore\MuseScore3.ini`)

The other preferences (palettes, session, shortcuts, workspaces...) are in:

- `C:\Users\[USERNAME]\AppData\Local\MuseScore\MuseScore3\` (actually `%LOCALAPPDATA%\MuseScore\MuseScore3\`)

For the Windows Store version (Windows 10), these are pretty well hidden, search for them via Windows Explorer

## Instructions for MacOS

1. If you have MuseScore open, you need to quit the application first (MuseScore → Quit)
2. Open Terminal (in Applications/Utilities, or via Spotlight search) and a session window should appear
3. Type (or copy/paste) the following command into your terminal line (include the `'/` at the front):

```
/Applications/MuseScore\ 3.app/Contents/MacOS/mscore -F
```

This resets all MuseScore preferences to factory settings and immediately launches the MuseScore application. Note that you cannot quit the Terminal without quitting MuseScore. You can safely quit MuseScore, quit the Terminal, and then reopen MuseScore in the normal fashion, ready to continue using.

For advanced users, the main MuseScore preference file is located at `~/Library/Preferences/org.musescore.MuseScore3.plist`. The other preferences (palettes, session, shortcuts, workspaces...) are in `~/Library/Application\ Support/MuseScore/MuseScore3/`.

## Instructions for Linux

The following is true for Ubuntu, and most likely all other Linux distributions and UNIX-style operating systems.

1. If you have MuseScore open, you need to quit the application first (File → Quit)
2. From the Ubuntu main menu, choose Applications → Accessories → Terminal. A Terminal session window should appear
3. Type, (or copy/paste) the following command into your terminal line (`Ctrl+Shift+V` to paste in Terminal):

```
mscore -F
```

Or, if you are using the AppImage version, you must first use the `cd` command to change directory to wherever you saved the AppImage. For example, if you saved it to your Desktop (and there is only one):

```
cd ~/Desktop  
./MuseScore*.AppImage -F
```

This resets all MuseScore preferences to factory settings and immediately launches the MuseScore application. You can now quit Terminal, and continue using MuseScore.

For advanced users, the main MuseScore preference file is located at `$(XDG_CONFIG_HOME:-  
~/.config)/MuseScore/MuseScore3.ini`.

The other preferences (palettes, session, shortcuts, workspaces, ...) are in  $\${XDG\_DATA\_HOME:-\~/local/share}/MuseScore/MuseScore3/$ .

## See also

- [Command line options](#)

## Bug reports and Feature requests

Before filing bug reports or feature requests in the [Issue Tracker](#) it is recommended first to post it in the relevant [Forum](#) so others may help establish a bug as genuine, or provide ideas and second opinions for new features. Include a link to such discussion when creating the Issue.

### Bug reports

Before posting in the [issue tracker](#):

- Try to reproduce the issue with [the latest nightly](#). You may also view the [version history](#) to check whether it has been fixed/implemented already.
- Please include as much of the following information as you know and limit each issue to one report:
  - Version/revision of MuseScore you are using (e.g. version 3.0, revision [871c8ce](#)). Check Help → About... (Mac: MuseScore → About MuseScore...).
  - Operating system being used (e.g. Windows 10, macOS 10.15 or Ubuntu 20.04)
  - Describe the precise steps that lead to the problem (where do you click, what keys do you press, what do you see, etc.).  
If you are not able to reproduce the problem with the steps, it is probably not worth reporting it as the developers will not be able to reproduce (and solve) it either. Remember that the goal of a bug report is not only to show the problem, but to allow others to reproduce it easily.
- **Please remember:**
  - Attach the score that shows the problem, at least a minimal example —use the "File attachments" option at the bottom of the page, just above the Save and Preview buttons when you're typing your post.

### Feature requests

When posting in the [Issue Tracker](#):

- Be brief, but describe the goal as precisely as you can
- Describe the context in which the new feature is intended to work
- Suggest a specific workflow, if you can

### Cross linking issues

When you write a comment in a forum topic, you can refer to an issue in the issue tracker using the following notation: ``[#number]``

That way the link in the comment will include the issue title and reflect the current status of the issue. Furthermore, it'll lead to the forum topic being listed in the issue itself.

Type `[#153286]` get [#153286: Change instrument causes a crash](#)

### External links

- [How to write a good bug report: step-by-step instructions](#) (MuseScore HowTo)
- [How to attach a file](#) (MuseScore HowTo)
- [Compose tips](#)

## Appendix

### Keyboard shortcuts

Most keyboard shortcuts can be customized via the menu: select Edit → Preferences... → Shortcuts (Mac: MuseScore → Preferences... → Shortcuts). Below is a list of some of the initial shortcut settings.

### Navigation

Beginning of score: Home (Mac: Fn+←)

Last page of score: End (Mac: Fn+→)

Find/Go to (measure number, [rehearsal mark](#), or pXX when XX is a page number): Ctrl+F (Mac: Cmd+F)

Next score: Ctrl+Tab  
Previous score: Shift+Ctrl+Tab

Zoom in: Ctrl++ (doesn't work on some systems) (Mac: Cmd++); or Ctrl (Mac: Cmd) + scroll up  
Zoom out: Ctrl+- (Mac: Cmd+-); or Ctrl (Mac: Cmd) + scroll down

Next page: Pg Dn; or Shift + scroll down (Mac: Fn+↓)  
Previous page: Pg Up; or Shift + scroll up (Mac: Fn+↑)

Next measure: Ctrl+→ (Mac: Cmd+→)  
Previous measure: Ctrl+← (Mac: Cmd+←)

Next note: →  
Previous note: ←

Note below (within a chord or on lower staff): Alt+↓  
Note above (within a chord or on higher staff): Alt+↑

Top note in chord: Ctrl+Alt+↑ (Ubuntu uses this shortcut for Workspaces instead)  
Bottom note in chord: Ctrl+Alt+↓ (Ubuntu uses this shortcut for Workspaces instead)

Next element (accessibility): Alt+→  
Previous element (accessibility): Alt+←

### **Note input**

Begin note input mode: N  
Leave note input mode: N or Esc

### **Duration**

1 ... 9 selects a duration. *See also [Note input](#).*

Half duration of previous note: Q  
Double duration of previous note: w  
Decrease duration by one dot: (as of version 2.1) Shift+Q (e.g. a dotted [quarter note](#) becomes a quarter note; a quarter note becomes a dotted [eighth note](#))  
Increase duration by one dot: (as of version 2.1) Shift+W (e.g. an eighth note becomes a dotted eighth note; a dotted eighth note becomes a quarter note)

### **Voices**

To select a voice in note input mode.

Voice 1: Ctrl+Alt+1 (Mac: Cmd+Alt+1)  
Voice 2: Ctrl+Alt+2 (Mac: Cmd+Alt+2)  
Voice 3: Ctrl+Alt+3 (Mac: Cmd+Alt+3)  
Voice 4: Ctrl+Alt+4 (Mac: Cmd+Alt+4)

### **Pitch**

*Pitches can be entered by their letter name (A-G), or via MIDI keyboard. See [Note input](#) for full details.*

Repeat previous note or chord: R (the repeat can be of a different note value by selecting [duration](#) beforehand)

Repeat selection: R (The [selection](#) will be repeated from the first note position after the end of the selection)

Raise pitch by octave: Ctrl+↑ (Mac: Cmd+↑)  
Lower pitch by octave: Ctrl+↓ (Mac: Cmd+↓)

Raise pitch by semi-tone (prefer sharp): †  
Lower pitch by semi-tone (prefer flat): ‡  
Raise pitch diatonically: Alt+Shift+↑  
Lower pitch diatonically: Alt+Shift+↓

Change enharmonic spelling in *both* written *and* concert pitch views: J  
Change enharmonic spelling in *current* view only: Ctrl+J (Mac: Cmd+J)

Rest: 0 (zero)

### **Interval**



Add interval above current note: Alt+[Number]

## Layout

Flip direction (stem, slur, tie, tuplet bracket, etc.):X

Mirror note head: Shift+X

Increase stretch of measure(s): }

Decrease stretch of measure(s): {

Line break on selected barline: Return

Page break on selected barline: Ctrl+Return (Mac: Cmd+Return)

## Articulations

Staccato: Shift+S

Tenuto: Shift+N

Sforzato (accent): Shift+V

Marcato: Shift+O

Grace note (acciaccatura): /

Crescendo: <

Decrescendo: >

## Text entry

Staff text: Ctrl+T (Mac:Cmd+T)

System text: Ctrl+Shift+T (Mac: Cmd+Shift+T)

Tempo text: Alt+Shift+T

Rehearsal Mark: Ctrl+M (Mac: Cmd+M)

## Lyrics entry

Enter lyrics on a note: Ctrl+L (Mac: Cmd+L)

Previous lyric syllable: Shift+Space

Next lyric syllable: if the current and the next syllables are separated by a '-': -, else Space

Move lyric syllable left by 0.1sp: ←

Move lyric syllable right by 0.1sp: →

Move lyric syllable left by 1sp: Ctrl+← (Mac: Cmd+←)

Move lyric syllable right by 1sp: Ctrl+→ (Mac: Cmd+→)

Move lyric syllable left by 0.01sp: Alt+←

Move lyric syllable right by 0.01sp: Alt+→

Up to previous stanza: Ctrl+↑ (Mac: Cmd+↑)

Down to next stanza: Ctrl+↓ (Mac: Cmd+↓)

*For more lyric shortcuts, see [Lyrics](#).*

## Display

Timeline: F12 (Mac: Fn+F12)

Play Panel: F11 (Mac: Fn+F11)

Mixer: F10 (Mac: Fn+F10)

Palette: F9 (Mac: Fn+F9)

Inspector: F8 (Mac: Fn+F8)

Piano Keyboard: P

Selection filter: F6

Display full screen: Ctrl+U (Mac: none, use View→Full screen instead)

## Miscellaneous

Toggle visibility on selected element(s): V

Show Instruments dialog: I

Toggle multimeasure rests on or off: M

Reset element to default location: Ctrl+R (Mac: Cmd+R)

## See also

- [Preferences: Shortcuts](#)

## Command line options

MSCORE(1)—General Commands Manual Page

## NAME

**mscore**, **MuseScore3**—MuseScore 3 sheet music editor

## SYNOPSIS

You can launch MuseScore from the command line by typing

- `mscore [options] [filename ...]` (Mac and Linux/BSD/Unix)
- `musescore [options] [filename ...]` (Linux/BSD/Unix)
- `MuseScore3.exe [options] [filename ...]` (Windows)

[options] and [filename] are optional. For this to work the MuseScore executable must be in `in%PATH%` (Windows) resp. `$PATH` (Mac and Linux). If it is not, see [Revert to factory settings](#) for detailed instructions on how and where to find and execute the MuseScore executable from the command line on the various supported platforms.

