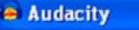
The Sheer Audacity!

Jerry Franklin

Using the Free Audacity Audio Editing Software to Produce a Podcast





What to Expect:

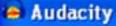
- Review some terms
- Tour Audacity

 Illustrate Audacity using screenshots, focusing on editing, producing, tips and tricks



What to Expect:

- Skip over recording techniques
- Link to lots of recording resources at the end
- American Idol NOT

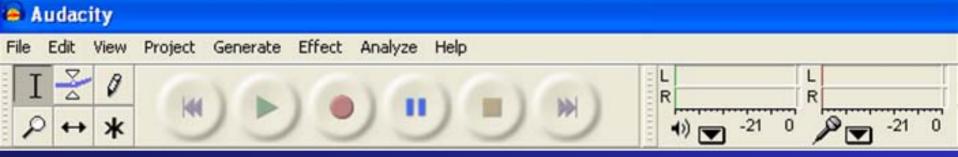




Podcasting Today Figures, forecasts vary widely

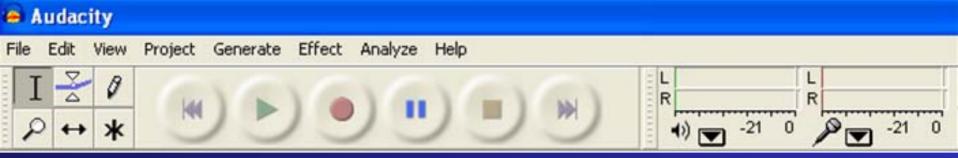
- Current listeners: 2 10 million
- Most optimistic: 60 million
 listeners by 2010

Podcasts now outnumber worldwide number of radio stations



But What About Corporate? Most major brands are doin' it!

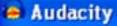
- Whirlpool ("The American Family" podcast)
- Ameriprise ("The New Retirement Mindscape")
- American Dental Association



And What About Tech?

Early evidence points to significant adoption

- 60% of IT professionals preferred podcasts to white papers
- 25% already incorporate podcasts in buying decisions



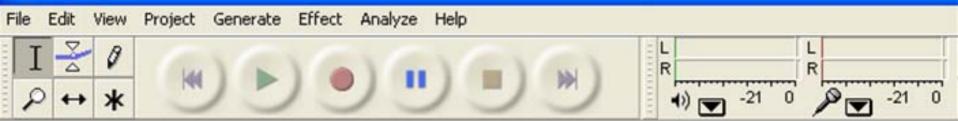


Plenty of Tech Examples

Usually conversations with executives, evangelists or other SMEs

- IBM WebSphere Technical
 Podcast Series
- Oracle Podcast Center
- Microsoft Voice of Support podcasts
- IT Conversations

👄 Audacity



A Few Focused on Tech Writing Writing

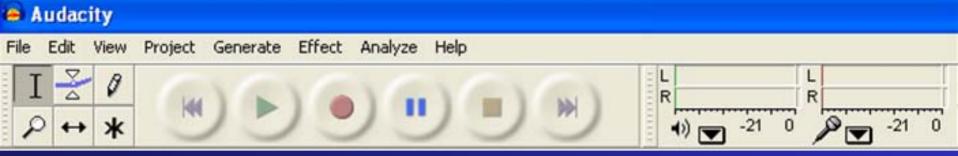
- Tech Writer Voices
- IT Author podcast
- DMN Communications podcast

👄 Audacity

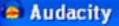


But Very Few Pure 'Instructional'' Examples

- One Minute Tip
- One Minute How-To
- IdiotVox (Computers podcast channel)
- Exertrack
- Apple VoiceOver Manual
- The Pandora Podcast



So – We Should Be Involved Why let marketing and engineering have all the fun?





