Installation

- Minimum System Requirements
  - OBServer
  - OBPlayer
- 1. Install OBServer
  - Web Updates
  - Command Line Tool
  - Advanced Configuration
- 2. Install OBPlayer
  - Dependencies
  - Web Updates
  - Advanced Configuration
- Running OBPlayer for first time

BEFORE YOU BEGIN

This guide will assist in the initial setup of both OBPlayer and OBServer backend application infrastructure. Once these applications are setup and running, proceed to the **Quick Start (https://support.openbroadcaster.com/quick-start/)** for provisioning instructions.

Minimum System Requirements

OBServer

Item	Description
Processor	1GHz 64 bit CPU. ARM, Intel or Pi
Memory	4GB of RAM
Storage	128GB
Display	No display is required for the web server
Framework	PHP, MySQL, Nginx and Gstreamer
Recommended. Should be a *nix system. Debian 10+, Raspberry PI OS or Ubuntu-Server/ Desktop 22.04/24.04	

OBPlayer

Item	Description
Processor	1GHz 64 bit CPU. ARM, Intel or Pi
Memory	4GB RAM
Storage	128GB
Display	None required unless displaying Video or Images
Audio	Analog Input\Output, USB Interfaces or Digital HDMI\DisplayPort
Video	Minimum 640x480 screen resolution
Framework	Python and Gstreamer
Recommended. Should be a *nix system. Debian 10+, Raspberry PI OS or Ubuntu-Server/ Desktop 22.04/24.04	

Compatible Hardware (https://support.openbroadcaster.com/accessories#supported-hardware)

ALSA Supported Soundcards (https://www.alsa-project.org/main/index.php/Matrix:Main)

1. Install OBServer

OpenBroadcaster - Server Installation Instructions

Dependencies

```
A web server with a web environment available (e.g., Apache, Nginx)
PHP 8.2 or higher
MySQL or MariaDB database server
Composer (PHP dependency manager)
Node.js and npm (Node Package Manager)
```

Required PHP Modules

Make sure the following PHP modules are installed and enabled:

```
mysql (for MySQL database connectivity)
mbstring (for multi-byte string handling)
xml (for XML parsing)
gd (for image manipulation)
curl (for making HTTP requests)
imagick (for advanced image processing)
```

Required Packages

Install the following Ubuntu / Debian packages, or the equivalent for your operating system.

```
festival (for text-to-speech functionality)
imagemagick (for image manipulation)
ffmpeg (for audio/video processing)
libavcodec-extra (extra codecs for ffmpeg)
libavfilter-extra (extra filters for ffmpeg)
vorbis-tools (for Ogg Vorbis audio encoding)
```

Installation Steps

Copy the OpenBroadcaster Server files to your web server’s document root directory.

Navigate to the cloned repository directory within the web document root and run the following command to install PHP and JavaScript dependencies.

```
composer install && npm install
```

Create a new MySQL or MariaDB database for OpenBroadcaster and import the db/clean.sql file to set up the initial database structure.

Copy the config.sample.php file to config.php and open it in a text editor. Set the required configuration items, such as database connection details and other settings specific to your environment.

Run the following command to validate your configuration file. Correct any errors displayed in red.

```
tools/cli/ob check
```

Run the following command to install database updates. This may take a few minutes to complete.

```
tools/cli/ob updates run all
```

Set the password for the default admin user by running the following command. Enter a secure password when prompted.

```
tools/cli/ob passwd admin
```

Set up a cron job to run the cron.php script regularly. This script is responsible for clearing old cache and unused upload files. The following is an example crontab entry.

```
*/30 * * * * /path/to/openbroadcaster/tools/cli/ob cron run
```

Source: **Install.txt (https://github.com/openbroadcaster/observer/blob/v5.3.3/INSTALL.md)**

