Using the Position Rehearsal Marks plugin

Bob Zawalich March 15, 2014, updated February 1, 2021 (2/1/21)

Updated features as of February 2021:

- Running the plugin on the full score will no longer affect parts. This prevents problems when Rehearsal Marks that are in the first bar of a system in the full score are not at that location in the parts, which would position the RMs incorrectly in the parts. If you want parts to be formatted you must use the option for Full Score and dynamic parts or Dynamic parts only, or process the active part when the active part is not the full score.
- The option to align objects other that Rehearsal Marks objects or System Text objects using the Rehearsal Marks text style has been removed. Only Rehearsal Marks objects or System Text objects located on beat 1 of a bar will be processed. Be careful that RM Text objects are actually attached exactly to beat 1. Text at beat 1.1 will not be processed. (look at the status bar to confirm this). This change is a side effect of the work done to prevent unwanted changes in parts.
- Rehearsal Marks or Rehearsal Mark Text will be processed in bars that are not the first bar in the system. This can be useful for interior bars with Time Signatures. Such objects will be centered over the barline by default.
- Interior bars new have their own set of horizontal adjustment values to let you approximate left-alignment of objects to a barline. Both RM objects and RMText are by default center aligned, and the plugin has to guess the width of the object to position it, and such objects have different widths.
- Moved objects will be selected when the plugin ends

Overview

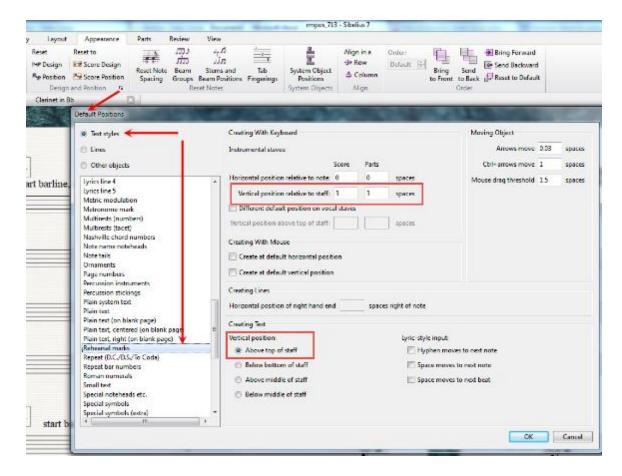
The **Position Rehearsal Marks** plugin shifts the horizontal position of Rehearsal marks (RMs) or System Text objects that use the Rehearsal Mark text style that are found at the start of a system, so that the Rehearsal Mark is centered over the clef (if present).

It is best to wait until the layout of bars in the score and the parts is relatively finalized before running this plugin, since it treats bars at the start of a system differently. If you run the plugin and change the layout so bars change position, you will need to run the plugin again.

Such objects that are in bars that are not the first bar in a system can also be adjusted so that they are centered over the barline, even if a time signature or key signature is present. RM Text objects will only be moved if they are attached exactly to beat 1 of their bar, as shown in the status bar. Objects whose attachment points are not on beat 1 will not be moved.

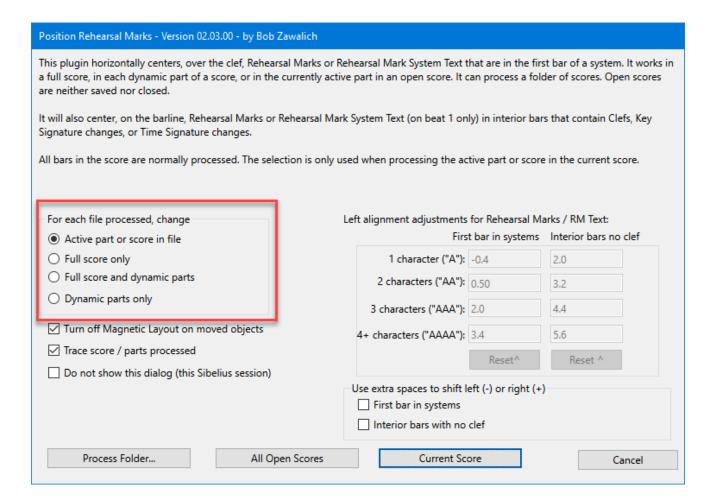
Aligning the RM with the left barline is really not possible to do precisely, but an approximation to that will be described below.

