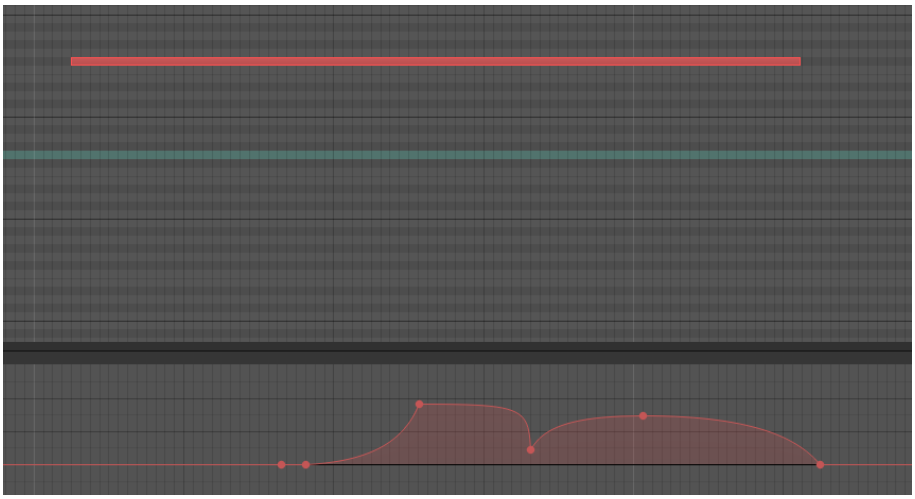
Ties

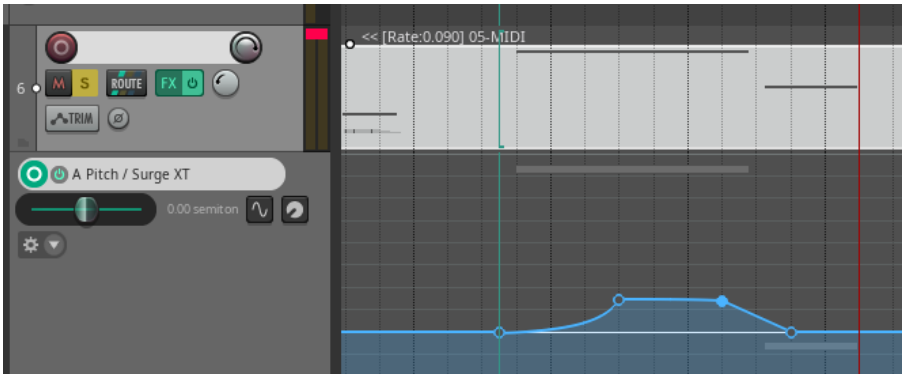
In Reaper, there are a few options to apply ties to your notes.

1. draw them in the Pitch CC lane of the Midi editor
2. use the Pitch of the VST
3. use a script in the Midi editor

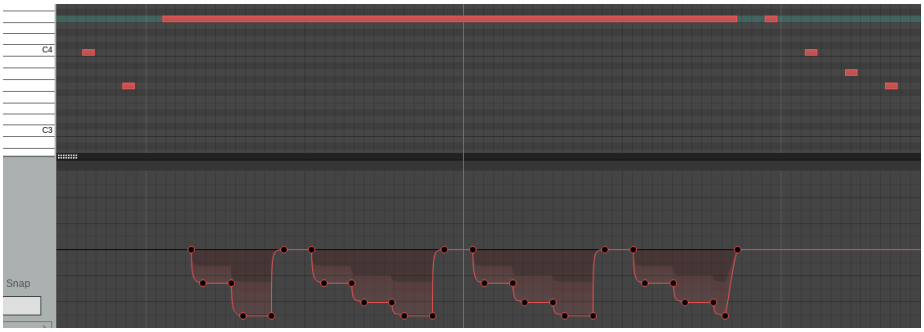
1. In the Midi Editor, there is only one note and that note gets a Pitch treatment. The Pitch CC lane can be set to Snap. This ensures that the pitch envelope point will move to one of the 12 notes in the Western notes/octave division. Disadvantage: the poor resolution of 127, resulting in sometimes small steps.