Four Terms of End-Ear-Ment

- Decibel
- Waveform
- Audio track
- Uncompressed vs. compressed files
 - .wav, .aiff
 - .mp3, Ogg Vorbis

Let's Meet Audacity

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The Audacity Interface A few selected areas:

Control Toolbar

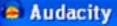


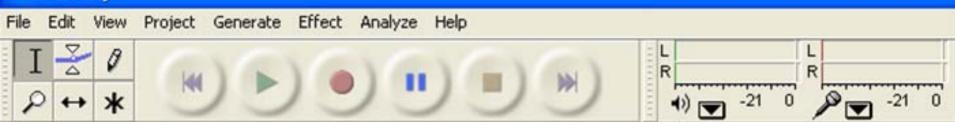
• Edit Toolbar



Track Control Panel

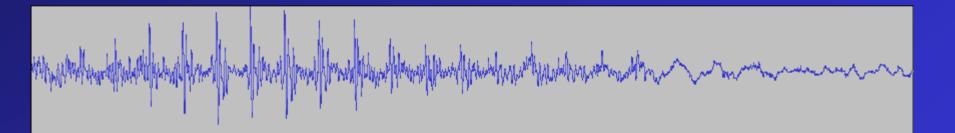




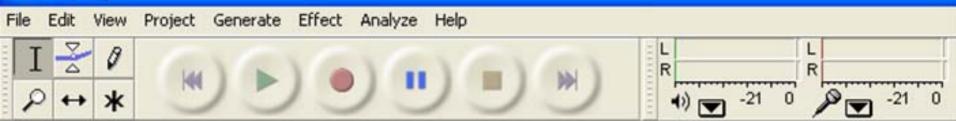


What Does Sound Look Like?

Like a wave

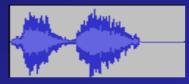


👄 Audacity



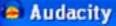
Examples of Waveforms





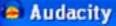
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- Eight Broad Steps to Editing a Podcast 1. Import your sound files 2. Arrange your sound files 3. Edit/clean each file individually
- 4. Adjust the timing of your files

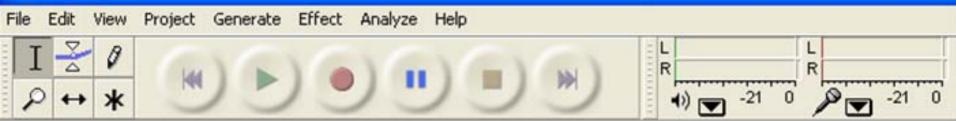




Eight Broad Steps to Editing a Podcast 5. Create your musical intro 6. Adjust volume for smooth transitions between files 7. Mix and master your podcast

8. Export your master as an .MP3 file and prepare your ID3 tags

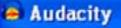
👄 Audacity

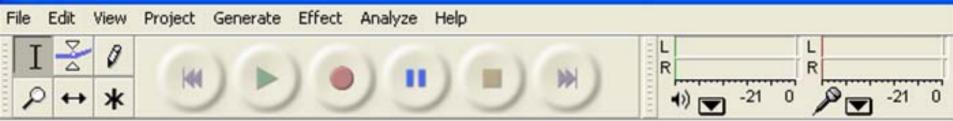


What We'll Do This Afternoon

- Afternoon
- Import ten sound files
- Work on three sound files, demonstrating all procedures

 Finally, will play the finished product in which I used everything I demonstrated





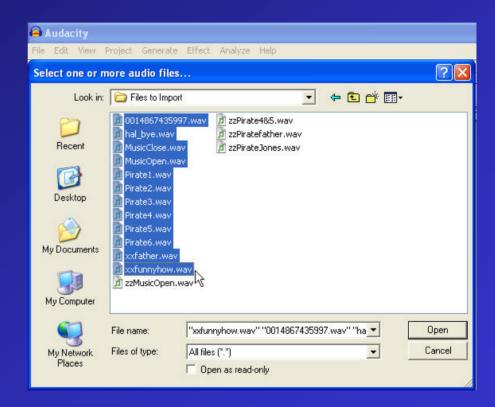
Step 1: Import Your Sound Files

- First create a new Audacity Project
- Works just like selecting files for a standard program, like Word
- Keyboard shortcut to import a file: Control-I

