Northern Territory Government

Creating Podcasts

Prior steps – Set preferences in Audacity
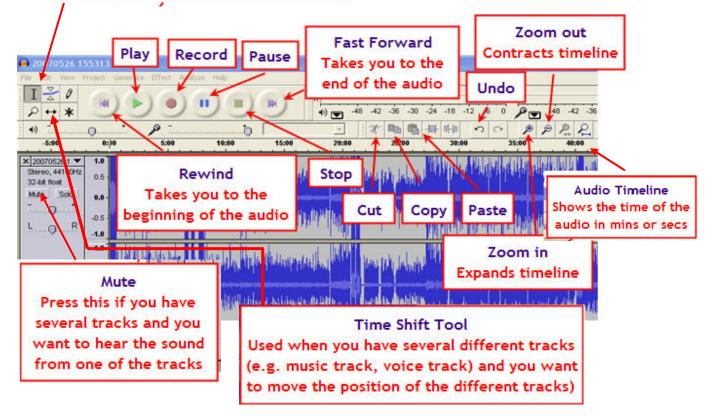
There are 3 main steps to creating a podcast:
1. **Create your audio file as an mp3 file.**
2. Upload your audio file to the Internet.
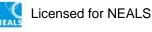3. Create a link to the MP3 file in a blog post

PART ONE: RECORD AUDIO USING AUDACITY
The Audacity Toolbar
Record
Edit audio tracks
Splitting, cutting, pasting and deleting an audio track
Work with multiple audio tracks
Save as an Audacity project file
Adding music
Fading in and fading out
Noise reduction and Amplifying
Exporting as an mp3 file

The Audacity toolbar

Selection tool
Used for selecting sections of audio

Play

Record

Pause

Fast Forward
Takes you to the end of the audio

Zoom out
Contracts timeline

Undo

Rewind
Takes you to the beginning of the audio

Stop

Cut

Copy

Paste

Audio Timeline
Shows the time of the audio in mins or secs

Zoom in
Expands timeline

Mute
Press this if you have several tracks and you want to hear the sound from one of the tracks

Time Shift Tool
Used when you have several different tracks (e.g. music track, voice track) and you want to move the position of the different tracks)
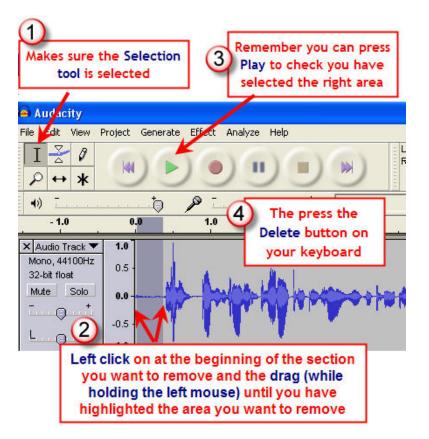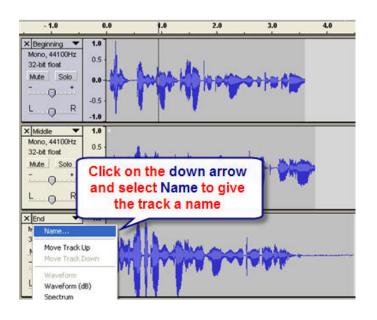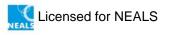
www.deet.nt.gov.au

Record a track

Once have ensured your recording volume is correct you can speak into your microphone and record the audio for your podcast by pressing the record button. Don't worry if you make mistakes -you can remove mistakes by highlighting the part you do not like and then pressing the delete button on your keyboard. NOTE: You can not delete a selection if you have paused play, you must have pressed STOP!
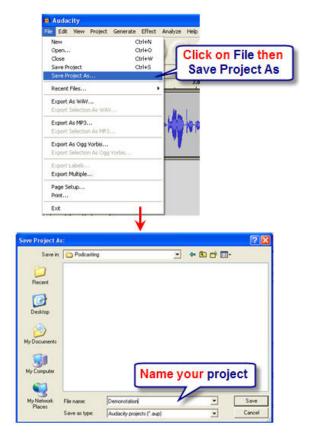

You can also **record multiple tracks**. You should **name each track**.

Delete a track

Saving an Audacity project

While you are working on your podcast make sure that you save it **as a project**. This will save it as an Audacity project file which means that you can open it up again and re-edit any time. (Remember to regularly keep saving the project).

Add music or audio
Sometimes you'll want some music to the opening or closing seconds of your podcast or as background behind your voice over.
As your podcast will be published on the Internet, you can only legally use copyright free (aka podsafe) music.

If you're downloading free music, remember that Audacity reads these audio file formats – wav, aiff, mp3 and Ogg Vorbis.
Note: Although Audacity has an "Import midi" option – it doesn't work).

Try these sites or do a search for "copyright royalty free music"
Podsafe Music Network - http://music.podshow.com/music/faq.htm#
• You need to join as a podcaster before you can download their music.
Partners in Rhyme - http://www.partnersinrhyme.com/
• You can purchase their CDs for unlimited use of the music or just download the free music loops.
The Freesound Project - http://freesound.iua.upf.edu/

- This web site has free searchable audio loops.

