



How to Podcast



How to Podcast

Jens Danielsen

Master of Science, Teacher in Higher Technical Examination (vocational A-levels) and Nørsgaards Folk High School. Independent IT consultant.

This paper can also be seen on <http://jensdanielsen.dk/podcast>

There are basically three ways you can hear a sound file on the Internet

Some useful words:

MP3 - The most used file format for sound files on the Internet

Subscribe - make advance payment: to agree to pay for (or receive free of cost) and receive or use something over a fixed period of time, e.g. a periodical, a series of books, or tickets to musical or dramatic performances

RSS - Stands for Really Simple Syndication. RSS is a simple XML-based system that allows users to subscribe to their favorite websites. Using RSS, webmasters can put their content into a standardized format, which can be viewed and organized through RSS-aware software.

XML - The Extensible Markup Language is the file format used in the RSS. The XML file contains information on where the sound file is located, the name of the sound file, the timestamp for upload, description of the sound file (ex. title of the broadcast, a short description of the content, an Internet address for a homepage that can give further information etc. These data are called Metadata)

Listen on Demand

Listen on Demand lets you listen to your chosen sound file via a sound player program. In order to do this you need to be online. When you click on the link to the sound file the player program opens, and the audio should start playing automatically. For this to happen, you will need to have the sound player program installed - ex Real Player, Windows Media player, Quicktime, depending on the format of the sound file.

Download

Downloading lets you save a copy of your chosen sound file onto your computer. You can then listen to this whenever you want, or even transfer it onto your portable MP3 player. How you download the audio will depend on the set up and settings of your computer. Usually, if you want to download the audio you need to click on the link using the button on the right hand side of your mouse. You should then see a list of options including either "Save Target As..." or "Save Link As...".

Podcast

Podcasting lets you automatically receive the latest episode of your chosen (radio) program as soon as it's available. You need to "subscribe" to receive a podcast, rather like you might subscribe to a magazine and get it delivered each week. An important difference is that all of the podcasts are free, and you can stop receiving the files at any time.

Some useful words:

FEED - A web feed is a data format used for serving users' frequently updated content. Content distributors syndicate a web feed, thereby allowing users to subscribe to it. A program known as a feed reader or aggregator can check a list of feeds on behalf of a user and display any updated articles that it finds.

URL - Uniform Resource Locator - an address on the Internet. In case of a podcast it's the address where the feed is (the XML file). Here is an example of an URL to a podcast from BBC radio:

"<http://downloads.bbc.co.uk/rmhttp/downloadtrial/radio1/bestofmoyles/rss.xml>".

The XML file is named here rss.xml and contains the data of the sound file as mentioned earlier

FTP program - File Transport Protocol program is a piece of software to use to upload your files to the Internet - e.g. the XML file (the RSS feed) and your sound file.



In order to sign up for a podcast (download) you need a piece of podcast software which is usually available free of charge. This software can check the sender of the podcast for new episodes and automatically download them for you, when they are available.

Podcasting is the technology used to "push" audio content from websites down to consumers, who typically listen to it on their iPod (hence the "pod") or other audio player that supports mp3 format. The term podcasting is meant to rhyme with broadcasting. While not directly associated with Apples iPod device or iTunes music service, the company did contribute both the desire and the technology for this capability. Note that this technology can be used to push any kind of file, including software updates, messages, pictures, videos and text documents.

XML

Podcasting uses an XML-based technology called RSS, or Really Simple Syndication. The publisher describes new content in an XML RSS file that includes dates, titles, descriptions, and links to MP3 files. This file is called a RSS feed. The key to making podcasting work with RSS is enclosures, a feature supported by RSS 2.0. RSS is a dialect of XML code controlled by Harvard University.

What makes podcasting special is that it allows individuals to publish (podcast) radio shows and TV shows you can subscribe to. Before podcasting you could of course record a radio show and put it on your website, but now people can automatically receive new shows, without having to go to a specific site and download it from there.

The steps you go through in order to subscribe to a podcast will vary, depending on which software you choose. The most popular software used for receiving Podcasts is iTunes from Apple

Distribute your own podcast

What do you need to distribute your own podcast?

1. A sound file containing your broadcast. Most used file format is the MP3 format. A sound file can be made by various programs, which is outside the scope of this course.
 2. Space on an Internet server with a known URL address (feed address). You can use a standard web hotel for your sound file and xml file. Just remember that sound files take up lots of space (lots of Mbytes).
 3. An XML file containing the address and metadata of the sound file. You can generate the XML code using a simple text editor like NotePad. This offers knowledge of the nature of the XML code, which resembles HTML code.
But you do not need to know XML programming to make a XML file. There are various programs that help you generate the code. On this seminar, we will demonstrate a program named FeedForAll. See the link section for more Podcast publishing programs.
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iTunes

First let us look at some Podcasts downloaded to iTunes:



1. The data set “title” for the new feed/podcast - called a “channel” in XML terms.
2. A link to a website defined by the owner. The website can, for example, involve complementary information about the podcast
3. A “description” of the feed.
4. Press the i - symbol and you get an enhanced description of the feed.