A more detailed synopsis follows:

```
mscore [-deFfhliLmnOPRstvw]
[-a | --use-audio driver]
[-b | --bitrate bitrate]
[-c | --config-folder pathname]
[-D | --monitor-resolution DPI]
[-d | --debug]
[-E | --install-extension extension file]
[-e | --experimental]
[-F | --factory-settings]
[-f | --force]
[-h | -? | --help]
[-I | --dump-midi-in]
[-i | --load-icons]
[-j | --job file.json]
[-L | --layout-debug]
[-M | --midi-operations file]
[-m | --no-midi]
[-n | --new-score]
[-O | --dump-midi-out]
[-o | --export-to file]
[-P | --export-score-parts]
[-p | --plugin name]
[-R | --revert-settings]
[-r | --image-resolution DPI]
[-S | --style style]
[-s | --no-synthesizer]
[-T | --trim-image margin]
[-t | --test-mode]
[-v | --version]
[-w | --no-webview]
[-x | --gui-scaling factor]
[--diff]
[--long-version]
[--no-fallback-font]
[--raw-diff]
[--run-test-script]
[--score-media]
[--score-meta]
[--score-highlight-config]
[--score-mp3]
[--score-parts]
[--score-parts-pdf]
[--score-transpose]
[--source-update]
[--template-mode]
[file ...]
```

## DESCRIPTION

**MuseScore** is a Free and Open Source WYSIWYG cross-platform multi-lingual music composition and notation software, released under the GNU General Public Licence (GPLv2).

Running **mscore** without any extra options launches the full graphical MuseScore program and opens any files specified on the command line.

The options are as follows:

**-a** | **--use-audio** *driver*

Use audio driver: one of **jack**, **alsa**, **portaudio**, **pulse**

**-b** | **--bitrate** *bitrate*

Set MP3 output bitrate in kbit/s

**-c** | **--config-folder** *pathname*

Override configuration and settings directory

**-D** | **--monitor-resolution** *DPI*

Specify monitor resolution (override autodetection)

**-d** | **--debug**

Start MuseScore in debug mode

**-E** | **--install-extension** *extension file*

Install an extension file; soundfonts are loaded by default unless **-e** is also specified

**-e** | **--experimental**

Enable experimental features, such as [layers](#)

**-F** | **--factory-settings**

Use only the standard built-in presets (“factory settings”) and delete user preferences; compare with the **-R** option (see also [Revert to factory settings](#))

**-f** | **--force**

Ignore score corruption and version mismatch warnings in “converter mode”

**-h** | **-?** | **--help**

Display an overview of invocation instructions (doesn't work on Windows)

**-I** | **--dump-midi-in**

Display all MIDI input on the console

**-i** | **--load-icons**

Load icons from the filesystem; useful if you want to edit the MuseScore icons and preview the changes

**-j** | **--job** *file.json*

Process a conversion job (see [EXAMPLES](#) below)

**-L** | **--layout-debug**

Start MuseScore in layout debug mode

**-M** | **--midi-operations** *file*

Specify MIDI import operations file (see [EXAMPLES](#) below)

**-m** | **--no-midi**

Disable MIDI input

**-n** | **--new-score**

Start with the New Score wizard regardless whether it's enabled or disabled in the user preferences

**-O** | **--dump-midi-out**

Display all MIDI output on the console

**-o** | **--export-to** *file*

Export the given (or currently opened) file to the specified output *file*. The file type depends on the extension of the filename given. This option switches to “converter mode” and avoids the graphical user interface.

**-P | --export-score-parts**

When converting to PDF with the **-o** option, append each part's pages to the created PDF file. If the score has no parts, all default parts will temporarily be generated automatically.

**-p | --plugin *name***

Execute the named plugin

**-R | --revert-settings**

Use only the standard built-in presets (“factory settings”) but do not delete user preferences; compare with the **F** option

**-r | --image-resolution *DPI***

Set image resolution for conversion to PNG files. Default: 300 DPI (actually, the value of “Resolution” of the PNG option group in the [Export tab of the preferences](#))

**-S | --style *style***

Load a style file first; useful for use with the **-o** option

**-s | --no-synthesizer**

Disable the integrated software synthesizer

**-T | --trim-image *margin***

Trim exported PNG and SVG images to remove whitespace surrounding the score. The specified *margin*, in pixels, will be retained (use 0 for a tightly cropped image). When exporting to SVG, this option only works with single-page scores.

**-t | --test-mode**

Set test mode flag for all files, includes **--template-mode**

**-v | --version**

Display the name and version of the application without starting the graphical user interface (doesn't work on Windows)

**-w | --no-webview**

Disable the web view component in the Start Center

**-x | --gui-scaling *factor***

Scale the score display and other GUI elements by the specified *factor*; intended for use with high-resolution displays

**--diff**

Print a conditioned diff between the given scores

**--long-version**

Display the full name, version and git revision of the application without starting the graphical user interface (doesn't work on Windows)

**--no-fallback-font**

Don't use Bravura as fallback musical font

**--raw-diff**

Print a raw diff between the given scores

**--run-test-script**

Run script tests listed in the command line arguments

**--score-media**

Export all media (except MP3) for a given score as a single JSON document to stdout

### **--highlight-config**

Set highlight to svg, generated from a given score

### **--score-meta**

Export score metadata to JSON document and print it to stdout

### **--score-mp3**

Generate an MP3 for the given score and export it as a single JSON document to stdout

### **--score-parts**

Generate parts data for the given score and save them to separate mscz files

### **--score-parts-pdf**

Generate parts data for the given score and export it as a single JSON document to stdout

### **--score-transpose**


Transpose the given score and export the data to a single JSON file, print it to stdout

### **--source-update**

Update the source in the given score

### **--template-mode**

Save files in template mode (e.g. without page sizes)

MuseScore also supports the [automatic Qt command line options](#) .

## **Batch conversion job JSON format**

The argument to the `-j` option must be the pathname of a file comprised of a valid JSON document honoring the following specification:

- The top-level element must be a JSONArray, which may be empty.
- Each array element must be a JSONObject with the following keys:
  - `in`: Value is the name of the input file (score to convert), as JSONString.
  - `plugin`: Value is the filename of a plugin (with the `.qml` extension), which will be read from either the global or per-user plugin path and executed before the conversion output happens, as JSONString. Optional, but at least one of `plugin` and `out` *must* be given.
  - `out`: Value is the conversion output target, as defined below. Optional, but at least one of `plugin` and `out` *must* be given.
- The conversion output target may be a filename (with extension, which decided the format to convert to), as JSONString.
- The conversion output target may be a JSONArray of filenames as JSONString, as above, which will cause the score to be written to multiple output files (in multiple output formats) sequentially, without being closed, re-opened and re-processed in between.
- If the conversion output target is a JSONArray, one or more of its elements may also be, each, a JSONArray of two JSONStrings (called first and second half in the following description). This will cause part extraction: for each such two-tuple, all extant parts of the score will be saved *individually*, with filenames being composed by concatenating the first half, the name (title) of the part, and the second half. The resulting string must be a valid filename (with extension, determining the output format). If a score has no parts (excerpts) defined, this will be silently ignored without error.
- Valid file extensions for output are:

flac	Free Lossless Audio Codec (compressed audio)
metajson	various score metadata (JSON)
mid	standard MIDI file
midi	

	standard MIDI file
mlog	internal file sanity check log (JSON)
mp3	MPEG Layer III (lossy compressed audio)
mpos	measure positions (XML)
mscx	uncompressed MuseScore file
mscz	compressed MuseScore file
musicxml	uncompressed MusicXML file
mxl	compressed MusicXML file
ogg	OGG Vorbis (lossy compressed audio)
pdf	portable document file (print)
png	portable network graphics (image)—Individual files, one per score page, with a hyphen-minus followed by the page number placed before the file extension, will be generated.
spos	segment positions (XML)
svg	scalable vector graphics (image)
wav	RIFF Waveform (uncompressed audio)
xml	uncompressed MusicXML file

See below for an example.

## ENVIRONMENT

### SKIP\_LIBJACK

Set this (the value does not matter) to skip initialization of the JACK Audio Connection Kit library, in case it causes trouble.

### XDG\_CONFIG\_HOME

User configuration location; defaults to `~/.config` if unset.