Podsafe Audio - http://www.podsafeaudio.com/

- This site aims to provide a location where musicians can upload music under the Creative Commons license for use in Podcasts, Mashups, Shoutcasts, Webcasts and every other kind of 'casting' that exists on the 'net.

Open Media Directory - http://www.ourmedia.org/learning-center/open

- This site is a free resource for finding legal, podsafe music and video (links to lots of other sites with feeds to different podcasts, blogs etc.)

If you've imported a .wav file and it doesn't play, you may need to play around with the sample rate.

Click on the arrow > Set rate > play around with different settings to hear what sounds best to you.

Editing audio with Audacity
This is an example of a 10-minute recording. Click on the right hand magnifying glass to view the entire waveform.
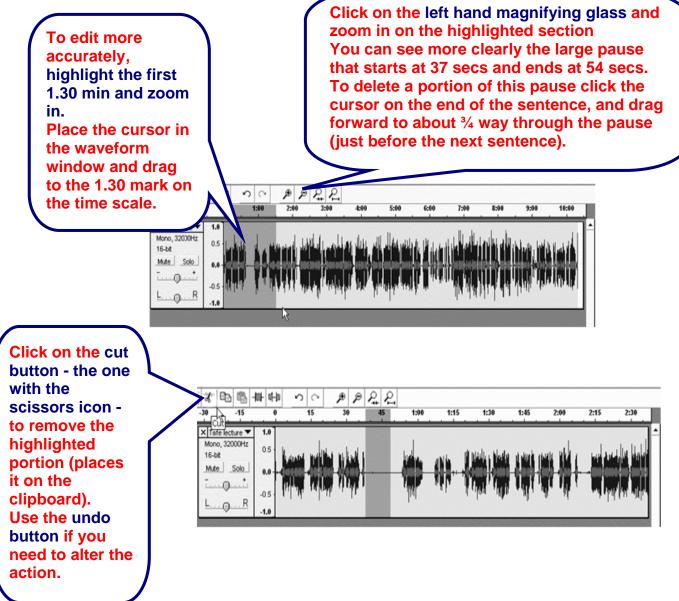Notice that at around the 45-second mark a very long pause in the recording happened.
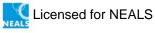
To edit more accurately, highlight the first 1.30 min and zoom in.
Place the cursor in the waveform window and drag to the 1.30 mark on the time scale.

Click on the left hand magnifying glass and zoom in on the highlighted section
You can see more clearly the large pause that starts at 37 secs and ends at 54 secs.
To delete a portion of this pause click the cursor on the end of the sentence, and drag forward to about ¾ way through the pause (just before the next sentence).

Click on the cut button - the one with the scissors icon - to remove the highlighted portion (places it on the clipboard).
Use the undo button if you need to alter the action.

Cut - Removes the selected audio data and places it on the clipboard. Only one "thing" can be on the clipboard at a time, but it may contain multiple tracks.

Copy - Copies the selected audio data to the clipboard without removing it from the project.

Paste - Inserts whatever is on the clipboard at the position of the selection or cursor in the project, replacing whatever audio data is currently selected, if any.

Trim - Removes everything to the left and right of the selection.

Delete - Removes the audio data that is currently selected without copying it to the clipboard.

Silence - Erases the audio data currently selected, replacing it with silence instead of removing it.

Split - Moves the selected region into its own track or tracks, replacing the affected portion of the original track with silence. See the figure below:

Duplicate - Makes a copy of all or part of a track or set of tracks into new tracks. See the figure below:

When editing, do a **Save Project As** and label as **Version 2 edit**. If you are happy with each edit, then **Save Project** as you go along. This will help you avoid the anguish that can occur when computers crash, sometimes losing valuable data.

Special Effects and Processing
Audacity comes with a range of special effects and audio processing functions you can apply to your audio files.
- Here is a quick online reference for Audacity – see *Special Effects* (http://audacity.sourceforge.net/onlinehelp-1.2/reference.html)

Fading-in and fading-out
- Highlight the section of track you want to fade out
- On the **Effects Menu,** select **Fade Out**
Any thing that is highlighted will now be faded out, to no sound at all. If you are merging two sections of recording you may also wish to fade-in the next section (just use the Fade-In option).

Noise Reduction
The **Effects** menu has a very useful tool for reducing unwanted background noise. When you look at the pauses in the previous waveform, you will notice no sound is present. It was recorded in a very quite office, with no unwanted background noise.

2 From the Effects menu, select Noise reduction

1 Select the section you want background noise removed.

3 Click Get Noise Profile. The computer then samples all the Audio Frequencies in the unwanted noise profile. Generally these are very low bass frequencies.

This will only take a few seconds.

Noise Removal

Noise Removal by Dominic Mazzoni

Step 1

Select a few seconds of just noise so Audacity knows what to filter out, the click Get Noise Profile:

[Get Noise Profile]

Step 2

Select all of the audio you want filtered, choose how much noise you want filtered out, and then click Remove Noise.

