



Western Southland Promotions Association Inc.



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Podzone Country: Audacity Workshop

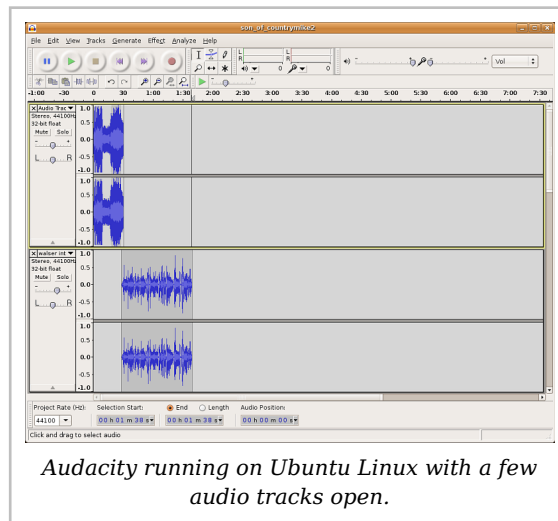
Using Audacity to create Podcasts

Using Audacity/ What is Audacity

Audacity is a free, easy-to-use audio editor and recorder for Windows, Mac OS X, and GNU/ Linux. You can use Audacity to:

- Record live audio;
- Cut, Copy and Paste, Delete, Duplicate, and Split audio files;
- Change the speed, pitch or volume of a recording;
- Apply effects to any part of the sound;
- Align audio segments.

Audacity is a popular Open Source tool for creating and editing podcasts; it is freely available to download, install and modify, and is relatively easy to use.



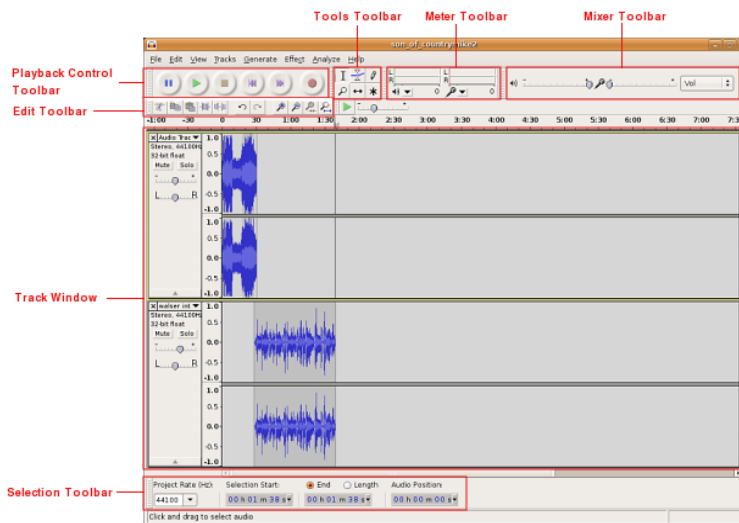
Web Resources

1 = You can download a copy of Audacity for Mac, Linux, or Windows from <http://audacity.sourceforge.net/>.

For an overview of downloading and installing Audacity including the LAME MP3 encoder, see: <http://www.youtube.com/watch?v=r5K1ZsoO1sU> (YouTube video 04:09).

Using Audacity/ The Interface







The Audacity Interface



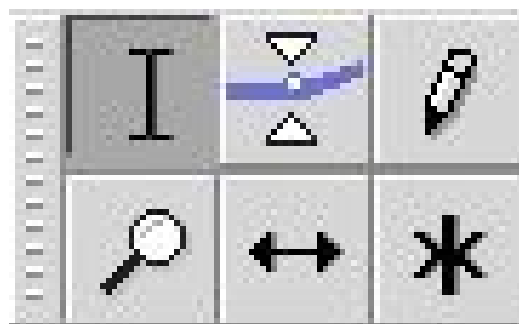
Playback Control Toolbar








The **Playback Control Toolbar** functions much like the buttons on a DVD or CD player, or perhaps more accurately the buttons on tape deck. It enables you to preview parts of your project and add (record) new ones.

