NotePerformer

SUPERIOR NOTATION PROGRAM PLAYBACK

Contents

Getting Started

Getting started with NotePerformer

Installing NotePerformer on Mac OS X

Double-click the .dmg file (disk image) that you have previously downloaded from the Internet. This will open a folder with the installer found inside. Double-click the installer file to begin installation.

If you are unable to open the installer because "it is from an unidentified developer" please right-click (or Ctrl+click) the file and select "Open" from the popup menu. This will allow you to run the installer.

Please follow on-screen instructions. NotePerformer must be installed on your main drive, so there are no settings or choices to be made during installation.

You can at any time run the NotePerformer installer again, in case you need to repair the installation.

File locations on Mac OS X (for reference only)

NotePerformer's main plug-in file is stored in your systems' VST folder:

/Macintosh HD/Library/Audio/Plug-Ins/VST/

Additionally, there is a NotePerformer "Sound Set" file located in your user's library folder:

username/Library/Application Support/Avid/Sibelius 7.5/Sounds/

and a NotePerformer "Playback Configuration" file in:

username/Library/Application Support/Avid/Sibelius 7.5/Playback Configurations/

Sound Set and Playback Configuration locations are unique to each version of Sibelius, so the folders above only serve as an example. But NotePerformer automatically creates/recreates these files in the appropriate folders for different Sibelius versions, on first launch.

For technical support purposes, NotePerformer also logs its progress to the files *NotePerformer32.log* and *NotePerformer64.log* located in your user's Log folder:

username/Library/Logs/

Installing NotePerformer on PC

Double-click the .exe file (disk image) that you have previously downloaded from the Internet. This will begin installation.

You can at any time run the NotePerformer installer again, in case you need to repair the installation.

If installation fails (using Sibelius 7 or higher) please make sure that Avid's VstPlugins folder exists on your main drive, prior to installation:

C:\Program Files\Avid\VstPlugins

For Sibelius 6, the equivalent folder is

C:\Program Files\Sibelius Software\VstPlugins

The NotePerformer installer checks if these folders exists, and then installs NotePerformer for the appropriate Sibelius versions.

Please also make sure that the correct folder is set to be used for plug-ins in Sibelius (*Audio Engine Options* dialog, which is opened from the *Playback Devices* dialog).

If you are using a 32-bit version of Sibelius (such as Sibelius 6) on a 64-bit operating system, all 32-bit files go into the "Program Files (x86)" folder.

File locations on Windows PC (for reference only)

Apart from the VstPlugins folders mentioned above, NotePerformer also stores resource files into your 32-bit Program Files folder:

C:\Program Files (x86)\NotePerformer\

Additionally, there is a NotePerformer "Sound Set" file located in your user's Application Data folder:

%appdata%\Avid\Sibelius 7.5\Sounds\

and a NotePerformer "Playback Configuration" file in:

%appdata%\Avid\Sibelius 7.5\Playback Configurations\

Sound Set and Playback Configuration locations are unique to each version of Sibelius, so the folders

above only serve as an example. But NotePerformer automatically creates/recreates these files in the appropriate folders for different Sibelius versions, on first launch.

The Application Data folder in Windows is normally hidden. The easiest way to access this folder is to open *Windows File Explorer* and enter *%appdata%* into the search field. That will automatically take you to the correction location on disk.

For technical support purposes, NotePerformer also logs its progress to the files *NotePerformer32.log* and *NotePerformer64.log* located in your system's temporary folder:

%temp%

To access the temporary folder, please to open *Windows File Explorer* and enter *%temp%* into the search field. That will automatically take you to the correction location on disk.

Switching to NotePerformer playback in Sibelius

Use the "NotePerformer" Playback Configuration

Sibelius 7 or higher: open any score and go to the "Play" tab on the ribbon. The first item in this panel (all the way to the left) is named "Configuration".

Click on the "Configuration" icon. You will be asked to select what Playback Configuration to use. If all has gone well with the NotePerformer installation, you should see an option named "NotePerformer".

Select the "NotePerformer" Playback Configuration, wait for the library to load, and you are good to go.

Sibelius 6: you switch Playback Configuration from the *Playback Devices* dialog, found on the "Play" drop-down menu.

Different versions of Sibelius may have different ways of switching Playback Configuration. For detailed information, please see the documentation for your Sibelius software.

Support Topics

Frequently asked questions on how to use NotePerformer

As a NotePerformer user, we recommend you to read through this full chapter. It will take only a few minutes, and you will learn how to get the highest quality playback possible.

Getting new download links

How do I get new download links for my second computer?

If you have lost your installer, please go to the support section of the NotePerformer website. You will find a link to a page where you can get new download links by entering your e-mail address.

If you have saved your previously downloaded installer, you can simply run the same installer on your second computer. Our personal license allows you to use NotePerformer on up to three computers.

Required host program

NotePerformer requires Sibelius 6 or higher

In order to use NotePerformer, you must own a copy of Sibelius 6 or higher.

There is no other way to access the sounds but through Sibelius. You cannot use NotePerformer with a VST or AU sequencer music program.

If you use Sibelius 7.0.0, you normally need to update to the latest version (7.1.3) in order to use NotePerformer.

Earlier versions of Sibelius cannot run NotePerformer. If you are using Sibelius 5 or earlier and want to use NotePerformer, you must purchase an upgrade from Avid to the latest version of Sibelius.

As for now, no other notation programs are compatible with NotePerformer.
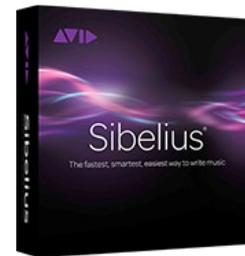
Cannot open installer (Mac only)

How to install NotePerformer on OS X Mountain Lion or higher

When installing NotePerformer on Mountain Lion, you may encounter an error message saying the installer cannot be opened because "it is from an unidentified developer", or because "it was not downloaded from the Mac App Store".

This is because you are using Gatekeeper, a feature in OS X Mountain Lion protecting you from installing unwanted programs by mistake.

To get around this restriction, right-click (or ctrl + click) on the installer and select "Open". You will then be offered to open the NotePerformer installer even though Gatekeeper is active.

Installed but nothing seems to work

Make sure that NotePerformer is listed under "Available devices"

Please open the "Playback Devices" panel. In Sibelius 7 this is accessed by clicking the small arrow shown to the bottom right in the image below. This is located on the ribbon, on the "Play" panel, to the far left.

