Editing Audio with Audacity (Part 2)

The first guide (Part 1) is here:

http://www.jtoolkit.com/audio/Audacity_Guide.pdf

Part 1 explains how to download and install Audacity and use it to make recordings, import and export audio files, and make simple edits on one track. You can also learn *how to convert a stereo file to mono*, which results in a much smaller file size for online goodness.

Your MP3 file for the Web should be 44.1KHz, 16-bit, mono (in most cases). To ensure that the format is correct, use this guide to change the Preferences before you begin editing in Audacity:

http://www.jtoolkit.com/audio/Audacity_File_Tips.pdf

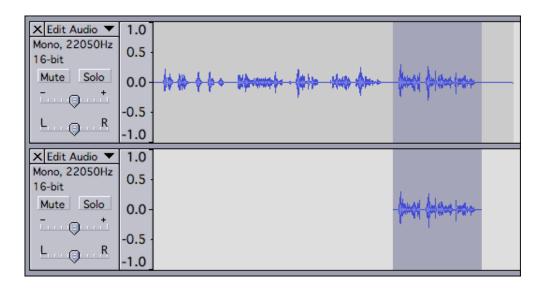
How to Isolate One Segment of Audio

Ctrl-D (Cmd-D/Mac) is your best friend in multitrack editing in Audacity. With Ctrl-D (Cmd-D), you *duplicate* a selected segment of a track into a new track, where it stands alone. Like this:

1. Click and drag to select the bite you want.



2. Press and hold Ctrl (Win) or Cmd (Mac) and press D. As the next illustration shows, this creates a new track, which contains a copy of the bite or section you had selected.



- 3. Instantly you have a new track containing only that selected sound bite. Your original track is unchanged.
- 4. Now use the **Time Shift Tool** (shown at right) to drag the clip (or bite) into position in its track.



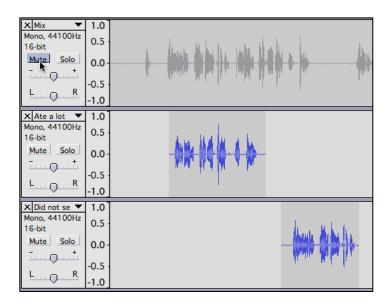
Normally we do all our selecting, cutting, pasting, etc., with the **Selection Tool** (at right).

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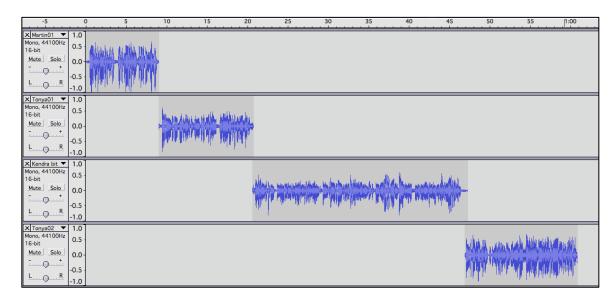


When you are editing with multiple tracks, it's good to mute some of the tracks (and un-mute them later as well).



Each track has its own "Mute" button. Click it to mute the track, then again to un-mute that track.

Before you export the MP3 file, delete any unneeded tracks. To delete a track, click the **X** at *top left corner of the track* (to the left of the track name, which you can change by clicking it).



In the illustration above, you can see four tracks. This is part of an Audacity project in which six interviews (with six different people) were mixed together. The project has eight separate tracks.

How to Add More Audio to the Same Project

On the **Project** menu in Audacity, select **Import Audio.** (In newer versions of Audacity, there is no Project menu. Instead, open the **File** menu. **Import** opens a sub-menu—select **Audio** there.) Find your audio file and select it. Audacity will add it as a new track.

- 1. If your tracks are all mono and the new one is stereo, *convert it to mono* (using the steps in the first tutorial; see page 1 here for the link to that tutorial).

1.0

X Mix

2. Note that the *sampling rate* of the tracks (44100Hz, at right) need not match. Audacity manual: "You can import audio of any sample rate or bit depth and Audacity will resample and convert it to the project rate and bit depth on the fly, as well as upon Export."

If all your files were recorded on the *same* device, you should have no problems. If files were recorded on *different* devices, they may have technical differences that will prevent them being edited together cleanly.

