Podcasting Guide

We've all heard people talking about Podcasting lately. Every year seems to be termed as the 'Year of Podcasting'. With the surge of ipods (or mp3 players) and the number of students who use it to listen to music, it's about time that we find an educational application for this.

This guide hopes to outline a step by step guide to creating, publishing, and subscribing to podcasts along with its applications to the different levels of learning. The intention is to package the whole notion of podcasting into an easy to understand and follow resource.

Its various sections allow users to learn individual skills such as audio recording, establishing a blog site, or learning RSS.

Note:

means that the material is either new or updated

Topics covered

1. What is Podcasting?
2. What do you need?
3. Is there a structure?
4. Purpose of podcasting
5. Quick (and free) steps to audio podcasting

Guides

1. Recording your podcast
2. Upload your file to a server
3. Set up a blog account (Blogger)
4. From a blog feed to a podcast feed (Feedburner)
5. Subscribing to your podcast (Juice)

New guides

1. Doing it all in Odeo
2. Learning a little of RSS
3. Subscribing using iTunes

Resources

1. Resources for further reading and learning
2. Books
3. Guide details

What is Podcasting?

Podcasting is the method of distributing multimedia files, such as audio programs or music videos over the Internet for playback on mobile devices and personal computers. The distribution format of a podcast uses a form of the RSS (Really Simple Syndication) format.

The term **podcast**, like "radio", can mean both the content and the method of delivery. The host or author of a podcast is often referred to as a "podcaster".

Podcasters' web sites may also offer direct download or streaming of files, however a podcast is distinguished by its ability to be downloaded automatically using software capable of reading RSS feeds.

Usually the podcast features one type of "show", with new episodes either sporadically or at planned intervals, such as daily or weekly. In addition to this, there are podcast networks that feature multiple shows on the same feed.

Podcasting's essence is about creating content (audio or video, even documents) for an audience who want to listen or watch an episode when they want it, where they want it, and how they want it.

What do you need?

Software

Audio recording software options
- Audacity + LAME encoder
  Free multi-platform audio editor and recorder
  audacity.sourceforge.net
  lame.sourceforge.net
- Adobe Audition
  Professional audio editing, 30-day free trial available
  www.adobe.com/products/audition
- Garageband
  Apple's audio composition software
  www.apple.com/au/garageband

Podcast receiver options
- Juice
  Free multi-platform podcast receiver
  juicereceiver.sourceforge.net
- iTunes
  Apple's music library and podcast management software
  www.apple.com/au/itunes

Hardware
- A computer with any operating system
  + a good sound card (optional)
  Suggestion: anything from Creative

- Microphone & headphone or headset
  *Suggestions: Sony Pro digital stereo microphone
                 Logitech desktop mic
                 Verbatim deluxe headset
                 USB connected headsets are better for
                 computer use*

Network
- Internet connection (any speed)
- Check with your ISP or internet admin regarding bandwidth (download/upload) restrictions

Is there a structure?

Yes, like any form of presentation you can structure your podcast.

The usual format is:

a. Introduction (welcome, what is the podcast about, when was it recorded, overview of the episode)
b. Talk about the episode topic/s
c. Feedback (emails, letters, comments on website)
d. Closing (what was discussed, acknowledgement, overview of the next episode)

No, some podcasts are very loosely structured. Examples of these are recordings of conferences, lectures, and field study tours. However, it is still good practice to introduce what the podcast is about.

An advantage of having a set structure is the ease of producing a **transcript** to assist with the podcast. In an educational setting, concerns about accessibility should be addressed. If a transcript is not available, ensure an alternative textual document is prepared.

Purpose of podcasting

Education
- Language learning (Podcast of English Language Teachers Worldwide)
- Conferences, seminars, and forums (MIT – Emerging Technologies; Cool Connections, Australia)
- Lectures (Harvard Extension School)
- Orientation material (Duke University)
- Research (RMIT University; Monash University)
- Project demonstration(Flash TV)

Business/Commercial
- Marketing and Promotions (DesignFix)
- Training of staff
- Product or service demonstration (Penguin books)
- News (ABC)

Recreation/Entertainment
- Chat radio (Merrick and Russo)
- Hobbies (VODcars)
- Cartoons (Happy Tree Friends – warning: PG rating)
- Crazy talk (Ask a Ninja)

Quick (and free) steps to audio-based podcasting

Step 1 Create an audio recording
Step 2 Upload the recording (mp3) to a server
Step 3 Create a blog account
Step 4 Create a link to your mp3 file from your blog.
Step 5 Enhance your blog feed into a podcast feed
Step 6 Subscribe to your podcast
Step 7 Submit your podcast

