

The Sheer Audacity!

Using the Free Audacity Audio Editing Software to Create A Podcast

Jerry Franklin



Today's Agenda

What We'll Cover:

- ▶ Current state of podcasting in the corporate world
- ▶ How some podcasts are used to disseminate technical content



Today's Agenda

What We'll Cover:

- ▶ Basics of sound and sound editing
- ▶ Basic features and functions of Audacity



Today's Agenda

What We'll Cover:

- ▶ Recording with Audacity (very basic)
- ▶ Editing, Mixing, Mastering, and Exporting with Audacity



Today's Agenda

What We Won't Cover:

- ▶ Recording equipment (mikes, mixers, etc.)
- ▶ Music production
- ▶ Most effects and other functions that may not be used frequently
- ▶ Upcoming NFL season



Today's Agenda

Key Takeaways

- ▶ Basic understanding of sound editing
- ▶ Basic audio production techniques using Audacity



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?

Many major brands are doin' it!

- ▶ Whirlpool ("The American Family" podcast)
- ▶ GM ("FastLane")
- ▶ Ameriprise ("The New Retirement Mindscape")



But 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



Some Tech Examples

Usually a conversation with or monologue by an evangelist or other SME

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

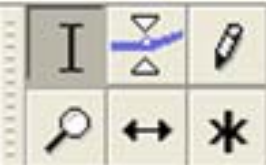


So – We Should Be Involved
Why let marketing have all the fun?



Terms of End-Ear-Ment

- **Decibel**
- **Waveform**
- **Audio track**
- **Sample / Sample Rate**



Terms of End-Ear-Ment

- **Lossy vs. Lossless**
- **Compressed vs. Uncompressed**
 - .wav, .aiff
 - .mp3, Ogg Vorbis





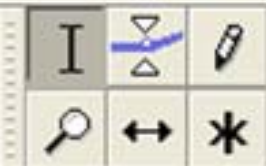
All You'll Need to Know (Almost) (Almost) to Produce a Podcast

- Recording and importing sound files
- Navigating Audacity
- Cutting, pasting, copying portions of a waveform



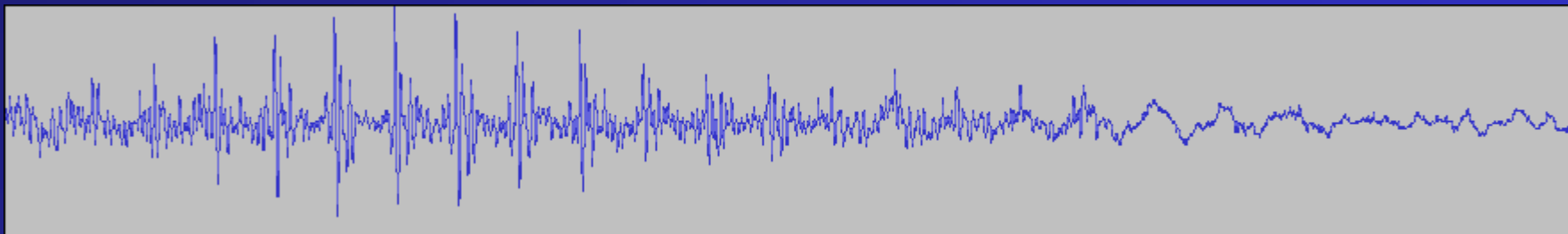
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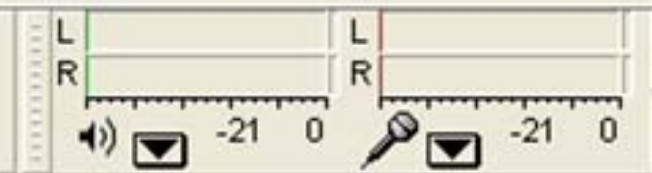
- Applying a few effects
- Adjusting levels, combining tracks, and exporting as an MP3
- Editing ID3 tags