Web Updates

Command Line Tool

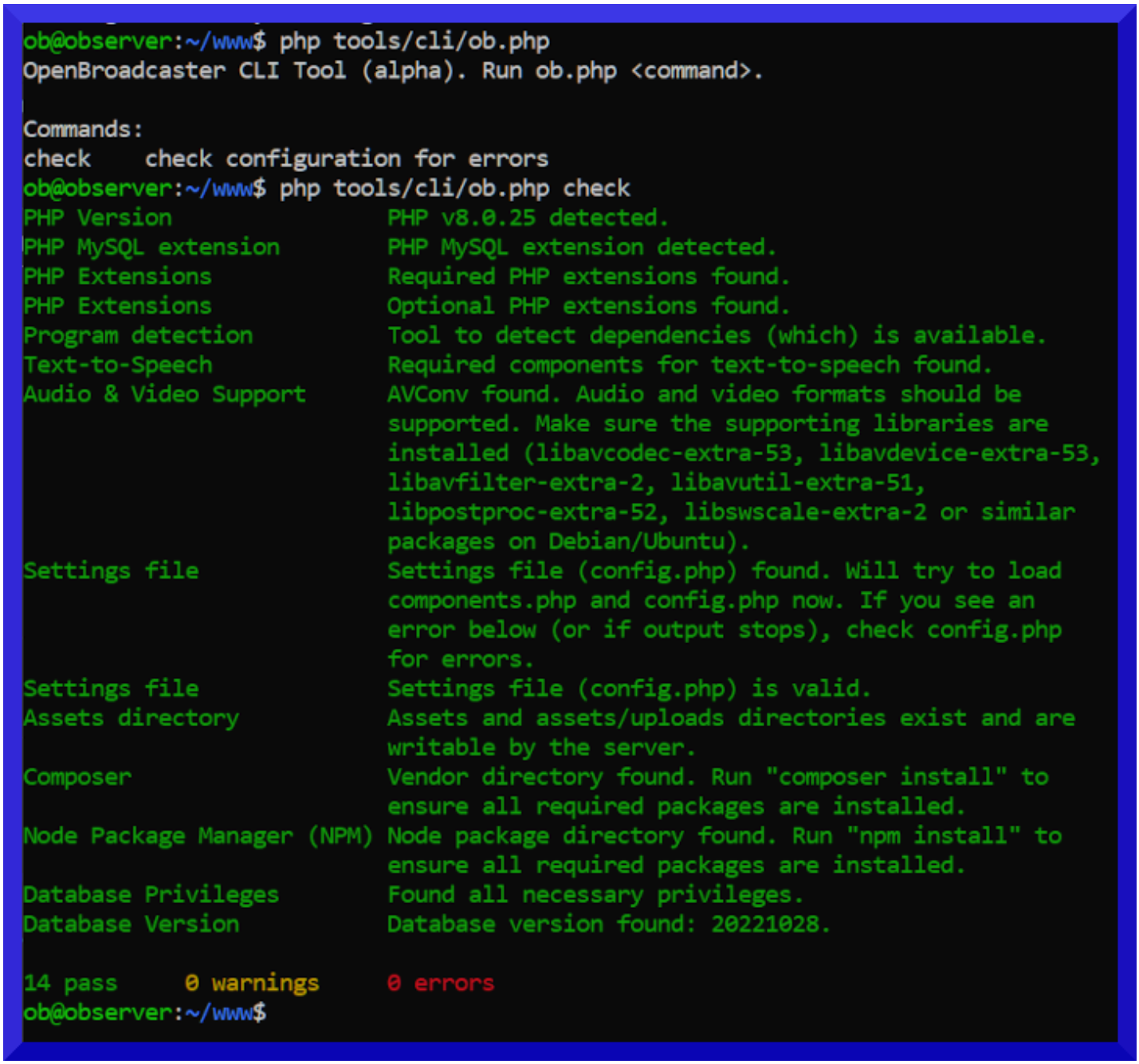
```
20210312   Clear and update show cache table.
20220704   Rename old schedules tables, add underscore for deprecated/old
           tables.
20221010   Rename old emergencies tables. Rename emergency broadcasts
           permission. Rename parent emergency field in players table.
20221026   Add table for user data storage.
20221028   Add uniqueness constraint to combined user ID and name for users
           storage.

11 installed    40 pending
obsuser@observer:/var/www/observer$ tools/cli/ob
OpenBroadcaster CLI Tool (alpha). Run ob <command>.

Commands:
check                  check installation for errors
cron run               run scheduled tasks
updates list           list available updates
updates run            run available updates
passwd <username>      change password for user
obsuser@observer:/var/www/observer$ tools/cli/ob updates run

Update 20200208 installed.
Update 20200220 installed.
Update 20200622 installed.
```