### XDG\_DATA\_HOME

User data location; defaults to `~/.local/share` if unset.

Note that MuseScore also supports the normal Qt environment variables such as `asQT_QPA_GENERIC_PLUGINS`, `QT_QPA_PLATFORM`, `QT_QPA_PLATFORMTHEME`, `QT_QPA_PLATFORM_PLUGIN_PATH`, `QT_STYLE_OVERRIDE`, `DISPLAY`, etc.

## FILES

`/usr/share/muscore-3.0/` contains the application support data (demos, instruments, localization, system-wide plugins, soundfonts, styles, chords, templates and wallpapers). In the Debian packages, system-wide soundfonts are installed into `/usr/share/sounds/sf2/`, `/usr/share/sounds/sf3/` or `/usr/share/sounds/sfz/`, respectively, instead.

The per-user data (extensions, plugins, soundfonts, styles, templates) and files (images, scores) are normally installed into subdirectories under `~/MuseScore3/` but may be changed in the configuration. Note that snapshot, alpha and beta versions use `MuseScore3Development` instead of `MuseScore3` in all of these paths.

`$XDG_CONFIG_HOME/MuseScore/MuseScore3.ini` contains the user preferences, list of recently used files and their locations, window sizes and positions, etc. See above for development version paths.

`$XDG_DATA_HOME/data/MuseScore/MuseScore3/` contains updated localization files downloaded from within the program, plugin information, cached scores, credentials for the *musescore.com* community site, session information, synthesizer settings, custom key and time signatures and shortcuts. See above for development version paths.

## EXAMPLES

### Convert a score to PDF from the command line

```
mscore -o 'My Score.pdf' 'My Score.mscz'
```

### Run a batch job converting multiple documents

```
mscore -j job.json
```

This requires the file `job.json` in the current working directory to have content similar to the following:

```
[
  {
    "in": "Reunion.mscz",
    "out": "Reunion-coloured.pdf",
    "plugin": "colornotes.qml"
  },
  {
    "in": "Reunion.mscz",
    "out": [
      "Reunion.pdf",
      [ "Reunion (part for ", ").pdf" ],
      "Reunion.musicxml",
      "Reunion.mid"
    ]
  },
  {
    "in": "Piece with excerpts.mscz",
    "out": [
      "Piece with excerpts (Partitura).pdf",
      [ "Piece with excerpts (part for ", ").pdf" ],
      "Piece with excerpts.mid"
    ]
  }
]
```

The last part of the job would, for example, cause files like `Piece with excerpts (part for Violin).pdf` to be generated alongside the conductor's partitura and a MIDI file with the full orchestra sound, whereas the equivalent part of the Reunion conversion will be silently ignored (because the Reunion piece (a MuseScore demo) has no excerpts defined).

### MIDI import operations

The attached [midi\\_import\\_options.xml](#) is a sample MIDI import operations file for the **-M** option.

### DIAGNOSTICS

The `mscore` utility exits 0 on success, and >0 if an error occurs.

### SEE ALSO

`fluidsynth(1)`, `midicsv(1)`, `timidity(1)`, `qtoptions(7)`

<https://musescore.org/handbook>

Online Handbook, full user manual

<https://musescore.org/forum>

Support Forum

<https://musescore.org/en/node/278582>

Reverting to factory settings (troubleshooting)

<https://musescore.org/project/issues>

Project Issue Tracker—Please check first to if the bug you're encountering has already been reported. If you just need help with something, then please use the [support forum](#) instead.

<http://doc.qt.io/qt-5/qguiapplication.html#supported-command-line-optio...>

Documentation of automatic Qt command line options

### STANDARDS

MuseScore attempts to implement the following standards:

- MusicXML 3.1 (score interchange format)
- SF2 (SoundFont 2.01)
- SF3 (SoundFont with OGG Vorbis-compressed samples)
- SFZ (Sforzato soundfont)
- SMuFL (Standard Music Font Layout 1.20)

### HISTORY

MuseScore was split off the MusE sequencer in 2002 and has since become the foremost Open Source notation software.

## AUTHORS

MuseScore is developed by **MuseScore BVBA** and others.

This manual page was written by *mirabilos* <[tg@debian.org](mailto:tg@debian.org)>.

## CAVEATS

The automatic Qt command line options are removed from the argument vector before the application has a chance at option processing; this means that an invocation like `mscore -S -reverse` has no chance at working because the `-reverse` is removed by Qt first.

## BUGS

- MuseScore does not honor `/etc/papersize`.
- Probably some more; check the project's bug tracker (cf. [SEE ALSO](#)).

MuseScore—January 12, 2021

## New features in MuseScore 3.6

### New score setup and layout features

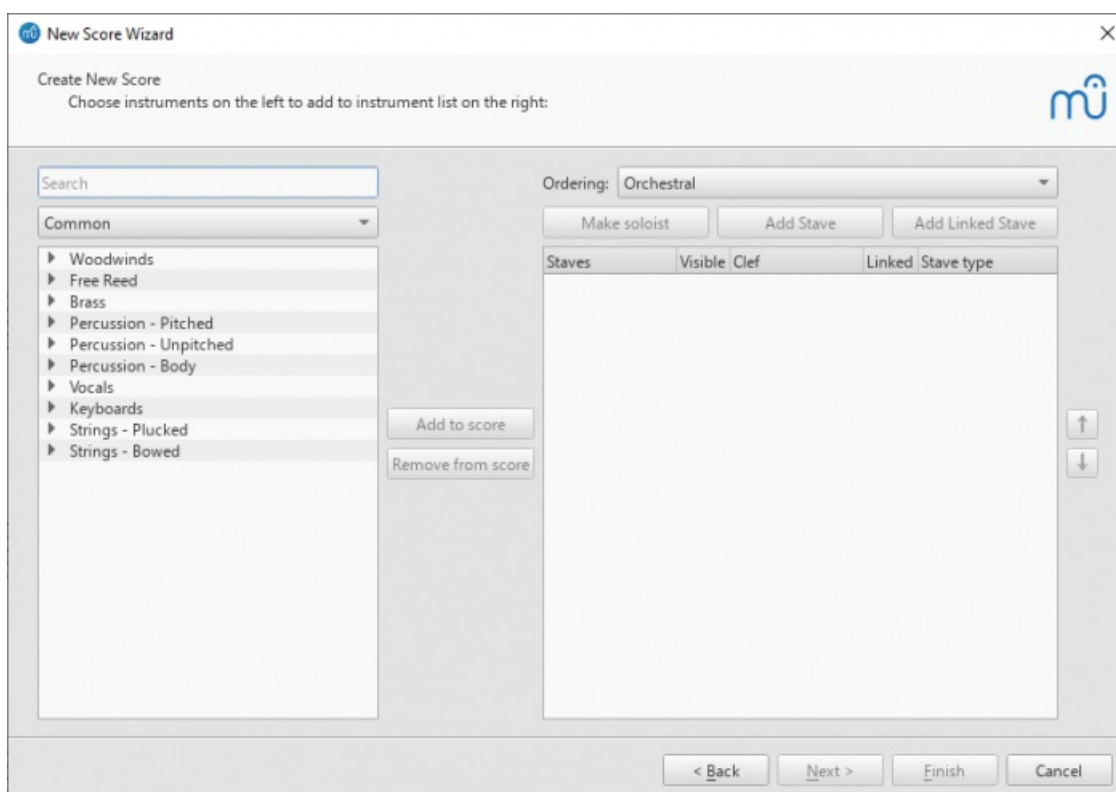
MuseScore 3.6 introduces a new music font, Leland, a new default text font, Edwin (a version of New Century Schoolbook), and many new default settings. It also introduces a number of new features which are available in all newly-created scores by default, and which can also be applied automatically or manually to existing scores.

The three main features, which are interrelated, are:

- Automatic instrument ordering
- Automatic brackets and braces
- Vertical justification of staves

The first two features apply at score creation time and are available in the New Score Wizard, though they can also be accessed later in the Instruments panel. Previously, it was up to the user to arrange instruments and add brackets manually once the score was created. The aim of these new features is to save time and give a better default result in the majority of cases, but it is not intended to accommodate every possible score setup. For unusual layouts, the results can be customised after the score is created, the features can be turned off completely, or a template could be used.

### Automatic instrument ordering





When creating a new score via 'Choose Instruments', there is now an 'Ordering' dropdown showing the current system of instrument ordering. 'Orchestral' is the default. As instruments are added to the score, they will be added in the correct position according to the select ordering. (Previously, each instrument would appear below whichever was currently selected in the right-hand list.) This also makes it easy to, for instance, add a double wind section, by selecting Flute, Oboe, Clarinet and Bassoon in the left-hand list, and clicking 'Add to score' twice.

Each ordering defines a position in the score for solo instruments. For example, in an orchestral ordering, this is above the strings. With an instrument selected in the right-hand list, the 'Make soloist' button will move it to that position. You can designate multiple soloists; within the soloist 'section' the overall ordering will apply. Solo instruments will have "solo" added to their name by default, and will be numbered separately from non-solo instruments, where relevant. Note that the soloist designation is a score layout feature only and has no impact on playback.

One quirk is that, for now, only a single soloist position is defined per ordering, so a work with a chorus plus both vocal *and* instrumental soloists will place the instrumental soloists above the chorus. These will need to be moved manually.

As before, instruments can be moved up and down manually with the buttons that are now to the right of the list. In the dropdown the ordering will have '(Customised)' appended to its name. The customised ordering is saved with the score. You can reset the order by selecting the original ordering (or a different one) from the dropdown.