| Button | Action |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
|  | moves the cursor to the start of the project. |
|  | plays your project from the position of the cursor. Use to listen to the audio in your project. |
|  | pressing the record button will record a new track from your computer's sound input device. |
|  | pause playback or recording. Press again to unpause. |
|  | stops playback or recording. |
|  | moves the cursor to the end of the project. |

Tools Toolbar














These tools work directly on tracks in the Track Window.

| Button | Action |
|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
|  The Selection Tool | use to select sections of an audio track to work on. |
|  The Envelope Tool | this tool allows you to control how tracks fade in and out. |
|  The Draw Tool | allows you to draw on the waveforms of individual tracks. |
|  The Zoom Tool | zooms in or out of a specific part of the audio. |
|  The Timeshift Tool | allows you to change the positioning of tracks relative to one another in time. |

Edit Toolbar



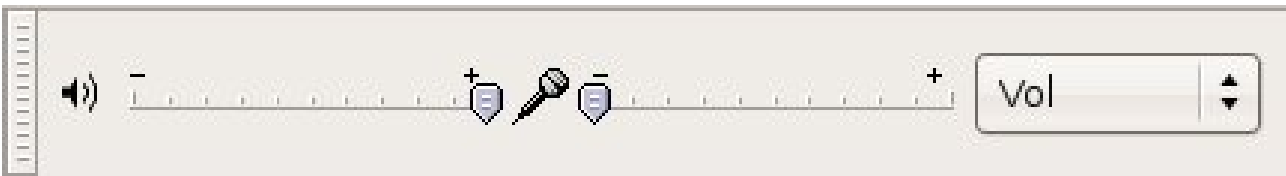
| Button | Action |
|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
|  The Cut button | removes selected audio data and places it on the clipboard. |
|  The Copy button | copies the selected audio data to the clipboard without removing it from the track. |
|  The Paste button | pastes whatever is in the clipboard into the track at the position of the selection cursor. |
|  The Trim button | deletes all of the track except the current selection. |
|  The Silence button | replaces the current selection with silence instead of removing it completely. |
|  The Undo button | undo the last editing operation performed. |
|  The Redo button | redo any editing operations that were just undone. |
|  The Zoom In button | zooms in on displayed tracks displaying less time and giving a more detailed view of the track. |
|  The Zoom Out button | zooms out displaying more time and a less detailed view of tracks. |
|  The Fit Selection button | fits selected audio into the width of the screen to show the selection in more detail. |
|  The Fit Project button | shows entire project in one screen. |

Meter Toolbar



Shows the input and output levels. You will use the input levels to test whether you are getting enough input through your mic or recording device.

Mixer Toolbar

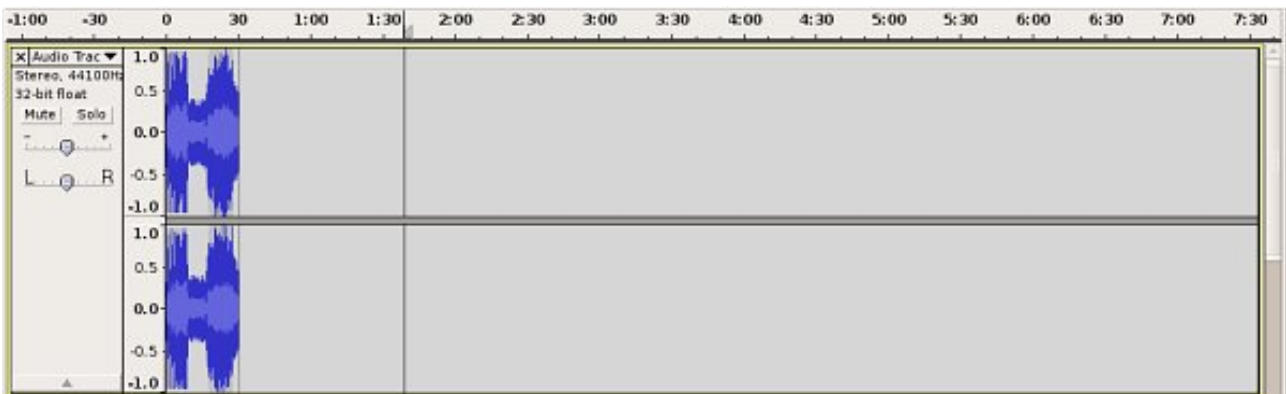


These sliders control the mixer settings of the soundcard in your system. The selector on the right (labeled Vol in this image) controls what audio input you wish to use.