CLI Running Updates



CLI Check without errors

CHECK FOR **UPDATES** Prior to reporting issues to ensure the most current version is running

Advanced Configuration

Toubleshooting Guide (https://support.openbroadcaster.com/troubleshooting#post-installation-observer-troubleshooting)

Web Server

Assuming your DNS is configured, you should be able adjust ob.apache.conf to your system and copy it to the appropriate spot for your machine, restart apache, and browse to //Your_IP/ to access your server. Login in with username admin and the password you set for the Admin user.

2. Install OBPlayer

```
OBPlayer Installation Instructions

1. See dependencies.txt for player dependencies (Debian 10/Ubuntu 20.04 & above)

2. Run "bash obplayer_check" or "bash obplayer_loop" or "bash obplayer_check -h" for hel
p

3. Config files settings.db generated on first run in ~/.openbroadcaster

4. Admin panel http://<IP_of_Player>:23233 default user = admin default password = admin

5. Configure tabbed menus

6. Restart the player

NOTE:User required to change login passwords on first login using the defaults.

Connect RJ45 to a network with a router handing out DHCP IP addresses.

For advanced instructions see https://support.openbroadcaster.com/install
```

Source: **install.txt (https://github.com/openbroadcaster/obplayer/blob/main/install.txt)**

Dependencies

```
ntp python3 python3-pycurl python3-openssl python3-apsw python3-magic python3-dateutil p
ython3-requests python3-gi python3-gi-cairo gir1.2-gtk-3.0 gir1.2-gdkpixbuf-2.0 gir1.2-p
ango-1.0 python3-gst-1.0 gir1.2-gstreamer-1.0 gir1.2-gst-plugins-base-1.0 gir1.2-gst-rts
p-server-1.0 gstreamer1.0-tools gstreamer1.0-libav gstreamer1.0-alsa gstreamer1.0-pulsea
udio gstreamer1.0-plugins-base gstreamer1.0-plugins-good gstreamer1.0-plugins-bad gstrea
mer1.0-plugins-ugly ffmpeg
```

Ubuntu

```
ubuntu-restricted-addons ubuntu-restricted-extras
```

Extras *(not installed with Apt)*

Needed for SSL dashboard

```
pip3 install passlib[bcrypt]
```

Needed in case it wasn't installed with Apt

```
pip3 install apsw
```

Recommended for CATV Video Playout

```
gstreamer1.0-vaapi mesa-vdpau-drivers
```

CAP Alerting onboard TTS

```
espeak mbrola mbrola-en1 mbrola-us1 mbrola-us2 mbrola-us3 mbrola-fr1 mbrola-fr4
```