Generally, I now save all my audio for the Web at a sampling rate of 41,100 Hz (or 41.1 kHz).

Remember to *keep saving* your project so you don't lose your changes:

File menu > Save Project

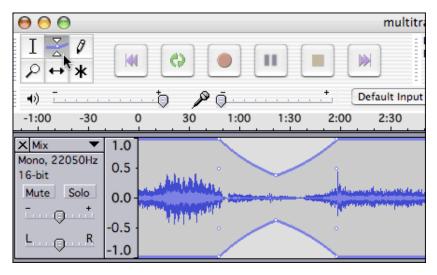
When you've finished all your editing, you can simply export the MP3 file (as explained in the first tutorial); there is no need to mix or combine the tracks. They will be mixed *automatically* upon export.

Fading, and Messing Around with Volume

The Fade options are on the **Effect** menu. Select something first (click and drag over several seconds), then look at the menu. If you *select about 2 seconds* of room noise at the beginning of a file, for example, and then select "Fade In" from the menu, you'll create a smooth beginning for your audio. It's usually good to fade out a couple of seconds *at the end* of the completed file so that it does not cut off too abruptly. ("Fade Out" is also on the **Effect** menu.)

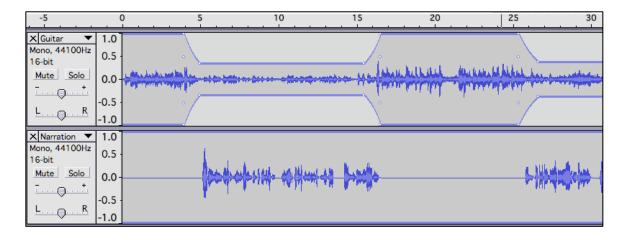
Remember: If you have *paused* your audio, *nothing works* in the menus. Click the Stop button to fix this problem.

For more sophisticated control of the volume on multiple tracks, you must use the Envelope Tool.



Changing the *volume* of a track in various places (e.g. bringing music up and down to accompany narration) requires the Envelope Tool (at left—upper left corner). It takes some practice, but don't give up.

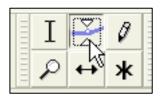
In the illustration above, I clicked at *three different spots* in the track—(1) around 50 sec.; (2) at 1 min. 20 sec.; and (3) at 2 min. Then I *dragged the cursor* down at the middle spot (1 min. 20 sec.), and the result is that the volume decreases from 50 sec. until 1 min. 20 sec., and then *increases* again (up to normal) until the 2 min. mark. Look at the illustration—it shows you what the volume does!



In the example above, a street performer is playing his guitar and singing in the first track (named "Guitar"). In the second track (named "Narration"), someone is talking about the street performers in that town.

I used the Envelope Tool to make four "handles" in the Guitar track. That is, after selecting the Envelope Tool, I *clicked four times*: at 4 sec., at 5 sec., at 16 sec., and at 17 sec. I dragged down the handles at 5 sec. and at 16 sec.,

making the guitar very quiet during the time when narration is voiced on the *lower* track.



The Envelope Tool is what allows you to add handles (by clicking). The handles allow you to "pull down" the volume anywhere, on any track, for any duration needed. After using the Envelope Tool, be sure to select the normal cursor again (that is, the Selection Tool)—the one to the left of the Envelope Tool.

Erase Unwanted Noise

Here's how to clean up noise, like a nasty air conditioner humming or buzzing.

According to the Audacity manual, "this works best when the audio signal is much louder than the noise."

- 1. Select a section of the audio that is silent *except for* the noise you want to filter out. (This section can be only a few seconds long.)
- 2. **Effect** menu > Noise Removal
- 3. Click the "Get Noise Profile" button.
- 4. Select *all* of the audio you want to filter.
- 5. **Effect** menu > Noise Removal (again)
- 6. Click the "Remove Noise" button.

If you don't like the result, **Edit** menu > Undo.

More Help

Everything on the mysterious **Effect** menu is explained here:

http://audacity.sourceforge.net/manual-1.2/menu effects.html

Nice Audacity tutorials are here:

http://audacity.sourceforge.net/manual-1.2/tutorials.html