The Note Attached Bracket plugin

Bob Zawalich October 16, 2020 Updated September 1, 2022

Some time ago, **Philip Rothman** came up with the idea of replacing one of the built-in Arpeggio lines with a line that looks like a vertical bracket, and then applying the corresponding note attached arpeggios to a group of notes, with the goal of having a bracket that can live in the staff, adjust to changes in pitch and number of notes, and in my view most importantly, will allocate horizontal space for itself amidst the notes, which inserting a vertical bracket line will not do.

At the cost of losing access to one of the arpeggio lines, it worked, but with some serious layout problems, because the Sibelius code was not expecting an arpeggio to have hooks.

As you can see here, some work quite well, but in several cases the hooks run into the notes, or land on staff lines or are unevenly spaced. The note attached arpeggios cannot be positioned in the **Inspector**, but you can adjust them with arrow keys (as described in the **Reference**) or the mouse. You would probably need to adjust the great majority of the brackets you create, though.


4.21 Arpeggios

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🕮 3.2 Keypad, 4.6 Lines, 6.8 Playback dictionary (Sibelius | Ultimate Only).

In keyboard, harp and guitar music, it's common to see a vertical wiggly line denoting that the notes of the adjacent chord should be "spread" from bottom to top, or in the direction implied by an arrowhead on the line.

Creating an arpeggio

To create an arpeggio, select a note or chord, then choose the fifth Keypad layout (shortcut F11), where you will find three variants: a regular arpeggio line (shortcut / on Windows, = on Mac); an arpeggio line with an upwards-pointing arrowhead at the top (shortcut * on Windows, / on Mac); and an arpeggio line with a downwards-pointing arrowhead at the bottom (shortcut—on Windows, * on Mac).
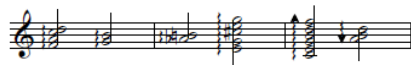
Sibelius automatically creates the arpeggio to an appropriate length, and as you add or remove notes from the chord, or change their pitches, the length is updated automatically. You can also adjust the length of an individual arpeggio line by dragging either end (or selecting the end of the arpeggio and using the ↑/↓ keys). To restore the default length, choose Appearance ▸ Design and Position ▸ Reset Position.

You can also move arpeggios left and right with Shift+Alt+←/→ or ⇧~⌥←/→, if need be.

Engraving Rules options

The Lines page of Appearance ▸ House Style ▸ Engraving Rules contains a number of subtle options for determining the default length and positioning of arpeggios.

Space before arpeggios

You can change the minimum distance Sibelius tries to maintain before arpeggio lines in Appearance ▸ House Style ▸ Note Spacing Rule—🕮 8.3 Note spacing.

Changing arpeggio design

If you want, you can change the thickness of the wiggles used by arpeggios—🕮 4.9 Edit Lines (Sibelius | Ultimate Only).

Interpretation during playback

You can define how quickly the three types of arpeggio should play back by choosing Arpeggio, Arpeggio Down or Arpeggio Up on the Staff Lines page of Play ▸ Interpretation ▸ Dictionary—🕮 6.8 Playback dictionary (Sibelius | Ultimate Only).

Printing problems

Some printer drivers have a bug that makes wiggly lines print in the wrong place; if you find this happens, 🕮 1.13 Printing.

Philip made a feature request, which I seconded, to add a new arpeggio line that could be used as a properly positioned note-attached bracket but it has never surfaced.

There are 3 impediments to using a *Rothman Line*, as I call these objects.

The first is that you need to redefine an existing arpeggio line and so lose its function. The second is the layout problems, and the third is a tricky one: you need to define the modified arpeggio line in every score where you want to use it.

I will discuss the definition problem at length in a bit, but let's discuss the layout problem first.

Adjusting the layout of a Note Attached Bracket

Fortunately, a plugin has access to several properties of a note attached arpeggio.

Variables

ArpeggioDx The horizontal offset of the arpeggio line on the NoteRest (read/write), in units of 1/32nd of a space (the distance between two adjacent staff lines).

ArpeggioType The type of note-attached arpeggio line present on the NoteRest. Values are **ArpeggioTypeNone**, **ArpeggioTypeNormal**, **ArpeggioTypeUp**, **ArpeggioTypeDown** (read/write).

ArpeggioTopDy The vertical offset of the top of the note-attached arpeggio line on the NoteRest (read/write), in units of 1/32nd of a space.

ArpeggioBottomDy The vertical offset of the bottom of the note-attached arpeggio line on the NoteRest (read/write), in units of 1/32nd of a space.

