Podcasting

An Introduction to Podcasting

Tony Sams
Matt Irsik
Richard Glaser
Agenda

• Benefits
• Types of Podcasts
• How to Distribute
• Hardware
• Software
  • overview
  • In depth
• iTunes U
What is Podcasting?

- Marriage of Terms
- Radio/Blog
- iPod/Broadcasting
Podcast History

• Roots in Blogging
• Roots in Web Radio
• RSS created by Dave Winer
• Audio Blogging
• Collecting the Feed (RSS)
• Ubiquitous iPod
Why Podcast?

- Easy to use to use up-to-date communication:
  - RSS Feeds
    - Daily, Weekly, or Monthly
- Community connections:
  - Universities sharing knowledge
  - Professional Development
- Distribution to large, target audience
Podcast Creation

Script: What do you want to say? and to whom?

Record: What do you want to do with it?

Produce: Is quality a consideration?

Publish: Where is it going? email? Web? iTunes U?
Podcast Formats

• Audio
• Enhanced
• Video
• PDF/Text/Images
Audio Podcasts

- Easiest to create
- Requires only basic equipment and editing
- iTunes supports MP3 or AAC formats
Enhanced Podcasts

- Audio with images and chapters
- Requires separate images and software that can create the chapters
- Exported as m4a or mp4 files
- Takes a little longer to produce than audio only podcasts
Video Podcasts

- Requires basic video editing knowledge
- iTunes supports MPEG-4 and H.264 formats
- QuickTime plug-ins allows iTunes to support additional formats
- Can take much longer to produce depending upon the desired quality
Publishing Podcasts
Publishing Podcasts

• The Basic Steps...
  ‣ Create Podcast
  ‣ Upload Podcast to Server
  ‣ Create RSS Feed
  ‣ Upload RSS File to Server
  ‣ Publicize Podcast
Publishing Podcasts

• **Upload Podcast to Server**
  - Use client/server supported option...
    - AFP, FTP, NFS, SMB, WebDAV, etc.
  - Web Server (http, https)
  - Streaming Server (rtsp, mms, etc.)
What is a RSS Feed?

- Acronym for Really Simple Syndication
- Used to publish frequently updated digital content, such as blogs, news feeds or podcasts.
- RSS 2.0
  Was the first version to support enclosures, making it the leading choice for podcasts.
- iTunes uses RSS 2.0 + Additional Tags
Publishing Podcasts

Parts of RSS Feed?

- Metadata
  - It is data about data
  - Structured Information
    - Explains, locates, or otherwise makes it easier to retrieve, use, or manage an information resource.
  - Often called “tagging”
  - A good resource is MIT’s Introduction to Podcast Tagging
Publishing Podcasts

Metadata - iTunes Example
Publishing Podcasts

Parts of RSS Feed?

- **XML**
  - eXtensible Markup Language
  - Very similar to HTML
    - Except errors are NOT tolerated
    - Tags must be lowercase
    - All tags must be opened & closed in order
      `<tag1><tag2></tag2></tag1>`
  - RSS files are written in XML
  - Unless absolutely necessary easier & safer to use RSS editor vs editing code by hand.
  - A good resource on XML...
    [http://www.w3schools.com/xml](http://www.w3schools.com/xml)
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Basic Sample RSS Feed

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<rss version="2.0">
  <channel>
    <title>Feed Title</title>
    <link>http://yourserver.edu/feed.rss</link>
    <description>Feed Description</description>
    <item>
      <title>Episode Title</title>
      <description>Episode Description</description>
      <enclosure url="http://yourserver.edu/rss.mp3" length="123456" type="audio/mpeg" />
    </item>
  </channel>
</rss>
```
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iTunes Sample RSS Feed - Part I

<?xml version="1.0" encoding="UTF-8" ?>
<rss xmlns:itunes="http://www.itunes.com/dtds/podcast-1.0.dtd" version="2.0">
  <channel>
    <title>Feed Title</title>
    <link>http://yourserver.edu/feed.rss</link>
    <itunes:subtitle>Feed Subtitle</itunes:subtitle>
    <itunes:author>John Doe</itunes:author>
    <itunes:summary>Feed Summary</itunes:summary>
    <description>Feed Description</description>
    <itunes:owner>
      <itunes:name>John Doe</itunes:name>
      <itunes:email>john.doe@yourmailserver.edu</itunes:email>
    </itunes:owner>
    <itunes:image href="http://yourserver.edu/image.jpg" />
    <itunes:category text="Technology"/>
      <itunes:category text="Gadgets"/>
    </itunes:category>
    <itunes:category text="TV &amp; Film"/>
  </channel>
</rss>
Publishing Podcasts

iTunes Sample RSS Feed - Part II