The slider near the small speaker icon will control the output of your soundcard affecting the overall volume of your project.

The slider near the small microphone icon controls the input of your soundcard; adjust this to increase the level of input on your microphone.

Track Window



New or existing tracks (or audio clips) in your project are lined up in the sequence that they are recorded or imported in this window. This example shows a stereo audio track; you can tell it is in stereo because of the two wave forms (one for left and one for right) that are present. Along the top of the Track window is a timeline in seconds, or even fractions of a second.

Selection Toolbar



Using Audacity/ Recording using a microphone

The basic element of an Audacity project is the track. A track is any audio recording or sound clip that you either record using a microphone into Audacity itself, or import into the program from an already existing file on your computer.

With Audacity open and a microphone plugged in and ready to go, click on the red Record

button  on the Playback Control toolbar.

This will automatically open a new track in the Track window and commence recording. You should, if all is going well, see some red lines appear in the Meter toolbar -



- indicating that recorded input is being received as well as some waveform appearing in the new track.



See: Audacity: Recording with the Microphone
(<http://blip.tv/file/365273/> Blip.tv video 0:52).

Web Resources


Using Audacity/ Importing existing audio files

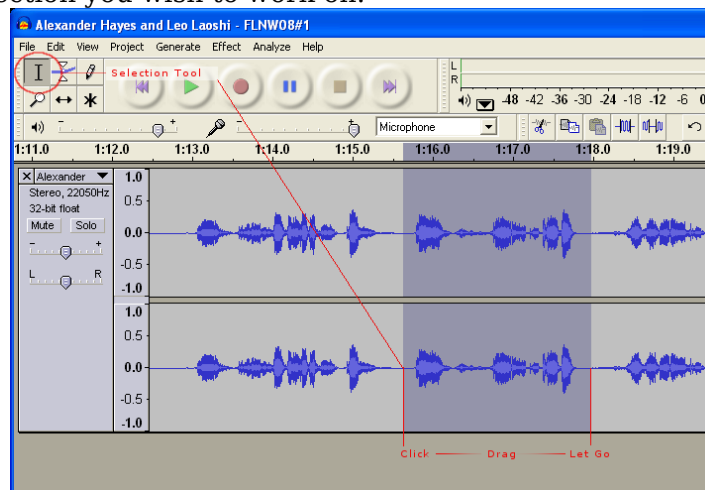
Audacity can also work with existing audio files or clips that you may have on your computer. To import existing audio to work with select *File - - > Import - - > Audio*. Then browse to the existing audio files on your computer that you wish to use and hit Ok.

In Windows you can also drag an audio file or clip to be used into the Track window.

Using Audacity/ Editing tracks

Selecting part of a track

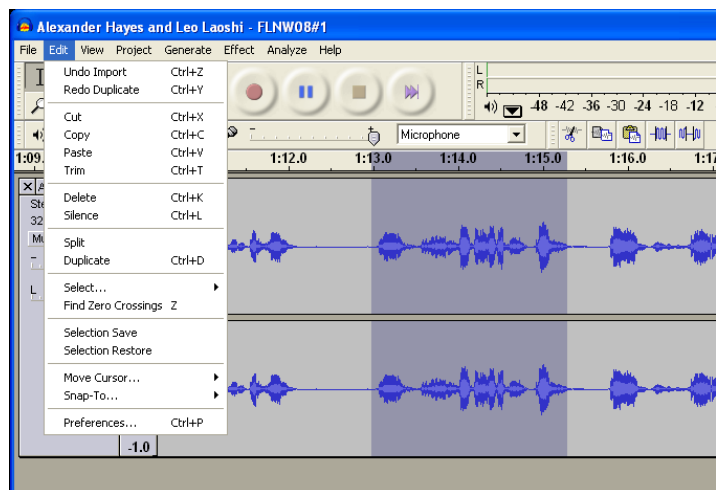
To select part of a track for editing, click on the the Selection Tool -  - and click and drag across the selection you wish to work on.