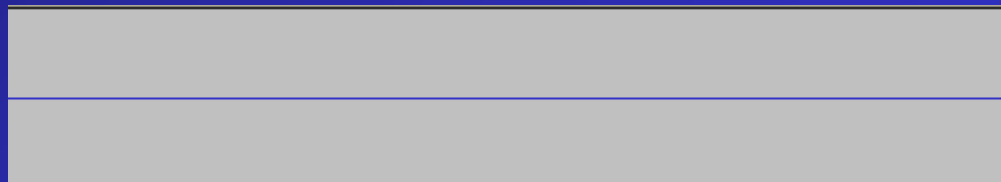
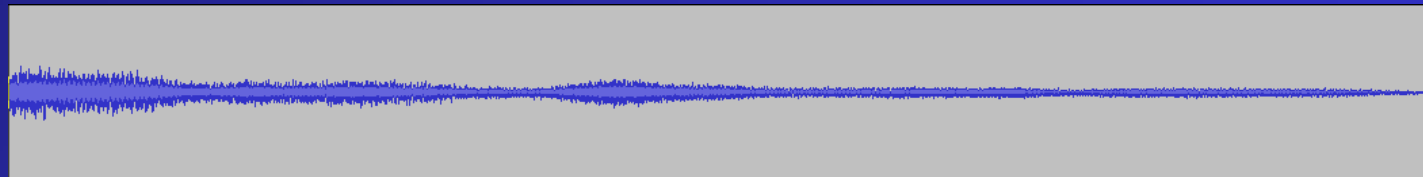
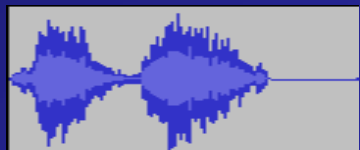
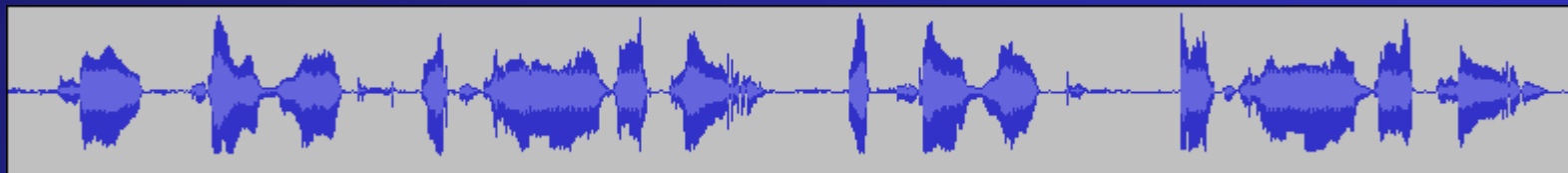
What Does Sound Look Like?

Like a wave





Examples of Waveforms





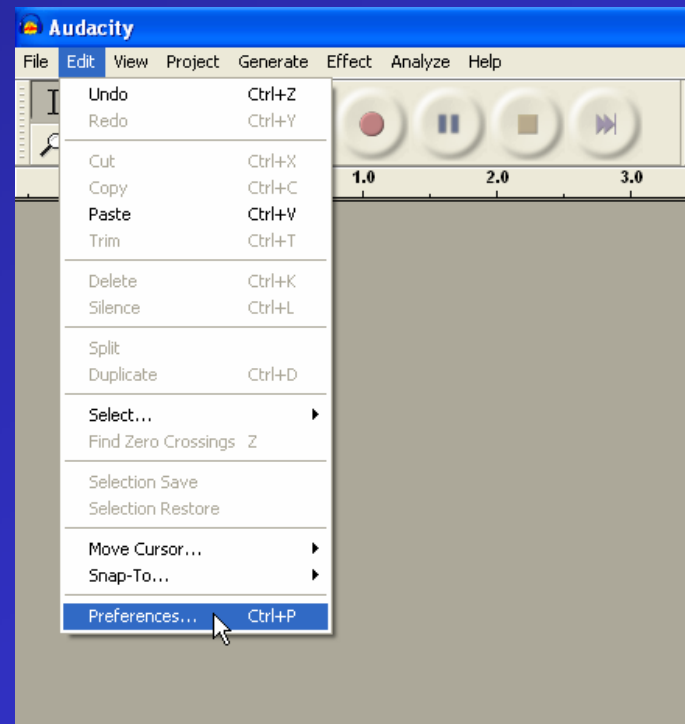
Recording Your Audio

- **Audacity not a must-have**
- **Also not easiest method**
- **True power is in post-production**



Recording Your Audio

- **Plug mike directly into your computer**
- **Open Audacity**
- **From Edit menu, select Preferences**
- **Select Audio I/O settings, click OK, and click record**





When recording, remember...