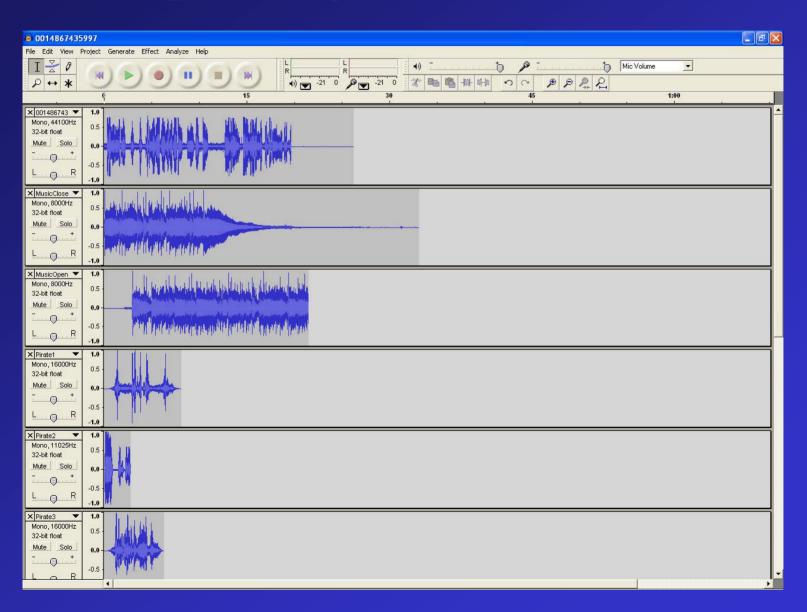
Let's take a look

Importing Sound Files

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	Align and move cursor	۲				
	Add Label At Selection Ctrl+B Add Label At Playback Position Ctrl+M					



Importing Sound Files



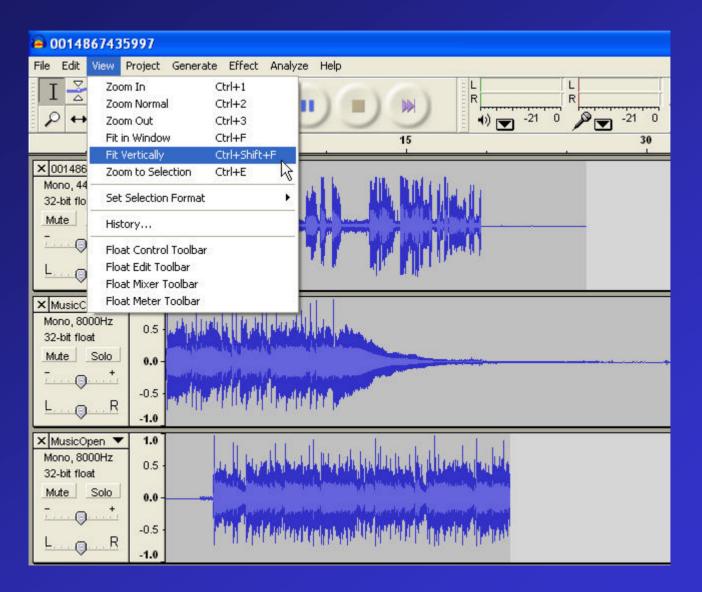


Step 2: File Management Protocol

- Fit all sound files vertically (keyboard shortcut: Control-Shift-F)
- Arrange sound files in order of use, from top to bottom
- Rename files
- Give 'em a listen!

Let's see it in action ...

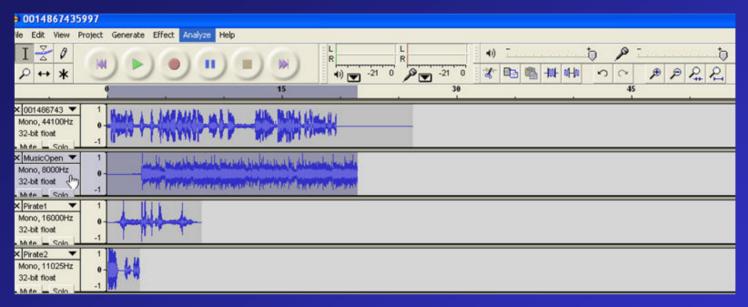
File Management – Viewing All Files



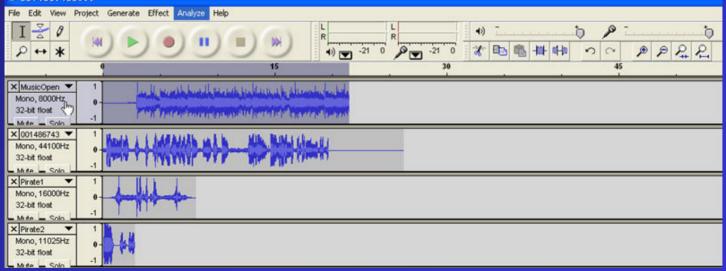
File Management – Viewing All Files

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File Management – Moving Files



