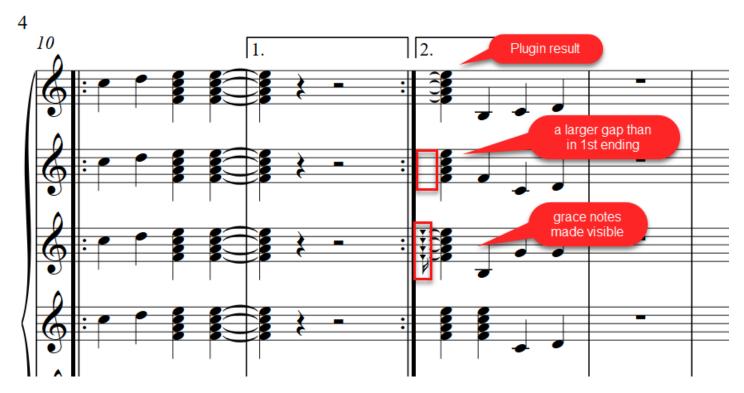
The Ties Into Second Ending plugin

Bob Zawalich January 15, 2020

This plugin simulates the appearance of ties into a second or later ending by using a variation of a technique used in the LV Fake plugin. It adds a grace note or chord before each selected note or chord, ties each grace note to the corresponding note in the selected chord or chord, and then uses a special notehead style to hide the notehead and stems of the grace notes.

The idea of the grace note implementation came from Samuel Wilson, replacing a much more complex and less useful tuplet implementation. Grace notes adjust the spacing before the visible note automatically, without changing the rhythmic position of the visible note, which aligns it with notes in the same position in other staves, requiring less manual adjustment.

Since the grace notes are invisible, it appears as if the visible note is tied from nothing. The note that starts the tie is given the notehead style **HeadlessStemlessPlayable**, which the plugin will derive from its associated data file if it is not defined in the score.



Adjusting Spacing of the resulting notes.

Here is the plugin dialog:

Ties Into Second Ending - Version 01.25.00 - by Bob Zawalich	
This plugin fakes ties into a second or later ending adding a hidden grace note or chord before *** any selected notes/chords ***. Since the grace note is hidden, it appears as if the visible note is tied from nothing. The grace note is given the notehead style HeadlessStemlessPlayable, which the plugin will derive from its associated data file if it is not defined in the score.	
At the end, the hidden grace note(s) will be selected. In some cases, to get the ties to be correctly flipped you may need to flip a grace note chord manually (X) so that its (invisible) stem points down. You can flip the hidden notes while selected even if you cannot see them. You can also use the left and right arrow keys to change the length of the ties.	
The technique was adapted from the LV Fake plugin; see Help for a more detailed explantion.	
☐ Make new hidden objects visible (debug only)	Horizontal shift in spaces (- left, + right)
Silence new grace notes	Hidden note:
Silence new tied-to notes	Visible note: 0
☐ Do not show dialog again (this Sibelius session)	Help Cancel OK

If you use the default settings, you will get results as shown above. Though the main notes are aligned in all staves (which is great and not easy), there is a bigger gap before the ties than in the first ending, because Sibelius is leaving space for the invisible grace notes. You may also want to adjust the length of the ties themselves. You can change these positions, but Reset Note Spacing will reset these changes to the defaults. The hidden grace notes are selected at the end of the plugin to make it a little easier to adjust their position.

- Flipping the grace notes
 - The ties are flipped properly only if the grace note stem points down. Select the grace notes and use X to flip the notes if the ties are not correct, or select the ties you want to change and flip them.
- Shifting the grace notes to change the tie length
 - Set a value in the Hidden note box for the Horizontal shift option. A negative value will increase
 the tie length, a positive vale will decrease it. If the grace notes are selected, you can use the X
 offsets in the Inspector to do the same thing.
- Shifting the main note to the left to decrease the initial gap.
 - Select the main note, then use the Decrease spacing command (Shift+Alt/Option+Right) to slide the main note left, taking the same note in other staves with it.

The Horizontal shift values will be saved across Sibelius session. You will likely never need to adjust to position of the visible note.

Resetting Position or Note Spacing will undo all this, so be careful not to reset these bars.