- **Avoid loud background noise**
- **Use audio slates to distinguish takes**
- **Remind your interview subject there are “do-overs”**



OK – the Files are Recorded

- **How do we turn them into a podcast?**



The Seven Broad Steps to Making a Podcast

- 1. Import Your Sound Files**
- 2. Edit/Clean Each File Individually**
- 3. Create Your Musical Intro**
- 4. Create Smooth Transitions Between Files**



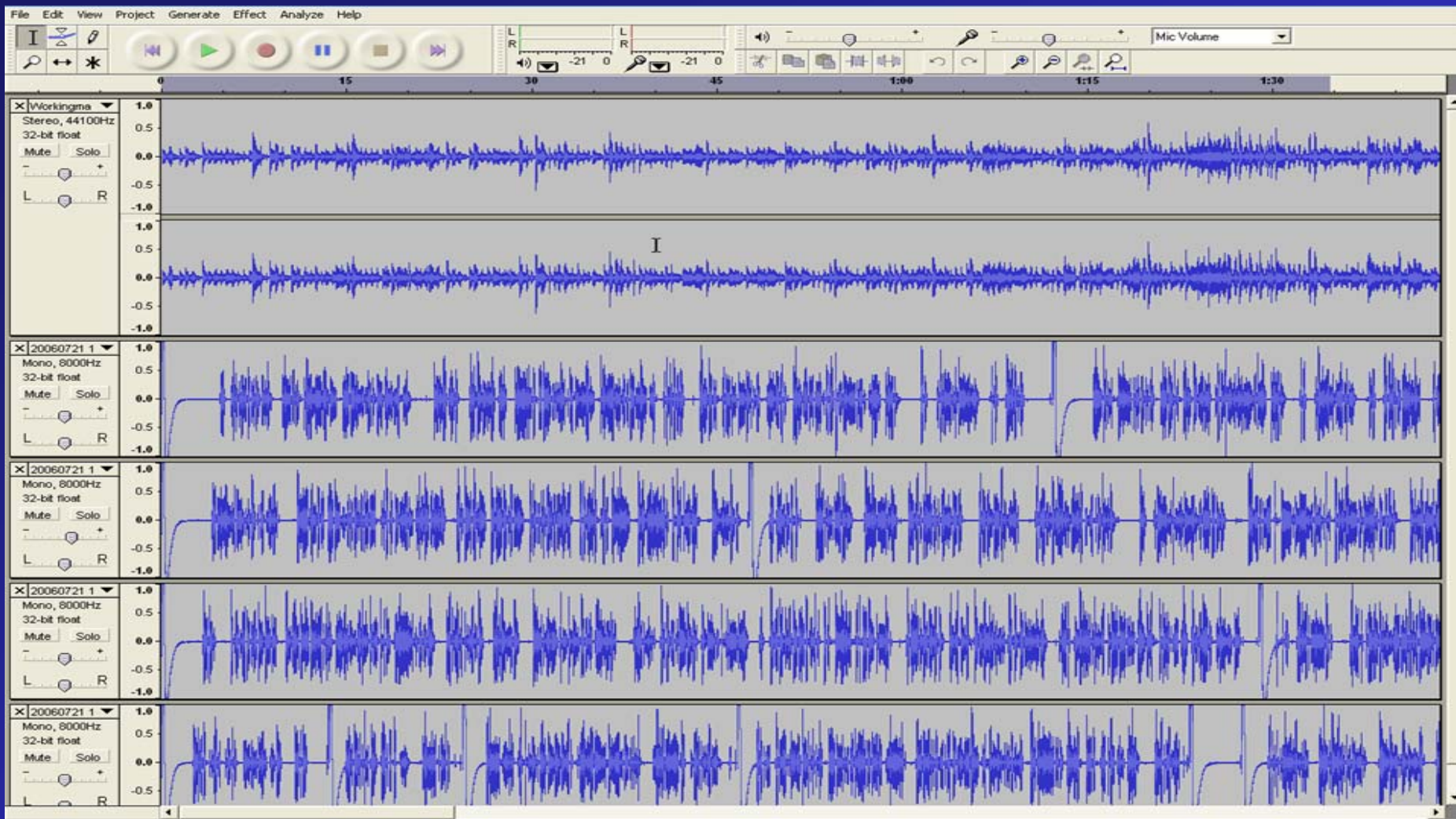
The Seven Broad Steps to Making a Podcast

5. Mix and Master Your Podcast

6. Export Your Master as an .MP3 file and Prepare Your ID3 Tags

7. Post Your Podcast and Party!

The Audacity Interface



The Audacity Interface

A few selected areas:

