

twitter

# RadioWeave ecosystem



amazon.com



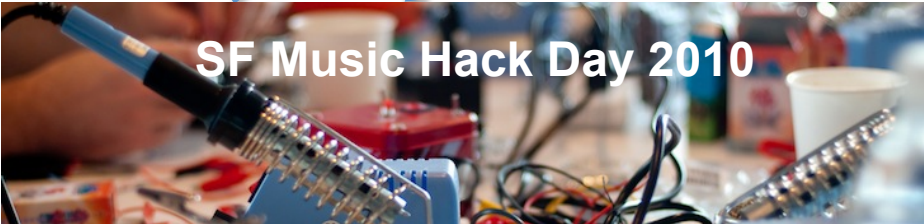
radioweave

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SF Music Hack Day 2010



# API Overview



- JSON REST-based API
- Basic Player - Everything needed to login, get playlists and meta information, and play a radio stream.
- Track Management - Upload/import/remove/reply-to content
- Weave Management - Manage the mix of selected channels
- Data Queries - Search and browse for people, channels, and tracks
- Miscellaneous - Other random stuff

# Request/Response format



## Server requests

- Most are HTTP GET with standard query parameter syntax including a **jsessionid** value (except for login):

`http://radioweave.com/v001/api;jsessionid=####/?param1=value1&param2=value2...`

- Most requests can accept the **heard**, **skipped**, **now**, and **loc** query parameters

## Server responses

- Server will return the "Content-Length" and "Content-Type" HTTP response headers
- For JSON responses, the Content-Type will be "application/json".
- "Accept-Encoding" to "gzip" is supported

## Sample Code (on our hack day link)



- `VeryVeryBasicRadioWeavePlayer` - Very basic player in a single short HTML page
- Chumby basic player source code - Full Flash Lite source code for the Chumby client
- `RadioWeaveMyMusic` - Flex source code for this music file uploader
- `VeryVeryBasicRadioWeaveUploader` - Very basic track uploader in a single short HTML page
- Python examples for uploading tracks - Short python scripts to upload files into RadioWeave: basic, chunked, and with a photo

# Sample Code: RadioWeave My Music



- “RadioWeaveMyMusic” Adobe AIR app (BETA version available now for early adopters)
- Use RWMM to upload songs from your music library on your computer into RadioWeave for your own listening pleasure
- RWMM automatically rotates the songs that are stored on our sever to keep your experience new and interesting

# Sample Code:



- Basic weave player
- Per-track rating
- COMING SOON: “music source” integration to support background play and alarm wakeup

# Things we have to offer fellow hackers



## Server & APIs to:

- ingest and combine multiple audio types (source agnostic)
- adjust volumes and compressions so all types of audio stream well together
- chapterize long podcasts, giving room for interstitial music
- import text and convert to audio (using TTS)
- capture listener per-track ratings, skips, repeats

## Recording tools:

- simple desktop recorder
- very spiffy and unique iPad/iPhone recorders that capture/edit/upload

# Existing channel types



- Creating new micro-channels on radioweave.com:

**create a new channel**

Channels are places to store RadioWeave content. All user-generated content goes into **normal** channels. All other channel types automatically update themselves when new content becomes available.

type:  normal a normal channel  
 twitter automatically ingests the statuses from a twitter user/list/etc...  
 podcast automatically ingests the content from a podcast RSS feed  
 weather National Weather Service forecast channel (US only)

channel name: podcast:

description:

podcast URL:

say title:  pronounce the title of each podcast before playing downloaded audio

max entries:  how many most-recent podcasts to retain (1 - 20)

expire (days):  how long each entry should remain in the system, in days (<365)

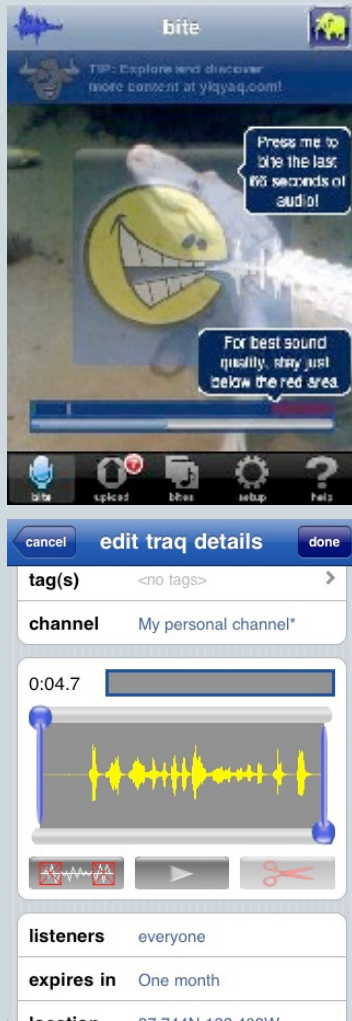
portion:  complete import full content of this podcast, allowing content to be segmented  
 sample import a sample from the middle of this podcast

total duration:  maximum total length for a podcast (in minutes) (2 - 90)

part duration:  maximum length for each podcast segment (in minutes) (1 - 6)



# Soundbiter (iPhone) App



- ‘Cuz you never know when something interesting is going to happen
- Continuously recording, press “bite” to grab the last X minutes of audio
- Simple crop-and-preview audio editor and batch uploader
- Twitter integration for posting uploaded tracks

## Some RW-ish Hack Ideas



- Add any other service as a RadioWeave channel
- Concert Moments using Soundbiter
- Ad-Hoc Event Radio
- Appropriate Interstitial Music
- Threaded Audio Conversations
- Give Content Creators control of their backchannels

# More Hack Ideas



- Audio API Interchange
- Musical mix split-testing
- Audio games
- Scaramouch Scaramouch

# Who are we?



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## Hacking at the Table Closest To The Free Food

