

MuseScore 4 versus Lilypond – first experience

Background

First, a few comments regarding myself. I'm not a composer or professional engraver but an amateur violinist in a symphony orchestra. In case, no good sheet music is available, I sometimes engrave the music for the orchestra.

My latest engraving work is a symphonic piece with 36 instruments and two SATB choirs. The score, printed on A3 sized paper to make it legible (the composer used B3 size paper which are even bigger than A3), encompasses in total about 120 pages (about 800 bars). Is a little slow, but manageable in Lilypond.

Over the New Year, I started, as an exercise, engraving a part of it in MS4, an Interlude between the two major parts. So far, the success is somewhat limited but a lot of grey hair and frustration, mostly because I'm completely unfamiliar with the user interface or MS4.

My first attempt, maybe 4 pages of the score, was completely lost because of a damaged file. It was saved ok on my computer and opened again. After a final saving, I switched off the computer. When I tried to resume my work the same day, the file did not open.. In fact, it completely "killed" the MS application without a trace of an error reporting. I had the same file also saved "in the MS cloud" but it had the same problem. Maybe it could have been recovered but I didn't know how and now I'm into my second attempt making enormous amounts of savings and savings into different file names to minimize the loss in case the file becomes damaged.

Engraving experience

My first experience with music engraving was with Capella (originally started as a German program). Then some tests with Noteworthy, free test versions of Finale and Sibelius until I came across Lilypond. The latter has been my desired tool now for at least 5 years.

Although not really WYSIWYG, I like LP because of its robustness. Also, in my particular case, I like it because you can split music and e.g. formatting issues in multiple simple ASCII files and incorporate them as needed when generating the score or the sheet music for the individual instruments. Being a space engineer, this is similar to the way we write simulation and control software for satellites using MATLAB or Octave.

Another advantage of using ASCII files is the simplicity of keeping track of changes using readily available tools. This is not so simple with binary files and a damage file could render your previous work lost forever.

MuseScore 4 Installation

Muse Hub

I installed MuseScore 4 via the Muse Hub without problem. Since then, I've used Muse Hub a few times, but recently the Muse Hub couldn't be started anymore, or more correctly, it started but then disappears without a trace or error message. The error persisted, i.e. Muse Hub was not useable anymore.

After deinstallation, computer restart and installation it works again. For how long is unclear.

MuseScore 4 versus Lilypond – first experience

A few additional remarks:

1. The Muse Hub docks at the low right side of the screen (new computer and Windows 11)
2. The Muse Hub window cannot be moved anywhere else on the screen or resized
3. If Muse Hub is open and I open or click on another open application, e.g. Word, the Muse Hub disappears.

Music Engraving Process

My Lilypond Process

Separation of music, formatting and generic issues. This means, I have the following split:

1. Generic / global parts
 - definitions
 - global settings
 - headers
 - layout for parts
 - layout for score
2. Music Files
3. Parts, calling the appropriate music files and generic parts
4. Score, as above

In total, there are 41 ASCII, i.e. Lilypond, files for the piece. If I set up the generic files correct from the beginning, these are never changed again but only the music files as they are completed. The score and all instrument files are generated/published in the pdf-format in one go through a small script.

Some tweaks have been necessary to improve the score and the parts.

MuseScore 4 Process

From my initial experience, it appears that the best approach in MS is to start with the score and then fill in all music, dynamics, etc in the different staves. A score can then be published in pdf-format. Parts are extracted afterwards.

Splitting global and other generic definitions in separate files seems not possible.

In my case, to save me the work of entering the music again, I imported the individual parts (in pdf format). After the music recognition which was quite good, I downloaded the MuseScore files and corrected/modified as needed. After correction, the music was inserted in the score by copy and paste.

Maybe it is possible to change but working on a large score with 32 instruments makes the score so big you cannot see the complete score from top to bottom even on a veery large screen. This makes working on the score quite difficult as you cannot see the bar numbers or rehearsal marks. For this, you have to scroll to the top and the beginning and to the beginning of a page (page view assumed).