The selected part of the track now appears a darker shade of grey and you may now apply an action to just that selection.


The Edit menu

The Edit menu contains many of the basic editing actions that you will apply to a selection of a track.




Cut - removes the section of selected track from the window and places it in the clipboard in case you want to paste into a new track or new project. You can also use the  button to perform this action on the selection.

Copy - keeps the selection in place but makes a copy in the clipboard for pasting into a new track or new project. You can also use the  button to perform this action on the selection.

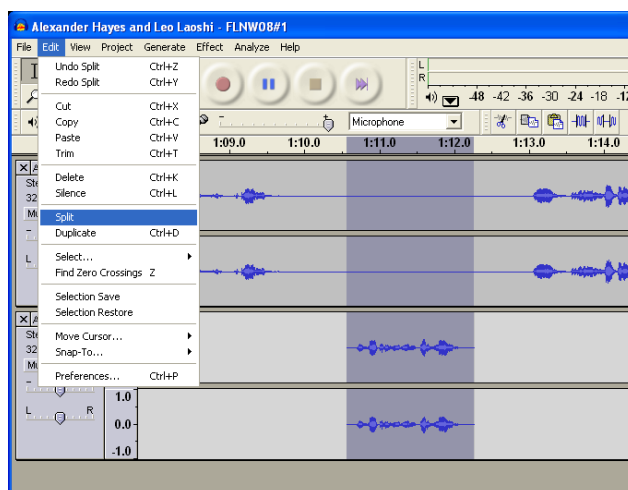
Trim - removes all audio before and after the selection. You can also use the  button to perform this action on a selection.

Delete - removes the selection completely from the track. You can also use the Delete key on your keyboard to perform this action on the selection.

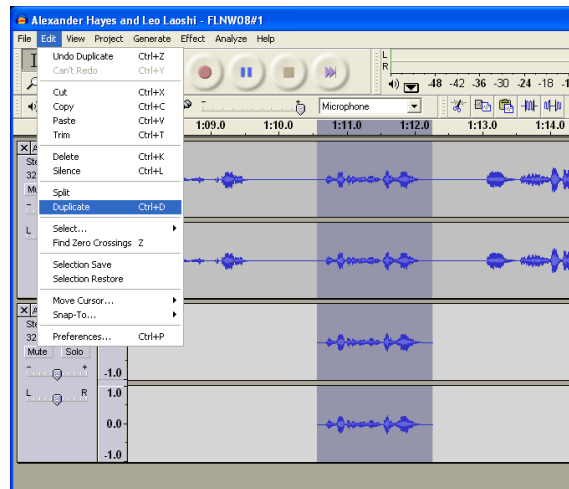
Silence - replaces the selection with silence. You can also use the  button to perform this action on the selection.

Splitting and Duplicating

Using the **Split** action removes the selection from the working track while creating another track into which the piece of removed audio is then pasted. This may be useful to move a segment of a recorded track into a different order than which it was originally recorded.





Using **Duplicate** is similar to the above but instead of removing the selection from the original track it just duplicates the audio into the new track.



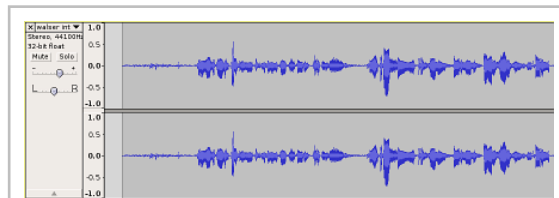
Using Audacity/ Zooming

It is often helpful to be able to zoom in to see the individual parts of the audio clip waveform in order to edit out sections or remove undesirable noises or pauses. To do this use the Zoom tool on the Tools toolbar to get more detail. If you select the Zoom tool from the Tools toolbar the cursor will change into a small magnifying glass with a