Clicking that arrow should bring up a new window, looking like the one in the image below.
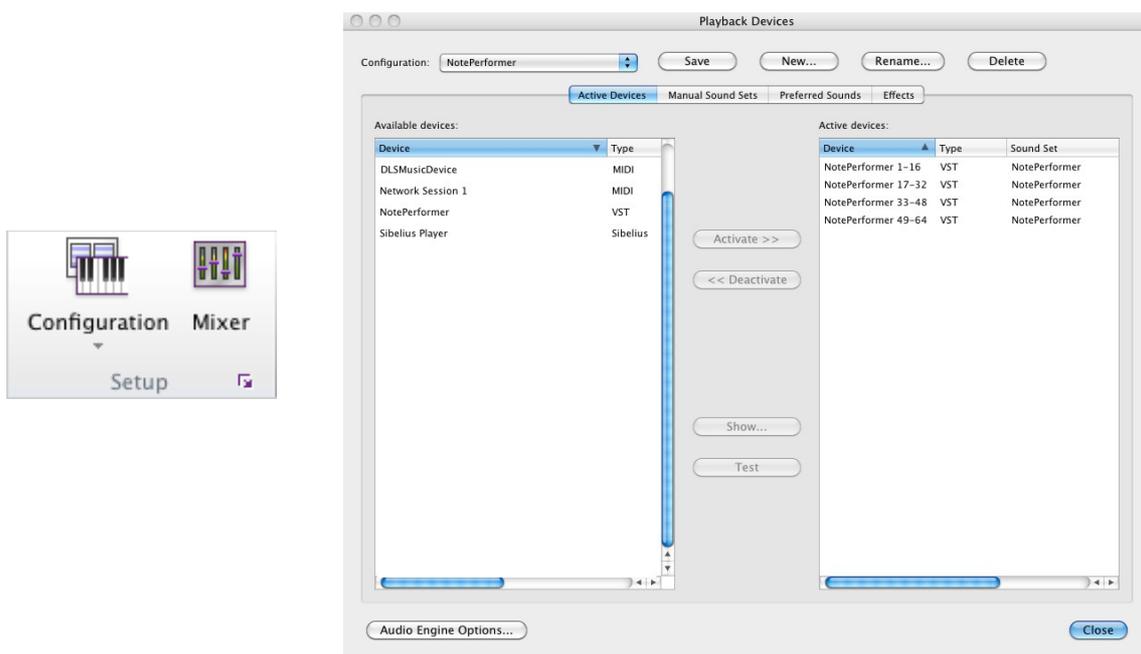
When all is working it should look similar to the image above. In the left the left column, the one labeled "Available devices", there is an entry named "NotePerformer", of type "VST". This means that Sibelius has identified an audio plugin called NotePerformer, and the plugin communicates with Sibelius through a format known as VST.

If there is no "NotePerformer" entry in the left column, this means Sibelius is unable to load NotePerformer.

The most common cause for this is on Mac when using an early release of Sibelius 7, such as Sibelius 7.0.0, which doesn't work with VST plugins but only AU plugins, due to a bug in Sibelius which was fixed in a free update. Sometimes switching to 32-bit mode helps, but normally this can only be resolved by downloading the latest free Sibelius 7 update, which is 7.1.3.

I only get trumpet sounds/the wrong sounds

You have deactivated "Send program changes" in Sibelius Playback Preferences

NotePerformer relies on MIDI messages to assign instruments and sounds.

Go to Preferences->Playback in Sibelius, and make sure that the option "Send program changes" is selected.
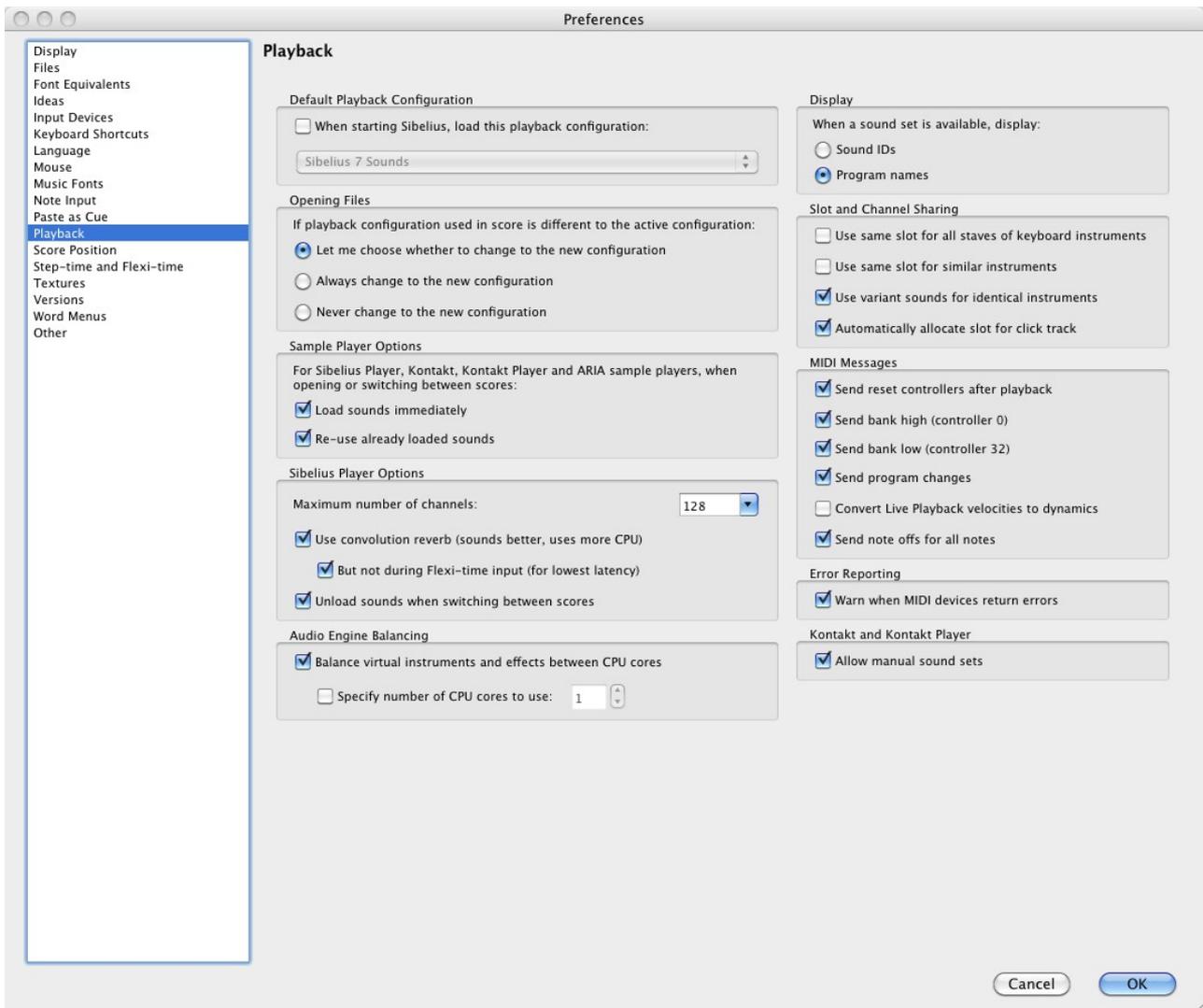
Unable to do live recording

Real-time record is not compatible with NotePerformer

There is no latency with NotePerformer when editing your score and playback is stopped.