In continuous view it's even worse because here you don't even have the bar numbers, only the rehearsal marks. That makes correction in score failure prone.

Current experience and problems

Hidden “formatting”

As mentioned above, I’ve imported the music from the pdf’s generated by Lilypond to save time.

Visibly incorrect formatting, engraving etc was manually corrected.

The sheet music looks ok, but not as good as Lilypond. One reason could be “hidden” formation only visible if you manually check the properties of each individual musical item. I do not know if there is a possibility to “reformat” everything to a MuseScore baseline.

Also copy and paste appears to propagate formatting tweaks to the new piece. N.B. This is the same if you copy and paste something from one Wordfile to another Wordfile. After some time, and if you are not careful, you could end up with hundreds of different formatting styles. A way around for this is to paste as text only and reformatting using your styles. I’ve not yet checked if this is possible or necessary in MuseScore.

Below a weird problem is shown. In the instrument part (in this case Clarinetto 1 shown in the top part of the picture) the notes are correct and everything looks fine.

In the lower part of the picture, you see the result after I copied and pasted the music into the score, i.e. completely corrupted. Note, the same excerpt of the music is shown. Could this be some kind of “hidden” formatting?

For the time being, this is a showstopper for me and I will save the corresponding files for failure investigation.

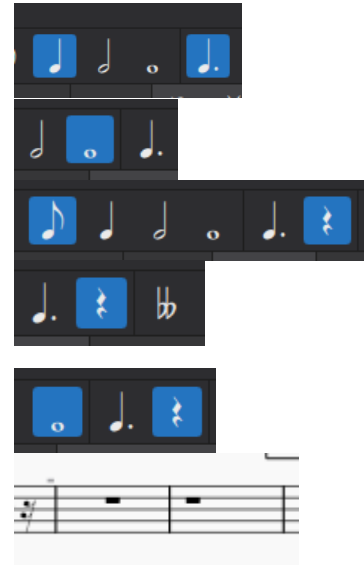


MuseScore 4 versus Lilypond – first experience

Indication of Note and Rest Values

If you click on a note or a rest, one could expect the formatting bar (at the top of the MS window) to indicate the correct duration etc of the note or rest. This is not the case, see below. Is this a bug and what is really “hidden” behind the full rest.

1. If you click on an augmented $\frac{1}{4}$ note, you see the following which is what I would expect
2. Accordingly, if you click on a whole note you see this
3. If you then press on a $\frac{1}{8}$ rest you get the following
4. But of you press on a full bar rest, you get the following, i.e. only an in indication that it is a rest but not at what duration
5. If I then click on the full note duration, the following is shown which appears correct.



However, the rest then change it's appearance where the left rest seems correct to me but the right one not.

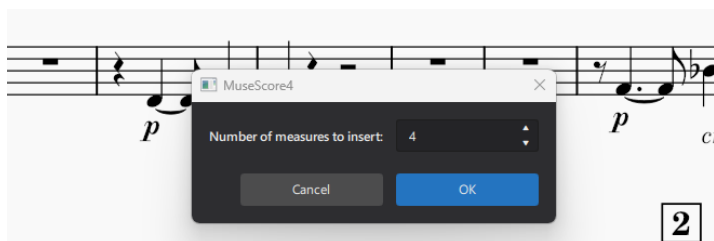
MS 4.0.1 arrived just when working on this. There is no impr

Tempo Definition when Establishing a Score

When you start a new score, a “Tempo” definition cannot be made explicit by just typing 50, you have to use the up and down scrollbar. It's not understood why, in particular as this is possible for the number of measures.

Insert Measures

When inserting a measure, you are asked how many and where, i.e. before or after, The number if measures can either be typed in via the keyboard or via the scrollbar. What's surprising is that when this has been done, you would expect that the highlighted OK is accepted by pressing the return key on the keyboard but it doesn't. You have to accept it by a mouse click.



Combining Two Voices, i.e Instruments, Into One Stave.

