

Working with Reaper: concatenating mp3 files

Before beginning in Reaper, you should have gone through these steps:

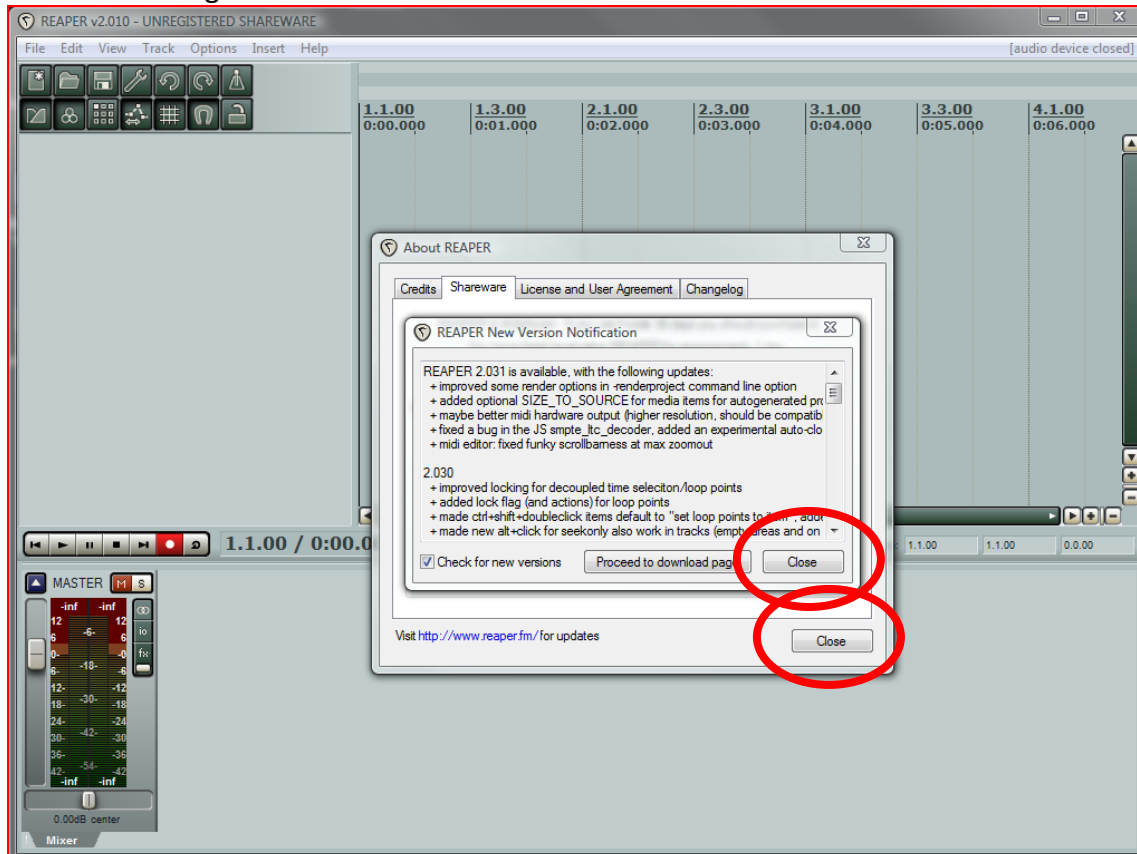
- Been assigned a ticket to create mp3s from Jan
- e-mailed Grace to request the files with this subject line format:
lecture files for LIS (or IMT, etc) XXX needed
- Checked in your N:\Project Folders\Staff-GA Shared Folders\Grace_Jan_GSACrew\yourname\instructorname folder to see the zipped folder or folders
- Extracted the zipped folders [note: if there are more than 5 zipped folders, extract the folders in batches instead of all at once].

Next, go to the Reaper site and download the product.

<http://www.reaper.fm/download.php>

You will also need a copy of **lame_enc.dll** to put into the main Reaper folder once the program is installed, found in the GA wiki documents library.

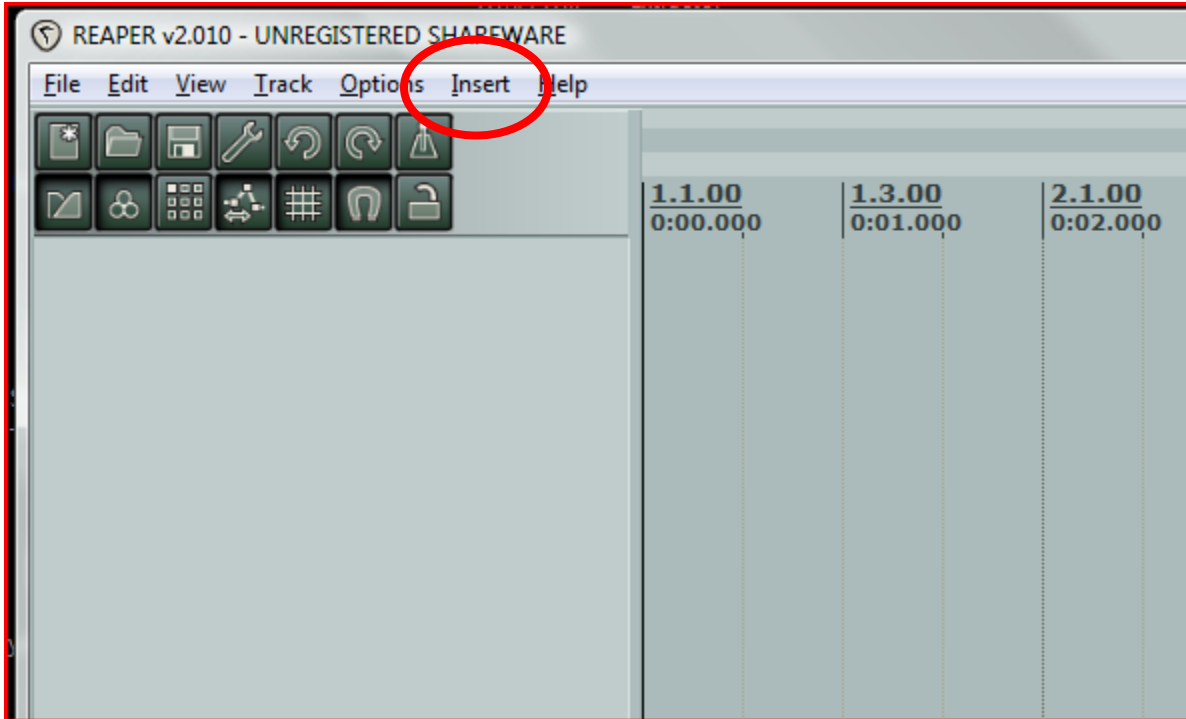
Once Reaper is installed, open the program. You should see a screen with dialog boxes that looks something like this:



click on both **Close** buttons.

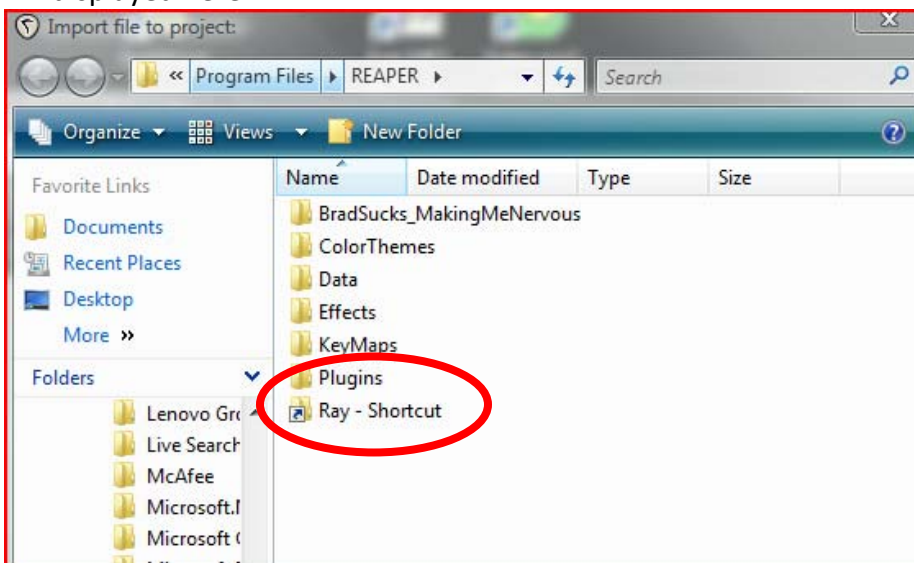
Using the program

1. from the **Insert** menu:

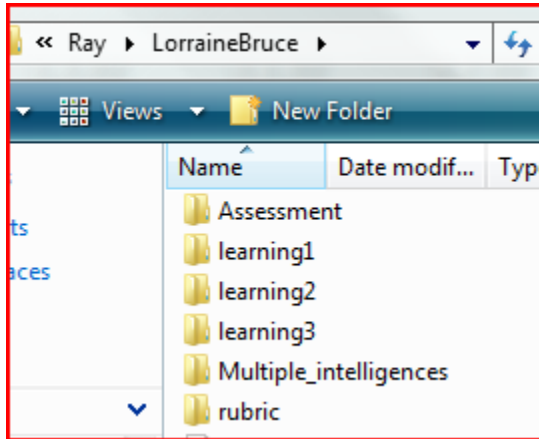


choose **Media File**. The default browser window will appear. Note that it's inside the Reaper folder under Program Files.

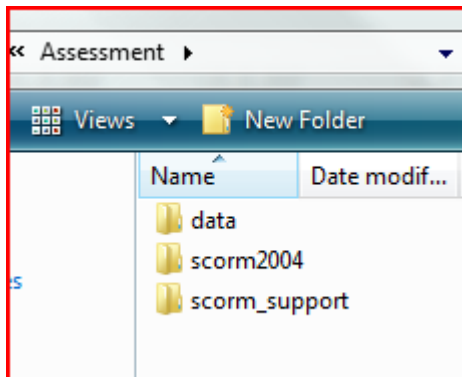
2. Add a shortcut inside this default folder that goes to your GA folder on the N: drive as displayed here.



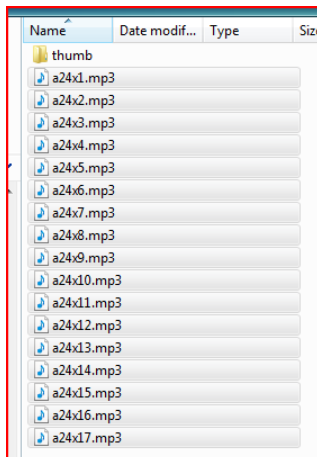
3. Once you have made a shortcut, navigate in this window to the folder where Grace has put the zipped lecture folders. If you don't see anything in the folder, go back to Windows Explorer and make sure you have extracted the folders first, so that Reaper will be able to use the contents. You should see folders like this:



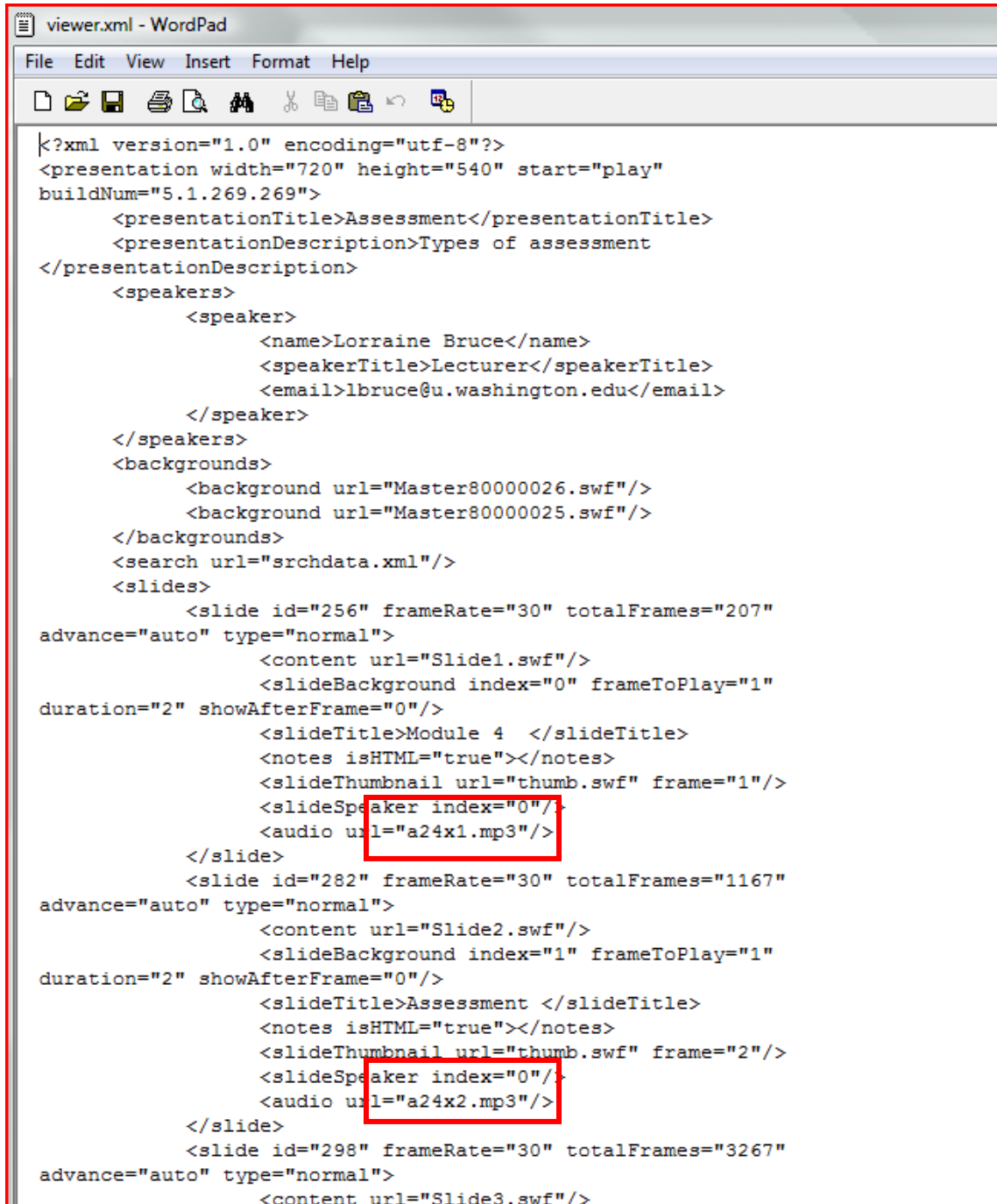
4. Open one of the unzipped folders, which will have multiple subfolders and files. Open the **data** subfolder.



5. Select all of the mp3 files inside, but not any other files. **[NOTE: If there are mp3s that are out of order, or some are "missing," you'll need to check that the sound file order matches the order in the slide show. Go to steps 5a. and 5b.]**



5a. [optional: see step 5 above.] Check the correct order of the mp3s by going opening the **data** folder you are working on in a new **Windows Explorer** window. Open the **viewer.xml** file. If you are more comfortable with XML Spy, that program will open the file by default, otherwise you can right-click on **viewer.xml** and choose **Open in Wordpad**. In Wordpad, **viewer.xml** looks like this:



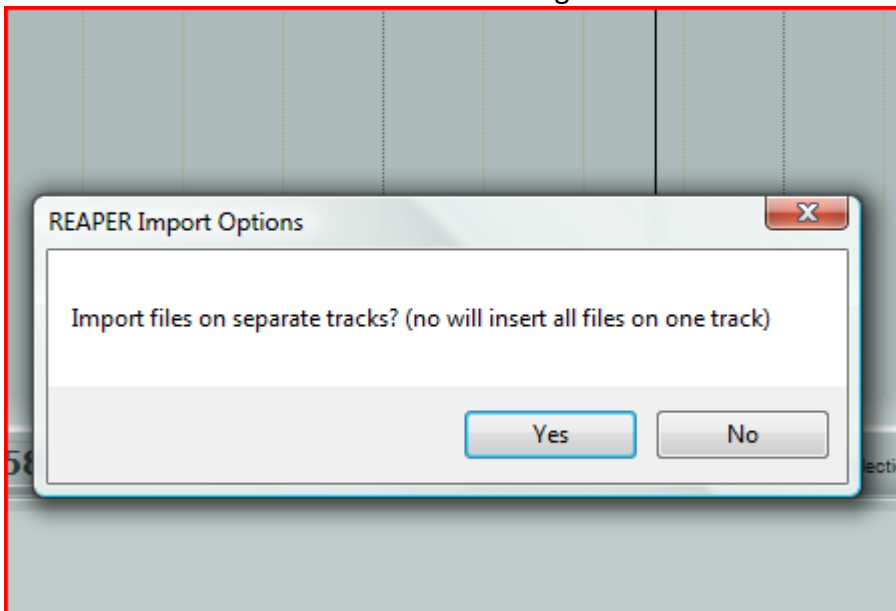
```
<?xml version="1.0" encoding="utf-8"?>
<presentation width="720" height="540" start="play"
buildNum="5.1.269.269">
  <presentationTitle>Assessment</presentationTitle>
  <presentationDescription>Types of assessment
</presentationDescription>
  <speakers>
    <speaker>
      <name>Lorraine Bruce</name>
      <speakerTitle>Lecturer</speakerTitle>
      <email>lbruce@u.washington.edu</email>
    </speaker>
  </speakers>
  <backgrounds>
    <background url="Master80000026.swf"/>
    <background url="Master80000025.swf"/>
  </backgrounds>
  <search url="srchdata.xml"/>
  <slides>
    <slide id="256" frameRate="30" totalFrames="207"
advance="auto" type="normal">
      <content url="Slide1.swf"/>
      <slideBackground index="0" frameToPlay="1"
duration="2" showAfterFrame="0"/>
      <slideTitle>Module 4 </slideTitle>
      <notes isHTML="true"></notes>
      <slideThumbnail url="thumb.swf" frame="1"/>
      <slideSpeaker index="0"/>
      <audio url="a24x1.mp3"/>
    </slide>
    <slide id="282" frameRate="30" totalFrames="1167"
advance="auto" type="normal">
      <content url="Slide2.swf"/>
      <slideBackground index="1" frameToPlay="1"
duration="2" showAfterFrame="0"/>
      <slideTitle>Assessment </slideTitle>
      <notes isHTML="true"></notes>
      <slideThumbnail url="thumb.swf" frame="2"/>
      <slideSpeaker index="0"/>
      <audio url="a24x2.mp3"/>
    </slide>
    <slide id="298" frameRate="30" totalFrames="3267"
advance="auto" type="normal">
      <content url="Slide3.swf"/>
```

The sound file order in the XML is pointed out by the red boxes.

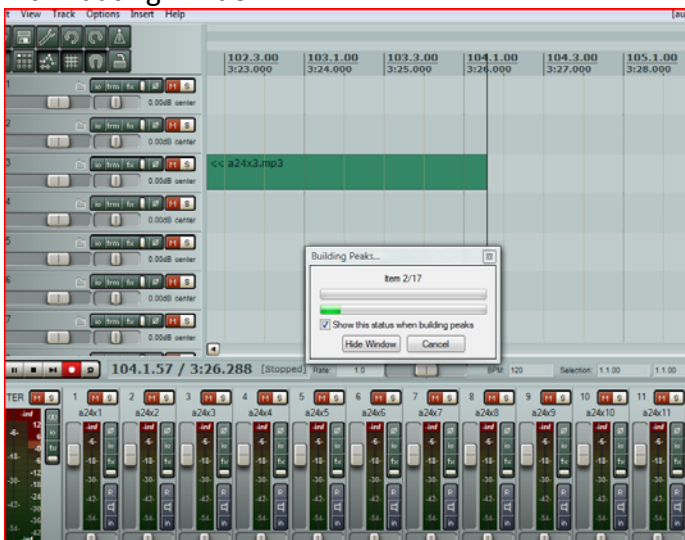
If the filenames you see in the XML jump around numerically (e.g. a24x4.mp3 is followed by a24x1.mp3, then a24x2.mp3), the mp3 files **MUST** be renamed in their proper order. In the previous example, a24x4.mp3 would need to be renamed a filename that puts it at the top of a numeric list, like 01.mp3. Then a24x1.mp3 becomes 02.mp3, and a24x2.mp3 becomes 03.mp3. **PRINT OUT** the viewer.xml file so that keeping track of the order is not a problem. You should probably not attempt to work on something like this if you think you may be interrupted, because it's very easy to lose track of your renumbering scheme.

5b. Select all of the renamed mp3s in the folder, but not any other files.

6. Once the mp3s have been selected in Reaper, click the **Open** button to open them in the tool. Be sure to choose **No** at this dialog box:

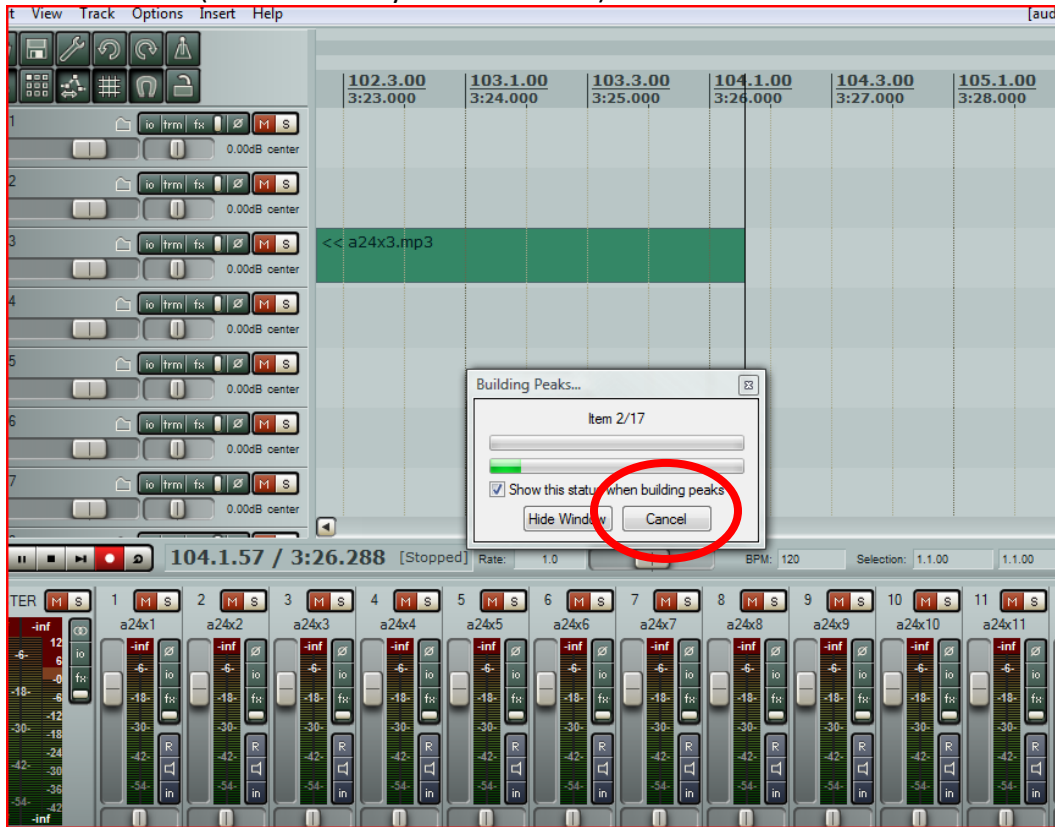


Note: choosing Yes instead of No (by clicking on Yes or pressing the Enter key) will lead to this intimidating window:



To correct this without closing Reaper and beginning again, follow the steps 6a and 6b below.

6a. [optional, see note above] From the window shown above, choose **Cancel** and then press **Control +Z** (the "undo" keyboard shortcut):

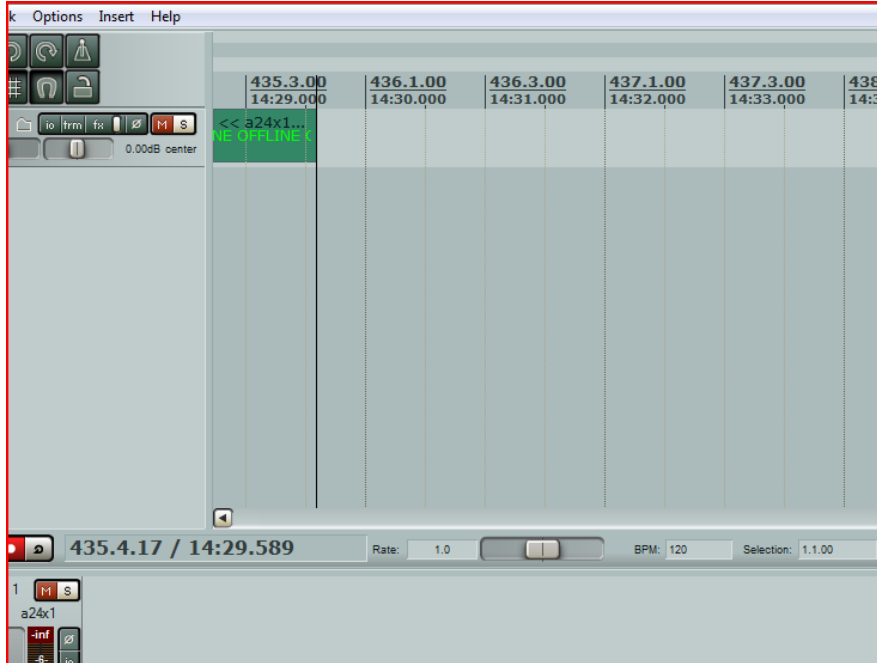


Which will return the window to its correct initial state:



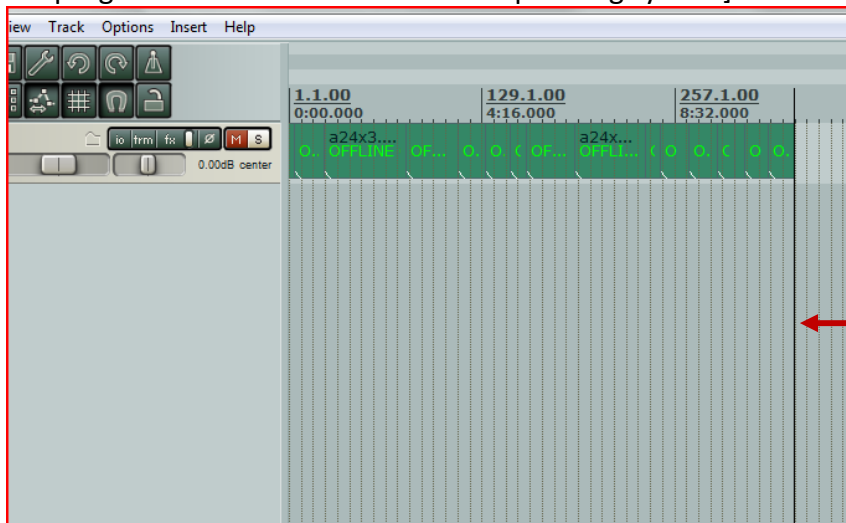
6b. [optional, see note above] From here, return to the **Insert** menu (Step 1 above) and follow the directions from that point, being careful to choose **No** in Step 5 above.