The plugin does not affect the vertical position and system objects, such as Rehearsal Marks, except indirectly through the use of Magnetic Layout. So this is important: *Before or after running the plugin, vertical position can be changed by changing the Default Position settings for the Rehearsal Mark text style.*



You can use the plugin to turn Magnetic Layout off on the moved objects, and the plugin does this by default. You might want to consider turning off the display of bar numbers at the starts of systems to avoid collisions with Rehearsal Marks.

The **Position Rehearsal Marks** plugin can process the currently visible part, the full score, the full score and dynamic parts, or the dynamic parts only, so you can align the RMs for a score and all its parts in one pass. You choose which score or parts to process in the initial plugin dialog:



The default setting is for the **Active part or score in file**, and this is most useful when you use the **Current Score** button to process the currently visible score.

If you choose **Full score only**, then the full score will be processed, even if a different part is showing.

Processing the full score will not change the positions of objects in the parts. This is by design, and is explained in Appendix 2 at the end of this document.

As you can see in the dialog, you can process the **Current Score**, **All Open Scores**, or a **Folder** of scores.

If you process the **Current Score**, the plugin will **process only the bars selected**. If there are no appropriate RMs in the selection, it will ask if you want to process all the bars in the score. The score will not be saved nor closed after it is processed.

If you process all open scores, all the bars in the scores will be processed, ignoring the selection.

If the **All open scores** option is chosen, then whichever score or part is visible will be processed as the active part. The option is sometimes useful if you want to process several scores at once but not all the scores in a folder. The scores will not be saved nor closed after they are processed.

If you process a folder of scores, the Active part or score will be set to the full score for any files that the plugin opens, and the current part for any scores from the folder that are

already open. Scores that the plugin opens will be saved and closed by the plugin. Scores in the folder that were already open will be neither saved nor closed.

The important points are:

- The **selection** is ignored unless you are processing the **Current Score** only. In all other cases, the score is processed as if the entire score were selected.
- The **Active part** is the part that is visible in a score that is open, using the **Current Score** or **All Open Scores** option, and the active part is the part that is processed.
- If you use the **ProcessFolder...** option, it is trickier
 - o If the score was not already open, the plugin opens the score and forces the active part to be the full score. These scores will be saved and closed after being processed.
 - o If the file for the score is in the desired folder but the score is already open, it is treated as the scores are in **All Open Scores.** The currently active part is still used, rather than being forced to make the full score active, any selection is ignored, and the score will be neither saved nor closed after being processed.

You may not have wanted to know that, but now you do.

Moving Rehearsal Marks

Rehearsal Marks and Rehearsal Mark System Text at the start of systems will be moved left, past start repeat barlines, time signatures, and key signatures, so they will be centered over the clef, or where the clef would be. For interior bars, RMs will be moved over clefs, time signature, or key signatures to be centered over the barline.

If **Magnetic Layout** is on, as it usually is, you may find that the presence of bar numbers may keep the RM from being centered. You can use the option to remove Magnetic Layout if you do not mind the overlap, or you can turn off the display of bar numbers in Engraving Rules, or you can set the vertical position of the RMs to be higher than the bar numbers to avoid them. I have found this to be more of a problem in parts than in full scores.

The plugin cannot tell if you have hidden a key signature using the **Inspector** or **Properties Window**, and it will move the RM incorrectly if you have done so. Repositioning time signatures or barlines can also affect the calculations that the plugin makes.

If you edit the score after running the plugin so a RM is no longer at the start of a system, it will retain the position adjustments made by the plugin. Selecting the RM and using Reset Position is probably the easiest fix for that. You should also be able to rerun the plugin to reposition all the RM/RM Text objects.

You can run the plugin multiple times, and it will adjust all moveable objects that it finds that are at the start of a system or at appropriate interior bars. Running the plugin in **Panorama** view is not recommended.

Appendix 1: Approximating aligning the RM with the leftmost barline

Rehearsal Marks are centered objects, and even changing their definition in the text style does not appear to change that. The shifts the plugin makes tends to keep the RMs centered over the clef, though the centering will be off a bit depending on the fonts used.

You can make some small adjustments using the *Left alignment adjustments* fields in the dialog.