```xml
  <item>
    <title>Episode Title</title>
    <itunes:author>John Doe</itunes:author>
    <itunes:subtitle>Episode Subtitle</itunes:subtitle>
    <itunes:summary>Episode Summary</itunes:summary>
    <description>Episode Description</description>
    <enclosure url="http://yourserver.edu/rss.mp3" length="123456" type="audio/mpeg" />
    <itunes:duration>7:04</itunes:duration>
    <itunes:keywords>training, rss, xml, exciting</itunes:keywords>
  </item>
</channel>
</rss>
```
Publishing Podcasts

iTunes RSS Tags

- Needed to properly use metadata w/iTunes
- Define tags with iTunes Namespace
  - Add to second line of XML code
- A good reference is Apple’s...

Podcaster Tech Specs
Publishing Podcasts

Create a RSS Feed?

- Use a text editor
  - Like BBEdit, TextMate, NotePad, command line, etc.
    - BBEdit
    - TextMate
      http://macromates.com/
  - Not recommended to use Microsoft Word

- Use RSS Editor
  - Mac OS X - Feeder
    http://reinventedsoftware.com/feeder/
  - Windows - Feed Editor
    http://www.extralabs.net/feed-editor.htm
Publishing Podcasts

TextMate

```xml
<?xml version="1.0" encoding="UTF-8"?>
<rss xmlns:itunes="http://www.itunes.com/dtds/podcast-1.0.dtd" version="2.0">
  <channel>
    <title>Feed Title</title>
    <link>http://yourserver.edu/feed.rss</link>
    <itunes:subtitle>Feed Subtitle</itunes:subtitle>
    <itunes:author>John Doe</itunes:author>
    <itunes:summary>Feed Summary</itunes:summary>
    <description>Feed Description</description>
    <itunes:image href="http://yourserver.edu/image.jpg" />
    <itunes:category text="Technology">
      <itunes:category text="Gadgets"/>
    </itunes:category>
    <itunes:category text="TV & Film"/>
  </channel>
</rss>
```
Publishing Podcasts

Feeder
Publishing Podcasts

Feed Editor
Publishing Podcasts

- **Upload RSS file to Server**
  - Use client/server supported option...
    - AFP, FTP, NFS, SMB, WebDAV, etc.
  - Web Server (http, https)
  - Publicize RSS Feed (link, etc)
Hardware
Hardware

- Computer, mic, headphones
- Computer (Mac or PC)
- Mic (built in)
- Headphones (playback)
- Other equipment
Hardware (this?)
Hardware (or this?)
Other Hardware

- MicroMemo
- Turns iPod into digital recorder
- Lapel mics available
Software
GarageBand 3
GarageBand 3

- Designed to create podcasts with minimum effort
- Easy to use
- Integrates seamlessly with iTunes
Feeder-RSS
Feeder-RSS

- RSS (Really Simple Syndication-2.0)
- Allows users to subscribe to your episodes
- Feeder creates the XML based summary for web pages and RSS aggregators
- Slight learning curve
Video Podcasts

• Called Vodcasts
• More hardware and software
• More editing
• Allows visual communication
Video Software

- iMovie
  - Easy to use
  - Subscribe to Video Feed
  - iMovie will compress for Podcast
Video Software

• Final Cut Studio

• More Professional

• High end video capabilities
Video Software (Windows)

- Avid
  - Originally intended for film
  - Large Production
  - Older than Final Cut
Enhanced Podcasting

• **ProfCast**
  • Easy to use
  • Minimal steps from creation to publication
Profcast

- Launch ProfCast
Profcast

- Launch ProfCast
- Add the presentation that you want to deliver
Profcast

- Launch ProfCast
- Add the presentation that you want to deliver
- Start Recording
Profcast

• Launch ProfCast
• Add the presentation that you want to deliver
• Start Recording
• Give your presentation the way you normally would.
• When you are finished click the "Stop Recording"
Profcast

- Launch ProfCast
- Add the presentation that you want to deliver
- Start Recording
- Give your presentation the way you normally would.
- When you are finished click the "Stop Recording"
- Click the "Publish" button
More Info

- Campus iTunes U (Soon)
  http://itunesu.utah.edu

- Questions & Comments
  itunesu-support@scl.utah.edu

- Apple’s iTunes U Site