But in order to read ahead and analyze your score, NotePerformer adds one second of latency (delay) during playback. This latency unavoidably added also during recording.

This makes real-time recording impractical to use when NotePerformer is the current playback device.

If you need to do live recording with Sibelius, you can temporarily switch over to another Playback Configuration, such as General MIDI, and then switch back when you've finished recording.

Rewire – problems with timing

No known workaround.

You may experience severe timing problems using NotePerformer inside Sibelius in Rewire mode.

This is because NotePerformer requires considerable latency compensation in order to read-ahead in your score.

Unfortunately, automatic latency compensation does not seem to work with any of the Rewire configurations we've tried with Sibelius.

Instruments being too loud/low in volume.

Reset all mixer levels.

Make sure your mixer levels in Sibelius are reset. Open the mixer in Sibelius, and double-click all the volume sliders, one-by-one, to reset them to a common value of 95.

When creating a new score in Sibelius, the mixer levels are always scrambled. This is because the instrument definitions in Sibelius do not specify the same default volume. So we recommend doing this every time you begin a new score.

With NotePerformer you should use the same volume for all instruments in the mixer, as a starting point.

Typical default instrument volumes in Sibelius 7. Double-click all sliders to reset to 95.

Changing the global reverb level.

Found under "Performance" settings in Sibelius.

To change the global reverb level, open Performance settings in Sibelius.
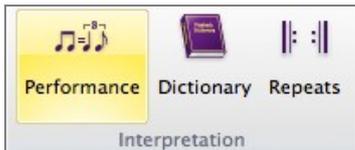
The checkbox labeled "Use reverb" should always be ticked even if you do not want reverb. If you untick this checkbox it only results in you being unable to change NotePerformer's reverb level at all.

Next to the checkbox you can change the global reverb level, ranging from dry to cathedral, where cathedral is the highest possible setting. By increasing this setting the orchestra will sound like it's further away from you.
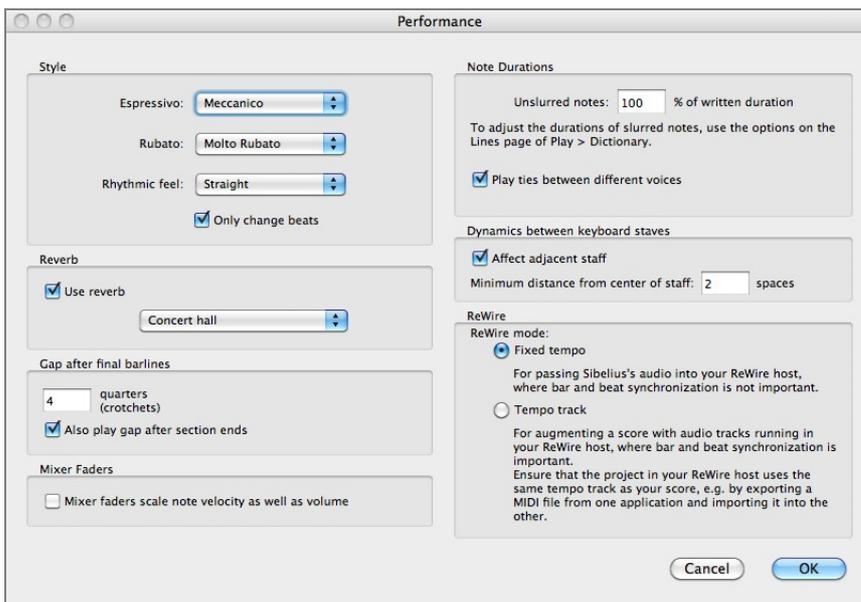
Performance settings in Sibelius 7.

Notes are uneven in dynamics.

Turn off Live Playback and Espressivo.

Turn off Live Playback in Sibelius. This is done either from the Sibelius ribbon, or the transport.

Also, open Performance settings and change the "Espressivo" setting to Meccanico.
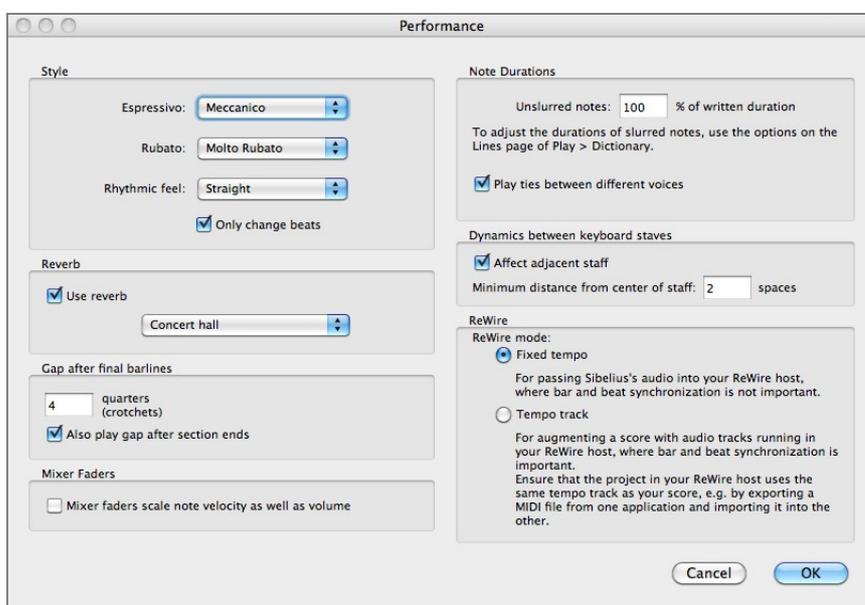
Both these features make Sibelius add its own pass of expression, but do not work so well with NotePerformer. By turning them off you usually get a smoother and more balanced performance using NotePerformer. So we recommend turning these features off, as a starting point, to make sure that the dynamics you hear is also the dynamics you write.

