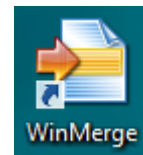# Using WinMerge to Verify Player Contents

To ensure quality contents when batches of players are programmed with specific audio for distribution, MegaVoice recommends sampling one player out of *each* batch to compare the player's contents against the source audio folder.
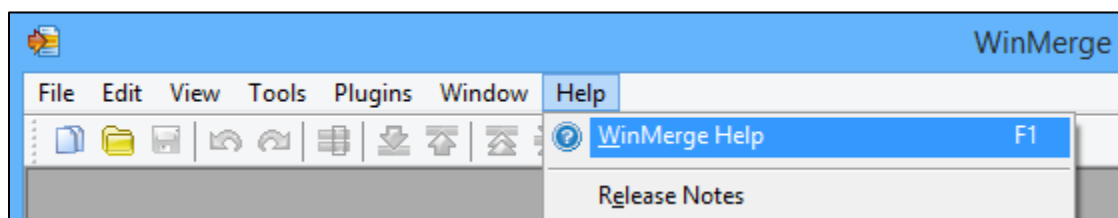
This document will provide instructions on how to use a free utility named "WinMerge" to compare a player's contents against a source audio folder. The comparison will include both folders and files. The type of file comparison executed for audio files is "binary" which is the most powerful method of comparison and will identify files that are internally corrupt and/or truncated. The process will also identify files on the player that are missing from the source folder.

Please note that this process is <u>not</u> intended to identify problems in the source audio folder. It is the sole responsibility of the person(s) that prepared that audio to ensure it is perfect and ready for distribution!
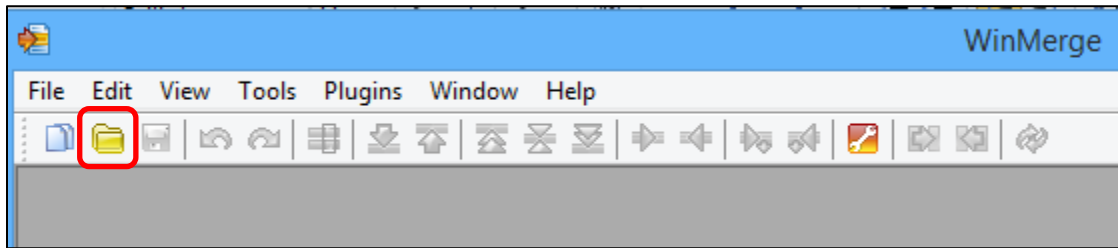
1. If you don't have WinMerge installed, click on this link (http://winmerge.org/downloads/) to download the program. In most cases, the program will be saved to your "Downloads" folder, but you may choose to save it elsewhere. If you do have WinMerge installed, skip to step 4.

2. Once the download completes, navigate to where you saved the file and execute the downloaded program to initiate the installation.

3. Installation is very straightforward and typical for a Windows program. If you need help, please go here for guidance: http://manual.winmerge.org/Install.html .
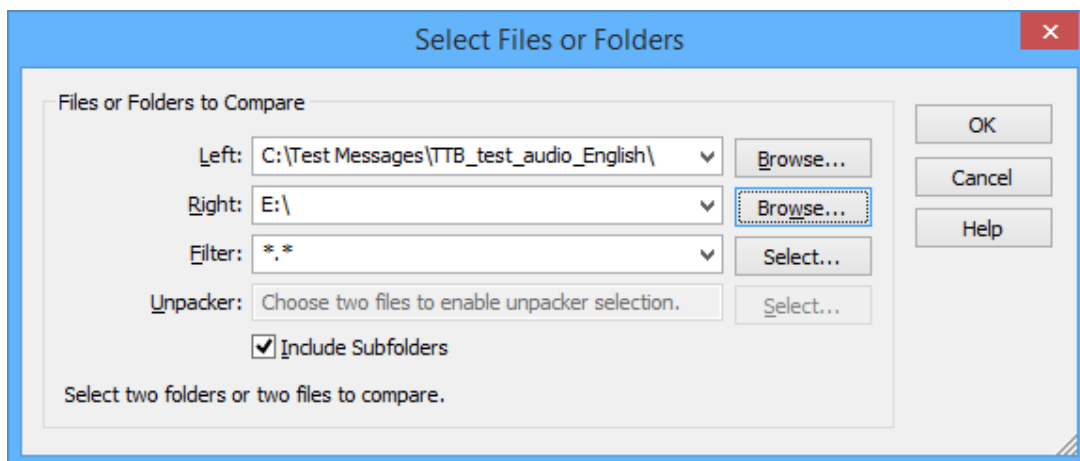
4. Once WinMerge is installed, double-click on the desktop icon to start the program.

