# Optimizing (Hiding Staves) in PrintMusic 2011
(with a little help from PrintMusic 2010)

Unfortunately, PrintMusic 2011 no longer provides an option for hiding staves. It will, however, support hidden staves that were created with PrintMusic 2010. So, with the help of 2010 you can have hidden staves in PrintMusic 2011. (If you don't have PrintMusic 2010, look a couple of pages below for a pure 2011 alternative).

First get your music into PrintMusic 2010, either by creating it there to begin with, or by exporting it from PrintMusic 2011. Once exported to a MusicXML file, the file can be imported into PrintMusic 2010 which allows staff hiding.

Export/Import Instructions

Exporting from PrintMusic 2011 is accomplished through the **File Menu > Music XML > Export** option:
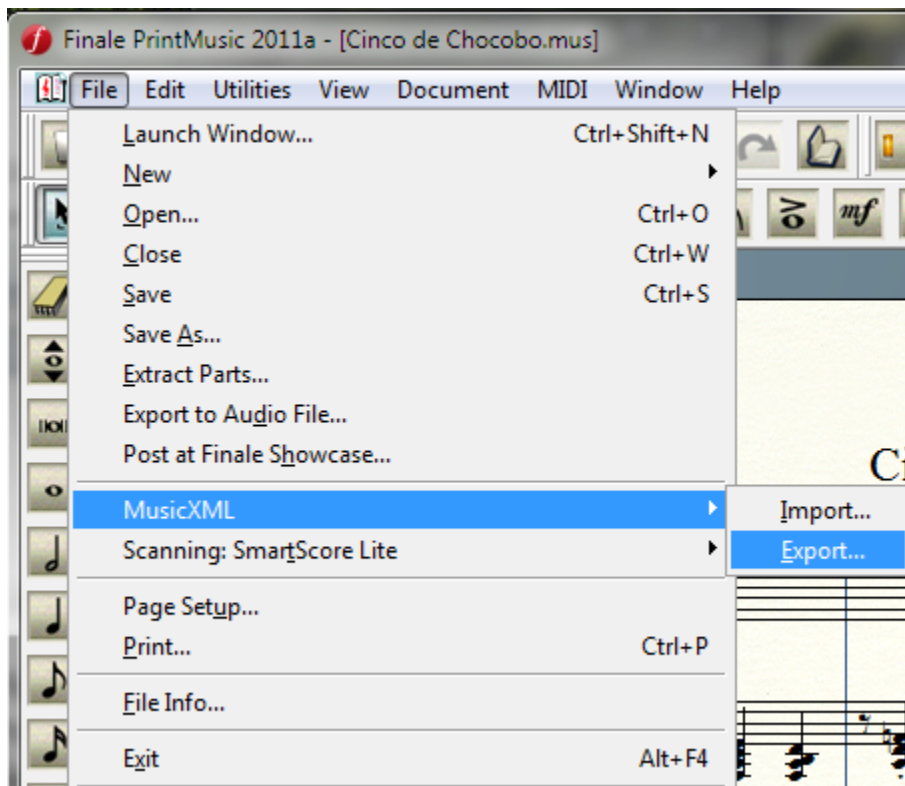
After exporting from PrintMusic 2011, import into PrintMusic 2010 using the **File Menu > Music XML > Import** option:
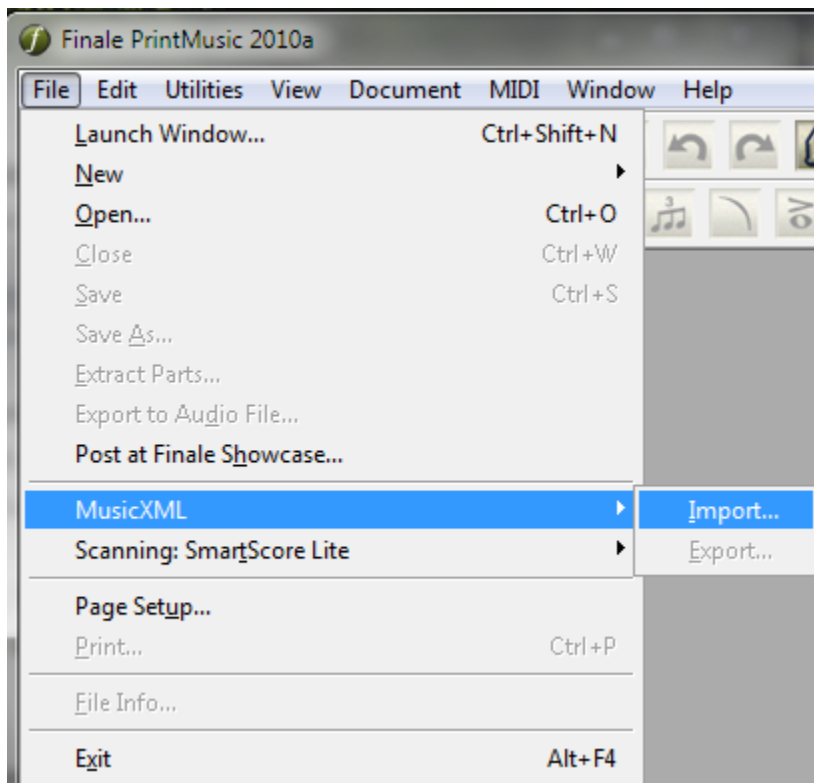
Since your score is now in PrintMusic 2010 (because you created it there or you imported there from PrintMusic 2011), you can simply apply all the staff hiding you need (see Mike Rosen's Hiding Staves in PrintMusic.pdf for instructions on doing this).