Position Rehearsal Marks - Version 02.04.01 - by Bob Zawalich		
This plugin horizontally centers, over the clef, Rehearsal Marks or Rehearsal Mark System Text that are in the first bar of a system. It works in a full score, in each dynamic part of a score, or in the currently active part in an open score. It can process a folder of scores. Open scores are neither saved nor closed. It will also center, on the barline, Rehearsal Marks or Rehearsal Mark System Text (on beat 1 only) in interior bars to allow positioning past Clefs, Key Signature changes, or Time Signature changes. All bars in the score are normally processed. The Selection is only used when processing the Current Score. Moved objects will be selected when the plugin ends.		
For each file processed, change Active part or score in file Full score only Full score and dynamic parts	Extra spaces to shift left (-) or right (+): use check boxes to activate/edit First bar in systems Interior bars with no clef Offsets to left-align to barline:	
O Dynamic parts only	First bar in systems	Interior bars no clef
☑ Turn off Magnetic Layout on moved objects	1 character ("A"): 0	2.2
☑ Trace score / parts processed	2 characters ("AA"): 1.3	3.5
Do not show this dialog (this Sibelius session)	3 characters ("AAA"): 2.8	5.0
	4+ characters ("AAAA"): 4,3	6.5
	Reset^	Reset ^
Cancel Process Folder All Open Scores Current Score		

These numbers are not offsets from the default horizontal position of the Rehearsal Mark as would appear in the Inspector, but are instead offsets from the horizontal position as it is centered over the clef or barline.

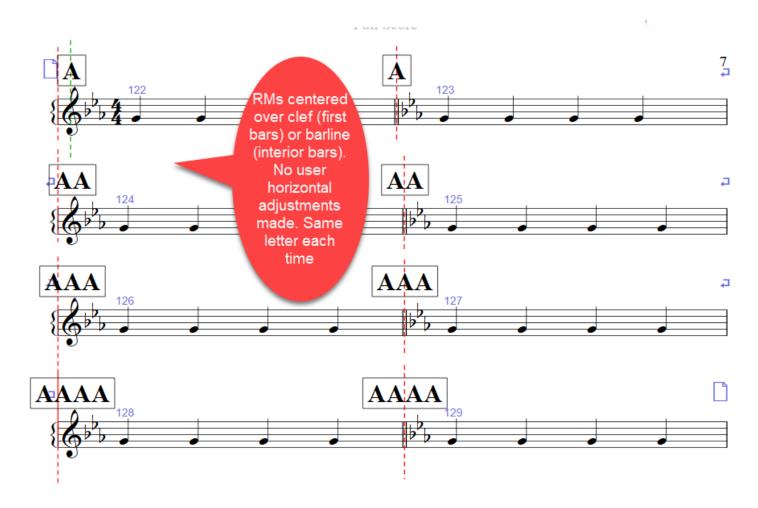
That centered offset is not a fixed number, but varies depending on whether there are key signatures, time signatures, or start repeat barlines in the bar, and on the number of accidentals in the key signature. I have some hard-coded internal offsets used to guess the sizes of the time signatures, key signatures, and clefs, which work pretty well most of the time.

The offsets can be used either to shift centered objects left or right, or to try to left align centered objects on the barline.

- In the first case, the same value should be used for all the lengths of the RMs and RM Texts, so the same offset is added in all cases.
- If we are trying to left align to barline, the offsets are the number of spaces added to the RM/RM Text object to compensate for it being centered. The amount to shift will increase when the text strings get longer.

Here is an example of some centered RMs of different lengths, using the same letter each time, with some dashed lines aligned with the barlines. Centering is "not bad" in this example. There will be

some variance with different fonts, different widths of letters or numbers, and the sizes of time and key signatures.