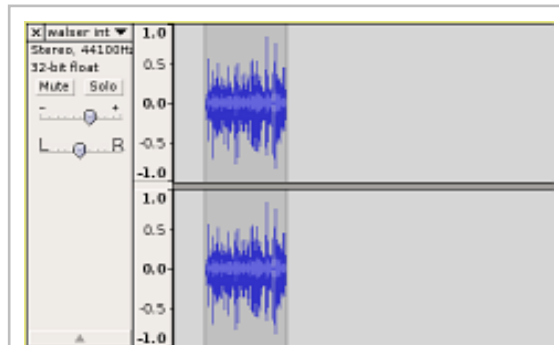
+ sign inside of it -  - this can be used to zoom in on a section of an audio clip by clicking on the left mouse button while in the Track window. Holding down the shift key will change the + inside the magnifying glass into a -  - and clicking on the left mouse button will then zoom the clip out, showing more time but less detail.



Tip: Using the Zoom tool, try clicking and dragging into a section of an audio clip to zoom into just that selection.



Zooming in shows you more detail about the waveform. This can be useful for editing out imperfections.



Zooming out shows less detail but is useful to get a wider overview of your project.

Using Audacity/ Fading in and out

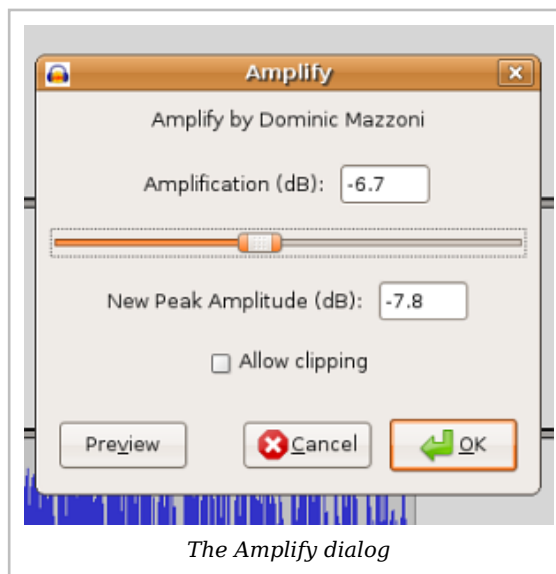
Fading tracks in and out is a technique often used on music tracks that you may want to add to your podcast to make it more interesting. Fading music out somewhat so that it continues to play in the background but that a speaking track can still be recognised is a useful skill to learn to create an interesting and richer podcast. There are a couple of methods for achieving this.

First Method

Select the part of your track that you wish to fade then select *Effect* from the main menu, then *Amplify*.

In the dialog that opens move the Amplification slider down (left) to about -10dB. Then either preview and adjust or hit ok.

This method may end up sounding a bit abrupt. To avoid this it may be desirable to select a smaller section of track just before the previously faded selection and then select *Effect* - - > *Amplify* again, this time selecting a slightly larger number on the Amplification slider like -4dB and then doing a similar modification to a section after the originally faded selection.

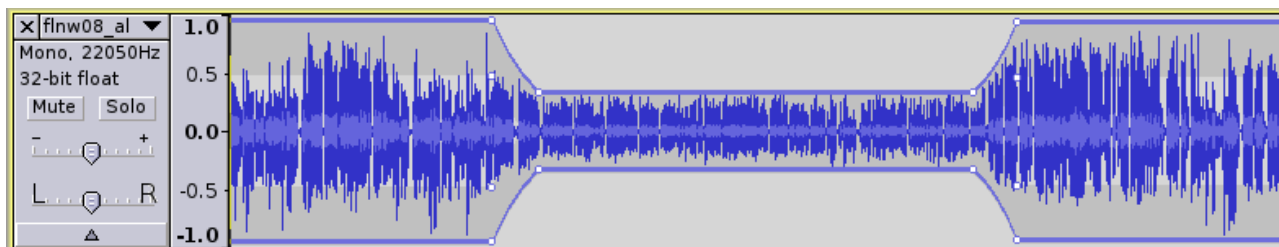


Second Method

Uses the Envelope tool  to control how tracks fade in and out.

This method is harder to master but can achieve much finer control over how and when tracks are faded in and out.