ArpeggioHidden Returns **True** if the note-attached arpeggio line on the NoteRest is hidden (read/write).

In the **Note Attached Bracket** plugin, I assume that the **Arpeggio Up** line has been redefined, and I change the Arpeggio Type of selected NoteRests to be **ArpeggioTypeUp**, which gives me the note attached arpeggio that looks like a bracket. I then adjust the Dx and Dy parameters based on a bunch or criteria, including stem direction and whether notes are on lines or spaces, and come up with something that is not perfect but is pretty good.

Sibelius does not position these things consistently, especially when the top and bottom notes have one note on a line and the other on a space in some cases, but currently this is the best I can do. I would imagine a built-in *Rothman Line* could do better. But mostly this looks ok to me.

There will generally be much less adjustment required than what you need to do when inserting a vertical bracket line by hand.


I have another plugin (**Note Attached Arppegio Offsets,** described below,) that will let you make adjustments to the **Dx**, **DyTop**, and **DyBottom** parameters of selected note-attached Arpeggio types, kind of like the **Inspector**. It has an option to "**Adjust Arpeggio As Bracket**", which will apply the same formatting to the chosen Arpeggios as **Note Attached Brackets** does when adding Arpeggios.

Defining a modified arpeggio line

You cannot just create a line in one score and copy it into another score and have the definition transfer over **if the definition already exists in the score**, as it does in this case. You **can** make such a copy if the object has a user-defined style that would not be present in the destination score. Since the line has to be one of the existing **Arpeggio** lines, if you copy a modified line into another score, it retains the definition from the destination score, and loses its changes. So that won't work.

There are only 2 ways you can get such a line into a score.

You can go into **Edit Line** and change the properties to match that of a vertical bracket, which is not horrible, but takes a bit of work, and it must be done in every score. (You can use symbols instead of hooks to avoid the offset corners, but I have found them really hard to precisely position, and they change from one Sib version to another, so I am staying with hooks).
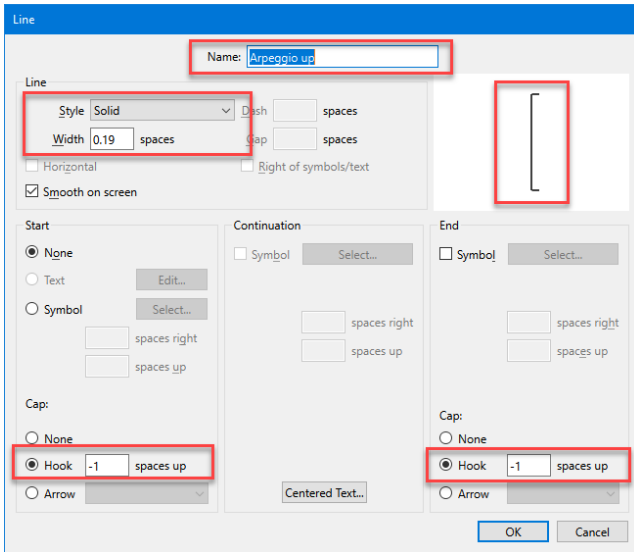
Or you can create an edited **Line** as above and then export the score to a House Style.

And here we encounter one of the classic problems with House Styles. When you need to import one, you want to import just the **Line** definitions, but to do so you need to import **Symbols** and **Text** as well.
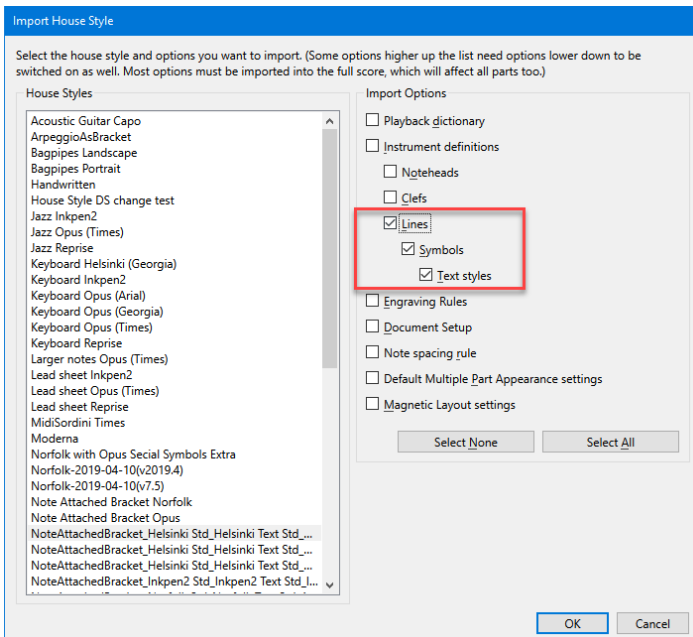
If I were to export a House Style from a score that uses **Opus** fonts, and then imported the house style into a score that uses **Inkpen2**, the fonts would be replaced, and the score appearance would utterly change. The Symbols would also be replaced, but unless you have redefined some of the existing symbols, this would be less of an obvious issue than the font problems.