Left-aligning centered objects

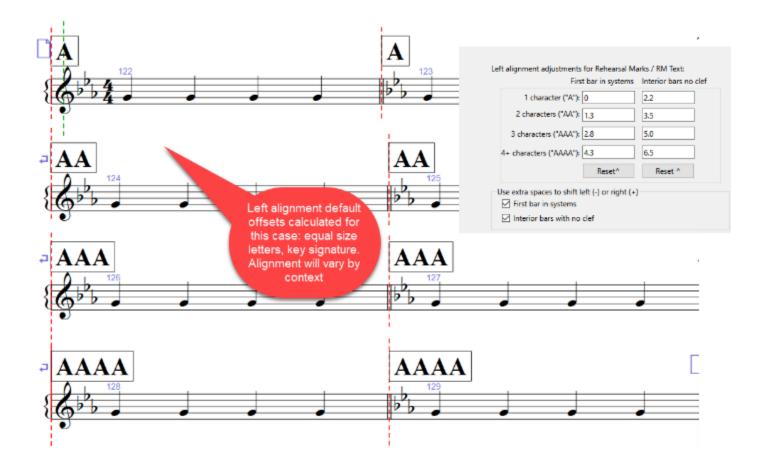
The default "Left alignment adjustments" values are intended to make the centered RMs and RM Text objects be approximately left-aligned to a barline. To make that work correctly, the plugin would need to know the width of the text (or numbers) in the RMs, and exactly when the attachment point is, which can vary depending on the presence and size of clefs, key signatures, and time signatures.

The plugin does not know any of these things, so I created some example scores, such as the one above, and adjusted the results to be good for that case. I then tried it with other cases, and tried to pick default values that worked well as often as possible.

You can change the defaults based on your own experiments and preferences, and the plugin will remember your settings across Sibelius sessions. You can also reset the offsets to the ones the plugin shipped with.

Here are the same RMs using the current default values for offsets, to make the RMs left-aligned to the barline. Your Mileage May Vary.

Check the results. You can't drag the RMs horizontally, but you can shift the X offset in the Inspector, or use the downloadable X Y Offset plugin.



Horizontal positioning using Left-aligned RM Text

You can change the Horizontal settings in the RM Text style to be left-aligned, and that will reposition RM Text objects, but not real RM objects, to be left-aligned to the attachment point, rather than being centered. You can also create a new left-aligned Text style based on **Rehearsal Marks**, named something like "Rehearsal Marks Left", and **Position Rehearsal Marks** will process Text in that style as well as normal RM Text.

If you **always** want left-aligned Rehearsal Marks, and were willing to give up the automatic sequencing features of RM objects, (which I would not do lightly) then you could run **Position Rehearsal Marks** on those Text objects and they would be left-aligned without having to make adjustments, and would be correctly aligned much more often that RM objects will be.

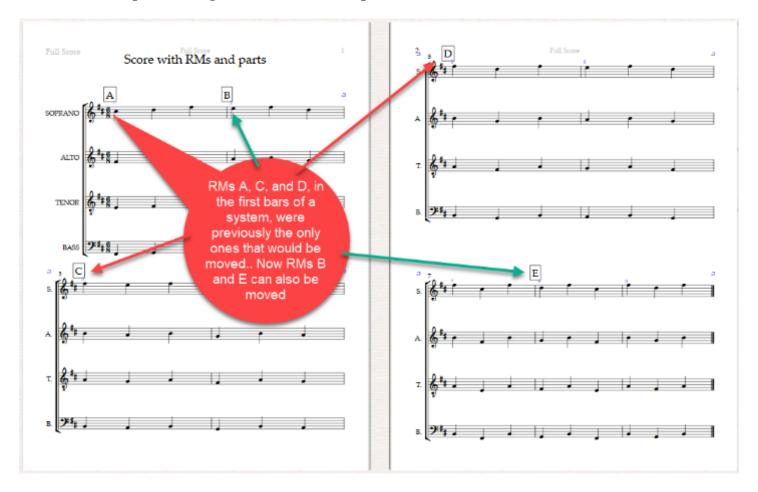
These adjustments may at least get you close enough to the barline so that fairly small adjustments will be all that is required.

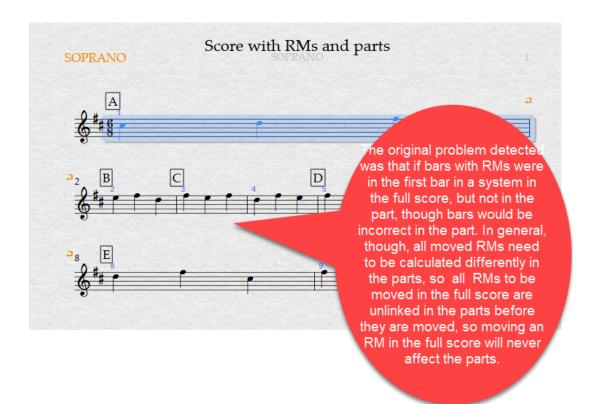
Appendix 2: Processing the full score will not (by design) move objects in parts

What the problem was:

In the original plugin, RMs were moved only if there were in the first bar in a system. Moving an object in the full score would move that object in all appropriate parts. It the page layout in the parts is different, such that bars that were the first bar in a system in the full score are not the first bar in the parts, the positions of RMs in such bars will be incorrect in the parts.