In case both voices are identical, I would expect to see only one voice is the score with an “a2” or “a due” above the stave. This is very simple in LP but not so in MS. There are quite some postings in various forums / Facebook addressing this difficulty. It was definitely a problem in MS 3.x and it's not known if it persist in MS4 as well.

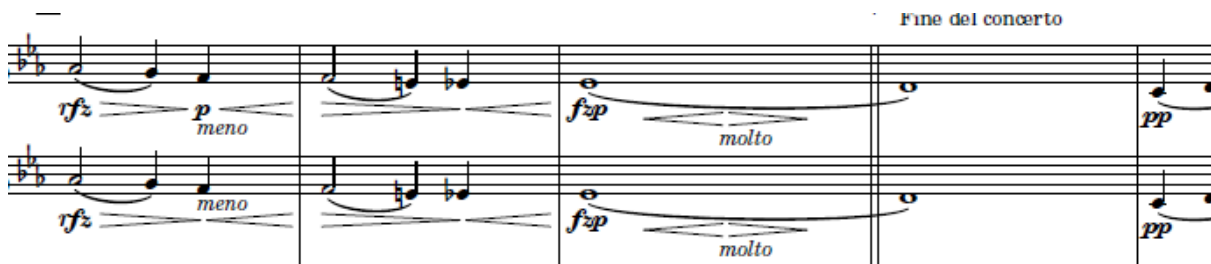
If this feature is indeed not “simple” to achieve, this is definitely a major drawback of MS.

MuseScore 4 versus Lilypond – first experience

Hairpins

In the piece I'm currently engraving, there are numerous places where there is a hairpin crescendo and decrescendo on one note only, see LP example below. In LP, this can be achieved by a simple tweak. Probably needed in MS as well but not yet identified. See also <https://musescore.org/en/node/47951> . from 2015. No improvement found in latest MS4 release.

An extension of the Dynamics palette would be appreciated



Dynamic Expressions

Under Palettes/Dynamics, there is a quite a large list of dynamic expressions. In the piece I'm engraving, the composer requires a "*fzp*". This is not in the list and how to generate own expressions is unclear.

According to the handbook; "Dynamics can be edited just like other text objects. They also have a playback effect on the score."

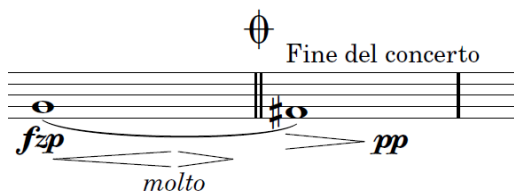
In the picture below, the left side shows what's required by the composer. On right side what I'm able to achieve in MuseScore4.

There are a number of deficiencies in MS4 output:

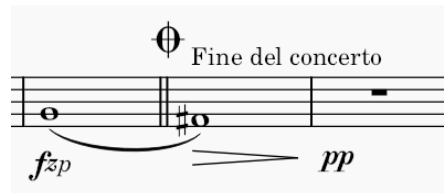
1. The crescendo and decrescendo hairpin on only one note as mentioned above
2. The dynamics expression *fzp*, modified as suggested in the handbook doesn't look the same as the other dynamic expressions, font not bold, distance between letters seems inconsistent
3. The decrescendo hairpin should end on the same note with a *pp*

It is possible that this will not be considered by the playback but this is of secondary importance.

Lilypond



MS4



Precise Positioning of Music Items

Precise positioning of dynamics etc seems tricky. So far I've only used "modification using the mouse" and that, many times, lead to a situation where everything starts "jumping around" because they are somehow linked to the notes and to each other as well, e.g. hairpins and dynamic expressions. Numeric tweaking appears to be possible in a "numerical way" under properties. In my

MuseScore 4 versus Lilypond – first experience

current case, I would need this on a more generic level, otherwise I've tweak each individual musical item individually which would be extremely awkward.