Selecting the 'Custom' ordering disables this feature entirely, as well as the automatic bracketing.

#### Automatic brackets and braces

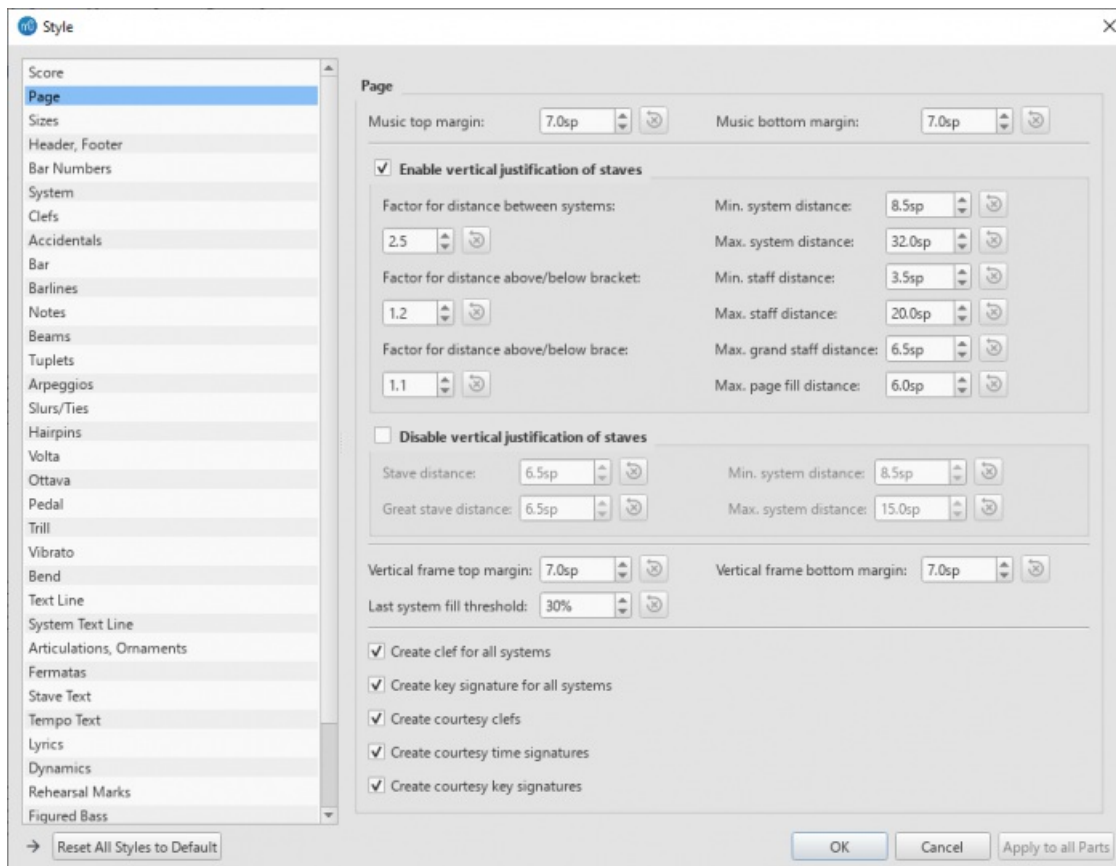
The predefined ordering assigns instrument *families* (flutes, oboes, clarinets, etc.) and arranges those families into *sections* (woodwind, brass, percussion, etc.). Brackets are added automatically according to these simple rules:

- A heavy bracket is applied to all adjacent instruments of the same section, assuming there is more than one
- a thin square bracket is applied to all adjacent identical instruments (four horns, for example)
- a curly brace is applied to each single instrument which is notated on more than one staff (piano and harp, most commonly)

Again, while this should provide reasonable defaults for most scores, it won't give perfect results for every possible style or layout. Fortunately, it is easy to make adjustments once the score is created.

#### Vertical justification of staves

There is a new algorithm for vertically justifying staves to properly fill the page, which is turned on by default for new scores in MuseScore 3.6. To turn this off, untick Format > Style > Page > Enable vertical justification of staves.



The basic principle of the algorithm is to try to make the space between staves equal, subject to two settings (all in

Format > Style > Page):

- The space either side of a system may be increased proportionally by adjusting the "Factor for distance above/below bracket" setting to a value greater than 1. For example, if this is set to 1.5, the algorithm will attempt to make the space either side of a bracket 1.5 times the 'standard' space used elsewhere.
- The same thing can be applied to braces with the "Factor for distance above/below brace" setting.

The space between a brace and bracket will be determined by the larger of these two values. The "Max. great staff distance" setting is used to limit the amount of distance between staves joined by a curly brace. This is useful as these staves generally need to be read at once in a single glance by the player.

The "Max. system distance" and "Max. staff distance" should have reasonably large values to enable the routine to fill even quite sparse pages. Sometimes a page will not have enough staves for it to make sense to justify. In this case, once the algorithm first equalises the space as described above, it then adds extra space between the staves up to a maximum of the setting given in "Max. page fill distance" (multiplied by any relevant factor setting). If you find many pages are not fully justified, but you'd like them to be, try adjusting this setting. In general, a low value is likely to be best for a score with a small number of staves per system, and a larger one for larger numbers of staves.

The vertical justification is dynamic, and not tied to the section assignments of instruments used to determine the score order at the setup stage, so if you add or remove brackets the spacing will change accordingly. In the same way, if empty staves are hidden on a given system, the spacing will be determined only by the brackets which are present on that system.

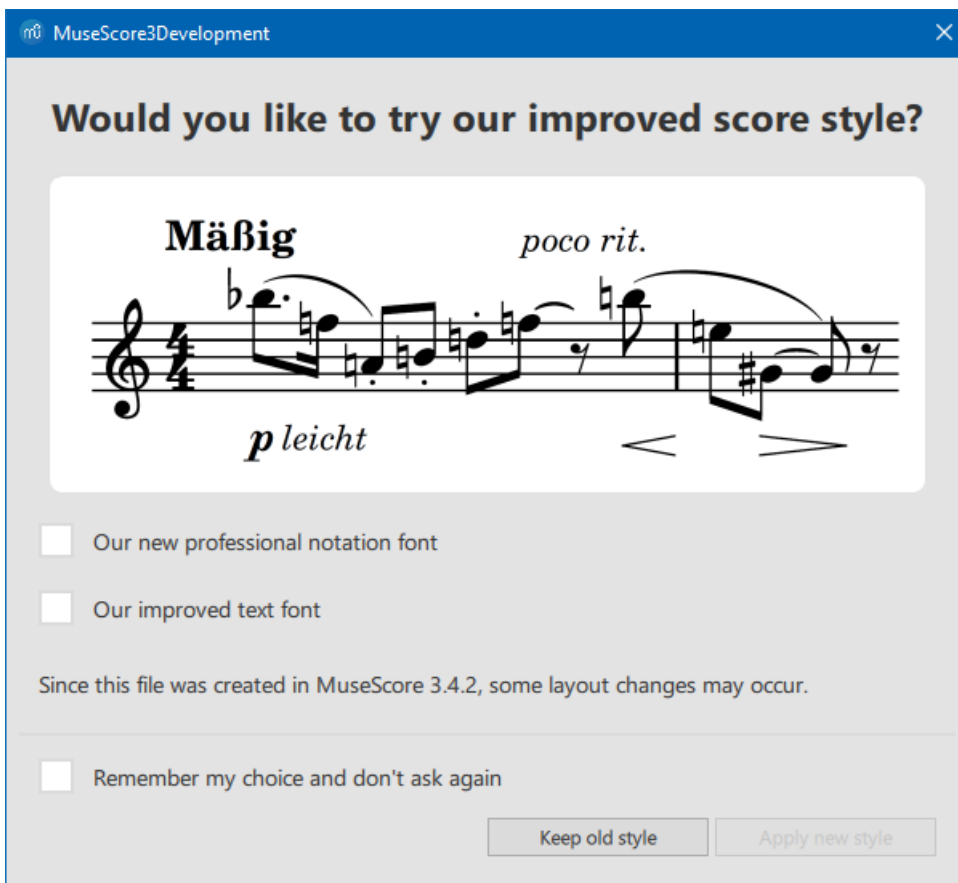
Hopefully the default settings give good results in most cases, but it might take a bit of experimentation with the settings depending on the makeup of a score. If you are used to using spacers to achieve similar results, it is best to try to find settings which give a good result for the majority of the score, and use spacers only where local adjustments are necessary. It is planned for future versions to make this more configurable. For example, extra space could be suppressed for a specific bracket, or the value might be increased or decreased for a particular page or system.

#### **Indentation of first systems**

This new option, which is turned on by default, is found in Style > Score > Enable indentation on first system. As the name suggests, it will indent the first system of a section in the customary way for classical scores. (The old workaround of using a frame for this is no longer necessary.) If there are instrument labels present, the maximum of either the value given for this setting or the length of the labels will apply.

#### **Applying new features to existing scores**

When opening an old score, a dialog box gives the option to apply either the new notation font Leland, or the new text font Edwin, or both. Each of these applies a subset of the new default 3.6 style settings beyond just the font changes, for example, line widths and text sizes, but does not apply every one of the the new defaults, in the interest of minimising disruptive layout changes.