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File Management – Renaming a File

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File Management – Renaming a File

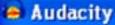


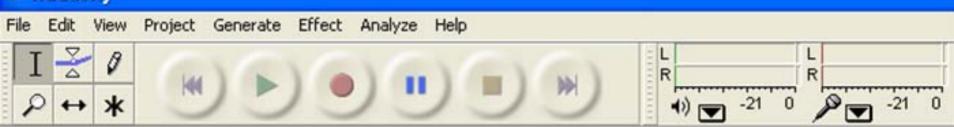
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Track Name	
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File Management - Renaming a File

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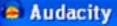


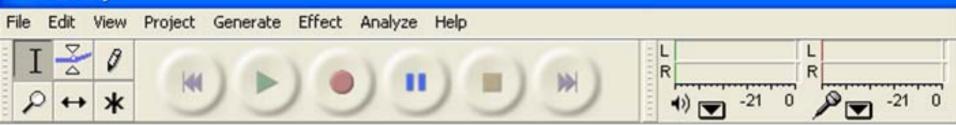


TIP: Remember this:

The Mute and Solo buttons are your friends!







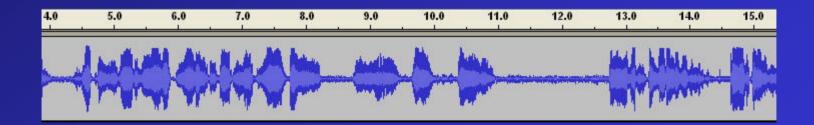
Step 3: Edit an Individual File Cut out artifacts and unwanted passages

- Use the Selection Tool to locate, isolate, select passages
- Zoom in and out
- Use the Cut function
- Use the Undo button

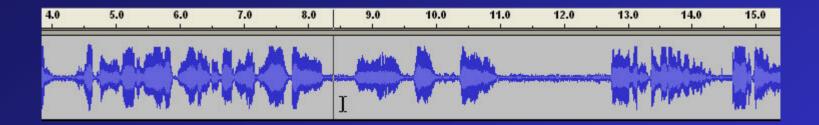
Let's take a look

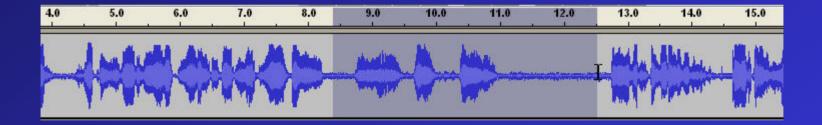
Editing an Individual File

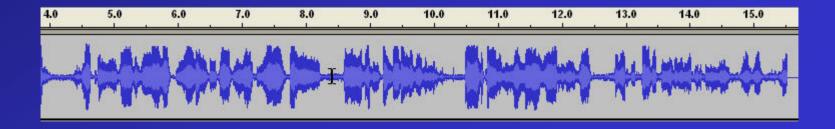


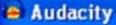


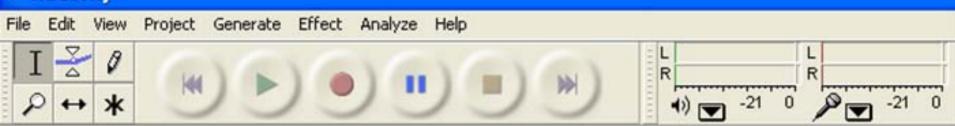
Editing an Individual File











TIP: Remember This

The Undo button is your best friend!