Quicker steps

Step 1 Create an audio recording
Step 2 Create an Odeo account
Step 3 Upload your recording (mp3) to Odeo
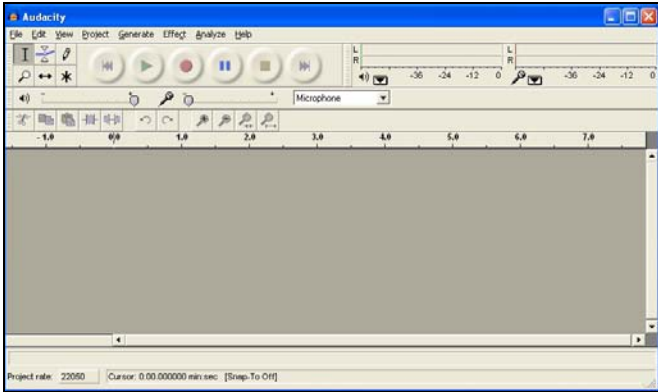
Even quicker steps
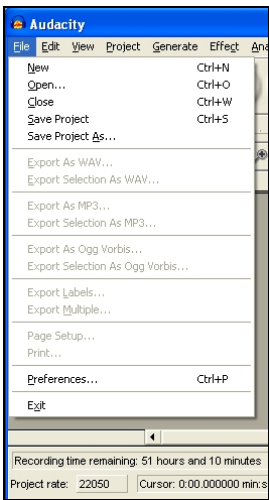
Do it all in Odeo

Recording your podcast
Audacity (audacity.sourceforge.net)
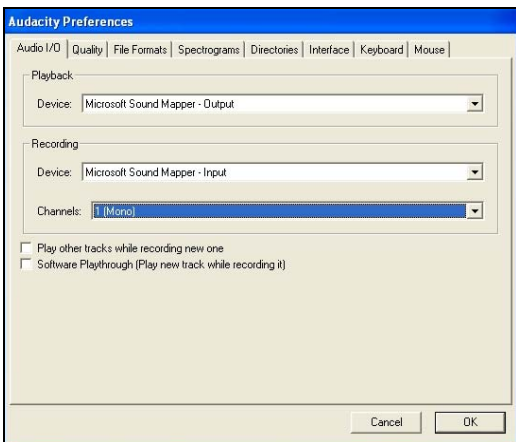LAME encoder (lame.sourceforge.net)
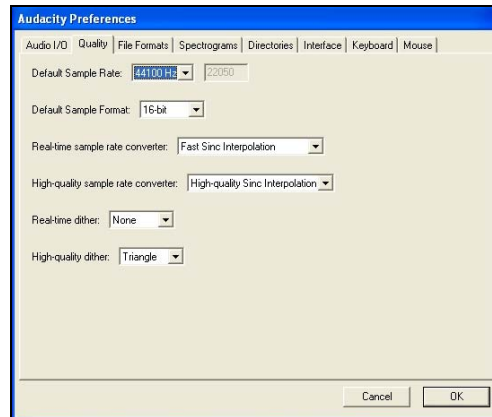
1. Open Audacity in your computer.

2. Set the Preferences in **File** select **Preferences**.

3. In the Audio I/O tab, ensure that your **soundcard** (Device) is selected. Select a **single (Mono)** channel.

Under the **Quality tab**, set the default sample rate to **44100 Hz** and the Default Sample Format to **16bit**. Keep the rest of the settings as they are.

Under the File Formats tab, set the Uncompressed Export Format to **WAV(Microsoft 16-bit PCM)**. And the MP3 Export setup bit rate to **56 or 64**.
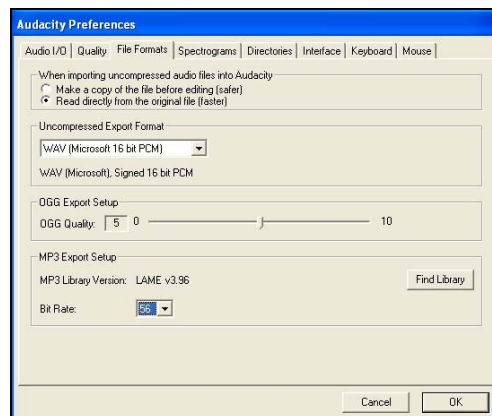
Click the **OK** button once this is done.