To apply *all* of the new defaults, including these text and notation font changes, open the Format > Style window and click the "Reset All Styles to Default" button at the bottom. This was formerly the Format > Reset Style menu option. The button behaves the same way, except that it no longer resets the page layout options which are set in the Format > Page Settings window; that window now has its own equivalent button, which will reset only those settings it contains. This means that the new style options can be tried out without completely ruining the layout of the score, though a few settings in the Score and Page settings of the Style window may need to be re-set manually.

If it is an option, delete any non-essential system and page breaks, then select the whole score and select Format > Stretch > Reset Layout Stretch. Also delete spacers if you want to see the default results of the new vertical justification algorithm (see below).

Edwin has wider character sizes in general than FreeSerif (though slightly smaller default point sizes are used) so it is quite likely that the Edwin option will cause layout changes, particularly in scores with lyrics. Leland will affect the spacing less radically, but some adjustments may still be necessary.

Text items which have local style overrides applied will not have those customisations removed, either as part of the score migration process, or via the Reset Styles options. This may result in an inconsistent score where some text retains its old font face or size. The new menu option Format > Reset Text Style Overrides will remove these customisations, resetting all text items to match the currently defined text styles. (This is equivalent to clicking 'Reset to style default' for each attribute in the Text area of the Inspector.) Note that this does *not* remove Custom Formatting, which must be done manually if required.

#### Applying new automatic instrument ordering and bracketing

Press I to open the Instruments panel, or choose the Edit > Instruments menu item. Assuming the score was created pre-3.6, the selected ordering will be 'Custom'. If you wish to apply a standard ordering, select one from the menu, for example 'Orchestral'. The instruments in the score will be reordered according to that definition, and have brackets and braces applied accordingly. Note that any existing brackets and braces will be deleted.

#### Applying vertical justification of staves

If you want to use this feature but have previously been using spacers to create extra or fixed distance between staves, it would be best to delete all those spacers first, as they will distort how the new algorithm works. A quick way to do this is by right-clicking any spacer, choosing Select > All Similar Elements, and pressing Delete.

Turn this feature on by selecting Style > Page > Enable vertical justification of staves. Then you can reintroduce spacers if there are specific places where the default spacing needs adjustment.

#### Other engraving changes in 3.6

In the process of investigating style settings, engraving issues, and creating a new music font, many issues were uncovered which needed to be corrected and which may have a small impact on the appearance of existing scores. In some cases it is possible to undo these manually.

### Beam spacing

A long-standing error in the interpretation of the `beamDistance` setting that is defined alongside SMuFL fonts meant that this value was frequently half as big as it ought to be in MuseScore, including with Emmentaler and Bravura. (MuseScore defines the distance between beams as a percentage of the thickness of a beam, but for SMuFL the setting is an absolute distance in stave spaces. The normal thickness of a beam is 0.5sp, and the standard distance between beams is also 0.25sp, which MuseScore interpreted as 25% of 0.5sp, i.e. 0.125sp.)

The new correct interpretation of this value, 50%, will be applied even to existing scores, unless this value had been explicitly overridden. The extra space is added inwards, so the position of the outermost beams remains the same. If you really want the old, very-tight spacing, set `Style > Beams > Beam distance` manually to 25%.

Before (beam distance 25%):



After (beam distance 50%):



### Ledger line length

In a similar way, MuseScore interpreted this SMuFL value as the total extension of the ledger line beyond the notehead (i.e.  $x/2$  at each side), when the value is meant to be the extension at each side. This error was also masked by a square cap being used for the line, rather than a straight cap, thus also adding half of the line thickness at each end.

As with beam spacing, if this setting was not explicitly overridden in the file, a new default will be applied even in old scores, but this will give identical results. If you did adjust this value, this value will be preserved, but will produce ledger lines that are too long. You can convert the value manually with the formula:

$$\text{new value} = (x / 2) - (y / 2)$$

where  $x$  is the previous 'Ledger line length' value, and  $y$  is the 'Ledger line thickness' value. Or, just use the now correctly-interpreted default settings for each font:

- Leland: 0.35sp
- Bravura, Gonville, Petaluma: 0.40sp
- Emmentaler: 0.38sp

### Stem caps and flag positions

Round caps were previously drawn on stems. This has been replaced with a flat cap. Partly this is to make the length of the stem more exact, but mainly it is so that the round cap does not obscure the design of the tip of the flag symbols in each font. Emmentaler's flags, for instance, are designed with a flat tip; Bravura and Leland have rounded tips which are not exactly symmetrical.

The placement of flags was also previously at odds with SMuFL fonts: a calculation was made of how much to extend the stem for a given number of flags, and then the flag symbol was drawn with the top or bottom of its bounding box at the end of the stem. Now, the presence of flags does not affect stem length (i.e. a normal length stem is used for a note according to its vertical position and stem direction) and the flag symbol is then placed with its  $y=0$  at the end of the stem. Any 'extension' of the stem is thus determined by the extent to which the flag symbol extends above or below  $y=0$ . The flags in Emmentaler, as used within MuseScore, have been repositioned to reflect this, and to match other SMuFL fonts.

The result of this is that flags may appear slightly lower or higher than they did previously; however, their positioning now reflects the intentions of the designers of each of the available fonts. Beamed notes are not affected.

Before (Bravura, in 3.5):



After (Bravura, in 3.6):



#### Bracketed accidentals

Previously MuseScore did not add any space between the bounding boxes of accidentals and brackets around them. Now a small amount of padding is added, which can be customised via **Style > Accidentals > Padding inside parentheses**.

Before (Bravura, in 3.5):



After (Bravura, in 3.6):



#### Accidentals in Emmentaler

These have been replaced with those taken from Parnassus. For details, see [PR #6747](#).

### New features in MuseScore 3

**MuseScore 3** includes a number of new and improved features. For a brief summary, see the [Release notes for MuseScore 3](#). More details can be found in the summaries below and by referring to the relevant pages of the handbook.

#### Automatic Placement

MuseScore initially places elements in the score according to (a) the properties specified in [style defaults](#) and (b) any manual adjustments made. For elements that have automatic placement enabled, however, MuseScore will attempt to avoid collisions by moving one or more of them as needed.

See [Automatic placement](#).

#### Default position

The default position for most elements is controlled by settings in **Format → Style**. You can either change the default

there, or, in the [Inspector](#), apply a manual adjustment (see below) and then use the "Set as style" control (the S to the right of the value you wish to set).

The specific properties you can set vary by element type but include:

- placement (whether the element appears above or below the staff by default)
- position above/below (specific positions when placed above or below)
- offset (same as position above/below, for which placement is the default)
- autoplacement min distance (minimum distance from other elements when autoplacement is enabled)

See [Automatic placement](#).

#### Manual adjustments

Many elements can be placed either above or below the staff. To flip an element from above to below or vice versa, use the "Placement" setting in the [Inspector](#), or press the shortcut "X".

Manual adjustments to position can be performed by dragging or by changing the offsets in the Inspector. Neither method will allow you to position an element in a way that causes a collision, however. To take full control of the position of an element, you can disable automatic placement for it.

See [Automatic placement](#).

#### Disabling automatic placement

To disable automatic placement for an element, untick the "Automatic placement" box in the Inspector. The element will revert to its default position, and it will no longer be considered when automatically placing other elements.

See [Automatic placement](#).

#### Stacking order

The "Stacking order" setting in the Inspector controls which elements overlap which in the cases where they actually do overlap and are not moved due to autoplacement.

See [Automatic placement](#).

#### Text Formatting

Formatting of text is controlled by three factors:

- The [text style](#) associated with the element sets the defaults for properties such as the font, alignment, and frame.
- Changes to these text properties can be applied to selected elements via the Inspector.
- Custom formatting can be applied to specific characters within the text using the text toolbar.

See [Text basics](#), [Text styles and properties](#).

#### Text Styles

Each text element has a [text style](#) associated with it. The default style for an element is determined by the type of the element itself - staff text defaults to the Staff text style, dynamics to the Dynamics text style, etc. This text style determines the default font face, size, style (bold/italic/underline), alignment, and frame properties.

You can change the defaults for any of these text styles using [Format](#) → [Style](#) → [Text Styles](#). For instance, you can make rehearsal marks bigger, or change lyrics to be italicized. This will affect all existing elements using that style as well as elements you add later. Some elements also contain a limited set of text style controls in their own sections of the [Format](#) → [Style](#) dialog (although this might not be the case in the final release). The settings are linked: you can change the font size for measure numbers in either [Format](#) → [Style](#) → [Measure Numbers](#), or in [Format](#) → [Style](#) → [Text Styles: Measure Number](#). The effect is the same: all measure numbers in the score will take on this size. You can also change the defaults for a text style using the Inspector; see [Text Properties](#) below.

For most text elements that you create directly (like staff text, rehearsal marks, and lyrics), you can apply a different text style using the Style control in the Inspector. This will cause them to display using that style instead of the "native" style for the element. For example, you can select one or more staff text elements and give them the Tempo style to force them to display as if they were tempo markings.

See [Text basics](#), [Text styles and properties](#).

#### Text Properties

The text style controls the default properties for elements using that style, but you can override any of these properties for selected elements using the Inspector. For example, you can select a handful of staff text elements using [Ctrl+click](#), then

use the Inspector to make them larger. The Reset to Default button next to each property control returns it to the default. You can also click the Set as Style button to change the style to match. So another way to change the size of all measures numbers is to select one, change its size in the Inspector, then click Set as Style.

See [Text basics](#), [Text styles and properties](#).