- **Track Control Panel**



- **Control Toolbar**



- **Edit Toolbar**





Importing Your Sound Files

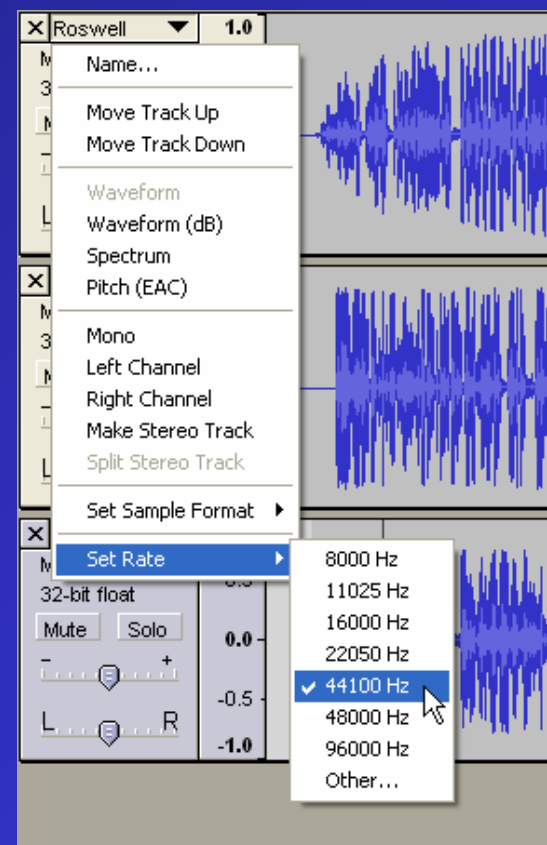
- **First create a new Audacity Project**
- **Works just like selecting files for a standard program, like Word**
- **Keyboard shortcut to import a file: Control-I**
 - Let's see it in action...



A Word About Sampling Rate

The number of times per second music is actually recorded, or “sampled”

If your recording sounds too high or too low... check the sample rate





Now... Back to Our Podcast...

First – some file housekeeping.

- Arrange sound files in order, from top to bottom
- Rename files

Let's see it in action...



Remember this:

**The Mute and Solo buttons
are your friends!**



Next, Edit Each Individual File, File, One at a Time

- **Delete unwanted passages and artifacts**
- **Adjust volume to smooth levels, transitions**



Cutting Out Vocal Artifacts

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

Let's see it in action...



Editing – Some Shortcuts

- **Spacebar** – plays your selection
- **L** – loops your selection
- **Same keyboard shortcuts as Office**



Altering Volume

The envelope tool

- Enables very precise modification of volume levels

Let's see it in action...



A Brief Public Service Announcement

Have you saved your file lately?



Remember this:

**Use your ear. Your ear is
the ultimate umpire!**



Next, 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 the Undo function

But before we see it in action...



...Some Words About the Effects Menu

- **Where you can really manipulate the sound**
- **More plug-ins provide more effects**
- **Adjust pitch, volume, and tempo, add reverb, remove artifacts, even play in reverse**



...More Words About the Effects Menu

- **Only works in Stop mode – NOT Pause mode**
- **Only works when you've selected a passage**



... Still More Words About the Effects Menu

Effects applied in same broad strokes:

- Highlight selection
- Apply effect
- Listen to results
- Undo/re-apply till satisfied



Remember this:

The Undo button is your best friend!



**Keyboard Shortcut:
Control Z**



Next, Align Your Files

- **Use the Time Shift Tool to adjust your waveforms horizontally along the timeline**
- **Aim to create a smooth transition between your audio files**

Let's see it in action...



Okay – You’re Done – Kind of

- **Play your podcast**
- **Listen to your podcast – really listen**
- **Take notes for everything that still needs fixing**
- **Fix ‘em**
- **Rinse and Repeat – and repeat, and repeat, until you’re satisfied!**



Next, Master Your Podcast

Mastering is...

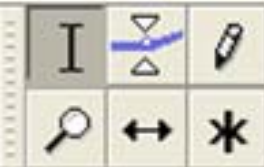
- Making your audio levels consistent
- Eliminate sudden spikes, plummets
- Raising the overall volume of the podcast
- Ensuring your listeners won't have to ride their volume controls



Next, Master Your Podcast

Mastering is...

- Mixing your multiple sound files into one combined sound file
- You could use many different techniques
- What follows is one very simple technique...



Mastering Your Podcast

The Hard Limiter

- Not a new action hero
- Places a “hard limit” on your maximum audio volume

Let's see it in action...