The HeadlessStemlessPlayable notehead style and the plugin data file

This plugin needs to hide a note or chord that contains a tie without hiding the tie. Just using Hide will hide both the note and the tie, so the plugin uses a user-defined notehead style called **HeadlessStemlessPlayable**, which was created by making a new notehead style based on the **Headless** style and turning off the **Stems** checkbox.

When the plugin is installed in Sibelius 7 or later, both the plugin and a data file called **HiddenNoteheadStyles_v6.dat** are copied into the same Plugins subfolder. (If you are installing in in Sibelius 6 you will need to copy both files from the zip file to the plugin subfolder).

If **HeadlessStemlessPlayable** is not defined in the current score, the plugin will open the data file and copy some notes from it into your score, which will define the Notehead Style. This will happen only the first time the plugin is run on a score.

The data file is actually a Sibelius score in Sibelius 6 format. If you run the plugin in a later version of Sibelius you will be asked to save changes to the data file. Just say Yes. This will save the data file in the current version, and it will not ask the question again.

Side effects of opening the data file

A plugin cannot create a notehead style, so it if it needs one it can import it in 2 ways. One is to import a House Style that contains the definition. The problem with importing a House Style is that even if you try to just import Noteheads you will also import Fonts and Symbols, and this can affect the appearance of your score. The other mechanism, which this plugin uses, is to open a score that contains notes that use the desired style, copy the notes, and paste then into the current score. Those notes can then be deleted, but the Notehead definition will remain.

In Sibelius 7 or later, when a plugin opens and closes a score, some Ribbon entries can be temporarily disabled once the plugin ends. The easiest workaround for this is to open the File tab, and then return to your previous tab, which should now be active.

Given the choices of having to stop the plugin and tell you to define a Notehead style, or to change the text in a score, or to have a screen flash when the data score is opened and have some disabled Ribbon fields, I chose what I considered to be the least of the evils. If you define this Notehead style in your Manuscript Papers, you will never need to see the data file open, but I think using the data file is probably the simplest workaround.

Making hidden objects visible

If you check the box when creating the ties notes, the hidden notes will be give the Arrow down notehead style, to make it distinct from normal notes. This is to make it easier to tell what was happening. You can undo or delete the entry, or manually hide the notes and tuplets once you have done any manipulations.

Alternate Workaround to have ties in 2nd endings

Workaround 1: Extend endings to include the tied notes. First ending includes previous bar. Add new bar before 2nd ending, copy bar that is now under start of first end line. Pro - looks and plays correctly. Con - altering music to accommodate software.



This is a Sibelius score with a ".dat" extension and it is installed in the same folder as the plugin file. It can be opened as a score, independently of the plugin, to serve as a source of the Notehead styles. The plugin will open this score, copy notes it wants, close this file, and paste the notes into the current score. It then deletes those notes, which leaves the Notehead Style defined in the current score. This is what it looks like:

Hidden Notehead Styles

Do Not Change anything in this score!

Bob Zawalich

Use these styles to create invisible notes that still displays a tie or slide.

If you open this score in a Sibelius version later than 6.2, it may ask you to save changes when it closes. Say OK when this happens, and it will not ask again.

There is a whole note in bar 1 that has the notehead style **HeadlessStemlessPlayable**, which is used to hide a note while keeping the tie or slide visible. It is headless, stemless, without accidentals, or leger lines. It will play and transpose.

There is a whole note in bar 2 that has the notehead style HeadlessStemlessSilent, which is a silent, but still transposable, version of HeadlessStemlessPlayable.

There is a whole note in bar 3 that has the notehead style StemlessAllQuarters, which plays but has no stem, accidentals, or ledger lines. All note values use the same black notehead. It can also be used for hiding notes.



To define these styles in another score, Passage select one or more bars and copy (ctrl/cmnd-c). Passage Select an empty bar in the destination score, and paste. With the destination bar(s) still selected, Delete. You should see the bar rest(s) return.

If you look in Notations >Noteheads >Edit Noteheads you will see the Notehead Style

HeadlessStemlessPlayable and/or HeadlessStemlessSilent and/or StemlessAllQuarters have been defined, without having had to define the styles or import a House Style.

It will be hard to find or select the hidden notes once created, so be careful.

To edit such notes, passage select the containing bar and set all notes to have Normal noteheads. Do your edits, then restore the special style.