Using WordPress to set up an internet radio station

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WordCamp Brisbane
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Going to be talking about:

• Why webcast?
• Creating content
• Using other people’s material
• Getting your stream on the internet
• Presenting content using WordPress
• Getting people to listen (and giving them a reason to do so)
My background with WordPress:

- Media career began as newspaper journalist
- Created first web pages in early 1990s
- Have used WordPress for more than 12 years, mostly for non-profits
About Living Arts Canberra

• Partner and I had more than 10 years as volunteers at an FM community radio station

• Living Arts Canberra launched in July this year

• Essentially a WordPress site with a web stream attached

• We use webcasting to promote website content, rather than the other way around
Our rationale

• To provide the local arts, music and community sector with an outlet they do not otherwise have

• At this stage, we mainly webcast interviews interspersed with music

• Music is essential, but incidental to the main purpose of the site
Some terminology

• Podcasting is on-demand audio, where users can select content and the time of delivery

• Webcasting is a continuous stream, and users have no control over the sequence

• Periscope and other live ‘broadcasting’ via social media is akin to pop-up webcasting

• We do both webcasting and ‘podcasting’
### Why webcasting?

<table>
<thead>
<tr>
<th>Broadcasting</th>
<th>Webcasting</th>
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<tbody>
<tr>
<td>Complex ACMA licencing process</td>
<td>No webcasting licence required</td>
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<tr>
<td>Limited frequencies available</td>
<td>No limit to number of streams</td>
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<tr>
<td>Requires expensive transmitter and other infrastructure</td>
<td>Needs only reliable internet connection</td>
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<tr>
<td>Significant electricity costs</td>
<td>Negligible power requirements</td>
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<tr>
<td>Coverage restricted to licenced area</td>
<td>Theoretically worldwide coverage</td>
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<tr>
<td>Listener statistics difficult and expensive</td>
<td>Accurate stream usage readily available</td>
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<tr>
<td>Receivers ubiquitous (especially in cars)</td>
<td>Requires mobile internet connection</td>
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- But challenge is then to make it as easy as possible for people to listen
Changing nature of music usage

• On average, people listen to music for nearly 18 hours a week
• Cars are the most popular listening location
• 86 per cent of us listen to music through online streaming
• 57 per cent of 16-24 year olds use a paid audio streaming service
• Nearly half of all time spent listing to on-demand music is on YouTube
• Local genres tend to be the most popular

We use WordPress to:

• Provide a self-service event calendar (All-In-One Calendar plugin)

• Display program schedules

• Stream via an HTML5 player for the stream (Wonderplug Audio Player)

• Create playlists of current and archived interviews as podcasts
Creating content

• If you can create a podcast, you can create programs suitable for webcasting

• At its most basic, you need a good microphone, audio editing software, and a way to encode your audio

• In reality, you will need to have music in a digitised form (and may have to convert it to .mp3)

• People expect a radio station to be on air 24/7, but that doesn’t mean you need new content for 24 hours a day
Recording via Skype
Live or pre-record?

• There is a substantial time commitment either way

• Live interviewing saves a lot of editing time and can sound more immediate

• Pre-records can give more polished result, better for nervous interviewees

• Most hosted services have the option of an ‘auto DJ’ service

• You still need to upload and retain control of the content.
Encoding

• Your stream needs to be encoded for a streaming protocol such as Shoutcast or Icecast

• Free encoders are available, such as the Nullsoft SHOUTcast source add-on to Winamp

• You can use an audio streaming provider, or host your own Shoutcast/Icecast server

• You need to decide on bitrate sampling rate and mono or stereo - we use 64 bit stereo at 44100kHz to balance quality and cost
Music licences

• You must have appropriate licences to play most 3rd party material
• This includes most commercially available recorded music
• APRA/AMCOS covers rights of music creators
• PPCA covers rights of artists and recording companies
• Fees vary, especially between individual and commercial webcasting
• You may not be covered for copyright outside Australia
• There can be serious fines for unauthorised use of copyright music
Licensed music - some things you can and can’t do

- You should take steps to avoid stream ripping
- You may not be allowed to issue detailed playlists in advance
- Don’t have copyright music on high rotation
- Try to keep a record of what was played when – you may be asked for it
A brief diversion: classic editor vs Gutenberg with audio playlists

Podcasts

Author interviews

2. “Monster party” 11:07
3. “Matryoshka by Katherine Johnson” 17:01
4. “Meredith Jaffe author of the making of christina” 15:50
5. “Anthony Bond on Ken Unsworth” 19:38
6. “Harry Sandler - The Eastern Curlew” 20:50
7. “Yael Macee author of When we vanish” 7:00
8. “Natasha Lester - author of The Paris Seamstress” 17:29
10. “Felicity Banks: Murder in the Mall” 9:47
11. “Kathryn Spurling: Fire at Sea” 15:07

2018 Film Festival interviews

Current performing arts interviews
Presenting your content to listeners

• This is the bit that your WordPress site can do well

• Vital that your site is responsive to capture mobile audience

• Make your streaming player prominent for both desktop and mobile

• Put program guide on website and publish it to subscribers
Going to the next level: playlists

LACE Radio

Our internet radio station is on air 24 hours a day with interviews, programs and music.

Living Arts Canberra Radio

LACE Radio

Our internet radio station is on air 24 hours a day with interviews, programs and music.

Last Tracks Played
12:27:42 AM  Not the Boys Club
12:23:50 AM  Got My Mojo Working
12:20:13 AM  Mel Parsons - Drylands - Far Away
Presenting your content to listeners

• By all means use social media to remind people what’s on

• If possible, display current and recent track and artist names (may need to use http:// rather than https://)

• Many cars have Bluetooth input – encourage people to listen through their mobiles

• An old tablet or phone can be a low-cost internet radio receiver
Or you can use one of these...
Other things to think about

• Hide your stream’s URL behind an HTML5 player

• Unlike broadcasting, live webcasting has latency which can vary by location, so avoid time signals and precise time calls

• Know your automation system and how it prioritises playlists
References and links


• https://www.pppca.com.au

• https://www.theverge.com/2018/9/7/17832320/twitter-periscope-ios-audio-only-broadcasts-podcasting-feature
Please listen and give us your feedback

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Thank you