Keyboard Shortcut: Control Z

👄 Audacity



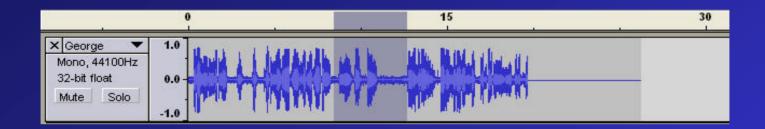
TIPS: Some Editing Shortcuts

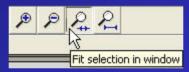
- Spacebar Plays your selection
- L Loops your selection
- Zoom to selection

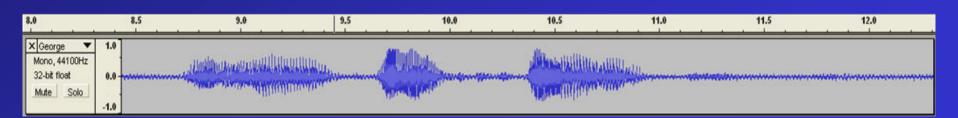
 To cut and paste, use the same keyboard shortcuts as Microsoft Office

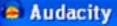
Let's take a look

Editing Shortcuts









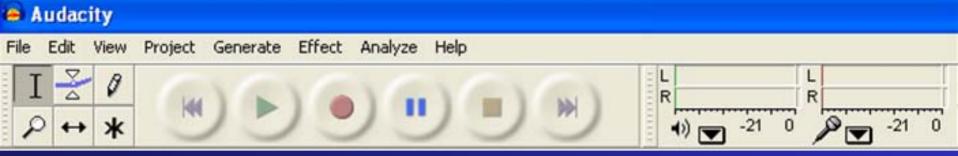


A Brief Public Service Announcement

Have you saved your file lately?

Best practice





Step 4: Adjust the Timing

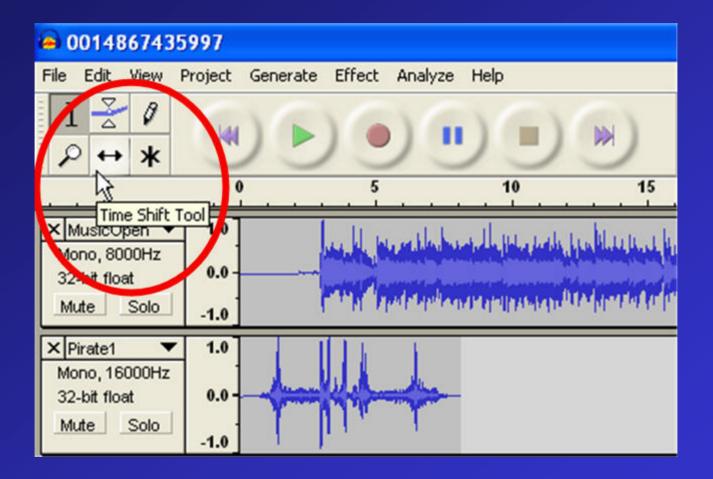
The Time Shift tool

 Adjusts your waveforms horizontally along the timeline

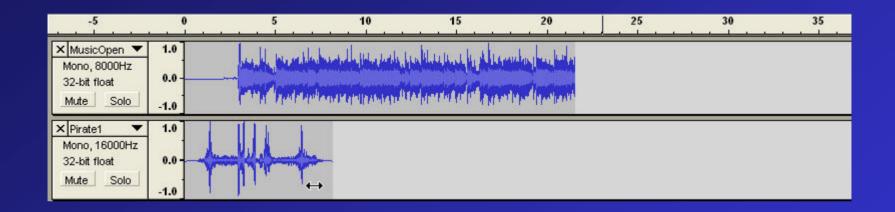
 Aims to create a smooth transition between sound files

Let's take a look

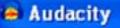
Adjusting File Timing

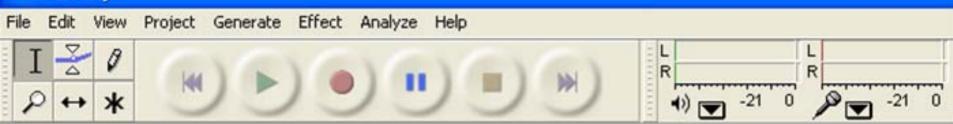


Adjusting File Timing



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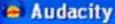


Step 5: The Musical Intro

- Insert silence at the beginning
- Fade music out
 - Use the Skip to Start button
 - Use the Generate Silence function

 Use the Fade Out function (use Fade In function for musical close)

But before we see it in action...