5. If at any time you need help with the usage and configuration of WinMerge, there is very good documentation built-in. From the menu choose Help | WinMerge Help.
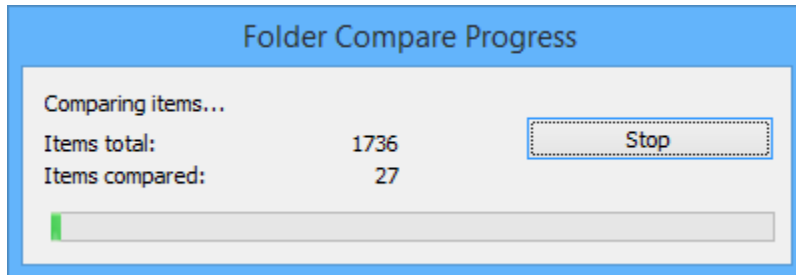
6. Click on the "Open" (folder) icon on the tool ribbon (circled in red) or, from the menu, choose File | Open to begin.

7. You will get the following "Select" dialog. Here you will open the source folder and player for comparison. It doesn't really matter which selection is "left" and which is "right".

8. Make sure the player to be sampled is connected to the computer with a SLS cable in a normal (UDISK) USB connection (*not* ADFU for those who use the Actions Programming Tool for loading players).

9. So for the "left" side, click Browse and navigate to the source folder on the PC that was used to load the sampled player.

10. Then for the "right" side, click Browse and navigate to the player chosen for the sampling. In the example below it is volume "E:".

