

# BASIC AUDIO EDITING USING AUDACITY

# INTRODUCTION

This document provides step by step instructions for a selection of some basic audio editing functions using Audacity -- a free and open source software program. Most audio projects, whether digitized or born digital, will benefit from at least minimal editing and export to multiple formats depending on preservation and access needs.

These instructions and screenshots are taken from Audacity 2.2.2 on a Windows machine, and will vary depending on version and operating system. Audacity is an easy-to-use, multi-track audio editor and recorder for Windows, Mac OS X, GNU/Linux and other operating systems and can be downloaded here:

• https://www.audacityteam.org/download

For more information about audio files, view related items connected to this resource on the Sustainable Heritage Network in the "<u>Audio Recordings</u>" category.

• Audio File Types for Preservation and Access: Resource Guide

# SAVING AND EXPORTING

Audacity has two similar commands that can be confusing: *Save* and *Export.* Saving produces AUP files which are not sound files and are only used within Audacity to construct a project from provided sound files. These AUP files are useful if a user needs to preserve the individual edits in a project, or needs to stop a project in the middle of editing and continue at a later time. Exporting produces audio files in a range of file formats (that the user can choose) suitable for use elsewhere (eg: MP3, WAV), and is used to produce preservation and access files.

# Save Audacity Project File (AUP)

#### 1) From the menu, go to File > Save Project



#### Export audio file

1) From the menu, go to File > Export > Export as (filetype)



Eile	<u>E</u> dit	Select	View	T <u>r</u> anspor	t <u>T</u> racks	<u>G</u> enerate	Effe <u>c</u> t	<u>A</u> nalyze	<u>H</u> elp	_
•		×								
	5	Save in:	🜉 This	PC			¥	G 💋	19▼	
	œ.		Folder	rs (6) —						<u> </u>
Re	ecent p	blaces	E	Deskto	p					
	Deskt	op	F	Docum	ients					
	Librar	ies	J	Downle	bads					
	A		LA	Music						
	This	PC								
	Netwo	ork		Picture	s					~
			File name	e:	untitled.mp	3			~	Save
			Save as	type:	MP3 Files				~	Cancel
Fo	ormat	Options								
		Bit	Rate Mo	ode: 🔿	Preset (	Variable	Aver	age 💿 🤇	Constant	
		Qu	ality	192	kbps				~	
		Var	riable Sp	eed: Fas	t				~	
		Ch	annel M	ode: 🖲 J	oint Stereo	○ Stere	o 🗌 Fo	orce export	to mono	
-						0				

2) Refer to project documentation when selecting export format and file options.

# **Exporting a Selection**

This is useful for producing shorter clips from a longer recording.

1) Using the Selection tool, highlight the portion of the recording to export by clicking and dragging on the waveform.



#### 2) From the menu, go to **File >Export Selected Audio**.

<u>F</u> ile	<u>E</u> dit <u>S</u> elect <u>V</u> iew	T <u>r</u> ansport	Tracks	<u>G</u> enerate	Effect	Analyze	Help						
	New Open	Ctrl+N Ctrl+O	M	•	I Q	₹/ +*	•	-57 -54	-51 -48 -51 -48				
	Close Save Project	Ctrl+W Ctrl+S	.5										
	Export	•	Exp	ort as MP3									
	Import	۲	Export as WAV										
	Chains	+	Export Audio Ctrl+Shift+E										
	Page Setup Print		Export Selected Audio										
	Exit	Ctrl+Q	Exp Exp	Ctrl+Shift+	nift+L								
	0.5-		Save Compressed Copy of Project										

3) Give the selection a new filename and refer to project documentation for the appropriate file format and settings.



# Separating One Track into Multiple Tracks

This is useful for indicating several tracks or clips to be exported from a longer recording, and then exporting them all at once, rather than one at a time.

1) Using the Selection tool, highlight the portion of the recording to export by clicking and dragging on the waveform.



2) From the menu, go to Tracks > Add New > Label Track (or press Ctrl+B).