When you are done, save the score as usual and open it with PrintMusic 2011. PrintMusic 2011 recognizes regular PrintMusic 2010 files and opens them without a problem. Your score will now have those hidden staves.

Definitely a step backward in convenience, but currently, this is the official MakeMusic Customer Support work around.

But I Don't Have PrintMusic 2010

If you don't have PrintMusic 2010 there is still a glimmer of hope, but it is not for the fainthearted as you will be editing an XML file. It's best if you have a basic familiarity with XML structure, especially the ability to recognize XML tags and elements.

First export your score to a MusicXML file using the PrintMusic option. Then open the XML file using your favorite text editor – mine is Notepad++. Any editor that recognizes XML format with smart highlighting is preferred.

The XML file will have a **<part id=XX>** tag for each part in your score. This tag starts a huge element that contains all the musical information for every measure in the entire staff. Another **<part id=XX>…</part>** element will contain the data for the next part and so on. You will have to find the part element that contains the empty measures you wish to hide.

Within that **<part id=XX>** element are **<measure number="nn" …/measure>** elements. You need to find the first measure of the part where you want to begin hiding the staff.

For example, I have a score where the *Violin 1* part has a group of empty measures beginning at measure 9 and ending with measure 12.

In browsing through the XML code, I have discovered that the *Violin 1* part has an id of "P1":

```
<score-part id="P1">
   <part-name>Violin 1</part-name>
   <part-abbreviation>Vln. 1</part-abbrev
   <score-instrument id="P1-I1">
      <instrument-name>Violin 1</instrumer
   </score-instrument>
   <midi-instrument id="P1-I1">
      <midi-channel>1</midi-channel>
      <midi-program>49</midi-program>
      <volume>80</volume>
      <pan>-70</pan>
   </midi-instrument>
</score-part>
<score-part id="P2">
   <part-name>Violin 2</part-name>
```

I can then continue browsing the XML code until I find the **part** tag where the id equals "P1":

```
<part id="P1">
   <measure number="1" width="379">
     <print page-number="1">
       <system-layout>
         <system-margins>
```

Now within the **part** element I browse further until I find measure 9:

```
<measure number="9" width="391">
   <print new-system="yes">
     <system-layout>
        <system-distance>114</system-distance>
     </system-layout>
   </print>
   <attributes>
     <key>
        <cancel>1</cancel>
        <fifths>-4</fifths>
        <mode>major</mode>
     </key>
     <time>
        <beats>6</beats>
        <beat-type>4</beat-type>
     </time>
   </attributes>
```

Looking inside the **measure** element, you should find a <**print**… start tag. Also, notice the end tag **</print>**. We will place code to hide the measure right after the **print**'s end tag. There may already be an **attributes** element following the **print** element. That's OK, we will simply to add another one with the hiding directive:

<attributes>
 <staff-details print-object="no"/>
</attributes>

```
<measure number="9" width="391">
  <print new-system="yes">
    <system-layout>
      <system-distance>114</system-distance>
    </system-layout>
  </print>
  <attributes>
    <staff-details print-object="no"/>
  </attributes>
  <attributes>
    <key>
      <cancel>1</cancel>
```

This will now hide all the measures from this point forward. But, of course, we want to unhide them again after the last empty measure. So, now find the first measure that *follows* the last measure to be hidden. In our example, that is measure 13 since measure 12 is the last measure to be hidden:

```
<measure number="13" width="370">
  <print new-system="yes">
    <system-layout>
      <system-distance>114</system-distance>
    </system-layout>
  </print>
  <attributes>
    <key>
      <cancel>-4</cancel>
```

Add the **attributes** element that turns off hiding in the same manner as before. Notice the slight difference in the code that turns the visibility back on:

<attributes>
 <staff-details print-object="yes"/>
</attributes>

```
<measure number="13" width="370">
  <print new-system="yes">
    <system-layout>
      <system-distance>114</system-distance>
    </system-layout>
  </print>
  <attributes>
    <staff-details print-object="yes"/>
  </attributes>
  <attributes>
    <key>
      <cancel>-4</cancel>
```

Now save the XML file and import it into PrintMusic 2011 using the MusicXML import option. Our example now looks like this:

Whew! That's all there is to it.

Dave Black
9/29/2011