Here is an example showing a full score and one part

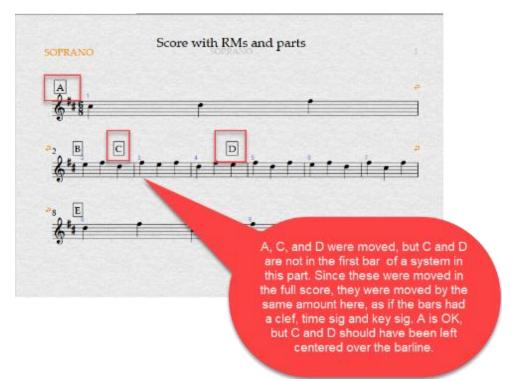




In the previous version of the plugin, processing the full score would reposition all RMs and RM Text in bars that were at the start of a system. In this example it would move the RMS A, C and D, and the resulting full score would look like this. Compared to the original, RMs A, C, and D are now more or less centered over the clef, and Rms B and E Are unchanged.



I had told the plugin to process the full score only, but doing so had an effect on the parts. Here is what the Soprano part would look like:



Note that no differences in parts are marked; the RMs are linked to those in the full score, so RMs A, C, and D were moved. But C and D are not in the first bar in a system in this part, and really should not have been moved. B and E actually are in the first bar of the system, and should have been moved.

Even if the plugin were later run on the part, while it would move A B, and E appropriately, C and D would still be wrong. And if the other parts were laid out differently, different RMs is those parts could be moved incorrectly. You would need to check and correct all the parts manually, which kind of kills of the advantage of the plugin.

The plugin could have been set up to run on the parts before running on the full score, but that would not help either. In this example, RMs A, B, and E in the part would be correct, but the full score would still move C and D.

How the plugin was changed to avoid the problem

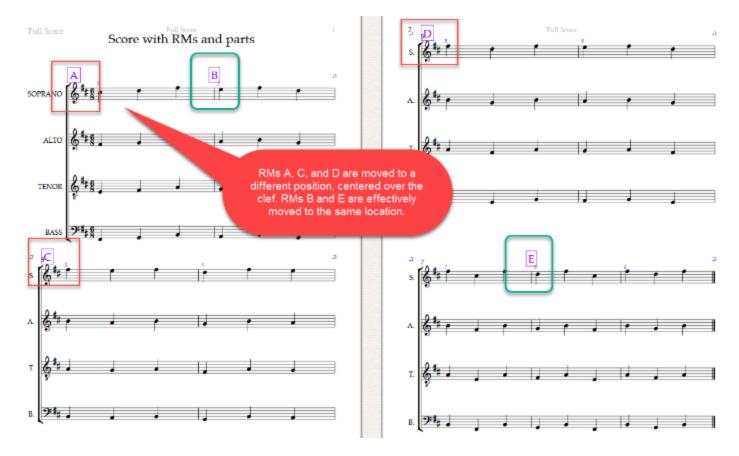
After considering a number of options, I came to the conclusion that it would be best if moving these objects in the full score would have no effect on the objects in the parts. The way I did this is to gather up any objects that would be moved if the full score were processed, and go to the parts and unlink all those objects in each part. If you change the position of an object in a part, then it will no longer be affected by position changes in the full score. It will be drawn by default in orange, to indicate that there were differences in the parts.

It turns out that if you make a small horizontal position change to an object in a part, and then restore the original position, Sibelius treats the objects as being in a different position, and unlinks it from the full score. This is what the plugin does to unlink objects.