### Custom Formatting

Custom formatting is applied to text using the [toolbar](#) at the bottom of the main window in the same manner as in previous releases. Thus, you can embolden one word in a sentence while the rest is normal, or superscript a particular character etc. You can also remove all custom formatting from select text elements using the "Remove Custom Formatting" button in the Inspector. This returns the text to the settings currently shown in the Inspector.

See [Text editing](#).

### Staff Type Change

You can change various staff properties mid-score, including staff size, notehead scheme (e.g., for pitch name noteheads), generation of time signatures, and others. The staff type change element is found on the Text palette (currently, but see [#278205: Move Staff Type Change to another palette \(it is not text\)](#) - it may move). Add it to the measure where you want the change to occur, then use the Inspector to change properties of the staff type change element.

See [Staff Type Change](#)

### Temporary and Cutaway Staves

To create a temporary staff that appears on certain systems only: first add the staff normally (Edit / Instruments), then add notes, then right-click the staff, click [Staff Properties](#), and set "Hide when empty" to "Always". This will cause the staff to show only where needed even without needing to turn on "Hide empty staves" for the whole score (in Format / Style). The default for "Hide when empty" is "Auto", meaning the staff will be hidden when empty if "Hide empty staves" is enabled. Additional values include "Never" (the staff will not be hidden when empty even if "Hide empty staves" is enabled) and "Instrument" (for instruments containing multiple staves, the staff is hidden only if all staves for that instrument are empty).

To create a cutaway staff in which only the measures containing notes are visible (for ossia or cutaway scores, for example), right-click the staff, click Staff Properties, and enable the "Cutaway" option. This can be used independently of "Hide when empty" or "Hide empty staves".

### System Dividers

System dividers are a set of short diagonal lines that are used to visually separate systems on a page. MuseScore can add these to your score automatically. In [Format](#) → [Style](#) → [System](#), you can enable dividers on the left, right, or both, and you can set their default position. You can also adjust the position of individual dividers in your score manually or mark them invisible (this currently does not survive saving).

### Staff Spacing

As part of the automatic placement in MuseScore, staves are now spaced automatically, so you can set a comfortable minimum distance and depend on MuseScore to open up more space where needed. You can use staff spacers as in MuseScore 2 to *increase* distance between staves, but MuseScore 3 now also provides a way to *decrease* it—the "fixed" staff spacer, found on the Breaks & Spacers palette. Just add the spacer and adjust its height. This will also prevent MuseScore from automatically adding more space to avoid collisions, allowing you to manage this yourself.

See [Spacers](#).

### Don't Break

#### Currently disabled

In addition to the system, page, and section breaks familiar from MuseScore 2, the "Breaks & Spacers" palette now contains a new "Don't Break" element. This allows you to force two measures to be kept together, for example, if there is some complex passage that spans the measures and you want to make sure they are adjacent. If both measures don't fit on a system, MuseScore moves them both to the next system. (currently, this leaves a "hole" at the end of the first staff - is this a bug or is there some purpose behind it?)

### Parts from Voices

In addition to the ability to generate [parts](#) from the different instruments in your score, you can now also associate a part with a specific staff within the instrument or even a specific voice within a specific staff. This allows you to combine multiple parts (e.g., Flute 1 & 2) onto a single staff in the score while still generating separate parts.

The Parts dialog now contains two sections at the bottom, Instruments in Score and Instruments in Part. Once you have generated a part (or all parts) using the New and New All buttons, you can select any part at the top and use the controls at the bottom to control not only what instrument is in the part, but also which staves and voices within the instrument are included.

To add an instrument to a part, select it from "Instruments in Score" and press "+". To remove an instrument from a part, select it from "Instruments in Part" and press "-". To customize the part at the staff or voice level, click the arrow next to the instrument in "Instruments in Part" to expand the listing to show all staves and voices of the instrument. You can remove a staff by selecting it and pressing "-", or remove a voice by unchecking it.

*Limitations:* If you select only voice 1 for a given staff, then only the content in voice 1 for that staff will be included in the part. Thus, in order to share flute 1 & 2 on the same staff, you will need to enter all notes onto both voices, even in passages where they share content. You also cannot enter the two parts as chords in the passages where they share rhythms.

## Explode and Implode

Explode has been updated to allow separation of voices as well as notes. See [Explode](#).

The implode tool (Tools / Implode) works in one of two modes.

With a single staff selected, the implode command merges notes in different voices into chords where possible (when notes are on the same beat and have the same duration). This is the same as recent versions of MuseScore, although some bugs have been fixed.

With multiple staves selected, the implode command combines the content of the first four non-empty voices (on any staves) into multiple voices on the top selected staff. This is different from MuseScore 2, where notes would be combined into chords rather than using multiple voices, and thus required the rhythms to match. The MuseScore 3 approach preserves the original rhythms even where they differ, and is intended to produce the expected results when combining two different parts onto one staff for use with the parts from voices feature, or when reducing an open (four-stave) SATB score into a closed (two-stave) version. To further merge the voices into chords where possible, simply run the command again.

See [Tools](#).

## Insert mode

You can insert and delete notes and have the measure automatically expand or contract to accommodate the change. This can be useful in creating unmetred music or in ordinary editing.

To insert a note before the currently-selected note, press **Ctrl+Shift** while adding the note normally. For example, in note input mode, **Ctrl+Shift+click** will insert a note of the currently-selected duration at that location. **Ctrl+Shift+B** will insert a B of the currently-selected duration before the note at the current cursor position. You can also switch to Insert mode using the dropdown menu next to the note input button on the toolbar. In this mode, all notes you add act as if you were pressing **Ctrl+Shift** - they are inserted rather than replacing the existing notes or rests at that location.

To delete notes, you must be in normal (not note input) mode. Select either a single note or a range and press **Ctrl+Del**.

See [Note input modes](#), [Remove selected range](#) (Tools)

## Split/Join Measures

To split a measure before a given note, simply insert a barline from the palette at that point while holding **ctrl**. For example, you can select the note, and **Ctrl+double-click** the barline in the palette, or **Ctrl+drag** the barline to the note. You can also use Tools → Measure → Split Measure Before Selected Note/Rest.

To join two measures, **Ctrl+Del** the barline between them. You can also use the menu command Tools → Measure → Join Measures.

See [Measure operations](#).

## Timeline

The Timeline presents a graphical overview of your score. To access it, use View → Timeline (F12). The top portion of the Timeline shows the location of tempo, key, and time signature changes as well as rehearsal marks, repeats, and double barlines. The bottom portion shows the staves of your score, with non-empty measures highlighted. You can click anywhere within this view to jump to the corresponding spot in the score.

See [Timeline](#)

## Score Comparison Tool



The Score Comparison Tool (View / Score Comparison Tool) allows you to compare two versions of a score to find the differences between them. Select the two scores you want to compare and whether you want to compare the current version or the last saved version (note you can compare the current version of a score against the last saved version of the same score to see what you have changed since the last save), then click the Compare button. A list of differences will be displayed to the right. The score view will automatically change to Documents Side by Side, with the two scores you have selected displayed within. Double-click on a difference from the list and both score views will automatically pan to show you the changed element, which will also be highlighted.

Normally you would want the default Intelligent comparison, which displays the differences in human-readable format (e.g. "Measure 1: Note: property pitch changed from B4 to C5"). There is also a Raw mode to show the results according to the actual XML code.

See [Score comparison](#).

## Mixer

See [Mixer](#).

## Piano Roll Editor

See [Piano roll editor](#) (preliminary page).

## Capo changes

Capo changes are now a property of staff text, and can be used to automatically change the pitch of all notes that follow them, up until another capo change.

See [Capo playback](#).

## Fretboard Diagrams

New UI. See [Fretboard diagrams](#).

## External links

- [Release notes for MuseScore 3.x](#) ↗
- [Transitioning from version 2 to version 3](#) ↗

## Known limitations of MuseScore 3.x

While all members of the development team did their best to make the software easy to use and bug-free, there are some known issues and limitations in MuseScore 3.x.

### Local time signatures

The local time signature feature, which allows you to have different time signatures in different staves at the same time, is very limited. You can only add a local time signature to measures that are empty, and only if there are no linked parts. When adding notes to measures with local time signatures, you can enter notes normally via note input mode, but copy and paste does not work correctly and may lead to corruption or even crashes. The join and split commands are disabled for measures with local time signatures.

### Regroup Rhythms

The Regroup Rhythms command found under the Tools menu may have unintended side effects, including changing the spelling of pitches and deleting some elements like articulations, glissandos, tremolos, grace notes and, esp. on undo, ties. Use this tool with caution on limited selections, so that you can tell if any unwanted changes are made.

### Tablature staff linked with standard staff

When entering multiple-note chords on a standard staff in [alinked](#) staff/tablature system, the notes should be entered in order *from the top (first) string to the bottom string* to ensure correct fret assignment.

This limitation does not apply if entering notes directly onto a tablature staff, or when using an [unlinked](#) staff/tablature system.

## Mixer

Changing settings in the mixer other than the sound doesn't mark the score 'dirty'. That means if you close a score you may not get the warning "Save changes to the score before closing?". Changing mixer values are also not undoable.

## Header & footer

There is no way to edit Header and Footer in a WYSIWYG manner. The fields in Format → Style → Header, Footer are plain text. They can contain "HTML like" syntax, but the text style, layout, etc. can't be edited with a WYSIWYG editor.

## Upgrade from MuseScore 1.x or 2.x

### How to upgrade MuseScore

Download and install the latest version from the [download](#) [↗](#) page as described at [Installation](#).

Installing MuseScore 3 won't uninstall 1.x nor 2.x —all three versions can coexist peacefully and can even be used in parallel. So this isn't really an upgrade but an installation of a new and different program.