7. Once you have inserted the media files correctly (choosing **No** in Step 5 above), the resulting screen after opening the files should look like this:



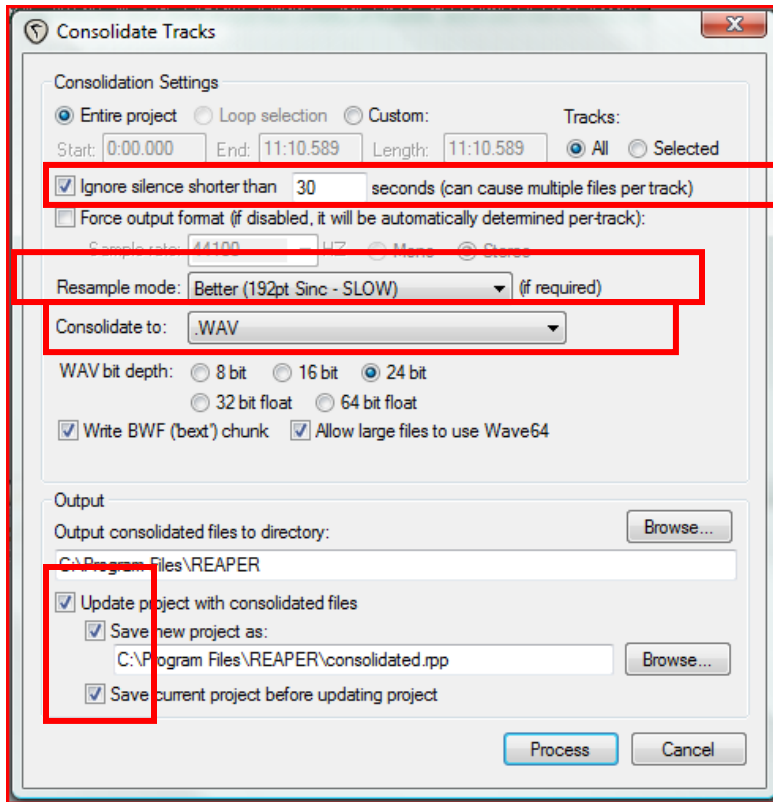
8. Click inside the Reaper workspace (with the tail end of the sound file) and roll the scroll wheel on the mouse backwards (towards you) a few times, until the display looks like this. This is so you can see the whole sound file at one time.

[note: the repeated word OFFLINE is showing in these examples because Reaper is not the program that has the focus of the operating system]

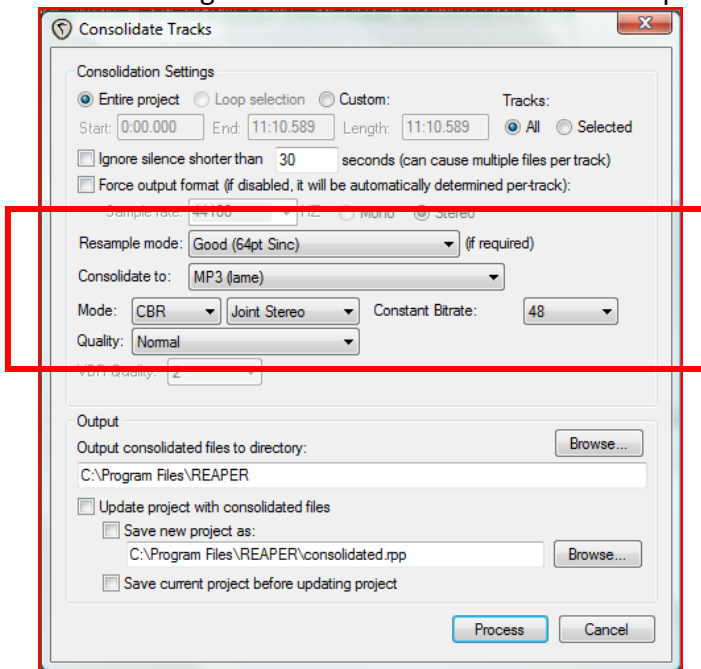


end of the sound file

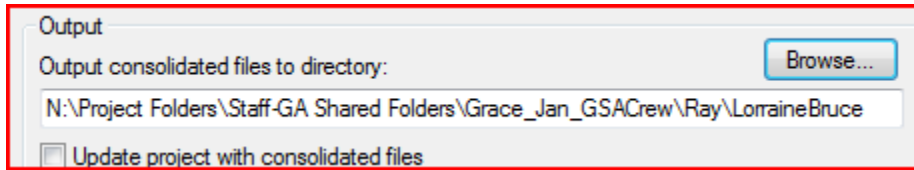
9. Go to the **File** menu and choose **Consolidate/Export Tracks...** to get this dialog box.



10. Change all of the areas inside the red boxes (using the drop-down menu, if present), until the dialog box looks like this - some new drop-down menus will appear:

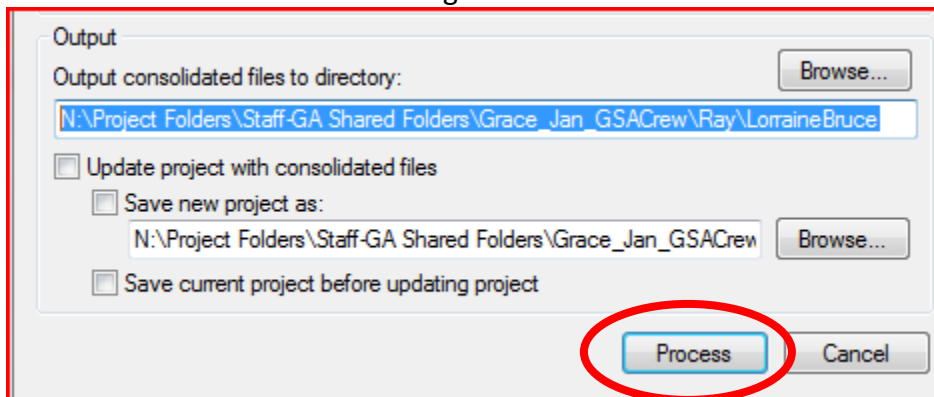


11. Now click the top **Browse...** button and navigate to the folder you want the **output** to go to. Consider putting it in the top level of your shared instructor's folder, like this:

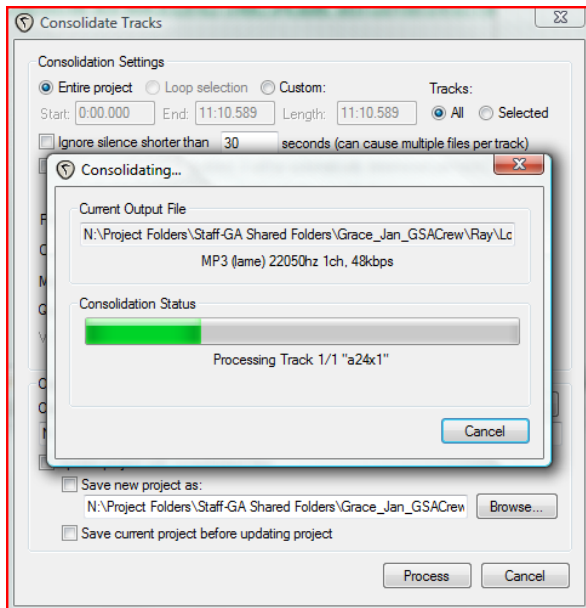


Because Reaper doesn't hang on to that information in the way we are using it, consider selecting that text and choosing Copy from the right-click menu to be able to paste it back in for other files in the same folder.

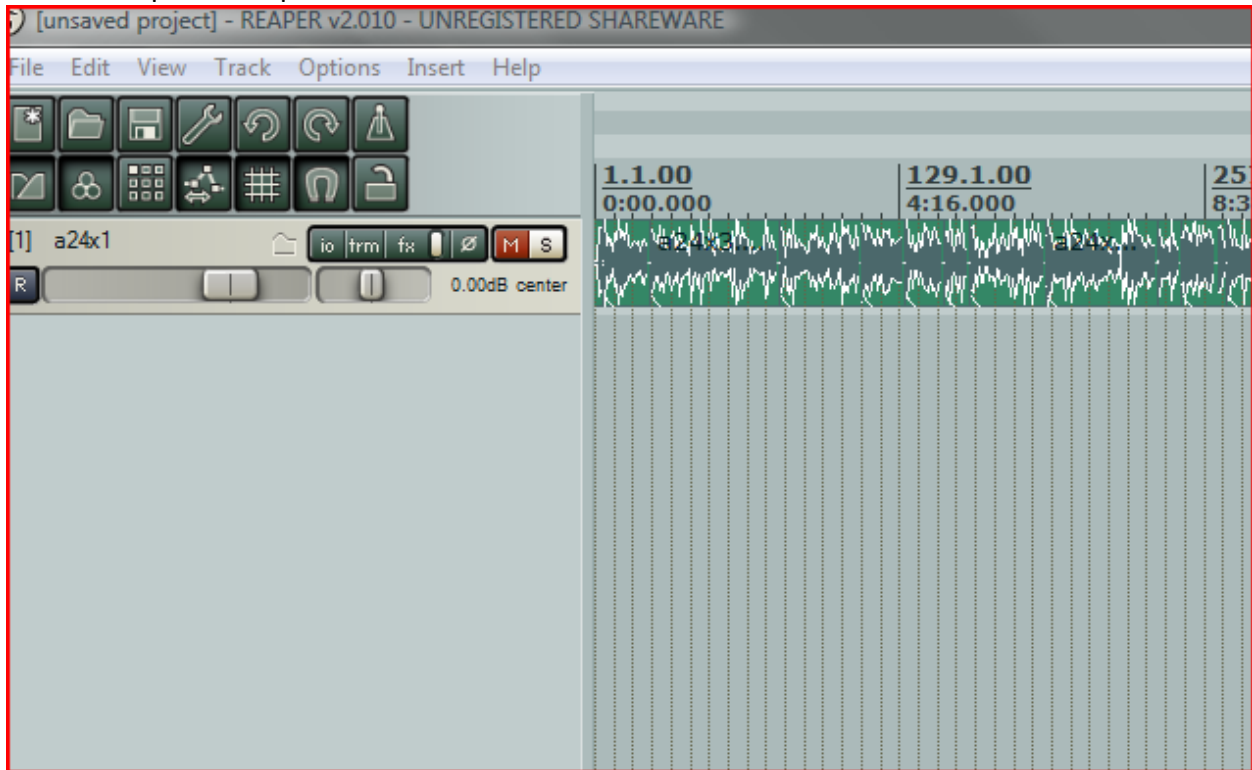
12. Click the **Process** button to begin:



Which results in this status window.