You can recover from this by finding another house style that matches your fonts (and ideally your symbols) and import the symbols and lines after you import the Lines from the first house style, but it is fiendishly difficult to be sure you can find an appropriate house style.

As of Sibelius Ultimate 2020.9, plugins have had the ability to export a house style, so the instructions shown immediately below here are only required if you are running a version of Sibelius prior to 2020.9.

In 2020.9 or later, the plugin will install one house style, and it will itself generate and then delete the house style that reflects the current score.

*But you can do this: **before importing the Line definition house style, export a house style from your score**. Now import the house style with the **Lines**, and **then import the Symbols and Text** from your previously exported house style, and you should have minimized the unwanted changes. You can now safely delete your exported house style.*

If a plugin could export a house style, this is what I would do: export a temporary house style from a score, import the line from a house style, the reimport symbols and text from the exported house style. But a plugin cannot (as of the moment) export a house style, only import one.

*So **Note Attached Brackets** does what I consider to be the next best thing. The first time you run the plugin on a score, the plugin requires you to have already exported a House Style from that score. If you haven't done that it will give you a warning that looks like this:*
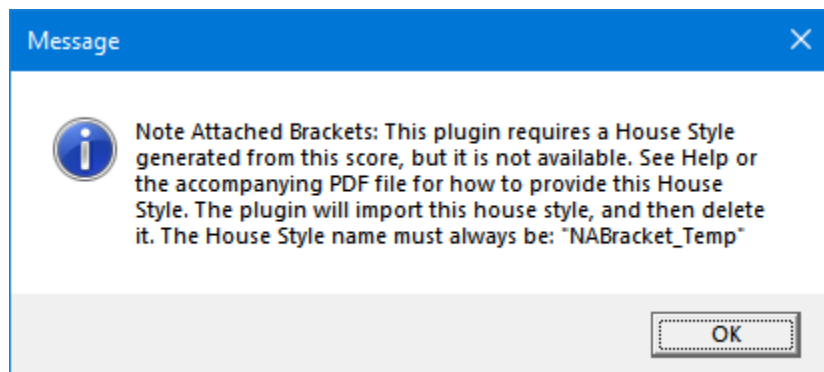
*To make use of the plugin to define the special **Line** Style you must go back to the score, and in **Appearance > House Styles >Export**, you need to export a House Style with the name **NABracket_Temp**. If you get the message, the same text is copied to the plugin **Trace** Window, and you can copy the name from there. Do not include the quotes in the name.*
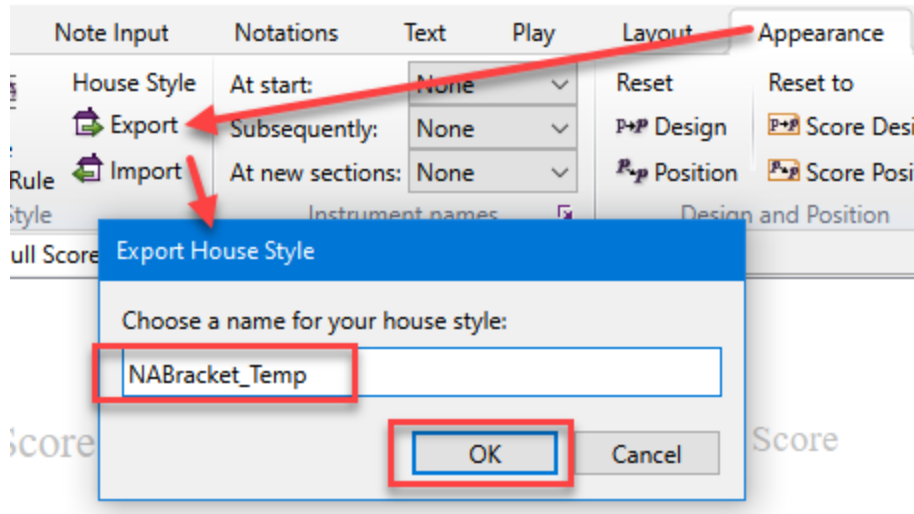
*Now you can run the plugin and it should work. The plugin will delete the exported House Style **NABracket_Temp.lib** after importing it so it does not confuse the plugin the next time it is run. **NABracket_Temp** is used to restore **Symbols** and **Text** styles, so it always needs to represent the current score.*

WARNINGS

Please be aware of these important limitations.