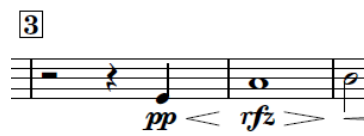
Minimum Length of e.g. Hairpins

Because the piece require a massive amount of crescendo / decrescendo hairpins, the sometimes become very short, so short they can be interpreted as an articulation instead, see below.

MS without tweak



LP with minimum harpin length defined



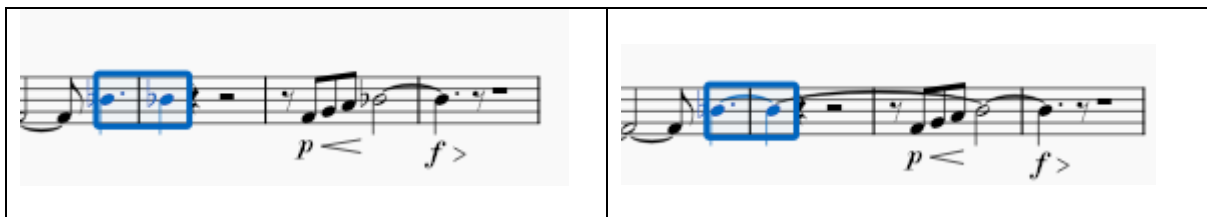
It's not clear yet if the content offset and scale properties of the item (hairpin in this case) can be modified to achieve something like a minimum length which is the way I define it in LP.

I played around with x and y offset, but functionality not yet understood. However, if too large offset number entered, the musical item, e.g. the harpin is not visible in the palette anymore.

Under Properties\Style settings, numerous parameters can be set. However, a minimum length for hairpins cannot be set.

Ties

The way ties are created is not understood. In the case below, I want to tie the two notes selected.



When I press the tie icon, I get the following, i.e. two ties, also to the next note of the same pitch but more than one bar later. The last one can be removed but it's a nuisance and not understood why. Is this a bug?

It appears this is only visible when I work on a single part, not on score level.

MuseScore 4 versus Lilypond – first experience

Ties and Slurs in Continuous View Versus Page View

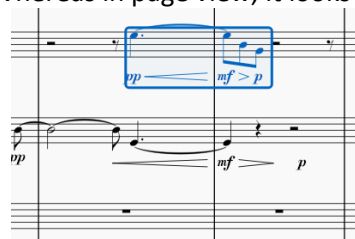
Correction of ties and slurs in continuous view appears to be buggy. In the following example, I try to insert a tie (for the two es notes) and then a slur over the whole group. This is probably a bug



In continuous view, I see the following selection frame



Whereas in page view, it looks ok



Rehearsal Marks

According to the handbook, you select the note (or rest) where you want the rehearsal mark and write what you want to use, e.g. a letter or a numerical value. In my case I selected a numerical “1” for the first mark and expected that the next one ctrl+M would automatically generate “2”. This is not the case. You have to write an explicit “2”, or, in fact, you can write anything e.g. and “A”. This seems to be in contradiction with the handbook which states “**Notes:** (1) By default, marks are added in the sequence, A, B, C etc. (2)

“Resequence rehearsal marks” works however as expected so if you have the sequence 1, 3 2, it will be 1,2,3. If you, maybe by mistake mix numbers and letters. I’ve only tested a sequence 1 A,3,B, it will be 1,2,3,4 after resequencing which I find a little surprising but appears to be in line with the handbook.

According to “*Behind Bars*”, rehearsal marks should be placed as follows:

In orchestral scores, tempo markings appear above the top stave, and also above the string section, below any vocal or solo lines (see Table 2, p. 509).

With the default setting of MS, this is not the case.

Summary

In summary, on a high level, MS4 appears to be user friendly but when it comes to a low level genetic approach for specific engraving situations, it's not obvious how this can be achieved.

So far, MS has been unstable, one day of work lost due to a damaged file. There is no way to inspect the MuseScore binary files compared to the simple ASCII files of LP.

MuseScore 4 have still some bugs and engraving deficiencies which makes it unsuitable for engraving of symphonic music.

The sound output in MS seems to be good but in my case a more nice to have feature than a necessity.