### Opening 1.x or 2.x scores in MuseScore 3

MuseScore 3 significantly improved the typesetting quality to make scores attractive and easier to read. Improvements cover many items such as beam slope, stem height, layout of accidentals in chords and general note spacing. However, this means that sheet music made with MuseScore 1.x or 2.x looks slightly different from sheet music made with 3.x.

It also means that scores saved with 3.x won't open with 1.x nor 2.x.

To prevent you from accidentally overwriting your 1.x or 2.x scores, 3.x treats them as an import, which means:

- The score gets marked as being modified, even if you haven't changed anything
- On exiting MuseScore you're asked to save the score (as a result from the above)
- MuseScore uses the "Save As" dialog to save it, not the "Save" dialog
- MuseScore uses the score's title to create a default filename rather than taking the old filename

### Relayout

If you did not manually adjust the layout of a 1.x or 2.x score, then MuseScore uses the 3.x typesetting engine to layout the score. If you *did* touch the layout of the 1.x or 2.x score, the individual adjustments you may have made should remain after opening it in MuseScore 3.x, but due to slight changes in the surrounding layout they may still not appear correct in context. If you wish to reset even manual adjustments to use the 3.x typesetting engine throughout, select the complete score with the shortcut Ctrl+A (Mac: Cmd+A) and reset the layout with Ctrl+R (Mac: Cmd+R).

**Note:** When you open a 1.x or 2.x file in MuseScore 3, it will ask you if you want to reset the layout to the defaults.

### Getting the sound from MuseScore 1.x

While the sound in 2.x/3.x has been much improved, you may still prefer the sound from MuseScore 1.x. In that case, you can get the 1.x sound in 3.x by downloading the 1.3 SoundFont and add it in 3.x. You can do this in two steps:

1. [Download the 1.3 SoundFont named TimGM6mb](#)
2. [Install and use the TimGM6mb SoundFont in 2.0](#) [↗](#)

## Known incompatibilities

### Hardware incompatibilities

The following software is known to crash MuseScore on startup:

- Samson USB Microphone, driver name "Samson ASIO Driver", samsonasiodriver.dll. [More info](#) [↗](#)
- Digidesign MME Refresh Service. [More info](#) [↗](#)
- Windows XP SP3 + Realtek Azalia Audio Driver. [More info](#) [↗](#)
- Wacom tablet. [More info](#) [↗](#) and [QTBUG-6127](#) [↗](#)

### Software incompatibilities

- Maple virtual cable is [known to prevent MuseScore](#) [↗](#) from closing properly.
- KDE (Linux) window settings can cause the whole window to move when dragging a note. [Changing the window settings of the operating system](#) [↗](#) avoids the problem.
- Nitro PDF Creator may [prevent MuseScore 2 from starting](#) [↗](#) on Windows 10, if being used as the default printer. Same for Amyuni/Quickbooks PDF Printer, see [here](#) [↗](#) and also some cloud printing services, see [here](#) [↗](#).
- Creative Sound Blaster Z Series ASIO driver may [prevent MuseScore 2 from starting](#) [↗](#) on Windows 10.
- Untrusted Font Blocking policy [prevents MuseScore 2 from starting](#) [↗](#) (except in debug mode, i.e. using the -d option) on Windows 10. (Solution in [the links provided here](#) [↗](#))
- The SteelSeries Engine 3 Audio Visualizer will prevent MuseScore from starting up, or cause MuseScore to crash if the Audio Visualizer is started when MuseScore is already running.

## AVG Internet Security hangs MuseScore

MuseScore requires access to your internet connection with AVG. MuseScore doesn't need an internet connection to function, but if AVG blocks it, MuseScore hangs.

If AVG prompts you, **Allow** MuseScore and check "Save my answer as a permanent rule and do not ask me next time."


If it doesn't prompt you anymore,

1. Open the AVG user interface (right-click on the AVG icon, close to your clock -> Open AVG User Interface)
2. Click on *Firewall*
3. Click *Advanced Settings*
4. Click *Applications*
5. Find MSCORE.EXE in the list and double-click it
6. Change *Application Action* to **Allow for All**

## Font problem on macOS

MuseScore is known to display notes as square when some fonts are damaged on macOS. To troubleshoot this issue:

1. Go to Applications -> Font Book
2. Select a font and press ⌘+A to select them all
3. Go to File -> Validate Fonts
4. If any font is reported as damaged or with minor problems, select it and delete it
5. Restart MuseScore if necessary

In [this forum article](#) , a user believes to have found the font "Adobe Jenson Pro (ajenson)" to be the culprit, regardless of not being reported as broken, or problematic as per the above validation, and solved the problem by deleting that font, so this is worth checking too.

## Font problem on Linux

If the default desktop environment application font is set to bold, MuseScore will not display the notes properly. To troubleshoot this issue (gnome 2.\*/MATE users):

1. Right-click on your desktop and select Change Desktop background
2. Click on Fonts tab
3. Set Regular style for Application font
4. Restart MuseScore if necessary

For GNOME 3/SHELL users

1. Open the shell and open "Advanced Settings"
2. Click on the Fonts option in the list
3. Set the default font to something non-bold
4. Restart MuseScore if necessary

## Save As dialog empty on Linux

Some users reported that the Save As dialog is empty on Debian 6.0 and Ubuntu 10.10. To troubleshoot this issue:

1. Type the following in a terminal


```
which mscore
```

2. The command will answer with the path of mscore. Edit it with your preferred text editor and add the following line at the beginning

```
export QT_NO_GLIB=1
```

Launch MuseScore and the problem should be solved.

## Glossary

*The glossary is a work in progress—please help if you can. You can discuss this page in the [documentation forum](#) .*

The list below is a glossary of frequently used terms in MuseScore as well as their meaning. The differences between American English and British English are marked with "(AE)" and "(BE)", respectively.

### A

Acciaccatura



A short → grace note which appears as a small note with a stroke through the stem. It is quickly executed and technically takes no value from its associated note.

Accidental

A sign appearing in front of a note that raises or lowers its pitch. The most common accidentals are → sharps, → flats or → naturals, but double sharps and double flats are also used. Also → koron, and → sori and other quarter tone accidentals. Accidentals affect all notes on the same → staff position only for the remainder of the measure in which they occur, but they can be canceled by another accidental. In notes tied across a → barline, the accidental continues across the → barline to the tied note, but not to later untied notes on the same → staff position in that measure.

Ambitus

Note (or vocal) range used in a → staff. Used particularly in Early Music

Anacrusis

See → Pickup measure.

Anchor

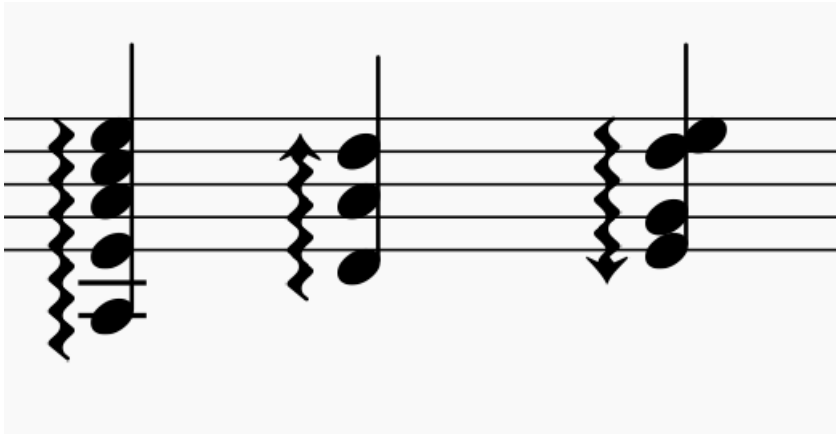
The point of attachment to the score of objects such as Text and Lines: When the object is dragged, the anchor appears as small brown circle connected to the object by a dotted line. Depending on the object selected, its anchor may be attached to either (a) a note (e.g. fingering), (b) a staff line (e.g. staff text), or (c) a barline (e.g. repeats).

Appoggiatura

A long → grace note which takes value from its associated note. Its functions include: passing tone, anticipation, struck suspension, and escape tone.

Arpeggio

An **arpeggio** tells the performer to break up the chord into the constituent notes, playing them separately and one after the other. An arrow on the arpeggio indicates the direction in which the player should play the notes of the chord.



**B**

Bar (BE)

See → measure.

Barline

Vertical line through a → staff, staves, or a full → system that separates → measures.

Beam

Notes with a duration of an → eighth ↗ or shorter either carry a → flag or a beam. Beams are used for grouping notes.

BPM

**Beats Per Minute** is the unit for measuring tempo, traditionally counted in quarter note durations. See → metronome mark

Breve

Brevis

A **double whole note** or **breve** is a note that has the duration of two whole notes.

**C**

Caesura

A **caesura** (//) is a brief, silent pause. Time is not counted for this period, and music resumes when the director signals.

Cent

An interval equal to one hundredth of a semitone.

Chord

A group of two or more notes sounding together. To select a chord in MuseScore, press **Shift** and click on a note. In the Inspector, however, the word "Chord" only covers notes in the same voice as the selected note(s).

Clef

Sign at the beginning of a → staff, used to tell which are the musical notes **on** the lines and **between** the lines. Clefs are very useful for → transposition.

## Concert pitch

Enables you to switch between concert pitch and transposing pitch (see [Concert pitch](#) and [Transposition](#)).

## Crotchet (BE)

See → [Quarter note](#).