4. Start recording by pressing the **Record button** (red dot)

Review your recording.
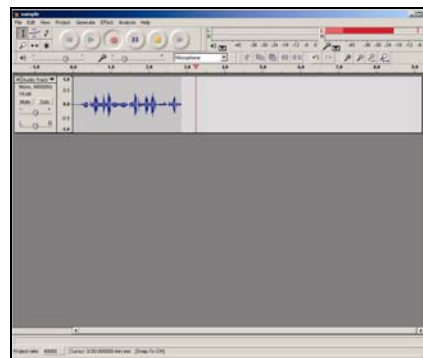
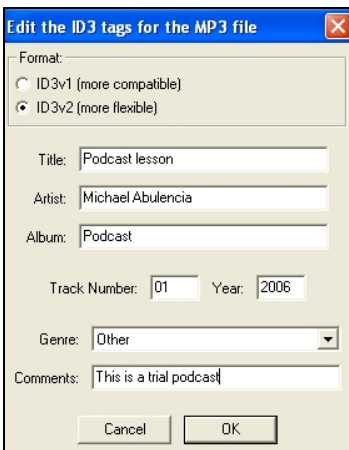5. Export the recording as an mp3 file, under **File** select **Export as MP3...**
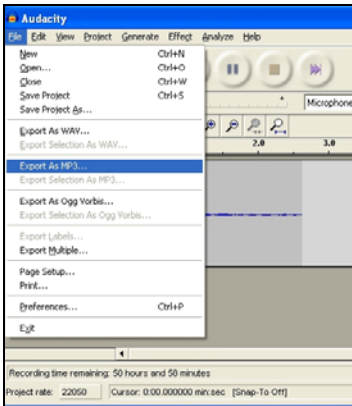
6. Save the file in your podcast folder and click the **Save** button.

7. You will be prompted to add ID3 tags, fill it in with the details about your recording.

Click the **OK** button once this is done.

Upload your file to a server
WS_FTP (www.ipswitch.com) + Webspace

1. Open **WS_FTP** from your computer. Enter the details of your web server, this can be obtained by either contacting your system administrator or your Internet Service Provider tech support.

The details that you need are:
- **Host address**
- **Username**
- **Password**

Click the OK button once the fields are filled.
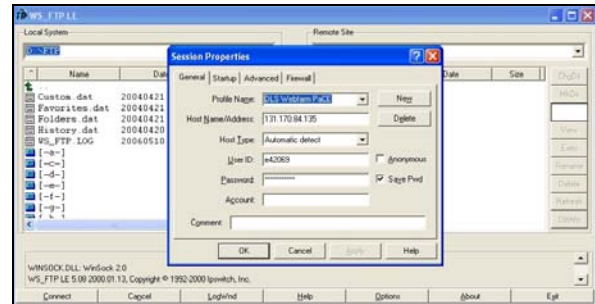
2. On the left panel, browse to the directory where you saved your audio recording, on the right panel, browse to the directory where your podcasts will be located on your server.

Select the file that you would like uploaded and click the **arrow button pointing to right**. Once this is done, click **Exit**.
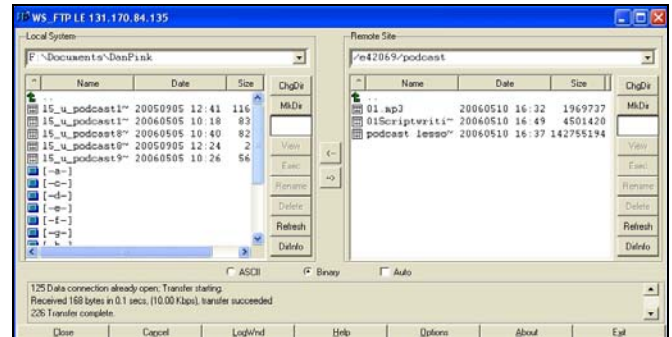
3. Test your uploaded file by going to the internet address of your file (URL).
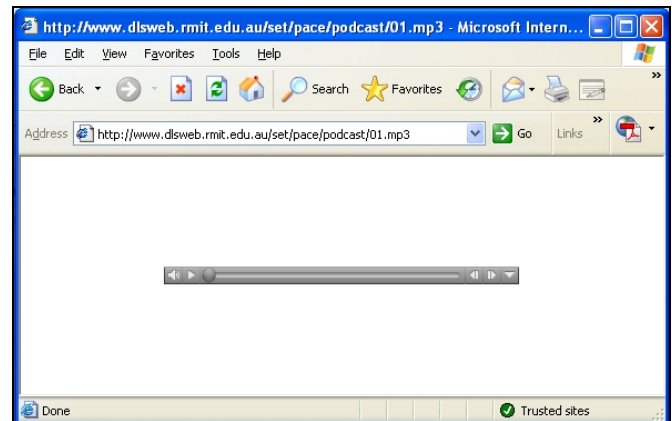
1. Open your internet browser (e.g. Internet Explorer, Safari, Mozilla Firefox, Netscape).
In the address bar, type **www.blogger.com** then press the **Enter** key or **Go** button.
This should take you to the Blogger start page.

2. As a new user, click the **Create your blog now** link.

3. Create an account. Fill in the details with your preferred username (subject to availability), password, etc.
Read and accept the Terms of Service, then click the **Continue** link.

4. Give your blog a **name** (eg. Podcasting) and a **unique address**. Enter the verification word provided and click the **Continue** link.