Mastering Your Podcast

Normalizing Your Podcast

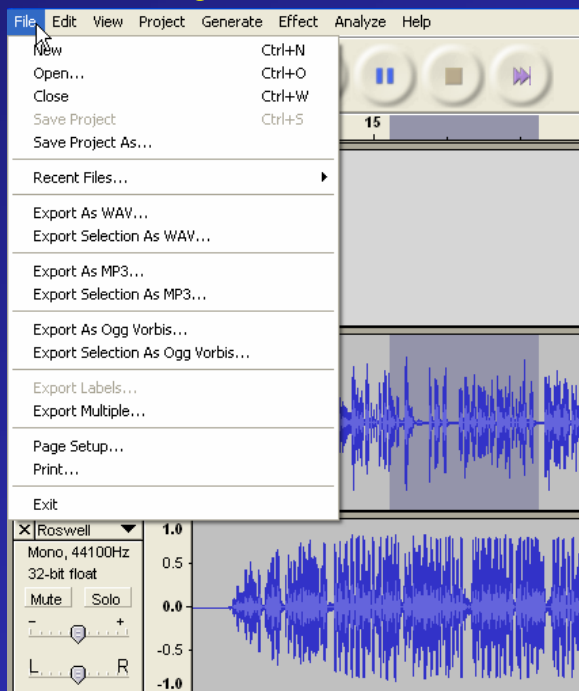
- Raises overall volume level of your podcast
- Maximizes “listenability”

Let's see it in action...

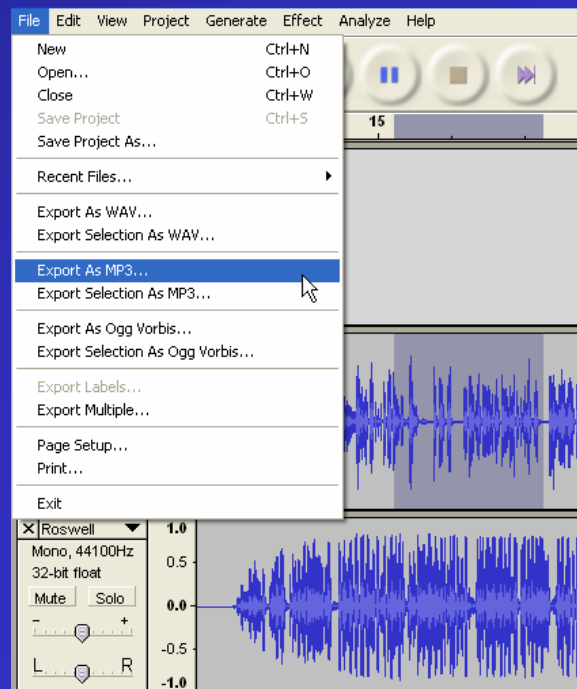


Exporting Your Podcast as an MP3 File

As easy as 1...



2...





Exporting Your Podcast as an MP3 File

ID3!

Edit the ID3 tags for the MP3 file

Format:

- ID3v1 (more compatible)
- ID3v2 (more flexible)

Title:

Artist:

Album:

Track Number: Year:

Genre:

Comments:



Remember this:

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...**
- **...and start all over again.**
- **Which is why you should know about a few...**



Tips and Tricks

Some keyboard shortcuts:

- Control-A to select all your audio files at once
- Control-mouse wheel to zoom
- Control-Shift-F to fit your audio tracks on one screen, vertically
- Shift-arrow buttons to expand selection; Control-arrow buttons to shrink it



Tips and Tricks

Some cool additional functions:

- Project menu – New Label Track – to transcribe, notate, or flag part of an audio track using text
- Delete an audio track by clicking the X in the Track Control Panel
- “Float” the toolbars to reduce mouse movement



Tips and Tricks

Also keep in mind:

- Click crisply
- Play the selection you highlight before modifying or deleting it
- Copy everything
- Delete all extraneous material before mixing and mastering



Er – one tiny little detail...

Where to download Audacity:

- <http://audacity.sourceforge.net>
- latest stable version is 1.2.4b
- don't forget the LAME MP3 Encoder (click the Download tab and then click Windows)



So – What Did We Cover?

- Recording and importing sound files
- Navigating Audacity
- Cutting, pasting, copying portions of a waveform



So – What Did We Cover?

- Applying a few effects
- Adjusting levels, mixing tracks, and exporting as an MP3
- Editing ID3 tags



Final Takeaways

Save. Save again. Save some more.

Edit one track at a time.

You can't do much while you're in PAUSE mode; you must be in STOP mode to work.



Final Takeaways

Clicking PLAY will always begin playing from the last spot you clicked in the waveform.

Take exceptional care when you master.

Be passionate.



Final Takeaways

Have fun.

Use your ears. Listen!

The Undo button is...

Save. Save again. Save some more.



Thank You Very Much!

Jerry is available for:

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