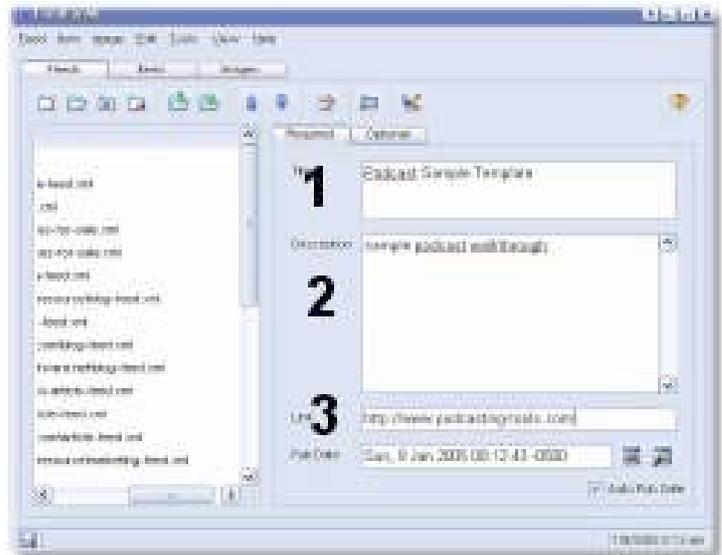
5. A “title” of a particular podcast. Notice that there are 10 podcasts in the feed. One podcast in a feed is called an “item” in XML terms. In this feed there are 10 items.
 6. A “description” of the particular podcast or “item”.
 7. Press the “i” - symbol and you get an enhanced description of the podcast.
 8. All these above “metadata” are embedded in the xml-file. A publishing program (like FeedForAll) will do the programming job for you. See links section for more publishing programs
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Make your own XML code in FeedForAll

“The Channel”

The following is a step by step tutorial that explains how to set up your podcast in the program “FeedForAll”.

1. Start a new RSS feed
2. Enter a title for the new feed/podcast
3. Enter a collective description of all the audio files contained in the podcast.
4. Enter the URL of the website or webpage you want associated with the podcast.



“The Item”

Click the “Items” tab and then the “Add Item Button”

5. Enter a title for this specific podcast or audio file.
5. Enter a description of what the audio file contains.
6. Enter the URL of the website or webpage you want associated with this audio file.
7. Click the “optional tag”



The Sound File

- Click the “Enclosure” field - a list will automatically drop down.



The Sound file

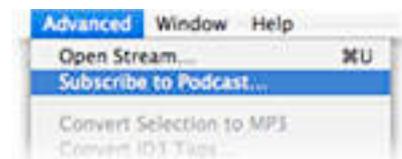
- Enter the URL of an MP3 or audio file containing the audio content.
- List the file size of the audio file.
- List audio and the format of the audio file.

<u>file</u>	<u>suggested type</u>
.wav	audio/x-wav
.mp3	audio/mpeg
.mid	audio/midi
.mpg	audio/mpeg
.ra	audio/x-realaudio



Upload the sound file and XML file

- Go back to main tab (Channel)
- Save and FTP the feed to your server by pressing the “Upload” button. The program needs information about your web server, FTP - username - password, before you can upload.
- Go to iTunes and test your Podcast



Links:

- ☑ Step by step guide to getting a podcast by the BBC:
<http://www.bbc.co.uk/radio/downloadtrial/podcast.shtml>
 - ☑ How to Podcast from the BBC:
<http://www.bbc.co.uk/radio/downloadtrial>
 - ☑ Programs for downloading Podcasts:
http://www.podcastingnews.com/topics/Podcast_Software.html
 - ☑ iTunes:
<http://www.apple.com/itunes/download/>
 - ☑ FeedForAll:
<http://www.feedforall.com>
 - ☑ Podcast publishing programs:
http://www.podcastingnews.com/topics/Podcasting_Software.html
 - ☑ RSS 2.0 by Havard University:
<http://blogs.law.harvard.edu/tech/rss>
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The structure of an XML file

```
<?xml version="1.0" encoding="UTF-8"?>
<rss version="2.0">
  <channel>
    <title>Learning with Internetradio</title>
    <description>The core idea of this project is the application of digital sound and
      Internet-radio as an innovative vocational learning medium. </description>
    <link>http://jensdanielsen.dk</link>
    <docs>http://blogs.law.harvard.edu/tech/rss</docs>
    <lastBuildDate>Tue, 24 Oct 2006 08:44:24 +0200</lastBuildDate>
    <pubDate>Mon, 23 Oct 2006 18:32:44 +0200</pubDate>
    <generator>FeedForAll Mac v2.0 (2.0.0.3) unlicensed version;
      http://www.FeedForAll.com/</generator>
    <item>
      <title>Chapter 2</title>
      <description>This contains a discription of the podcast &quot;Chapter
        2&quot;</description>
      <link>http://jensdanielsen.dk</link>
      <author>danielsen@dk-online.dk</author>
      <enclosure url="http://jensdanielsen.dk/student1/chapter2.mp3" length="916240"
        type="audio/mpeg" ></enclosure>
      <pubDate>Mon, 23 Oct 2006 18:32:31 +0200</pubDate>
    </item>

    <item>
      <title>Chapter 1</title>
      <description>This contains a discription of the podcast &quot;Chapter
        1&quot;</description>
      <link>http://jensdanielsen.dk</link>
      <author>danielsen@dk-online.dk</author>
      <enclosure url="http://jensdanielsen.dk/student1/chapter1.mp3" length="886601"
        type="audio/mpeg" ></enclosure>
      <pubDate>Mon, 23 Oct 2006 18:32:44 +0200</pubDate>
    </item>

  </channel>
</rss>
```

For more information on XML tags see:

<http://www.feedforall.com/rss-fields.htm>