5. Blogger allows you to choose one of the preset templates so you don't have to worry about colour schemes and text styles.

Just select one of the templates and click the **Continue** link.
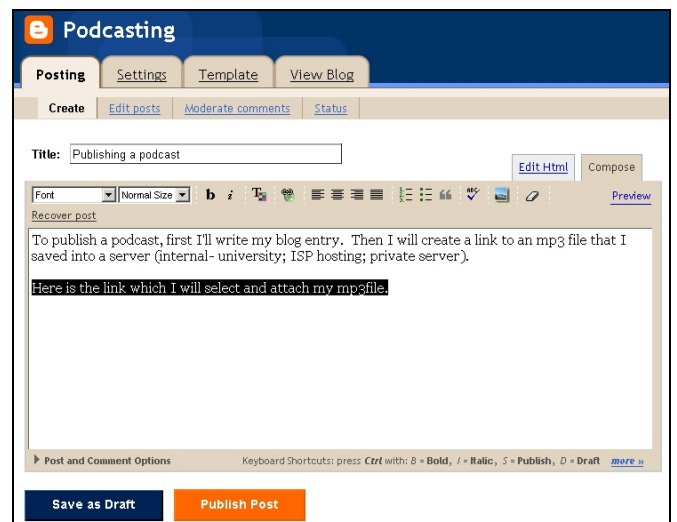
These templates can be changed later.
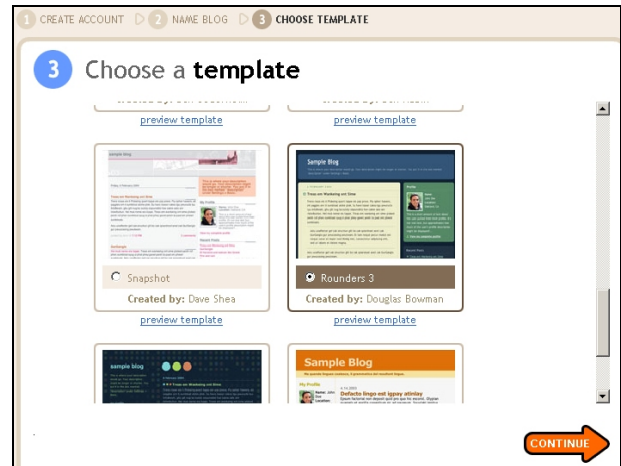
6. Your blog request will now be processed and created.

Once created, click the **Start posting** link to begin posting on your blog.

**7**. Give a title to your posting and add your first journal entry.

With your journal entry, you can change the styles of the text e.g. adding a bold face, or an underline.

8. In you first blog entry, highlight the text which refers to your podcast. (eg. Audio, episode01, listen to my podcast). Click the link button which is beside the paragraph layouts (4th from the left).

Enter the address of your mp3 file. This should be an exact link, for example, http://www.site.com/account/filename.mp3
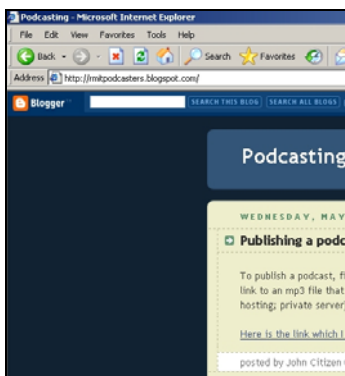
Click the **OK** button once done.
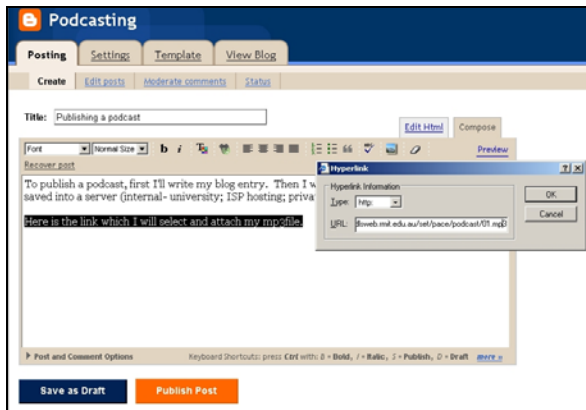
9. The selected text will now appear with an underline which means it is linking to your mp3 file. Click the **Publish Post** button.
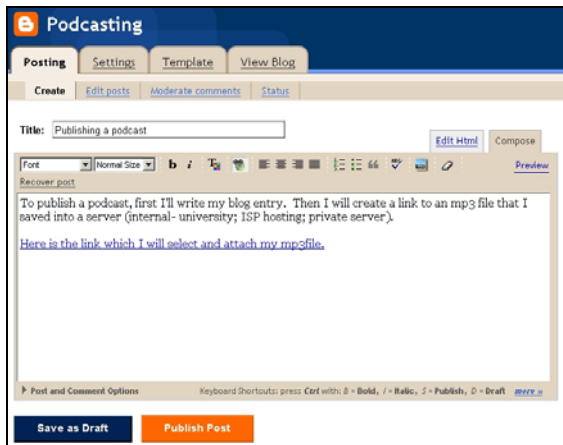
10. Once published, click the **View the Published** blog to see your blog.