POLLY AWS Voices in the alerts module

```
pip3 install boto3
```

RS-232 trigger option in the alerts module

```
python3-serial
```

Sharing multiple OBPlayers with a local media library

```
cifs-utils
```

Better

```
autofs
```

Command Line tool for PulseAudio

```
pip3 install pulsectl
```

Off-air audio log and SDR FM Receiver USB Dongle

```
pip3 install pyrtlsdr
```

Include if using the news feed override

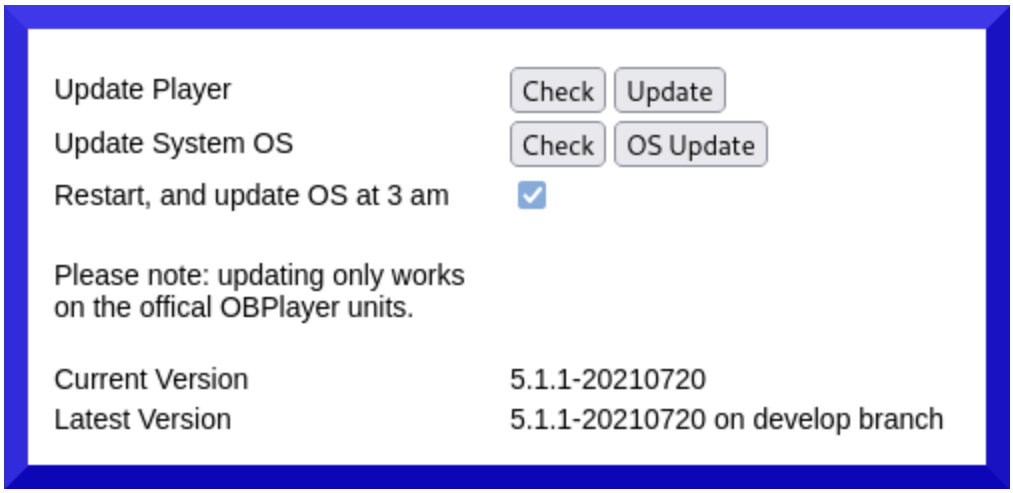
```
pip3 install inotify
```

Note: pip3 pkg not included in apt-get; must be installed using pip3

Web Updates

NOTE *Utilities for displaying current version and updating the Player are on the Admin Page of the* ***Dashboard****.*

Updating the software ensures the most current version of the application is running. To obtain and install updates, click the Update button in the dashboard Admin menu. After updating the Player, restart the Player to the load changes to the Dashboard.



Player is up to date

Advanced Configuration

Toubleshooting Guide (https://support.openbroadcaster.com/troubleshooting#post-installation-obplayer-troubleshooting)

Example Installation

Open Terminal and from your home directory run:

```
mkdir /usr/share/obplayer
```

Then go to this directory

```
cd /usr/share/obplayer
```

In the empty target/installation directory run

```
sudo git clone https://github.com/openbroadcaster/obplayer.git ./
```

Defaults to Main Branch

Change Branch during install

```
sudo git clone -b develop https://github.com/openbroadcaster/obplayer.git ./
```

Example using -b (develop branch)

2FA (2 Factor Authentication)

You'll need to have a key setup on target machine and run

```
git clone git@github.com:openbroadcaster/obplayer.git
```

or

```
git clone -b develop git@github.com:openbroadcaster/obplayer.git
```

OBPlayer is now setup with latest code ready to use

Running OBPlayer for first time

From the install directory **EG** `/usr/share/obplayer`

```
bash obplayer_check
```

or

```
bash obplayer_loop -d
```

using -d (debug) displays useful start up info

> **TechTip** Resetting Lost or Admin passwords cannot be retrieved easily. Config files containing user and machine settings are located in the hidden ~/.openbroadcaster folder within the users home directory. To reset admin or lost passwords may be recovered by editing the sqlite DB file `settings.db` or simply deleting it and restarting obplayer. On restart obplayer will recreate this DB with default values and prompts for new passwords.

Feedback

Find a bug? Want to request a feature? Submit your issue to **OBServer (https://github.com/openbroadcaster/observer/issues/new)** or **OBPlayer (https://github.com/openbroadcaster/obplayer/issues/new)**

Have some Gstreamer, PHP or Python coding skills? Help **Contribute (https://github.com/openbroadcaster/.github/blob/main/docs/CONTRIBUTING.md)** and **Sponsor (https://github.com/sponsors/openbroadcaster)** to make the OpenBroadcaster community even better

We really appreciate your feedback!

OBServer Advisories

No OBServer Security Issues

OBPlayer Advisories

No OBPLayer Security Issues

Open Server Bugs

124 - Double clicking media item, show details or editing PL, loses the work in progress.

Open Player Bugs

147 - Live Assist playlist can cause dead air when no host intervenes
127 - LA Cannot Advance up, stuck at Break Point
126 - LA Missing > indicator after pressing Hot Button
16 - LA not switching to Fall Back Media

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With ❤ from Friends of Cake

Quick Start Guide

- Server
  - Upload Media
  - Create Default Playlist
  - Create The Player
- Player
  - Provision The Player
  - Sync the Player to Server
- Advanced
  - Search Media
  - Schedule a Show

Preamble instructions

This quick start guide will help you get media playing on a OBPlayer box managed by a OBServer. For instructions on setting up the OBServer and OBPlayer see this **installation (https://support.openbroadcaster.com/install)** guide first.

Prerequisites

Updated OBServer and OBPlayer that can see each other on same machine or on network.