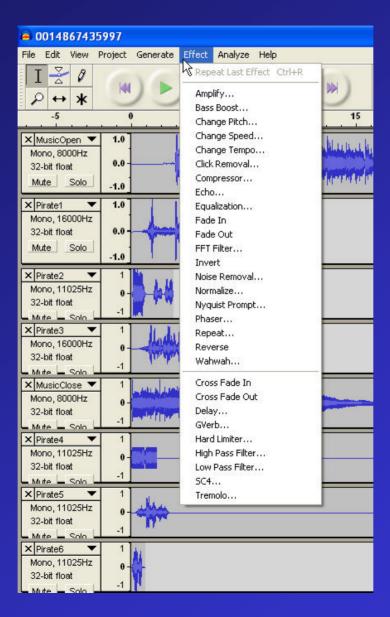


Introducing The Effects Menu

Adjust pitch, volume, and tempo, add reverb or echo, filter frequencies, remove background noise, even play in reverse

Let's take a look

The Effects Menu



The Musical Intro – Generating Silence



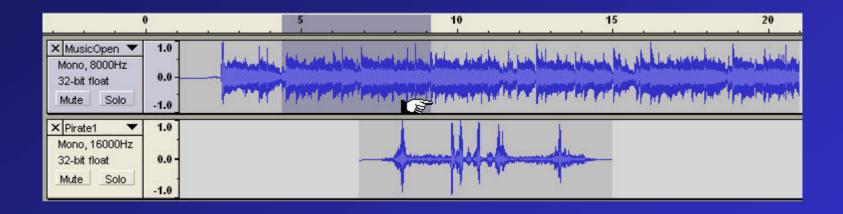
The Musical Intro – Generating Silence





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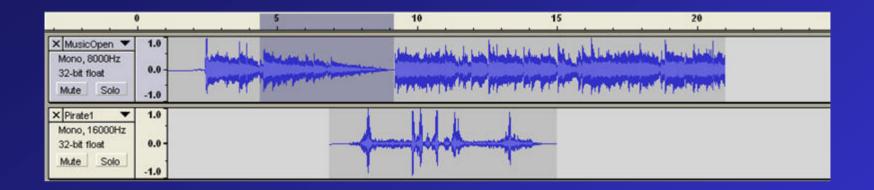
The Musical Intro – Fading Out



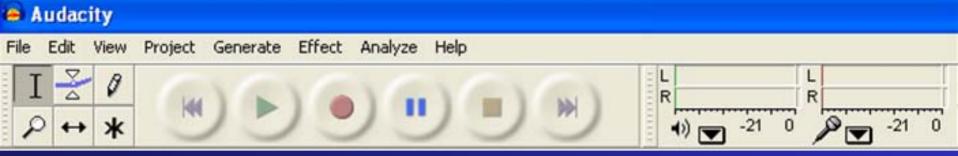
The Musical Intro – Fading Out

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× Pirate2 ▼ Mono, 11025Hz 32-bit float	- 1 0-	Invert Noise Removal	
× Pirate3 ▼	_1	Nyquist Prompt Phaser Repeat	
Mono, 16000Hz 32-bit float Mute – Solo	0	Reverse Wahwah	
× MusicClose ▼ Mono, 8000Hz		Cross Fade In Cross Fade Out	بالمطاعداتيا
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× Pirate4 ▼ Mono, 11025Hz		Hard Limiter High Pass Filter	
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The Musical Intro – Fading Out