11. In most cases, leaving the "Filter" field set to "*.*" will be fine, but possible caveats will be discussed later.

12. Make sure the "Include Subfolders" checkbox is selected so that the entire audio message is checked.

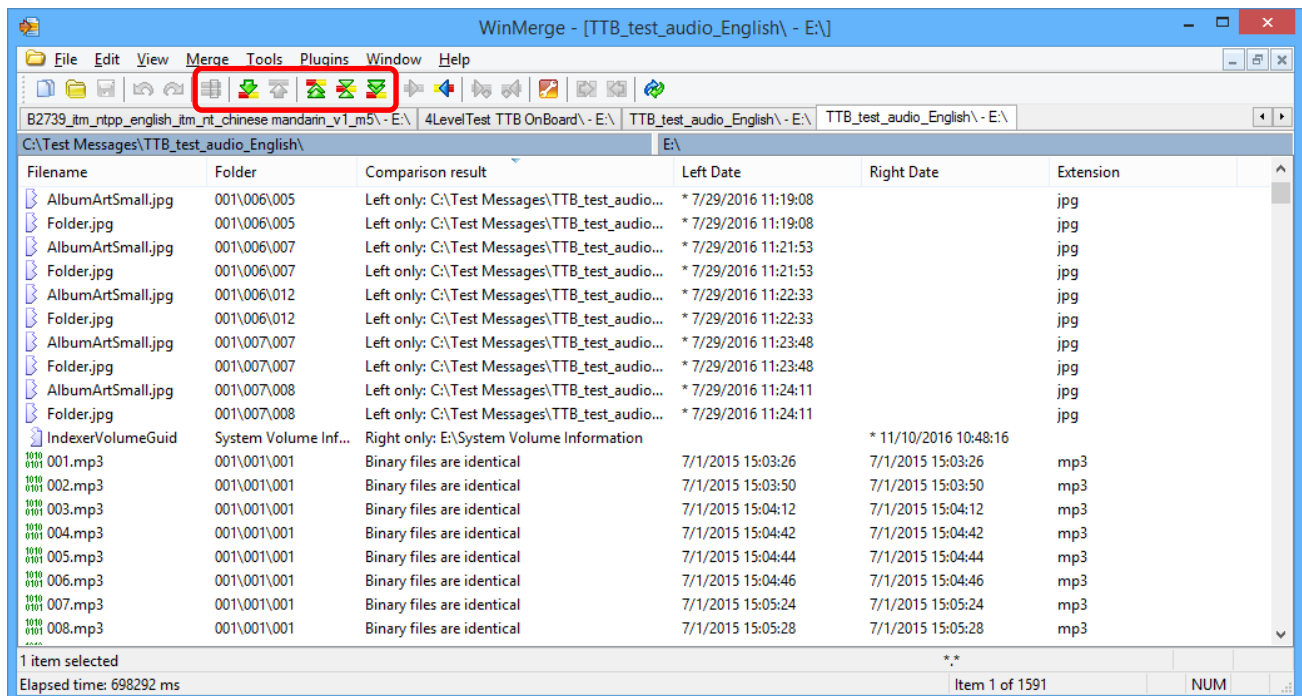13. Click the OK button and the comparison will begin.

14. You will get a comparison progress dialog like the one below. The time required to complete the comparison depends on your computer's speed and the size and number of audio files you are comparing. It is possible that the process will take 5, 10 or 15 minutes or possibly longer.
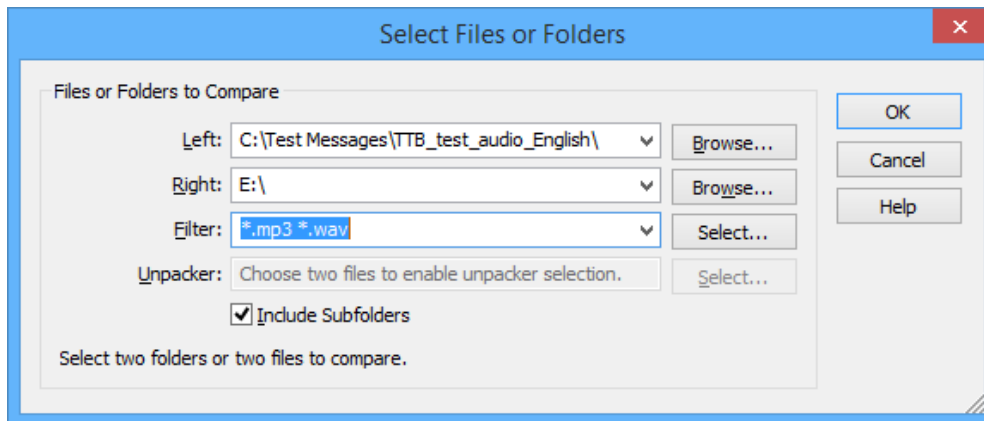