Less   More
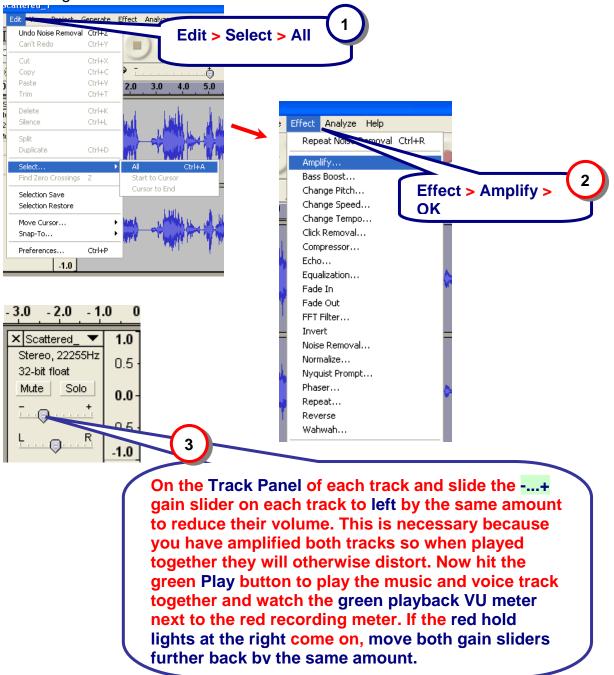
[Preview]   [Remove Noise]

[Close]

4 Now that the computer has sampled the unwanted noise, select and highlight the entire waveform that needs to be filtered. From the **Effects** menu, select **Noise Removal** again.

5 Select Preview, and slide the adjustable fader and determine how much noise reduction you wish to apply.
Less is always better - too much noise reduction will create strange and unnatural effects on the voice.

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Step 1

Select a few seconds of just noise so Audacity knows what to filter out, then click Get Noise Profile:

[Get Noise Profile]

Step 2

Select all of the audio you want filtered, choose how much noise you want filtered out, and then click Remove Noise.

Less   More

[Preview]   [Remove Noise]

[Close]

6 Once you are happy with your setting, press the Remove Noise button. All the unwanted noise will be eliminated from the selected waveform

Amplifying

Your last editing step will be to make the tracks as loud as they can be without distorting.

Edit > Select > All

Effect > Amplify > OK

On the Track Panel of each track and slide the -...+ gain slider on each track to left by the same amount to reduce their volume. This is necessary because you have amplified both tracks so when played together they will otherwise distort. Now hit the green Play button to play the music and voice track together and watch the green playback VU meter next to the red recording meter. If the red hold lights at the right come on, move both gain sliders further back by the same amount.
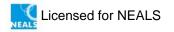
Exporting as mp3

1. First, save your project as a **.wav file** because it is not compressed and therefore is a good format if you want to ever reuse the file for another purpose.
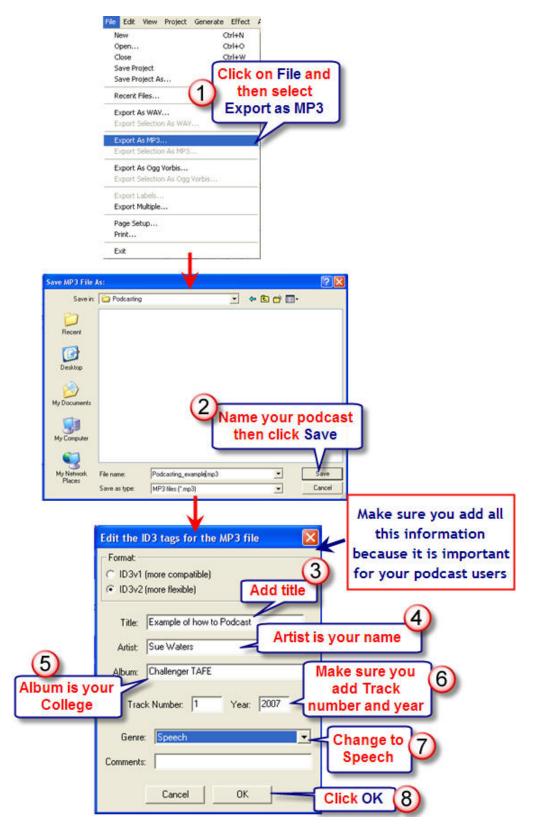
2**. Check Compression Rate**

Go to Preferences > File Formats and check that under "MP3 Export Setup" the Bitrate is set to the desired setting (around 32 Kps).

3. **Exporting as an MP3 File**

You use mp3 format for podcasting because it reduces the file size of the audio without losing quality and will play in most players.

References:
http://audacityteam.org/wiki/index.php?title=Creating_a_simple_voice_and_music_Podcast_with_Audacity
http://www.nswlearnscope.com/wiki/index.php?title=Audacity#Preparing_the_computer_to_record_sound
http://podcastingwa.wikispaces.com/audio+#mp3
http://audacity.sourceforge.net/onlinehelp-1.2/reference.html#menu_effect