In more recent versions of Sibelius you also have the option to use "Espressivo 2", which is a much improved algorithm. Although the our recommendation would still be to turn this off for orchestral works, or for proof-listening dynamics, it can improve overall playback of small ensemble works such as string quartets.

Audio is stuttering/crackling.

Look into your soundcard, drivers and audio buffer size.

At the core of NotePerformer there is an advanced audio software that requires a fair bit of CPU. But with that said, a modern system should be able to playback complex orchestrations in real-time with a high enough audio buffer size.

You may be able to solve problems with stuttering audio simply by increasing your audio buffer size, found underAudio Engine Options in Sibelius. This should always be your first step.

A larger buffer size will be much easier on your computer. However, when you enter notes there will be a longer delay between pressing the key and hearing the sound (latency).
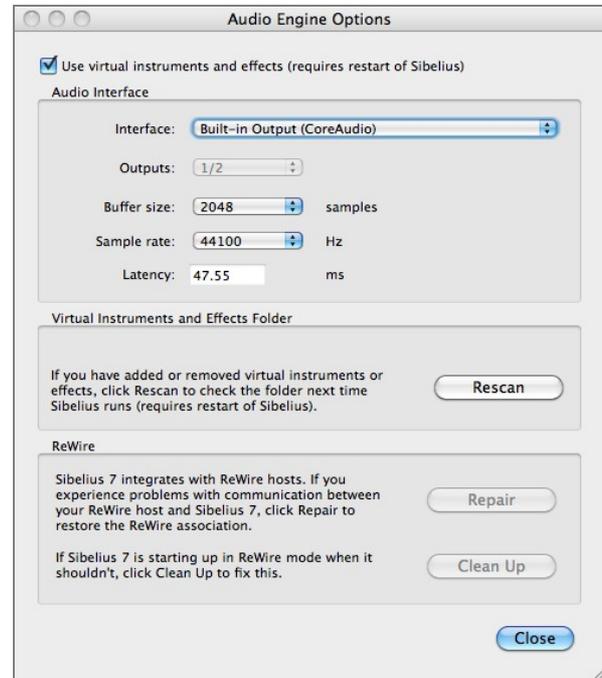
Since NotePerformer is not suitable for live performance or recording anyway (see "Unable to do live recording") the recommendation is to use as large buffer size as you are comfortable with. 2048 samples or higher will make things easier for your computer, if you are fine with that latency.

You may also want to look into what your sample rate setting is. A sample rate of either 44100 Hz (CD quality) or 48000 Hz (film quality) is advisable

Audio Engine Options is found in Sibelius 7 under Play ^ Setup ^ Audio Engine Options.

On PC, if you use your computer's built-in soundcard you may be able to improve performance by installingASIO4ALL, a popular and free soundcard driver optimized for music computers. It shows up as a new "Interface" (see image) in Sibelius, once installed. Having a good soundcard with proper ASIO drivers may additionally help improving audio performance.

For more detailed instructions, please follow Avid's guidelines for improving Sibelius' audio performance. Please note that this is an issue only related to real-time audio playback in Sibelius. You can always export your music as an audio file to your harddrive, even on slower computers, allowing you to hear your music without stutters.

Accent/marcato/tenuto not working as expected.

Add dictionary entries for +accent, +marcato and +tenuto.

In some of Sibelius's included House Styles – in particular the House Styles from Sibelius 6 – there are no +accent and/or +marcato sound ID dictionary entries added for accent and marcato articulations. When the entries are missing, the entire note's dynamics is changed, not just the attack.
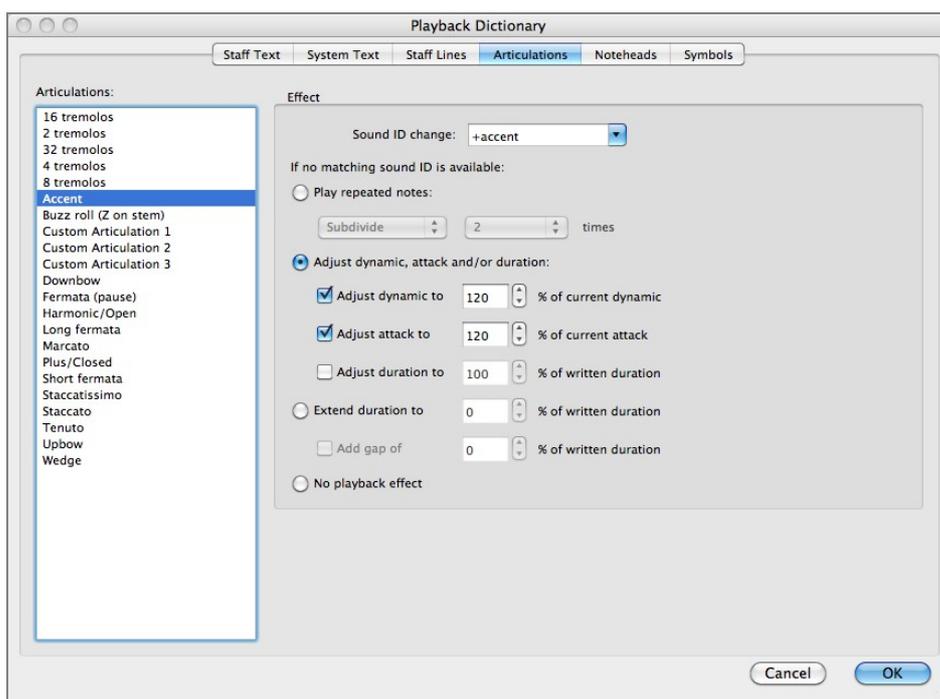
If that is the case for your project, you may need to add these entries manually to your dictionary. You could also load a newer House Style including these entries, but it may be just as easy to add them manually.

The accent and marcato dictionary entries are found in the "dictionary" in Sibelius, under "articulations". Add +accent and +marcato to the "Sound ID change" field of these two articulations, respectively.

Please note that when writing for unpitched percussion, Sibelius ignores the Sound ID field for accents and marcato. Instead it uses the values specified for changing the entire note's dynamics. So if you want to change the impact accents and marcato have on percussion dynamics, you must tweak the values below for "Adjust dynamic, attack and/or duration". The "attack" controller is not used by NotePerformer and can be ignored. Only the "dynamic" controller is used.