15. In the example comparison below, some of the source audio book folders contain JPG artwork files that are displayed when the audio is played on MP4 players or a computer program. WinMerge detected that they are missing on the player. Actions Programming Tool was used to load the player and it ignored the JPG file when loading.
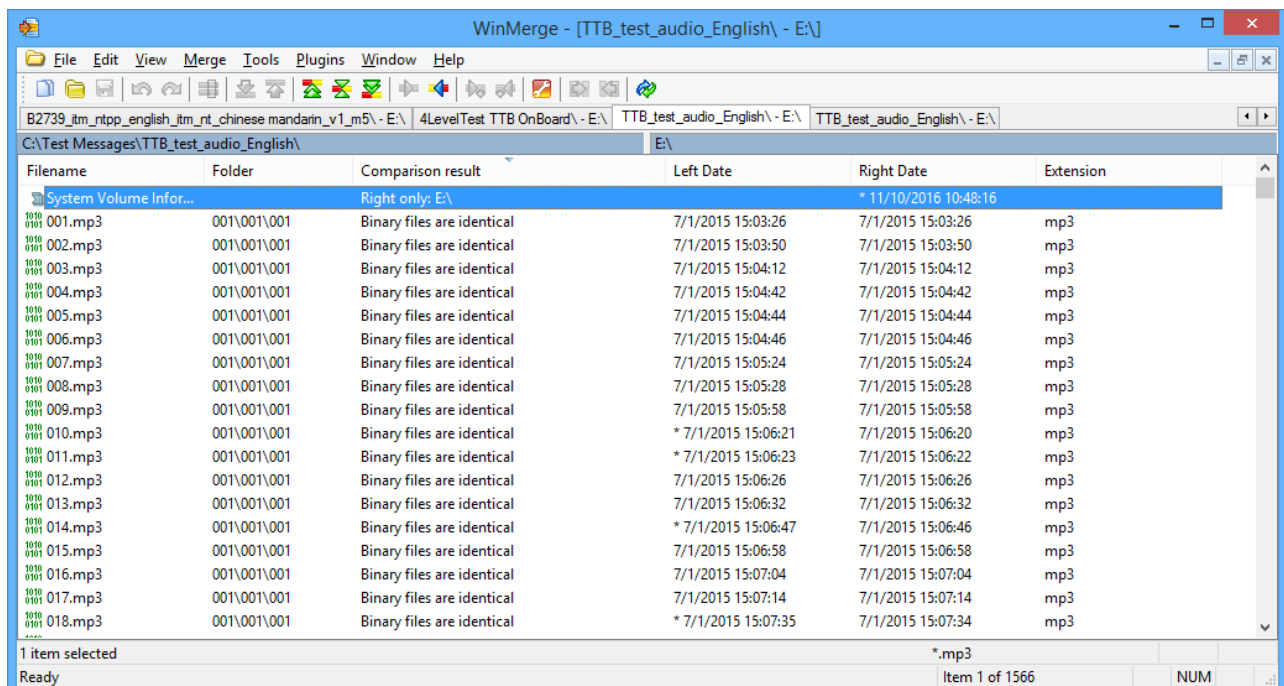We also see some MP3 files that were compared and found to be identical (which is what we want). You can navigate differences in the list by clicking on any of the "difference" buttons in the ribbon bar (circled in red). Holding the mouse over each button will display a tool tip explaining what that particular button does.

16. If you have audio source folders that contain non-audio files, you can ignore those during the comparison process by changing the filter option in the "Select" dialog. For example, we could tell WinMerge to only compare files that have the extension "mp3" which would ignore all others.

   a. You can specify multiple file types if you wish by listing all of them and separating them with a space, comma or semi-colon. For example, your audio may contain a mix of MP3 and WAV files. See below:

17. If we re-run the same comparison again with the filter set to only MP3 files, we will get the following results. (see image below) This time, the only difference found is the System Volume Information folder on the player. This is a hidden system folder that Windows places on any USB device. It can be safely ignored. If you scroll through the rest of the files in the list, you should expect to see the result of "Binary files are identical" and no other differences.

18. In the majority of cases the *only* difference you should expect to see is the System Volume Information folder on the player.

19. In the event that WinMerge has detected audio files that don't match OR there are file(s) in the source audio folder that are missing from the player, please resolve the problems <u>before</u> continuing to load any more players.

20. Once problems have been identified and corrected, all players loaded up to this point <u>must be reloaded with the corrected audio</u>!