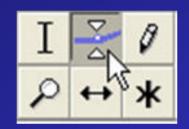




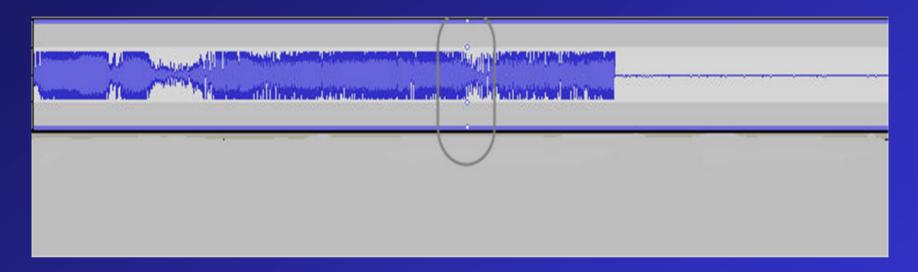
Step 6: Adjust Volume Adjusting volume: The Envelope Tool

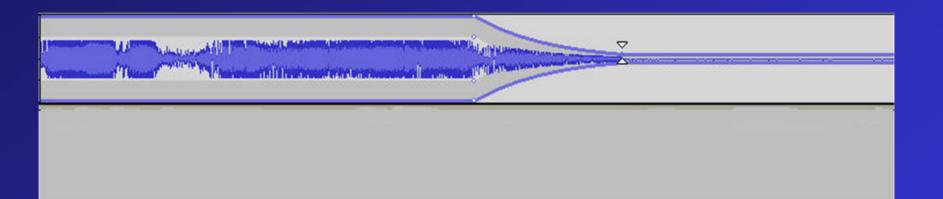
 Enables very precise modification of volume levels

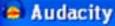
Let's take a look....



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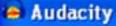






TIP: Remember This

Use your ear. Your ear is the ultimate umpire!





Okay – You're Done – Kind of

- Play your podcast
- Listen to your podcast really listen
- Take notes on everything that still needs fixing
- Fix 'em

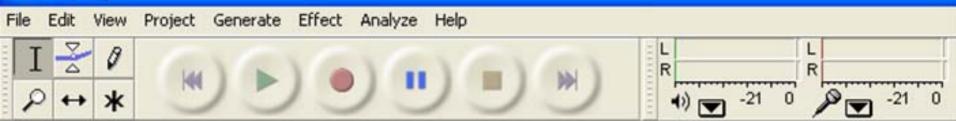
 Rinse and Repeat – and repeat, and repeat, until you're satisfied!



Step 7: Master Your Podcast Mastering is...

- Making your audio levels consistent
- Eliminating sudden spikes, plummets
- Raising the overall volume of the podcast

 Mixing your multiple sound files into one combined sound file



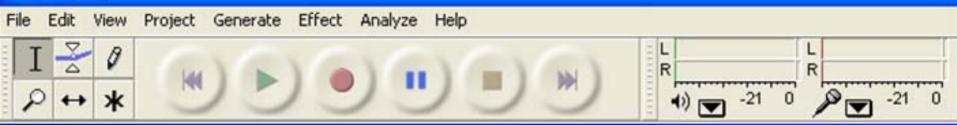
Compressing and Normalizing Your Podcast

Maximizes "listenability"

 Raises overall volume level of your podcast

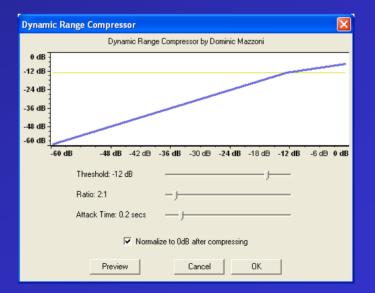
Let's take a look

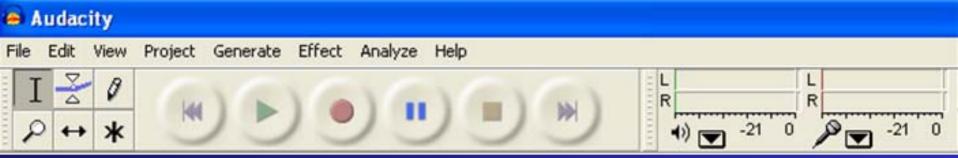
ie Audacity



Compressing and Normalizing Your Podcast

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Using the Hard Limiter Not a new action hero