Overlapping/nested slurs not playing back legato.

Currently unsupported by Sibelius

If you end a slur on a note and immediately begin a new slur from the same note, Sibelius may choose to ignore the second slur in playback.

Similar problems can occur when you put a slur inside another slur.

The solution is to avoid notating this way if you need accurate legato playback. Use a single continuous slur to indicate legato.
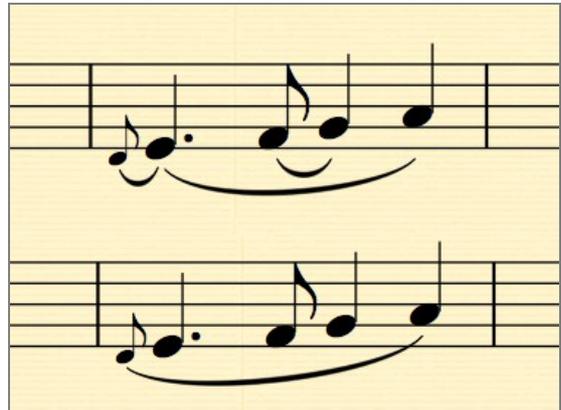
Included Sounds

List of instruments and techniques supported by NotePerformer

Introduction to sounds in NotePerformer

How instruments are assigned

Most instruments in NotePerformer are assigned completely automatically.

However, there are a few exceptions, as some instruments currently lack an instrument definition in Sibelius. These sounds that can be assigned either from the mixer, or by changing the sound settings in the instrument definition yourself.

Assigning instruments from the mixer

Press "M" on your keyboard to open the mixer.

It's recommended that you learn to find your way around the mixer. Try clicking the buttons, as you will need to click a few buttons to fully expand the mixer, and reveal the options for assigning instruments.

With the mixer properly expanded, you should be able to see a field where the instrument name is displayed for each staff. If you click this field, you should be presented with a list of all the instruments in NotePerformer (unpitched percussion excluded). Please select the instrument of your choice.

If you have a very large score, switching instruments from the mixer can sometimes provide you with the wrong sound...

When that happens, locate the other text fields next to the name (they will often say "Ch. 2" and "(N. 1-16)" or similar) and set both these fields to "(auto)". That should resolve it.

The technical reason why this happens is that manually selected sounds in Sibelius will automatically be assigned to one of the first 16 MIDI channels, but these could already be occupied by your other staves.

Switching between unmapped sounds in the middle of a score

You may want to switch between organ stops or unmapped sounds/articulations (such as bowed percussion) in the middle of a score, in which case assigning instruments from the mixer will not work.

To resolve this, you must make your own instrument definition/staff in Sibelius (select a suitable built-in instrument and click "New instrument" to make a copy of it) and then override the default sound. When done correctly, you will end up with multiple instrument types in the Sibelius instruments librarythat each have a different default sound assigned. You can now reliably switch

between these sounds in the middle of a score, by using "Instrument change".

This technique is appropriate for switching between bowed/mallet percussion or other unmapped sounds. If you want to change organ or accordion registration in the middle of a score, you should instead learn how to use MIDI CC 103, described in the chapter on MIDI controllers.

General notes on using NotePerformer's sounds

There are a few things you want to be aware of, in order to fully utilize NotePerformer:

- Occasionally you may find that Sibelius is not assigning the right sound for a staff. First step of action should always be to open and expand the mixer, locate the instrument staff, and reset the instrument by manually selecting the value "(auto)" for *Plug-in* (e.g "NotePerformer 1-16"), *MIDI channel*, and I*nstrument*. The next time you start playback Sibelius will repopulate that instrument.

- To get a proper drum set with sticks, please use any drum set except the "Drum Set (Rock)" or the "Drum Set (Brushes)" staff. The rock staff will give you orchestral percussion sounds.

- To get the drum set with brushes, please use the "Drum Set (Brushes)" staff.

- If the drum set is not mapped properly (e.g. the snare drum may sound like a side stick) there are several things you must consider. Firstly, if you are working with an older score, please make sure that you are using an up-to-date House Style in Sibelius with the appropriate drum set mapping. If you import a new House Style, you may need to create a new staff with an up-to-date instrument definition, and copy the music from old staff over to the new staff. Also, please locate the drum set staff in the mixer, click the instrument name and MIDI channel and assign them both to (auto) to make sure the instrument type has not been overridden.

- Individual organ stops can be assigned from the mixer. If you wish to change organ registration in the middle of a score, you must learn how to use MIDI CC 103, described in the chapter on MIDI controllers.

- Accordion is assigned the same way as the organ (see above). It contains multiple stops, as well as a separate left/right hand instrument for both the accordion and the bandoneon.

- Bowed percussion must be assigned from the mixer, or using custom instrument definitions for real-time change between bow and mallets. The "arco" keyword will unfortunately not work, as this Sound ID is reserved exclusively for going back from +pizz for strings.

- There are two types of theremins included: a modern theremin (sine wave) and a more classical theremin (tube type, having more overtones). By default the modern theremin is used, but the classical one can be assigned from the mixer.

- Eb clarinet and Basset-horn are by default assigned to the regular Bb clarinet sound, by Sibelius. This can be overridden from the mixer to get a proper Eb clarinet or Basset-horn sound from NotePerformer.

- There are several unpitched percussion instruments in NotePerformer that are not mapped to any percussion staff in Sibelius, for example opera gongs and wind gong. If you want to use unpitched percussion sounds which aren't mapped by Sibelius, you must create your own instrument definition (or override an existing one) and map the sound manually to the notehead of your choice, from the menu *Edit Instrument->Edit Staff Type* in Sibelius.

- NotePerformer's string orchestra has the size 8-8-6-6-4 (see divisi technology, below). Section sizes can be overridden (1 to 8 players) using MIDI CC 104, described in the chapter on MIDI controllers.

- When splitting a string section over two staves, there are dedicated 1/2 section instruments in NotePerformer which can be assigned from the mixer. By using these instruments, half the section will play on the upper staff, and the other half on the lower staff. For example, the cello section consists of 6 players, and using the split staff technique with 1/2 section sounds you will have 3 players on the upper staff and 3 players on the lower staff, without phasing problems.

Section strings divisi technology

Starting from version 1.4.0 of NotePerformer, the section strings sounds are created from stacking solo players in real-time. So when adding a Violins staff, there are actually 8 different samples sounding at the same time, corresponding to the different players of the section.