Take note of your podcast address.

From a blog feed to a podcast feed
Feedburner (www.feedburner.com)

1. On your browser, go to the Feedburner website (**www.feedburner.com**)

With your blog address in Blogger, add the RSS feed file of Blogger (atom.xml) therefore you may come up with:

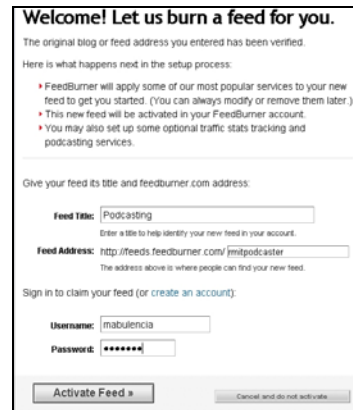http://rmitpodcasters.blogspot.com/atom.xml

Make sure the **"I am a podcaster"** tick box is checked and click the **Next** button.
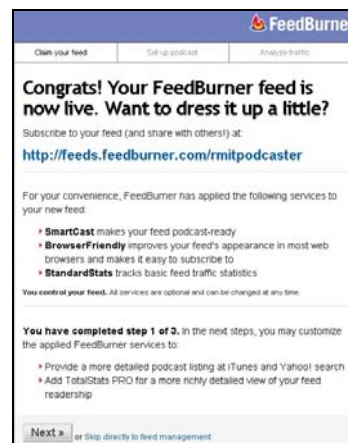

2. Feedburner will automatically recognize the title of your blog feed, change the **feedburner feed address**.

Sign up for an account (Name, password, email). Click the **Activate Feed** button.

Your Feedburner podcast feed is now ready, click the **Next** button.

3. Set up your feed for iTunes (iTunes is one of the biggest podcast directory listing software; it comes from Apple and works on both Macs and PCs).
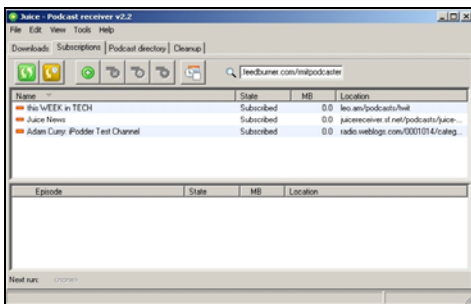
Click the **Next** button.

4. Sign up for a Pro version or just click the **Next** button.

5. Your feed is not ready, click on the feed address and it will open on a new window.

Take note of your Feedburner feed address.

Subscribing to your podcast
Juice (juicereceiver.sourceforge.net)

1. Open Juice from your computer.

2. Click the **Add new feed** button (green button with a plus). A window will pop-up asking for your podcast feed address (URL). Type or paste the location of your feedburner feed. Click the **Save** button.
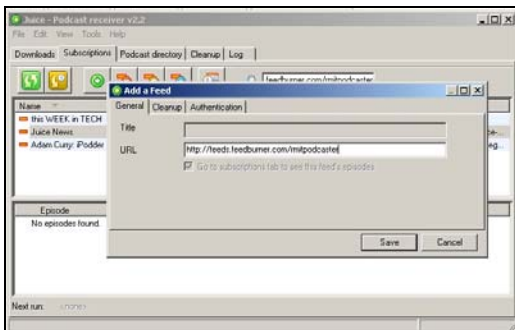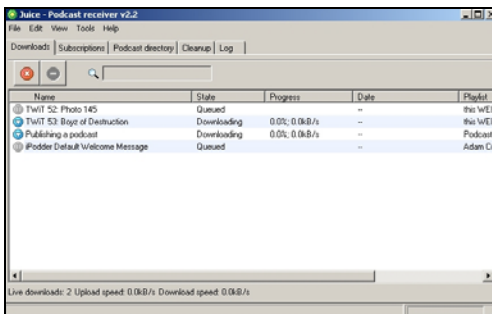

You will notice that your podcast feed has automatically been added to your subscription list.