<u>Eile E</u> dit <u>S</u> el	ect <u>V</u> iew	Transport	<u>Tracks</u> <u>Generate</u> Effe <u>c</u> t	Analyze Hel	p				
		14	Add New	•	Mono Track Ctrl+Shift+N				
		N	Mix		Stereo Track				
9/ (E) (P)	test at las		Resample		Label Track				
	-BOOL INFID	<b>n</b> a		Time Track					
0.5	0.0	(	Remove Tracks	2.0 2.5					
	1. 1. L		Mute/Unmute	· · È	<u> </u>				
× Audio Track	▼ 1.0		Pan	- • [					
Mute Solo	0.5		Align Tracks	•					
	-		Sort Tracks	,	H A				
L R	0.0		Sync-Lock Tracks (on/o	ff)	······································				
Stereo, 48000Hz 24-bit PCM	-0.5								
LT-DILT OIII	-1.0								

3) Type the name of the track. Once named, a track's start and end points can be adjusted by clicking and dragging. Repeat as needed.



4) From the menu, go to File > Export > Export Multiple

<u>F</u> ile	<u>E</u> dit	Select	View	T <u>r</u> ansport	Tracks	Generate	Effect	<u>A</u> nalyze	<u>H</u> elp					
	New Open Recent Files		Ctrl+N Ctrl+O ♪	► ●			₹/ ++ >	L -57 -54 -51						
	Close Save Project Save Project As			Ctrl+W Ctrl+S	0.5	1.0		1.5	2.0					
	Export			•	Export as MP3 Export as WAV									
	Import	t		•										
	Chains	hains 🔸				Export as OGG Export Audio								
	Page Setup Print				Exp	port Selected								
	Exit	Exit Ctrl+			Exp	oort Multiple	Ctrl+Shift+	Ctrl+Shift+L						
_					Exp									
			0.5		Save Compressed Copy of Project									

- 5) Choose destination, file format, and settings as specified in project documentation.
  - a) Select Split files based on: Labels.
  - b) Select Name files: Using Label/Track Name
  - c) Click **Export**

olden	C:\Users\michael.w	wnne\Deskton		Choore	Create				
oluel.	ertoseistimendenn		Choose	Cleate					
ormat:	MP3 Files		~						
	Bit Rate Mode:	OPreset OVariable OA	werage						
Options:	Quality	192 kbps							
	Variable Speed:	Fast	~						
	Channel Mode:	● Joint Stereo  ○ Stereo  □	Force export to mono						
plit files l	based on:		Name files:	<u> </u>					
Tracks			Using Label/Track Nar	ne					
) Labels	ude audio before first	label	O Numbering before Label/Track Name						
First file	: hame:	Iabei	File name prefix:	ame prefix					
_	a sector to a different								

# **Zooming In and Out**

This is useful when more precision is needed for making selections, labels, or other edits on a recording. A zoomed out view will show the overall waveform, and a zoomed in view will show more detail.

1) Click on the + or - magnifying glass to zoom in or out as needed.

•																				Aud	acity
<u>F</u> ile	<u>E</u> dit	Select	<u>V</u> iew	T <u>r</u> ansport	<u>T</u> racks	Generate	Effe <u>c</u> t	Analy	ze <u>H</u> elp												
	II		-	M	M	•	I Q	+ +	∕ ↓ * ●	R R	57 -54 57 -54	-51 -48 -51 -48	5 -45 -4 5 -45 -4	2 -3 Cli 2 -39 -	ck to Sta 36 -33	art Monit 30 –27	oring !1 -24 -21	-18 -1 -18 -1	\$-12 5-12	9 6	-3 (
8			ul alta	n a	Ð		२ &		> <u></u>		+										
	7 30		0.00	0.10 0.2	0 0.30	0.40 0.50	0.60	0.70	0.80 0.9	0 1.00	0 1.10	0 1.2	0 1.3	1.40	1.50	1.60	1.70	1.80	1.90	2.00	2.1
	- ·	1 1 1					- 1			N I											<u> </u>
×	Audio Ti	rack 🔻	1.0																		
Mu	ite	Solo	0.5 -																		
<u> </u>	0	<u></u>																			
L		R	0.0									-				-					Ċ
Ster 24-b	eo, 480 it PCM	00Hz ·	-0.5 -																		
19829		62	-1.0																		
			10																		

# **Cutting Audio**

This will delete a selected portion of an audio recording.