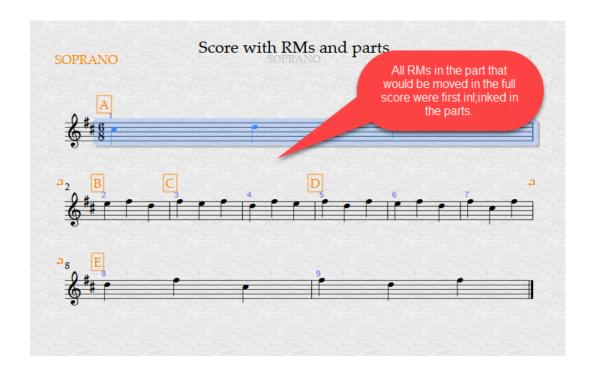
If the full score is going to be processed, the plugin now gathers up all the objects that would be moved in the full score before the full score is processed. If then goes into each of the parts, and unlinks those objects, so that moving them in the full score would not affect the position on the parts.

In the current version of Position Rehearsal Marks, all selected RMs and RM Text are candidates for moving. Thus all such RMs (A, B, C, D, and E) will be unlinked in the parts.

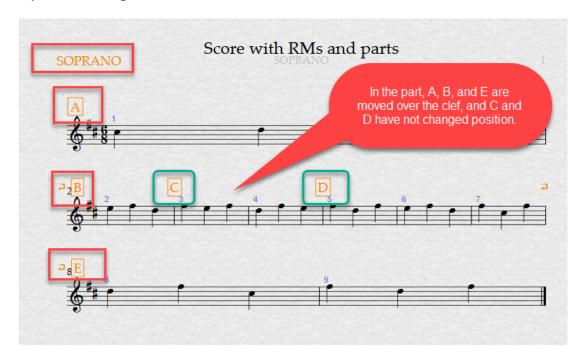
In the example above, RMs A, C, and D are the only RMs that will change position. Here is the full score after running the plugin:



The first part would look like this after the full score is processed:



If you were to now run the plugin on this part, you would get this result, which would, as expected, make no change to the full score. Other parts would be similarly processed, and different layouts would produce different results.

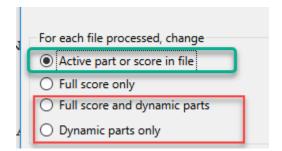


By the way, an interior bar should only have a clef if it has a Gap before Bar. In such a case, that bar will use the offsets usually applied to the first bar in a system, which are set up to deal with clefs. Interior bars without clefs normally align on the barline, rather than the clef, and they use a different set of default offset to fake left alignment to a barline.

This is not a simple plugin.

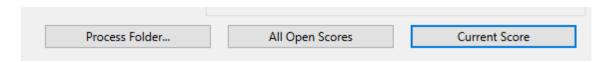
At any rate, if the full score will be processed, the plugin unlinks the objects that will be moved in the full score. The effect of this is that unlike most cases, **changing the position of an object in the full score will not affect the parts.**

If you want RMs to be moved in the parts, you must specify an option that includes the parts



The 2 options in red will always process the parts. The green option could be either a part or the full score. If it is a dynamic part, only that part will be processed, and other parts will be unaffected.

One last detail about this option. What is considered to be the active part, and whether the selection is respected is different depending which scores are processed.



I will repeat an explanation I gave earlier in this document.

If you process the **Current Score**, the plugin will **process only the bars selected**. If there are no appropriate RMs in the selection, it will ask if you want to process all the bars in the score. The score will not be saved nor closed after it is processed.

If you process all open scores, all the bars in the scores will be processed, ignoring the selection.

If the **All open scores** option is chosen, then whichever score or part is visible will be processed. The option is sometimes useful if you want to process several scores at once but not all the scores in a folder. The scores will not be saved nor closed after they are processed.

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The important points are

- The selection is ignored unless you are processing the Current Score only. In all other
 cases, the score is processed as if the entire score were selected.
- The Active part is the part that is visible in a score that is open, using the Current Score or All Open Scores option.
- If you use the **ProcessFolder...** option, it is even trickier
 - o If the score was not already open, the plugin opens the score and forces the active part to be the full score. These scores will be saved and closed after being processed.
 - o If the file for the score is in the desired folder but the score is already open, it is treated as the scores are in **All Open Scores.** The currently active part is still used, rather than being forced to make the full score active, and the score will be neither saved nor closed after being processed.

I hope you will find this useful!