In order to make this technology manageable for a home computer's CPU, NotePerformer uses a small/medium sized string setup of 8-8-6-6-4 players, where chords are automatically played divisi. Various section sizes were tested extensively during development, and it was found that increasing the section sizes additionally did not have any significant impact on the timbre.

Solo strings

Starting from version 1.5.0, NotePerformer contains both "soloist" and "section member" solo strings. The soloists have a dynamic range and volume more appropriate for soloists or string quartet works, while the section members should be used if you want to do string section building with a separate staff for each player. Besides these differences in volume and dynamic range, the instruments are the same.

There are two reasons for NotePerformer containing separate versions of the same solo string instruments. The first reason is that a soloist or string quartet is usually seated in a position which is more audible to the audience, and have thus been given a slightly higher volume. The second reason is that a section member must play with a force considerably lower than a soloist in order for a section

to jointly produce a soft dynamic such as *pp* or *ppp*, as each player's volume is added up. Approaching it from the opposite direction, a soloist or quartet player would compensate for being in his or her own, by playing the lower dynamics a with greater force, in order to be heard on an orchestral setting. To sum it up, the section member instruments in NotePerformer have a greater dynamic range, or more specifically they play the lower dynamics much more softly, than NotePerformer's soloist instruments.

The solo string sounds in NotePerformer uses the exact same players as the sections. So adding eight "section member" violin staves can be used for building a violin section where you control each individual player.

Woodwinds

Flutes

Flute
Piccolo flute
Alto flute
Bass flute

Oboes

Oboe
English horn
Oboe d'amore

Clarinets

Clarinet
Bass clarinet
Eb-clarinet
Contrabass clarinet
Basset-horn

Bassoons

Bassoon
Contrabassoon

Saxophones

Sopranino saxophone
Soprano saxophone
Alto saxophone
Tenor saxophone
Baritone saxophone
Bass saxophone

Recorders

Garklein recorder
Sopranino recorder
Soprano recorder
Alto recorder
Tenor recorder

Bass recorder

Great bass recorder

Contrabass recorder

Woodwinds techniques

+ legato

+ staccato

+ staccatissimo

+ vibrato

+ vibrato.heavy

+ non vibrato

+ accent

+ marcato

+ tenuto

+ flutter-tongue

+ mezzo-staccato (tenuto+staccato)

+ portato (tenuto+legato)

Brass

Trumpets

Trumpet

Piccolo trumpet

Bass trumpet

Cornet

Soprano cornet

Flugelhorn

Trombones

Trombone

Bass trombone

Alto trombone

Cimbasso

Horns

French horn

Wagner tuba

Tubas

Tuba

Euphonium

Alto horn/Tenor horn

Baritone horn

Brass techniques

+ legato

+ staccato

+ staccatissimo

+ vibrato

+ vibrato.heavy

+ non vibrato

+ accent

+ marcato

+ tenuto

+ flutter-tongue

+ mezzo-staccato (tenuto+staccato)

+ portato (tenuto+legato)

+ mute.straight

+ mute.cup

+ mute.bucket

+ mute.harmon

+ mute.plunger

French horns only

+ mute (stopped)

Strings

Violins

Violin section (auto-divisi)

Violins 1/2 section (auto-divisi)

Solo violin

Violas

Viola section (auto-divisi)

Violas 1/2 section (auto-divisi)

Solo viola

Cellos

Cello section (auto-divisi)

Cellos 1/2 section (auto-divisi)

Solo cello

Contrabasses

Contrabass section (auto-divisi)

Contrabasses 1/2 section (auto-divisi)

Solo contrabass

Plucked strings

Harp

Guitars

Classical guitar

Steel-string guitar

Mandolin

Banjo

Ukulele

Electric guitar

Basses

Electric bass

Upright bass

Bowed strings techniques

+ pizzicato

+ snap pizzicato

+ col legno

+ mute

+ sul tasto

+ legato

+ staccato

+ staccatissimo

+ vibrato

+ vibrato.heavy

+ non vibrato

+ accent

+ marcato

+ tenuto

+ mezzo-staccato (tenuto+staccato)

+ portato (tenuto+legato)

+ spiccato (staccato+legato)

+ harmonic

Guitar & electric bass effects

+ pizzicato

+ fuzz

+ overdrive

+ distortion

+ metal

+ chorus

+ flange

+ phase

+ wah-wah

+ harmonic

Bass special techniques

+ slap

Miscellaneous

Keyboards
Piano

Harpsichord

Celesta

Pipe Organ

Vocals (ah, oh)
Sopranos

Altos

Tenors

Basses

Solo soprano

Solo alto

Solo tenor

Solo bass

Miscellaneous
Accordion

Bandoneon

Harmonica

Theremin (modern)

Theremin (tube)Drum percussion
Timpani

Taiko

Metal percussion
Glockenspiel

Glockenspiel (bowed)

Chimes

Chimes (bowed)

Crotales

Crotales (bowed)

Vibraphone

Vibraphone (bowed)

Wood percussion

Xylophone

Xylophone (bowed)

Marimba

Marimba (bowed)

Drum kit (jazz kit and brushes kit)

Kick drum

China cymbal

Cowbell

Crash cymbal (suspended)

Hi-hat

Ride cymbal

Splash cymbal

Snare drum

Tom-toms

Unpitched percussion

Agogo bells

Anvil

Bass drum

Bongos

Cabasa

Castanets

China cymbal

Clash cymbals (medium)

Clash cymbals (small)

Claves

Congas

Cowbells

Crash cymbal (suspended)

Egg shaker

Finger cymbals

Guiro

Hi-hat

Maracas

Opera gongs

Ratchet

Ride cymbal

Sleigh bells

Splash cymbal

Snare drum

Tam-tam (large)

Tam-tam (medium, 18")

Tambourine

Tom-toms

Triangle

Timbales

Vibraslap (Jawbone)

Wind chimes (Mark tree)

Wind gong

Wood block

Whip

Whistle

MIDI Controllers

Using MIDI CC controllers for further controlling playback (advanced)

Using MIDI CC values for advanced features

Introduction

This chapter describes the advanced topic of using MIDI CC values to access some special features of NotePerformer, which cannot be controlled directly from the notation program or score. If you need help using CC values in Sibelius, beyond what is covered in this document, please consult the Sibelius documentation ("Play" chapter) or contact Sibelius support.

The MIDI CC features of NotePerformer are highly experimental. They may be subject to change in the future, and should not be heavily relied upon. These settings are only provided as an experimental means to access certain power features which are not yet readily available from Sibelius. Only if you know how MIDI messages works should you attempt to use these features, as MIDI messages in a score can also have adverse effects on playback.