3. Click the Check for New Podcasts button (green with arrows), this will check your subscriptions for new podcasts.
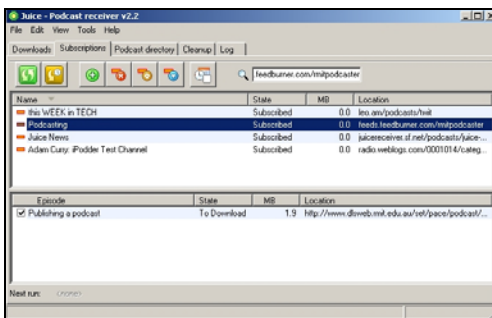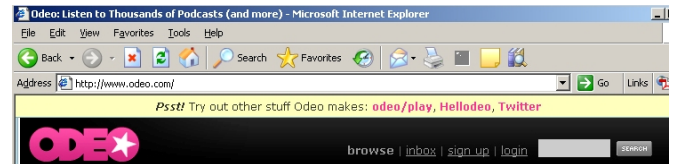

Under the **Downloads** tab, you will see the files that are currently downloading.

Doing it all in Odeo
Odeo (www.odeo.com)

1. On your browser, go to the Odeo website **www.odeo.com**

2. Sign up for a free account by clicking the **sign up** link.

3. Fill in the simple form with your details and clicking the **SIGN UP NOW** button.
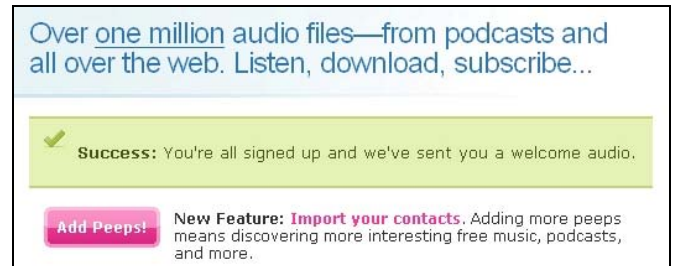

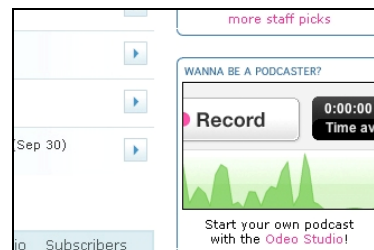4. A message saying that you've successfully signed up will appear.

5. Scroll to the bottom right end of the webpage and look for the **WANNA BE A PODCASTER?** link. Click this to start your own podcast.

6. Odeo allows 3 options of making your podcast episodes:

    a. Recording New Audio (online and sometimes a bit too soft)
    b. Upload Audio from Your Computer (works with small files sizes)
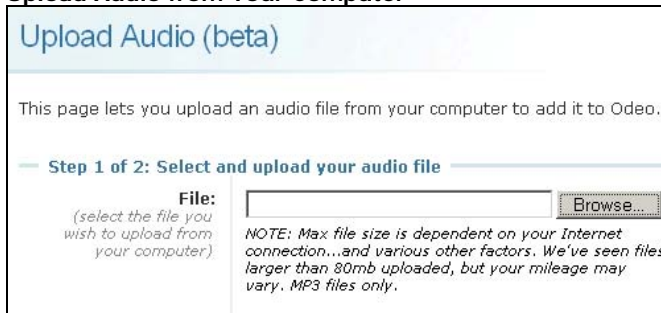   c. Add Audio from the Web (allows you to just add the URL where your podcast is stored)
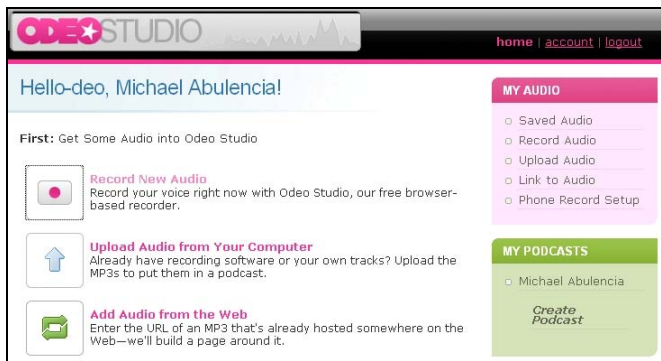
7. Select one of the options and you will be presented with one of these interfaces. Record, upload, or link your podcast.

Recording New Audio
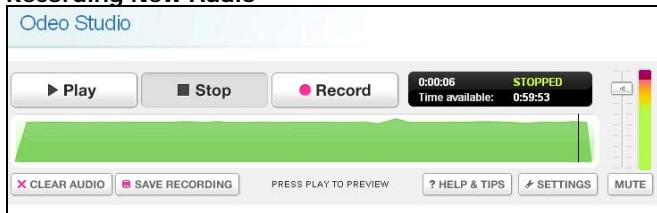
Upload Audio from Your Computer