Server

Upload Media

1. On the bottom Navigation Bar is a `Media>New Media`.
2. Select the file you want to upload.
3. Fill in mandatory info for Artist and Title.
4. Save
5. You'll see the media you just added appear in the `Media Sidebar`

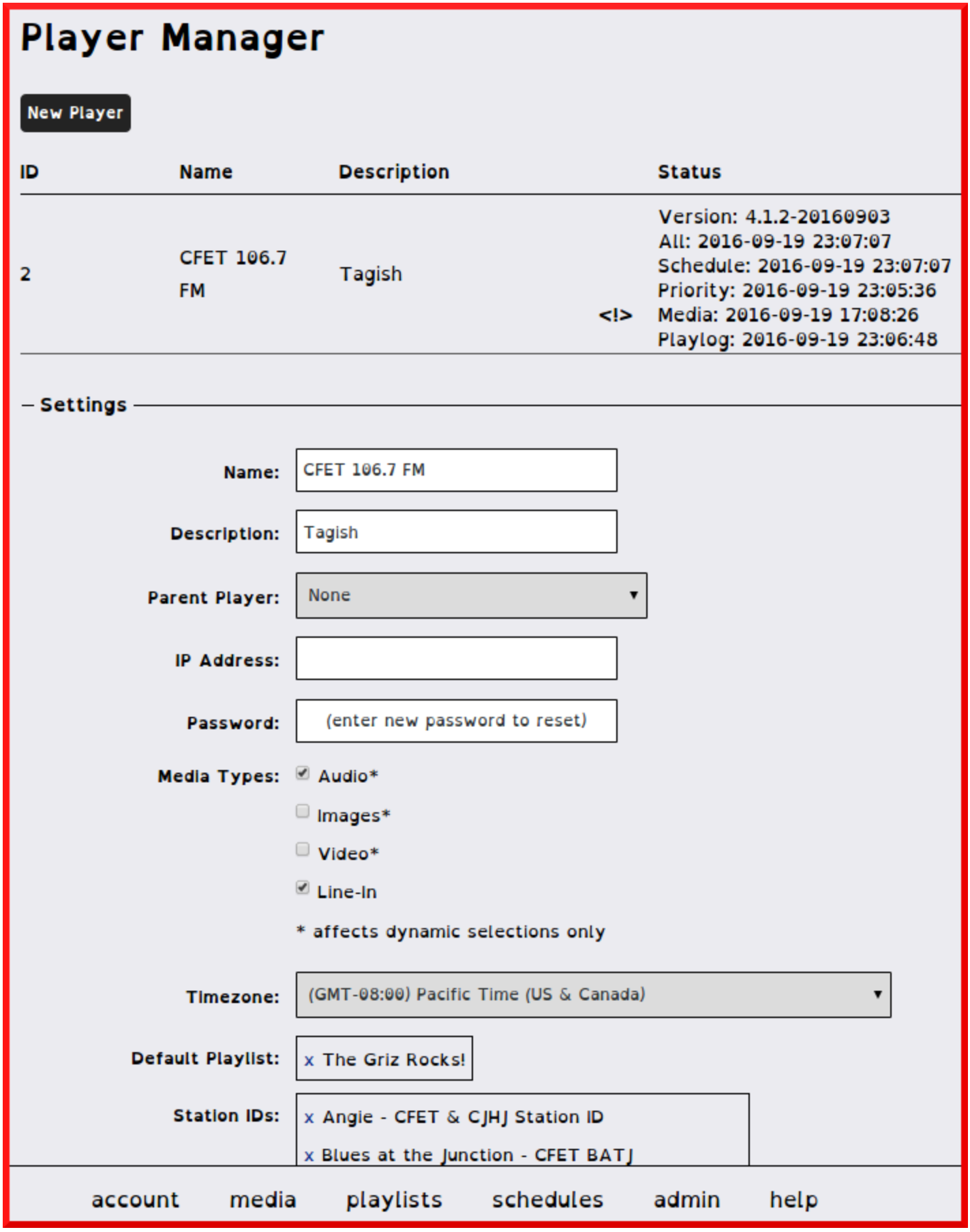
Create Default Playlist

If a Player cannot locate a schedule of media to be played, it will play the Default Playlist (DPL) in a loop to avoid dead air. Server will sync DPL with remote Player and play the contents of DPL.