You are strongly advised NOT to use other CC messages in the score, as this may negatively impact articulation switching and/or override settings made in the Sibelius mixer without you knowing it.

MIDI messages in Sibelius

In Sibelius, a ~C technique stands for CC value. To send a MIDI message to the current playback device, you would add the technique text ~C followed by the MIDI CC number, and the MIDI CC value, comma separated.

So if you for example wanted to send the value 58 to MIDI CC controller 104 somewhere in your score, you would add the technique text ~C104,58. MIDI CC messages are also staff dependent, meaning they must be attached to the correct staff just like dynamics or regular text techniques.

Special controllers in NotePerformer use the range MIDI CC 102-119 (which are undefined by the MIDI standard). As for now, the MIDI CC controllers available to NotePerformer are:

- CC 102: Global tuning (e.g. 440 Hz).

- CC 103: Pipe organ/accordion registration.

- CC 104: Unisons, or section size (e.g. a2, a3, ...).

- CC 105: Vibrato amount.

- CC 106: Vibrato rate.

- CC 107: Pop attacks.

MIDI CC 102: Global tuning

CC 102 can be used to override the global tuning of NotePerformer. By default the global tuning is 440 Hz.

Please note that this is a global setting which is resistant even to switching scores. So if you have a score which sets NotePerformer's tuning to 443 Hz, the tuning will stay at 443 Hz until you change it back. This means, even if you close the current score and open another score. If you restart Sibelius, however, the tuning will go back to the default 440 Hz.

The value of this message specifies the number cents the tuning should deviate from 440 Hz, where a CC value of 64 is the center/zero value. The only exception is the value 0, which also resets the tuning to 440 Hz. So both the value ~C102,64 and the value ~C102,0 will set the tuning to 440 Hz.

To calculate what CC value to use for a tuning, one can use the formula:

$12*log2(X/440)*100 + 64$

where X is the sought after tuning in Hz. But for reference, here is a list of CC values and their corresponding tuning:

- 445 Hz: ~C102,84

- 444 Hz: ~C102,80

- 443 Hz: ~C102,76

- 442 Hz: ~C102,72

- 441 Hz: ~C102,68

- 440 Hz: ~C102,64

- 439 Hz: ~C102,60

- 438 Hz: ~C102,56

- 437 Hz: ~C102,52

- 436 Hz: ~C102,48

- 435 Hz: ~C102,44

MIDI CC 103: Pipe organ/accordion registration

Pipe organs and most types of accordions have multiple registrations, which you can switch on/off to control the timbre.

Because NotePerformer reproduces these sounds in a similar manner, with individually sampled registers, one can also turn on/off the individual stops in NotePerformer. This can be done programmatically from the score using MIDI messages.

Please note that this is an advanced topic, and you should know how MIDI messages and MIDI CC (Continuous Controllers) work before attempting it.

To turn registrations on or off, one uses MIDI CC 103 to specify exactly which registers are to be active from a given point in the score (for those familiar with bytes and bits, the seven bits in the CC value controls the registers in the instrument).

To determine which CC value to use to achieve a certain combination of registers, each register must be given a "register value". In order to explain how this works, lets have a look at the register table for "Pipe organ (great)":

Pipe organ - Great	Value
Principal 8'	1
Gedackt 8'	2
Trumpet 8'	4
Viola da gamba 8'	8
Octave 4'	16
Chimney flute 4'	32
Octave 2'	64

When entering a registration, you first decide which registers are to be used. Then, locate these registers in the table above and *add together their values* to get the appropriate CC value. So the CC value to send to MIDI CC 103 is the sum of the values of the register you want to use.

For example, you want a sound with the registers Principal 8', Trumpet 8' and Octave 2' (but no other registers). Looking at the table, their values are 1, 4 and 64, respectively. Adding these values together gives us 1+4+64=69. So the MIDI CC value for this registration is 69. If you want this combination of registers, you add the technique text ~C103,69 to the score.

To reset the instrument and go back to full stops, please send a CC value of 0 to the instrument (the technique text ~C103,0).

In Sibelius, pipe organs and accordions usually need to be assigned from the mixer to get the right variant (great/swell/pedal or left hand/right hand for accordions). Please note that you must select the *full stops* variant of the sound if you want to do dynamic registration.

A full reference of the stops in NotePerformer is found below.

Pipe organ - Great	Value
Principal 8'	1
Gedackt 8'	2
Trumpet 8'	4
Viola da gamba 8'	8
Octave 4'	16
Chimney flute 4'	32
Octave 2'	64

Pipe organ - Swell	Value
Fugara 8'	1
Oboe 8'	2
Chimney flute 8'	4
Diapason 4'	8
Spire flute 4'	16
Flute 2'	32

Pipe organ - Pedal	Value
Sub bass 16'	1
Trombone 16'	2
Octave 8'	4
Gedackt 8'	8
Octave 4'	16

Accordion - Right hand	Value
Bass	1
Treble	2

Accordion - Left hand	Value
Bass	1
Treble	2

MIDI CC 104: Unisons

CC 104 can be used to emulate "a2", "a3", ... on a staff.

This parameter affects both string sections as well as solo brass, woodwind and string staves.

To use this feature you add the technique text ~C104,X, where X is a number between 0 and 8 specifying the section size. If you, for example, want to produce an a2 sound (X = 2) you add the technique text ~C104,2.

The maximum section size is eight players, which means that the highest accepted value for this parameter is 8 (technique text ~C104,8).

A value of zero (technique text ~C104,0) is used to turn this feature off and return to normal playback.

When used with string sections, CC 104 may be used to override the number of members in the section. This is useful if you want to create differently sized sections than NotePerformer's default string layout which is 8-8-6-6-4.

[Please note, if you want to alternate between a string section and a *soloist* it is recommended to use regular instrument change in the score instead of CC 104. The reason is, the individual solo string patches have a better solo string sound, and a dynamic range adapted for soloist playing or quartets.]

When used with brass or woodwinds, CC 104 may be used to produce a section sound without having to duplicate notes or staves. You may have up to eight players on a staff, meaning the highest accepted value is 8, producing an "a8" sound.

The sections created with CC 104 also have built-in divisi. If you, for example, employ "a3" on a horn staff using ~C104,3, the three players will not only play three-note unisons for single notes but they will also intelligently divide when encountering two or three note chords.

Please keep in mind that this setting only changes the playback sound, as it is an internal setting in NotePerformer. Changes are not reflected in your printed parts.