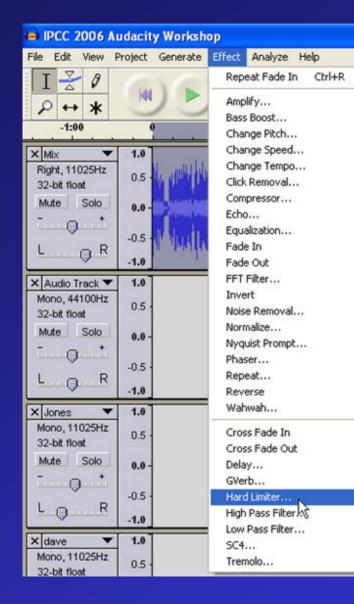
 Places a "hard limit" on your maximum audio volume

Let's take a look

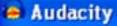
The Hard Limiter

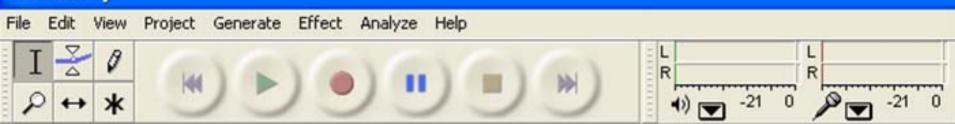
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× MusicClose ▼ Mono, 8000Hz 32-bit float Mute Solo	1.0 0.0- -1.0		

The Hard Limiter



Hard Limiter			
Author: Marcus Ar	ndersson		
GPL			
Effect Settings			
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Wet level	1.000000		—J
Residue level	0.000000	-	
	Preview	Cancel OK	





TIP: Mastering Shortcut

The Levelator

http://www.gigavox.com/levelator

ie Audacity



Step 8: Export Your Podcast as an MP3 File

As easy as 1...

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ID3!

Edit the ID3 tags for the MP3 file
Format: C ID3v1 (more compatible) (C) [D3v2 (more flexible)]
Title: Artist: Album:
Track Number: Year:
Genre: Blues
Cancel OK



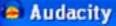


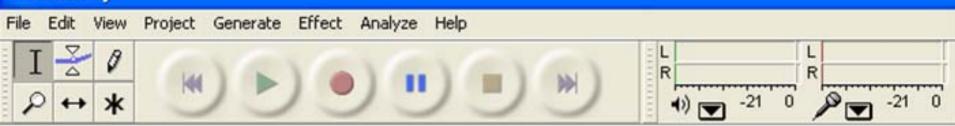
ID3 tags are big.

Huge.

Critical.

Because that's how we find you. And if we can't find you... we can't hear you.





- **Congratulations You're a Podcast Producer!**
- Now, post it... party down...
- ...and start all over again.
- Which is why you should know about a few more...



TIPS and TRICKS

Top keyboard shortcuts:

- Control-A to select all your audio files at once
- Control-mouse wheel to zoom
- Shift-arrow buttons to expand selection



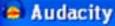
TIPS and TRICKS

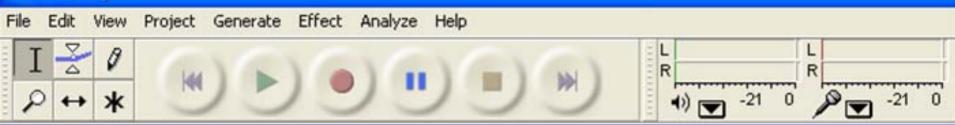
Cool additional functions:

 Project menu – New Label Track – to transcribe, notate, or flag part of an audio track using text

 Effects menu – Noise Removal – removes or decreases background

Float the toolbars to reduce mouse movement





Er – one tiny little detail...

Where to download Audacity:

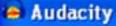
- http://audacity.sourceforge.net
 NOT www.audacity.com
- Latest stable version is 1.2.6

 Don't forget the LAME MP3 Encoder (click the Download tab and then click Windows)



What's Next With Audacity?

- Customizable user interface
- More effects
- Repair of corrupted waveforms
- Greater stability





Thank You Very Much!

Jerry is available for:

- Additional questions
- Weddings and bar mitzvahs
- audacityguy@gmail.com
- www.audacityguy.com
- www.dogworks.libsyn.com