Add Audio from the Web

8. Once you've recorded, uploaded or linked to your podcast, you can change the title, description, link to its dedicated webpage, attach an image that will show when the podcast is played, and even assign it to a specific podcast show (Place in☺. Press the **Save** button to keep these changes.
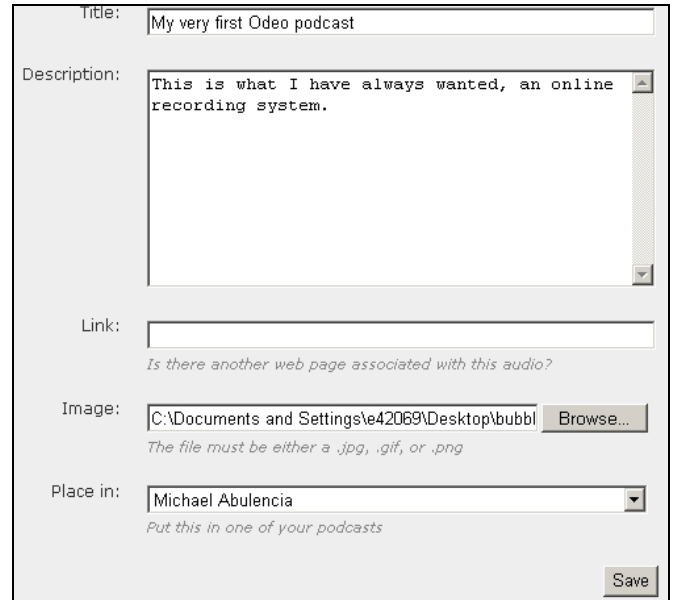
9. You can also create or edit podcast shows by clooking at the **MY PODCASTS** panel. To change a podcast show, just select it from the list or alternatively, you can select the **Create Podcast** link and make a new one.

10. Just edit the description of your show and click the **Save changes to this Podcast** button.
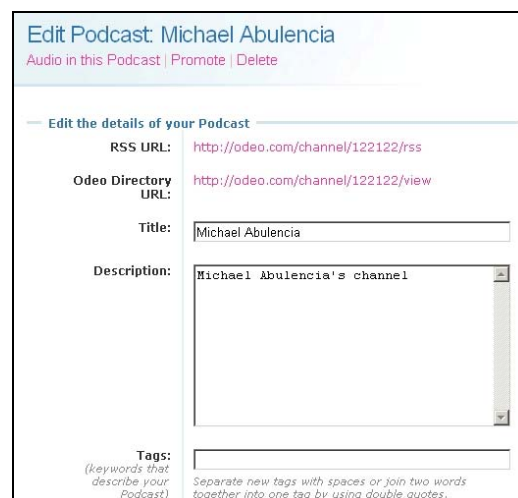
Learning a little of RSS bubbly new

Really Simple Syndication (RSS) is basically based on an emerging format called **XML (eXtensible Markup Language)**. Put simply, it is a tag driven way of clearly identifying sections of text and making it more digestible for use in different systems or cross formatting.

Tags are enclosed in pointed parenthesis **< >** and have a start tag and end tag (denoted by a forward slash **/** character before the tag name).
XML files end with the **.xml extension** and can be opened with a simple text editor.

The sample for this exercise is focused on the **iTunes RSS feed**.

Here it is if opened in a simple text editor such as Notepad.

The first part of the RSS feed is the header, this is pretty straightforward and tells the receiver or browser what the XML file is about.

```
<?xml version="1.0" encoding="windows-1252"?>
<rss xmlns:itunes="http://www.itunes.com/DTDs/Podcast-1.0.dtd" version="2.0">
```

The next part tells what the Show is about, who owns it, the website link, Copyright owner and the language it uses.

```
<channel>
<title>Podcast title</title>
<description>This is a sample podcast.</description>
<link>http://www.site.com/podcasts/podcast.html</link>
<itunes:author>Site Owner</itunes:author>
<copyright>Copyright Owner</copyright>
<language>en</language>
```

The following section is what is repeated on the RSS feed whenever a new episode or podcast is produced. It specifically defines each episode. You can just copy this section and paste it and change the details when you have a new podcast.

```
<item>
<title>RSS is really simple</title>
<description>A talk about RSS feeds and how easy it is to use and create</description>
<link> http://www.site.com/podcasts/rss.html</link>
<itunes:author>Podcast Author</itunes:author>
<enclosure
url=" http://www.site.com/podcasts/episode1.mp3"
type="audio/mpeg">
</enclosure>
<pubDate>Tue, 29 Aug 2006 12:00:00 +1000</pubDate>
</item>
```

The last part of the RSS feed is the closing tags for the 2nd and 1st parts. These have to be properly nested and should not be placed in the wrong order. Else, the RSS feed will not work.
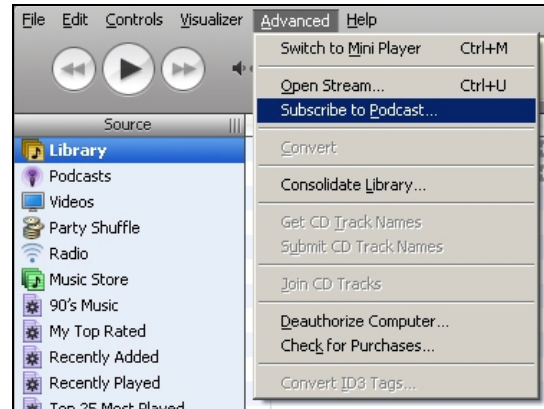
```
</channel>
</rss>
```

Once you've created your very own RSS feed, just upload it to your server, take note of the address and share it as the subscription URL for iTunes users.