2. In the Arrangement. Touch the main Pitch of the VST and show the Pitch envelope. This has a much cleaner flow of the Pitch bend. This solution is to be preferred. However, there is no snapping and you have to do the pitch bending by ear.



3. Again, in the Midi Editor, select of few notes and choose a script called “Notes to Smooth Pitch Bend”. The selected notes will turn into one long note but a pitch bend will get created according the the key of the old notes.



I have changed this script to be able to glue notes together that are 48 notes apart

The script inserts pitch bend interpolation based on the current grid spacing, so if the note length or spacing is shorter than the grid, things can go wrong.

To fix this, you have two options:

- You can **reduce the smoothing length** by editing the script. Look for line 42:

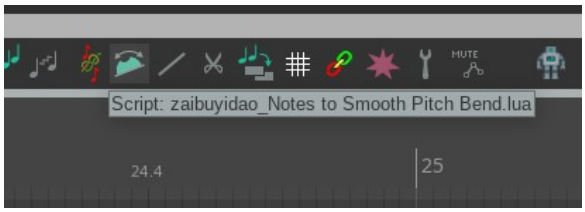
  Code:

```
local grid_scale = 1 -- User-adjustable factor: 1 = normal grid spacing, 0.5 = half spacing (denser interpolation)
```

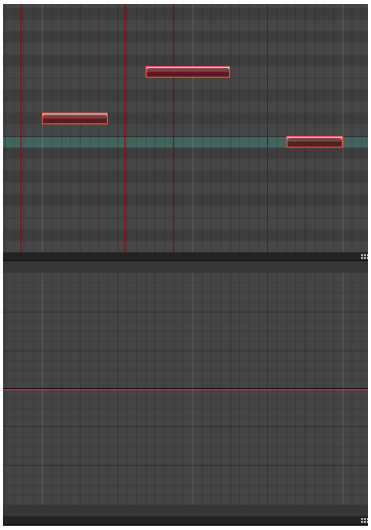
Try changing 1 to a smaller value like 0.5 or 0.25.

•Alternatively, **set a smaller grid size** in the MIDI editor itself, which will also allow for finer interpolation placement.

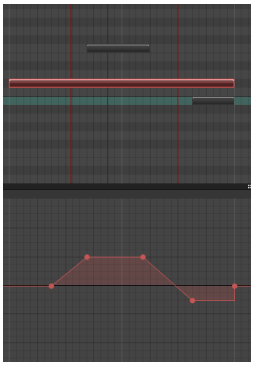
Again: not the best resolution- small pitch steps may be heard- but you are sure to stay in tune if that is what you need.



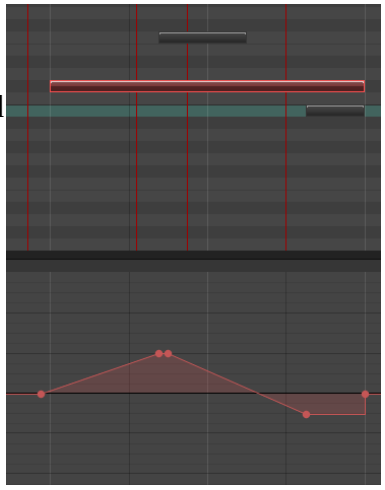
Here are 3 notes:



3 notes are selected, ready to be pitched with this script.
Grid = 1/16, notes = ¼



Now the notes are pitch bended in this resolution. The muted notes (black) show the old notes. This is a good reminder of what key that note was in, relative to the newly created basis note that is used to pitch bend. Note that the muted notes are now on a higher midi channel number!
To the right you see the same notes, pitch bended once again but now with the resolution grid of 1/2. You see in the first bend bend of ½ that the influence was that big, that the bending starts before the note start.



Although the pitch bend of the notes is represented as squares, it is possible to make the line more smooth sounding with the bézier curve.