Use `Playlist` menu to create a new playlist:

1. Select `Playlist>New`
2. Provide a `Name` and `Description` for the (DPL).
3. From the media sidebar tab, click hold to **drag and drop** selections to the DPL. As items are added to the list of Playlist Items, the `Total Duration` for all items on the Playlist is updated. Add items to the Playlist until the desired duration is achieved. See **Server Documentation (/observer/#playlist)** for more details on creating Playlists.
4. Status select visible. This allows users to see your show, but not change it. Private makes your show invisible to others. Public shares media through public API (if enabled)
5. Save Data.

Create The Player



Using the `admin` menu to access the `player manager` options:

1. `Expand` existing Player Settings for a defined **Player**, or create a `New Player`.
2. Provide a `Name` and `Description` for the **Player**.
3. Enter the password that will be required for the **Player** to establish a sync connection to the **Server**.
4. Leave IP blank.
5. Set the media types that will be available for the **Player**. Ensure the **Player** is configured properly to handle the assigned media types.
6. Set the `Timezone` that will be used for scheduling shows.
7. Drag the **Playlist** created in the previous step (DPL) from the Playlist sidebar tab to the **Default Playlist** drop zone (the area highlighted during the drag operation).
8. Save the Player.

> When newly player is created, it will be assigned a unique `Device-ID` and show up in `Schedule`

Player

Provision The Player

Access the **Player Dashboard (https://support.openbroadcaster.com/obplayer/#administration)**

Go to `Sync Media` Tab

‘Enable The Scheduler’ so the player tries to check managing server

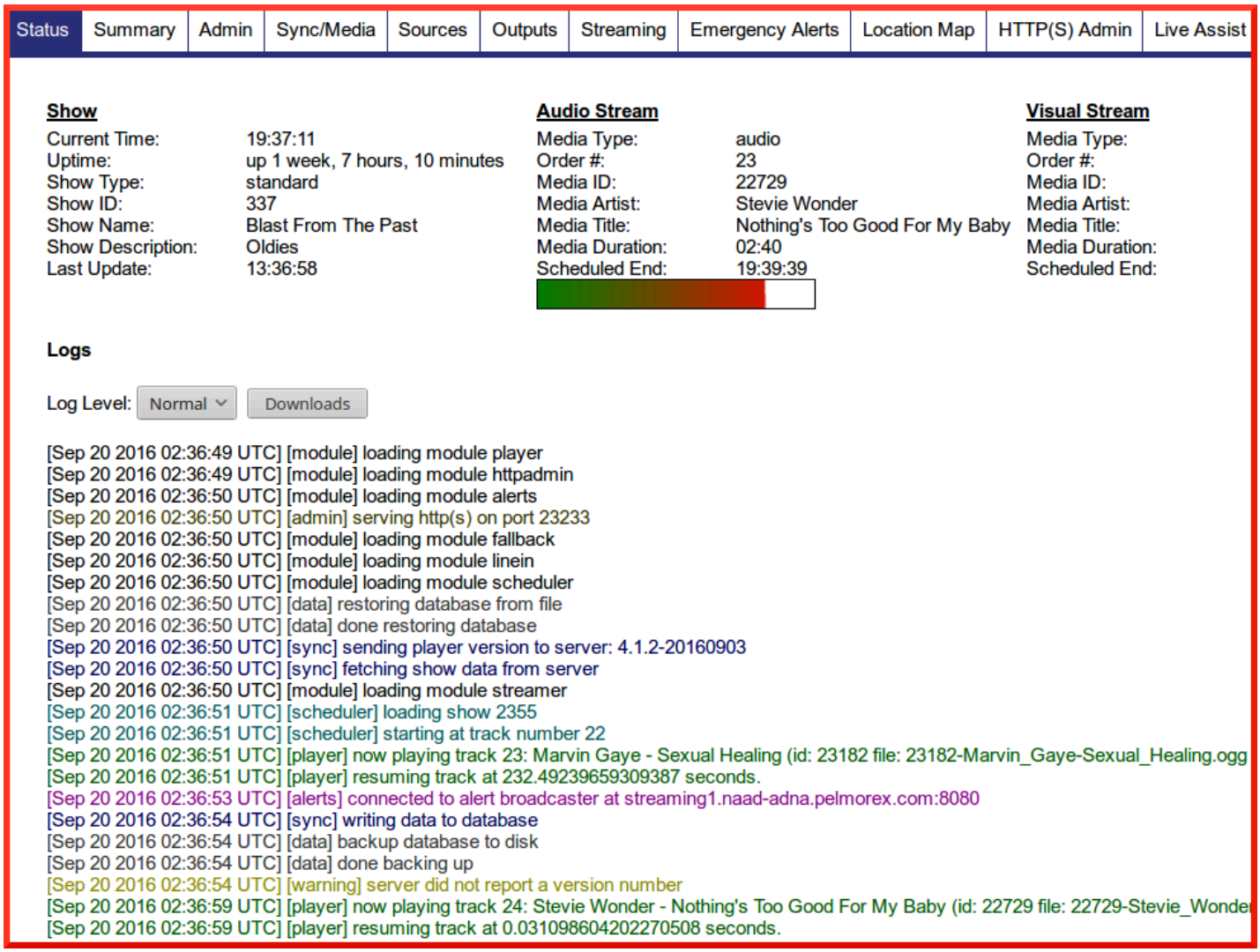
1. `Device ID` generated in `Player Manager`
2. `Password` with the password you enter in server
3. `Sync URL`

```
https://<IP_of_Server>/remote.php
```