13. Once the output process is complete, you are returned to the file displayed in the Reaper workspace:



14. Navigate to the shared instructor's folder on the N: drive in a **Windows Explorer** window.

Note that there are 2 Reaper-generated files:

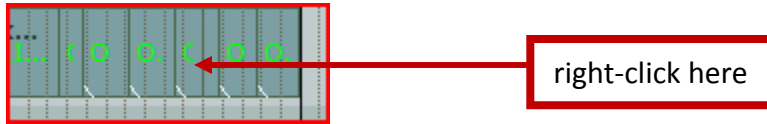
rubric	1/15/2008 7:13 PM	File Fo
01-a24x1-consolidated-080115_2005.mp3	1/15/2008 8:05 PM	MP3 F
01-a24x1-consolidated-080115_2005.mp3.reapeaks	1/15/2008 8:05 PM	REAPB

15. Double-click on the mp3 file and listen to the first few seconds and the last few seconds to make sure everything is correct. Rename the mp3 file with something that will tell you and the instructor which lecture file this is. Often, the name of the folder that the files came from is named with something that is already useful (like "Assessment" from Step 3 in this example):

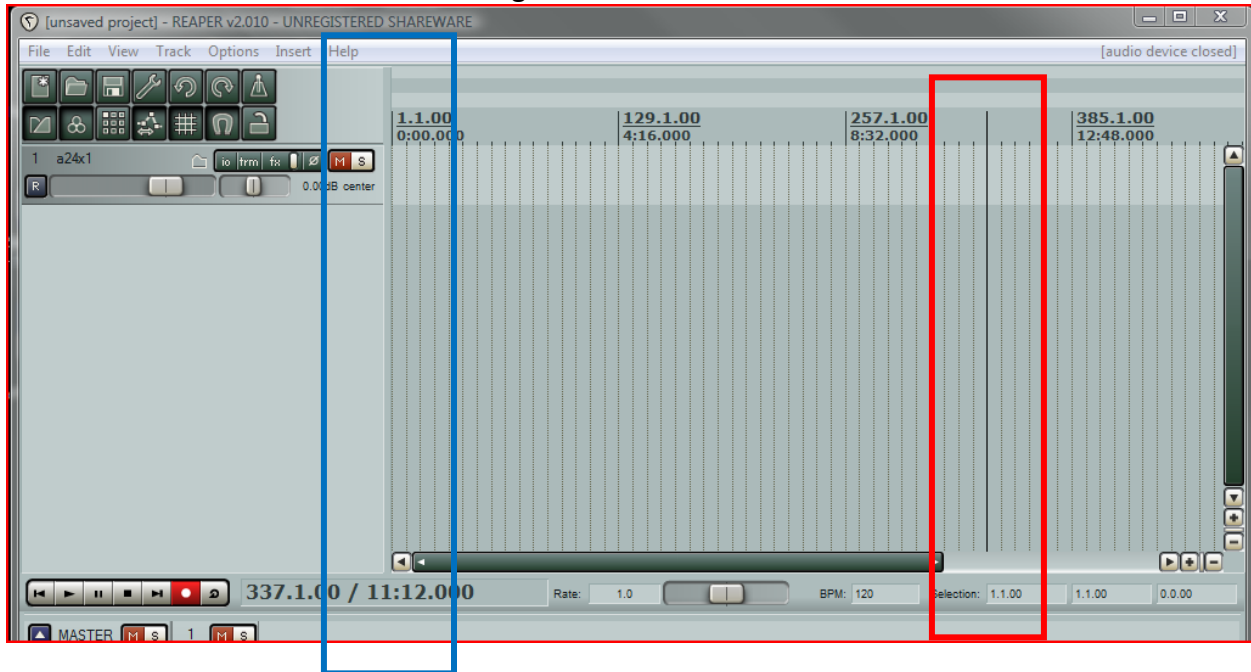
assessment.mp3	1/15/2008 8:05 PM
01-a24x1-consolidated-080115_2005.mp3.reapeaks	1/15/2008 8:05 PM

Note that the .reapeaks file is a "scratch file" and is only used to build the mp3. You'll be deleting it and any other files that are not the finished mp3s once you have processed and output all of the sound files you are working on, and have closed down Reaper.

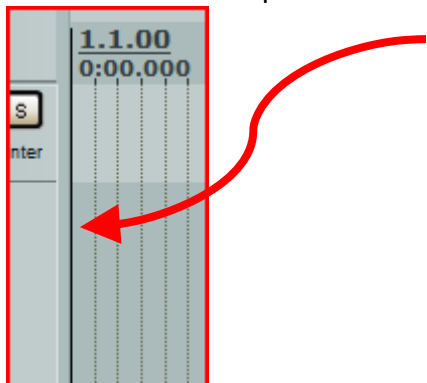
16. To continue working on other lecture files without shutting down and restarting Reaper, first return to Reaper. In the Reaper workspace, press **Control + A** to **select all**. Right click on the sound form:



and choose **Remove selected items** to get this:

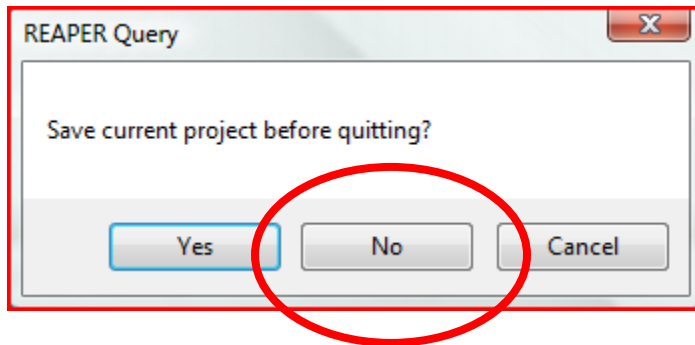


In the red box is the current insertion mark, which is where any new inserted file will be placed. We want that mark to be back at time zero, so click on the zero mark (in the blue box) while the mouse cursor is shaped like an I-bar to re-position the insertion point at time zero.



17. Return to the **Insert** menu, and repeat the steps above, starting back at Step 1.

18. Finally, when exiting Reaper, **don't** save the project when prompted, as Reaper will generate additional files you will only have to go back and delete. When prompted to save, choose **No**:



19. You're done! All that's left is to move/link the mp3s to the website.