## D

### Double Flat

A **double flat** ( $bb$  or  $\flat\flat$ ) is a sign that indicates that the pitch of a note has to be lowered two semitones.

### Double Sharp

A **double sharp** ( $\sharp\sharp$  or  $\sharp\sharp$ ) is a sign that indicates that the pitch of a note has to be raised two semitones.

### Demisemiquaver (BE)

A thirty-second note.

### Duplet

See → [tuplet](#).

## Dynamic

A symbol indicating the relative loudness of a note or phrase of music—such as *mf* (mezzoforte), *p* (piano), *f* (forte) etc., starting at that note.

## Dynamic. Single note

A dynamic marking which applies *only to one note*—such as *sfz* (sforzando), *fp* (fortepiano) etc.

## E

## Edit mode

The program mode from which you can edit various score elements.

## Eighth note

A note whose duration is an eighth of a whole note (semibreve). Same as a **quaver** (BE).

## Endings

See → [volta](#).

## Enharmonic notes

Notes that sound the same pitch but are written differently. Example:  $G\sharp$  and  $A\flat$  are enharmonic notes.

## F

### Flag

See → [beam](#).

## Flat

Sign ( $b$ ) that indicates that the pitch of a note has to be lowered one semitone.

## G

## Grace note

Grace notes appear as small notes in front of a normal-sized main note. See → [acciaccatura](#) and → [appoggiatura](#).

## Grand Staff (AE)

## Great Stave (BE)

A system of two or more staves, featuring treble and bass clefs, used to notate music for keyboard instruments and the harp.

## H

### Half Note

A note whose duration is half of a whole note (semibreve). Same as a **minim** (BE).

### Hemidemisemiquaver (BE)

A sixty-fourth note.

## I

## Interval

The difference in pitch between two notes, expressed in terms of the scale degree (e.g. major second, minor third, perfect fifth etc.). See [Degree \(Music\)](#) ↗ (Wikipedia).

## J

## Jump

In MuseScore, "jumps" are notations such as "D.S. al Coda", found in the "Repeats & Jumps" palette.

## K

## Key Signature

Set of → [sharps](#) or → [flats](#) at the beginning of the → [staves](#). It gives an idea about the tonality and avoids repeating

those signs all along the → [staff](#).

A key signature with B flat means F major or D minor tonality.

Koron

An Iranian → [accidental](#) which lowers the pitch of a note by a quarter tone (in comparison to the [flat](#) which lowers a note by a semitone). It is possible to use this accidental in a → [key signature](#).

See also → [Sori](#).

L

Longa

A **longa** is a **quadruple whole note**.

Ledger Line

Line(s) that are added above or below the staff.

M

Measure (AE)

A segment of time defined by a given number of beats. Dividing music into measures provides regular reference points to pinpoint locations within a piece of music. Same as → [bar](#) (BE).

Metronome mark

Metronome marks are usually given by a note length equaling a certain playback speed in [BPM](#). In MuseScore, metronome marks are used in [Tempo texts](#).

Minim (BE)

See → [Half note](#).

N

[Natural](#)

A natural (♮) is a sign that cancels a previous alteration on notes of the same pitch.

[Normal mode](#)

The operating mode of MuseScore *outside note input mode* or *edit mode*: press Esc to enter it. In **Normal mode** you can navigate through the score, [select](#) and move elements, adjust Inspector properties, and alter the pitches of existing notes.

[Note input mode](#)

The program mode used for entering music notation.

O

Operating System

OS

Underlying set of programs which set up a computer, enabling additional programs (such as MuseScore). Popular OSes are Microsoft Windows, macOS, and GNU/Linux.

Not to be confused with a sheet music → [system](#).

P

Part

Music to be played or sung by one or a group of musicians using the same instrument. In a string quartet, 1st part = Violin 1, 2nd part = Violin 2, 3rd part = Viola, 4th part = Cello, in a choir there might be parts for soprano, alto, tenor and bass. A part has one or more → [staves](#) (e.g. Piano has 2 staves, Organ can have 2 or 3 staves).

Pickup Measure (also known as an Anacrusis or Upbeat)

Incomplete first measure of a piece or a section of a piece of music. See [Measure duration](#) and [Create new score: Pickup measure](#). Also [Exclude from measure count](#)

Q

Quadruplet

See → [tuplet](#).

Quarter note

A note whose duration is a quarter of a whole note (semibreve). Same as a **crotchet** (BE).

Quaver (BE)

See → [eighth note](#).

Quintuplet

See → [tuplet](#).

R

Respell Pitches

Tries to guess the right accidentals for the whole score (see [Accidentals](#)).

Rest

Interval of silence of a specified duration.

### Re-pitch mode

Allows you to rewrite an existing passage of music by changing the note pitches without altering the rhythm.

## S

### Semibreve (BE)

A **whole note** (AE). It lasts a whole measure in 4/4 time.

### Semiquaver (BE)

A sixteenth note.

### Semihemidemisemiquaver (Quasihemidemisemiquaver) (BE)

An hundred and twenty eighth note.

### Sextuplet

See → [tuplet](#).

### Slash chord

See [Slash chord](#) ↗ (Wikipedia).

### Slash notation

A form of music notation using slash marks placed on or above/below the staff to indicate the rhythm of an accompaniment: often found in association with chord symbols. There are two types: (1) *Slash notation* consists of a rhythm slash on each beat: the exact interpretation is left to the player (see [Fill with slashes](#)); (2) *Rhythmic slash notation* indicates the precise rhythm for the accompaniment (see [Toggle rhythmic slash notation](#)).

### SFZ

A virtual instrument format supported by MuseScore (along with → [SoundFonts](#)). An SFZ library consists of one or more SFZ text files, each defining a particular instrument setup, and many audio sound samples.

### Sharp

Sign (#) that indicates that the pitch of a note has to be raised one semitone.

### Slur

A curved line over or under two or more notes, meaning that the notes will be played smooth and connected (*legato*).

See also → [tie](#).

### Sori

An Iranian → [accidental](#) which raises the pitch of a note by a quarter tone (in comparison to the sharp which raises it by a semitone). It is possible to use this accidental in a → [key signature](#).

See also → [Koron](#).

### SoundFont

A virtual instrument format supported by MuseScore (along with → [SFZ](#)). A **SoundFont** is a special type of file (extension .sf2, or .sf3 if compressed) containing sound samples of one or more musical instruments. In effect, a virtual synthesizer which acts as a sound source for MIDI files. MuseScore 2.2 comes with the SoundFont "MuseScore\_General.sf3" pre-installed.

### Spatium (plural: Spatia) / Space / Staff Space / sp. (abbr./unit)

The distance between the midpoints of two lines of a music staff (or one-quarter the size of the full five-line staff, assuming a hypothetical staff line thickness of 0). The sizes of most elements in the score are based on this setting (see [Page settings](#)).

### Staff (AE) / Staves (plural)

A set of lines and spaces, each representing a pitch, on which music is written. In ancient music notation (before 11th century) the staff may have any number of lines.

### Staff Space

See [Spatium](#) (above).

### Stave (BE)

See [Staff](#) (above).

### Step-time input

MuseScore's default [note input mode](#), allowing you to enter music notation one note (or rest) at a time.

### System

Set of staves to be read simultaneously in a score.

See also → [Operating System \(OS\)](#).

## T

### Tie

A curved line between two or more notes on the same pitch to indicate a single note of combined duration:

- Quarter note + Tie + Quarter note = Half note
  - Quarter note + Tie + Eighth note = Dotted Quarter note
  - Quarter note + Tie + Eighth note + Tie + 16th note = Double Dotted Quarter note
- See also → [slur](#).

### Transposition

The act of moving the pitches of one or more notes up or down by a constant [interval](#). There may be several reasons for transposing a piece, for example:

1. The tune is too low or too high for a singer. In this case the whole orchestra will have to be transposed as well —easily done using MuseScore.
2. The part is written for a particular instrument but needs to be played by a different one.
3. The score is written for an orchestra and you want to hear what the individual instruments sound like. This requires changing the transposing instrument parts to concert pitch.
4. A darker or a more brilliant sound is desired.

#### Triplet

See → [tuplet](#).

#### Tuplet

A tuplet divides its next higher note value by a number of notes other than given by the time signature. For example a → [triplet](#) divides the next higher note value into three parts, rather than two. Tuplets may be: → [triplets](#), → [duplets](#), → [quintuplets](#), and other.

## U

#### Upbeat

See → [pickup measure](#).

## V

#### Velocity

The velocity property of a note controls how loudly the note is played. This usage of the term comes from MIDI synthesizers. On a keyboard instrument, it is the speed with which a key is pressed that controls its volume. The usual scale for velocity is 0 (silent) to 127 (maximum).

#### Voice

Polyphonic instruments like Keyboards, Violins, or Drums need to write notes or chords of different duration at the same time on the same → [staff](#). To write such things each horizontal succession of notes or chords has to be written on the staff independently. In MuseScore you can have up to 4 voices per staff. Not to be confused with vocalists, singing voices like soprano, alto, tenor and bass, which are better viewed as instruments.

#### Volta

In a repeated section of music, it is common for the last few measures of the section to differ. Markings called *voltas* are used to indicate how the section is to be ended each time. These markings are often referred to simply as → [endings](#).

#### External links

- <http://www.robertcarney.net/musical-terms-definitions.htm> ↗
  - [https://en.wikipedia.org/wiki/List\\_of\\_musical\\_symbols](https://en.wikipedia.org/wiki/List_of_musical_symbols) ↗
-