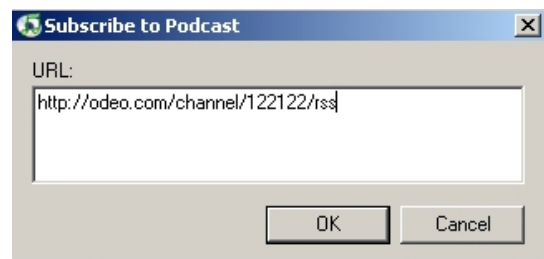**Subscribing using iTunes** bubbly new
iTunes (www.apple.com/au/itunes)
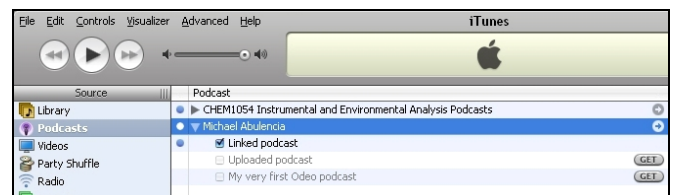
1. Open iTunes from your computer.

From the Advanced menu select **Subscribe to Podcast…**

2. Type or paste the URL of your **podcasts' RSS feed** and press the **OK** button.

3. Your personal podcast directory will load and the most recent podcast will download. You can download previous podcasts by clicking the **GET** button.

Resources for further reading and learning

Wikipedia's definition of Podcasting
Wikipedia (http://en.wikipedia.org/wiki/Podcasting) accessed 9 May 2006

Christopher's Guide to Podcasting
http://www.superuser.com.au/documents/podcast_on_windows
Contributor: Christopher Harvey

Casting the Net Learnscope Project
http://www.groups.edna.edu.au/course/view.php?id=273
Contributor: Christopher Harvey

Odeo: an online-based podcasting tool
http://www.odeo.com/
Contributor: Mike Brooks (RMIT Library)

Podcasts from University of California (Berkeley)
http://itunes.berkeley.edu/
Contributor: Peter Varitimidis (RMIT Uni – DSC Portfolio)

Podcasting site roundup
http://evhead.com/hodgepodge/podcast-sites-alexa.html
Contributor: Peter Varitimidis (RMIT Uni – DSC Portfolio)

iPods and Podcasting in Education (by Graeme Daniel)
http://m.fasfind.com/wwwtools/m/8907.cfm?x=0&rid=8907
Contributor: Suzanne Arnott (Elisabeth Murdoch College)

MP3Players, Podcasting and Online Audio Materials in Education
http://seanfitz.wikispaces.com/mp3players
Contributor: Sean Fitzgerald

Online Learning and Teaching
http://www.online-learning-and-teaching.blogspot.com/
Contributor: Ron Passfield

A Guide to Accessibility
http://www.aptitudemedia.com/accessibility.htm
Contributor: Adam Maxwell (Aptitudemedia)

Books about Podcasting and Blogging

o   Blogging for Dummies by Brad Hill

o   Blogging in a Snap by Julie Meloni

o   Podcasting for Dummies by Dawn Miceli

o   Podcasting Pocket Guide by Kirk McElhearn

Guide details

Author: Michael Abulencia
Version: 3.0
Date: 29 August 2006

This guide is produced as part of the podcasting sessions of RMIT's (Pod)cast special interest group.
It is available for download at
www.dlsweb.rmit.edu.au/set/pace/podcast/guide.pdf
as well as the VITTA publication, Infonet and the September 'Cool Resources for e-Learning' forum at the Australian Flexible Learning Framework website.

The author acknowledges the contribution of fellow podcasters, educators, support staff, multimedia experts, and authors in the development of this resource.

Special thanks to my RMIT colleagues; Adrian Miles, Peter Varitimidis, Filiz Ergec, Mike Brooks, David Samulenok, Anne Burke, Russell Bywater, Warren Nageswaran, Rod McCrohan, Ruby Lee, and Prof. Mark Shortis.

Copyright for the software packages are maintained by their respective organizations.

Author profile

Michael currently works as a Web Support Officer for RMIT's Science, Engineering and Technology Portfolio. He manages projects involving effective online delivery and creative quality driven courses.

An educator by heart, his prior role was with lab.3000 where he taught teacher PDs, community projects, and educational workshops involving emerging technologies.

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