1. The **Arpeggio Up** line will be redefined for this score, and any on which you run this plugin. You can restore the line by importing a standard house style (you can use the plugin **Which House Style to Use** to find a reasonable choice), but then the brackets will be gone.
2. The plugin currently has no way to choose which arpeggio line to redefine, so it will only redefine **Arpeggio Up**.
3. The plugin imports the **Lines**, **Symbols**, and **Text** from a custom House Style, to define the modified **Arpeggio Up** line. It will restore **Symbols** and **Text** styles, but if you had any other modified **Line** styles, they will be lost due to the importing of **Line** Styles from the custom House Style.
4. Check carefully, and it may be wise to run the plugin on a copy of an existing score so you can investigate any side effects.

A related plugin: Note-Attached Arpeggio Offsets

Note Attached Arpeggio Offsets allows you to modify the horizontal and vertical offsets of selected note-attached arpeggios, similar to how the Inspector works. Observe that the offsets are treated as differences from the **current** positions, not from the **default** positions. To reset positions to their defaults, select the notes that contain arpeggio lines and call **Appearance > Design and Position > Reset Position**.

The checkbox **Adjust arpeggio as bracket** applies the same default positioning that **Note Attached Bracket** uses when it adds an arpeggio line that is redefined as a vertical bracket. Offsets in the edit boxes will be added after that adjustment is done.

Note Attached Arpeggio Offsets - Version 01.07.00 - by Bob Zawalich

Filter notes, trace, and change properties for Note-attached arpeggios , found in the 5th keypad layout.

Offsets, in spaces, are offsets from the current arpeggio settings. Trace to see current settings. Blank edit boxes will make no changes. Most settings will be saved across Sibelius sessions.

Notes whose arpeggios were added or changed will be selected at the end of the plugin.

Filter arpeggio type(s):
☑ Normal   ☑ Up   ☑ Down

New Type: [Unchanged   ▾]   Hidden: [Unchanged   ▾]

Vertical offset (- down, + up)

	Top	Bottom

Horizontal offset (- left, + right)

Stems up: [0]

Stems down: [0]

Stems up: [0]   [0]

Stems down: [0]   [0]

☐ Adjust arpeggio as bracket

☑ Reset note spacing for affected bars

☐ Do not show this dialog (this Sibelius session)

[Help...]   [Trace selected arpeggios]   [Cancel]   [OK]

Other adjustments to Note Attached Arpeggios

You can manually reposition note attached arrows with arrow keys as described in the Sibelius Reference under **Arpeggios**:

You can also adjust the length of an individual arpeggio line by dragging either end (or selecting the end of the arpeggio and using the up and down arrow keys). To restore the default length, choose **Appearance >Design and Position > Reset Position.**

You can also move arpeggios left and right with shift+alt+left arrow/right arrow *or* cmd+shift+left arrow/right arrow, if need be.

Sometimes you may need to make more horizontal space in a bar than the arpeggio line allocates. The best way to do that is to select the note to which the bracket is attached, rather than selecting the bracket, and use shift+alt+left arrow/right arrow to add space to the bar. If you use Reset Note Spacing, though, this spacing will be lost.

Some Other Options

Note Attached Brackets is a shortcut for redefining the Arpeggio Up line, inserting Arpeggio Up lines that look like brackets on selected notes and chords, and repositioning the Arpeggio lines to work as a bracket.

If you prefer to redefine a different Arpeggio Line you can do the definition in the score, add the modified **Arpeggio** line where you want it to go, and then run **Note Attached Arpeggio Offsets,** choosing your desired **Arpeggio** Type, and using the **Adjust arpeggio as bracket** option.

You can also run **Note Attached Brackets** and tell it not to import House Styles, so you could redefine the Arpeggio Up line in a different manner, and just use the plugin to add and position the lines. The positioning may not match your modified line, though.

Note Attached Brackets and **Note Attached Arpeggio Offsets** require Sibelius 7.5 or later. You can install these plugins by going to **File > Plug-ins > Install Plug-ins** and finding them in the **Engravers' Tools** category.