MIDI CC 105: Vibrato amount

CC 105 can be used to override the vibrato amount. It is only applicable when an instrument actually uses vibrato to begin with.

A value of zero (technique text ~C105,0) resets the vibrato amount to the instrument's/staff's current default.

To use this feature you add the technique text ~C105,X to a staff in your score, where X is a value of your choice between 1 and 127.

The vibrato is scaled by the value (X - 1)/63. At the highest setting (X = 127) the vibrato is doubled in depth. At the lowest setting (X = 1) there is no vibrato. At the center value (X = 64) the vibrato is not scaled at all.

Please note, the primary way of controlling vibrato is to use the "vib", "non vib" and "molto vib" techniques in your score, as these techniques are universally known and also communicated to a real performer reading your score. CC 105 only introduces an additional override which may be used for artistic reasons.

MIDI CC 106: Vibrato rate

CC 106 can be used to override the vibrato rate. It is only applicable when an instrument actually uses vibrato to begin with.

A value of zero (technique text ~C106,0) resets the vibrato rate to the instrument's default.

To use this feature you add the technique text ~C106,X to a staff in your score, where X is a value of your choice between 1 and 127.

The vibrato rate is scaled by the value $(X - 1)/63$. At the highest setting ($X = 127$) the vibrato is doubled in speed. At the lowest setting ($X = 1$) vibrato rate is zero. At the center value ($X = 64$) the vibrato rate is not scaled at all.

Please note, for many instruments such as strings, brass and woodwinds, the vibrato rate is contextual. In this case the vibrato rate CC will act only as a guide for the performer, to aim for a faster or a slower choice of vibrato. But the exact vibrato rate will be determined by NotePerformer and may vary with the musical context.

MIDI CC 107: Pop attacks

The technique text ~C107,1 turns on "pop attacks" for an instrument (~C107,0 turns it off).

While orchestral players typically vary the attack time from note-to-note, this is not applicable to any style of music. For example, pop, rock and jazz is often performed with rapid or even accentuated attacks throughout. This flag is an instruction for the performer to put more energy into the attack portion of the note, playing the music more in the style of a pop musician than a classical musician.

This feature is only applicable for brass, woodwinds and strings.

System Requirements

Minimum and recommended requirements on Mac and PC

Minimum requirements

Mac

- Sibelius 6 or higher,
- 2 Gigabyte RAM memory,
- Mac OS X Leopard (10.5),
- Intel Core™ 2 Duo, 2.0 GHz, or equivalent CPU,
- 1.5 GB free space on your main hard drive.

PC

- Sibelius 6 or higher,
- 2 Gigabyte RAM memory,
- Microsoft Windows XP,
- Intel Core™ 2 Duo, 2.0 GHz, or equivalent CPU,
- 1.5 GB free space on your main hard drive.

Recommendations

Mac

- Sibelius 7 (64-bit) or higher,
- 4 Gigabyte RAM memory,
- Mac OS X Snow Leopard (10.6) or higher,
- Intel Core™ i5, 1.8 GHz, or faster CPU,
- 1.5 GB free space on your main hard drive.

PC

- Sibelius 7 (64-bit) or higher,
- 4 Gigabyte RAM memory,
- Microsoft Windows 7 or higher,
- Intel Core™ i5, 1.8 GHz, or faster CPU,
- 1.5 GB free space on your main hard drive.

Files and Folders

Automatic installation

NotePerformer installation should normally be effortless. You simply launch the installer, and follow the instructions.

In case you want to uninstall NotePerformer from your system, or need to know what files are included, this chapter describes the files that are installed and used by NotePerformer.

If you fail to install on PC, please make absolutely sure that the following folder exists, prior to running the installer:

C:\Program Files\Avid\VstPlugins

Also make sure that this folder is setup as your plug-ins folder, under "Audio Engine Options" in Sibelius.

The NotePerformer plug-in file on PC

Sibelius 6

Sibelius 6 uses its own folder for VST plug-ins, located at:

C:\Program Files (x86)\Sibelius Software\VstPlugins

If you choose to install NotePerformer for Sibelius 6, this is the folder where the NotePerformer plug-in is installed.

If you are using a 64-bit version of Windows, all 32-bit applications such as Sibelius 6 are installed to a folder named "Program Files (x86)" instead of the regular "Program Files".

Sibelius 7 or higher, Windows 64-bit

More recent versions of Sibelius have both 32-bit and 64-bit folders for VST plugins (when using a 64-bit operating system) located at:

C:\Program Files (x86)\Avid\VstPlugins

and

C:\Program Files\Avid\VstPlugins

For 32-bit and 64-bit plug-ins, respectively.

If you choose to install NotePerformer for Sibelius 7 or higher, two different versions of NotePerformer will be installed. A 32-bit version in Sibelius's 32-bit plug-ins folder, and a 64-bit version in Sibelius's 64-bit plug-ins folder.

Sibelius 7 or higher, Windows 32-bit

If you are using a 32-bit operating system, there is only one folder for plug-ins:

C:\Program Files\Avid\VstPlugins

This is where the 32-bit version of NotePerformer is installed.

A 32-bit operating system cannot use 64-bit software, so only the 32-bit version is installed.

NotePerformer's resource files

NotePerformer installs resource and documentation files to the folder:

C:\Program Files (x86)\NotePerformer

The files in this folder are required for NotePerformer to function, but can be deleted if you at any point wish to uninstall NotePerformer entirely from your system.

The NotePerformer plug-in file on Mac

All versions of Sibelius

On Mac, there is a system folder used for all VST plug-ins. This is also where NotePerformer is installed. The folder is located at:

Macintosh HD / Library / Audio / Plug-Ins / VST

When you install NotePerformer, the plug-in is installed to the folder above. The file is named "NotePerformer.vst" and is a Universal Binary supporting both 32-bit and 64-bit versions of Sibelius.

Sound Set and Playback Configuration

Location of folders

Sibelius's folders for Sound Sets and Playback Configurations vary with each version of Sibelius. As a general rule, the files are found in a Sibelius folder located within your user's folder. For the exact location, please follow Avid's guidelines on Sound Sets for Sibelius.

How to revert to the original Sound Set/Playback Configuration

NotePerformer automatically creates (spawns) a Sound Set and Playback Configuration in the appropriate Sibelius folders, at Sibelius startup.

If you edit or overwrite NotePerformer's Playback Configuration by accident, you may simply delete it from the Playback Devices dialog and restart Sibelius to go back to the original version.