1) Using the Selection tool, highlight the portion of the recording to cut by clicking and dragging on the waveform.

<u>File Edit Select</u>	t <u>V</u> iew T <u>r</u> ansport	<u>T</u> racks <u>G</u> enerate Effe	ect Analyze Help	
			I	12 -9 -6 -3 0
*DD*			& ▶	
	0.0	0.5		2.5
Audio Track V Mute Solo L R Stereo, 48000Hz 24-bit PCM	1.0 0.5- 0.0- -0.5- -1.0			- (************************************
_	1.0 0.5- 0.0- -0.5- -1.0_			- #p



#### 2) Press the Cut icon, or go to Edit > Cut, or press Ctrl+X.

#### **Silencing Audio**

This will mute or silence a selected portion of a recording without cutting or deleting that time from the track.

1) Using the Selection tool, highlight the portion of the recording to silence by clicking and dragging on the waveform.



2) Press the Silence icon, or Ctrl+L.



#### **Combining Multiple Tracks**

This is useful for combining multiple tracks or recording into a single recording.

- 1) Import the tracks to be combined.
  - a) Go to File > Import > Audio
    - $\leftrightarrow$
- 2) Select the Time Shift Tool.

<b>A</b>									Audacity						
Eile Edit Selec	t <u>V</u> iew T	ansport	<u>T</u> racks	Generate Effect	Analyze <u>H</u> elp										
				I	-/ !!	-57 -54 -51 -48 -45 -42 -	Click to Start Monit	oring 1 -18 -15 -12	9 6 3 0 🌒	<del>.</del>	• • •	<b>.</b> .			
	-	14	►I		→ <b>*</b> ■	-57 -54 -51 -48 -45 -42 -	39 -36 -33 -30 -27 -	-24 -21 -18 -15 -12	9 -6 -3 0 MM	· .	Microphone (Pro 900	✓ 2 (Stereo) Re	v	ah Defini 🗸	
9/ FD (P)	Int stile		e e	000	R R	+				Ť				5	
	atta. ol.bo		90	1 2 2 4			- 1						1221		
	0.0		0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5
M Audio Trook	10	_	_												
Mute Solo															
T	0.5														
L R	0.0-						·	hangen an a	ap a pupp						
<u> </u>															
24-bit PCM	-0.5														
	-1.0														
	1.0														
	0.5														
					-			R.A	and a share						
	0.0			10 <del> </del>			- prose - transfer	had a second second	and the second s						
	-0.5-														
•	-1.0														
× Audio Track ▼	1.0 <														
Mute Solo	0.5.														
ī	0.5			1		and the second sec		e 4							
L R	0.0-									_					
Staran 48000Hz	0.5					- A									
24-bit PCM	-0.0														
	-1.0 <	_	_							_					
	1.0 ←														
	0.5			1											
	0.0-			land	h.	- A Am	- ll	James Her	here and						
	0.0				THE STATE	the second		Harris A.	N.						
	-0.5			1											
	-1.0 ÷														
-							110								

3) Click and drag the tracks to align or overlap as needed.



4) When finished, switch back to the **Selection Tool.** 

### Normalizing

This is used for setting the peak amplitude (loudest volume) across all tracks and/or channels.



1) From the menu, go to Effect and select Normalize.

- 2) Check Remove DC Offset.
- 3) Set the Maximum Amplitude to -1.0dB.
- 4) Click OK.



# Additional Resources

Audacity is a well-established tool with an expansive user base and many helpful resources available online.

- Audacity User Manuals: <u>https://www.audacityteam.org/help/documentation/</u>
- Audacity Wiki: <u>https://wiki.audacityteam.org/wiki/Audacity\_Wiki\_Home\_Page</u>
- Audacity Forum: <u>https://forum.audacityteam.org/</u>