Using the Envelope tool lets you change the volume of a track gradually over time by adding a number of control points to the track. Each control point can be used to set the volume of the track at that point in time and Audacity will interpolate the volume smoothly between multiple points.




In the figure above, there are four control points. Each control point has up to four "handles" arranged vertically. The top and bottom handles are positioned at the target volume, and the middle handles are positioned a quarter- screen down, giving you a way to move the envelope above the 1.0 level. In this example handle #2 has been lowered to decrease the volume or fade the track out until it reaches handle #3 at which point it will

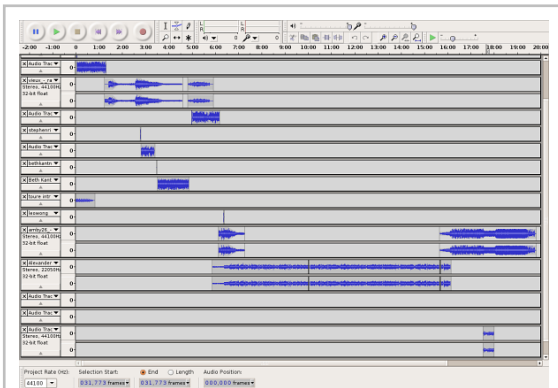
increase in volume to its original level. This type of fading a track in and out can give you a much nicer transition and control over the levels than the previous method.

To create a new control point, just click. To move a point, just drag. To remove a point, click on it and drag it outside of the track, then let go.

Using Audacity/ Moving tracks

When creating a podcast that has uses multiple audio clips you will often be trying to get one clip to start after another one has finished. All separate tracks in Audacity sit on a timeline and can be shifted left or right along this timeline.

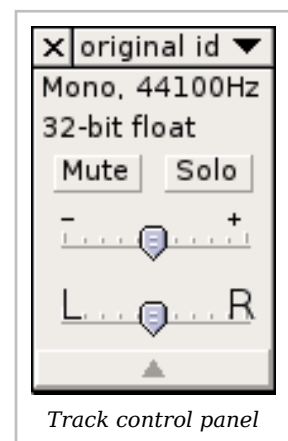
Use the Timeshift tool  to move tracks along the timeline. After selecting the Timeshift tool, select a track by clicking on the waveform and dragging it left or right to move it earlier or later in the timeline.



An example of a podcast project in Audacity with multiple tracks open. Notice how some tracks start at different times in the timeline.

Reording tracks

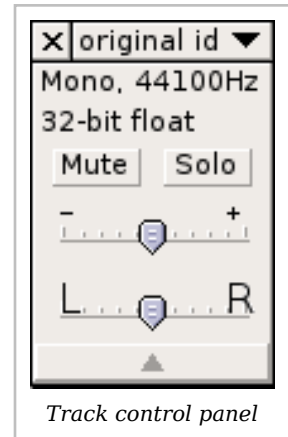
In the image above you can see that a podcast may involve many tracks being worked at at the same time. You can also reorder tracks in this window by selecting the Timeshift tool and clicking and holding in the Track control panel and moving the track up or down.



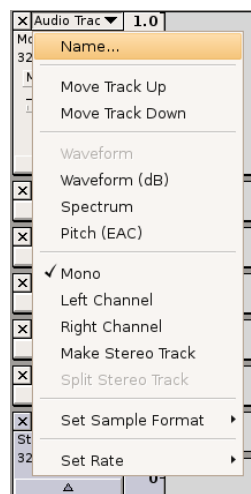
Track control panel

Using Audacity/ Track control panel

The Track control panel contains a lot of useful features for working with Tracks. The small downward arrow contains a list of options. The first three are the most useful for purposes. They include the ability to Name a track and another way to move tracks up and down in the window. Naming tracks can really be useful if you are working with a lot of tracks as it become hard to discern what each one is from just looking at the waveform :-)



Track control panel



There are two sliders on the Track control panel. The first one controls the gain or volume of the track. This can be useful if you have a track in your project that is much louder or quieter than the rest of your clips. Use this to increase or decrease an individual tracks volume.

The next slider only appears on tracks that have been recorded in stereo and lets you adjust the volume of the sound that will come out of either the left or right speaker. This is called panning.

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