For initial testing set `Media Sync Mode` to `Remote`

SCREEN SHOT Enable Scheduler

Sync the Player to Server



Restart player with `Admin>Delete DB and restart` Forces schedule and media sync refresh and take you back to main `Status` page.

Observe sync connection messages. If no Red Errors then player is provisioned and is now run from server. You will see media being downloaded.

Once media is finished downloading, it will begin playing.

You will be able to hear audio coming out of Pulse Audio (used as default)

Advanced

Search Media

Your media is now in the database and can be searched

All searches are based on the parameters you include when you upload your tracks. Please be accurate as possible entering Metadata when uploading tracks.

Under the media tab you will find

- `Simple` Quick search. Start typing and search results will appear.
- `Advanced` Apply filters for: Artist, Title, Genre, Comments, Duration (in seconds).

Check out the drop down menus for all the options.

Click the Add button to apply the filter.

To get out of Advanced search click the Simple link.

Too many filters may not give you a result

Schedule a Show

Once the Player is provisioned and playing the DPL, go into Server and schedule a `Playlist` and `Media`

1. Open `Schedule` on the bottom navigation bar on server
2. Locate `Playlist` from sidebar and drag it into the schedule.
3. Enter the date and times parameters and show is set into the schedule.
4. Save

Media items and schedule information will automatically sync from server to player.

> Intitial `show lock-in time` will require at least 20 minutes of lead time before playout of a scheduled or default playlist, thus ensuring all required media are downloaded before a show begins.

For more details, go to **Trouble Shooting (/troubleshooting)**

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Media Player

- Using the Player
- Main Status
  - Downloads
  - Local Audio Streams
- Administration
  - Audio and Video Outputs
  - Audio and Video Sources
  - HTTP(s) Admin
  - Live Assist
  - Location Map
  - Summary Page
  - Sync/Media
- Streaming Media

    - **Icecast Streaming**
    - **STL (Studio Transmitter Link)**
    - **RTP Livewire Multicast Streaming**
    - **YouTube Live Channel**
- **CAP Emergency Alert Player**
    - **Heart Beats**
    - **Location Geocodes**
- **CAP Alerts Configuration Page**
    - **Initial Setup**
    - **Set Alerting Locale**
    - **Set TTS (Text to Speech)**
    - **POLLY AI Voices**
        - **Obtaining AWS Polly Key**
    - **Advanced Settings**
- **Injecting CAP Alerts into the broadcast chain**
    - **Audio**
        - **CAP Alerts with Barix Exstreamer**
        - **GPIO Audio Relay**
    - **Visual**
- **Test Alerts**
    - **Self Generated Test Alerts**
    - **Scheduled Testing**
    - **Ad Hoc LIVE testing**
- **Indigenous Alerts**
- **Experimental Features**

Using the Player

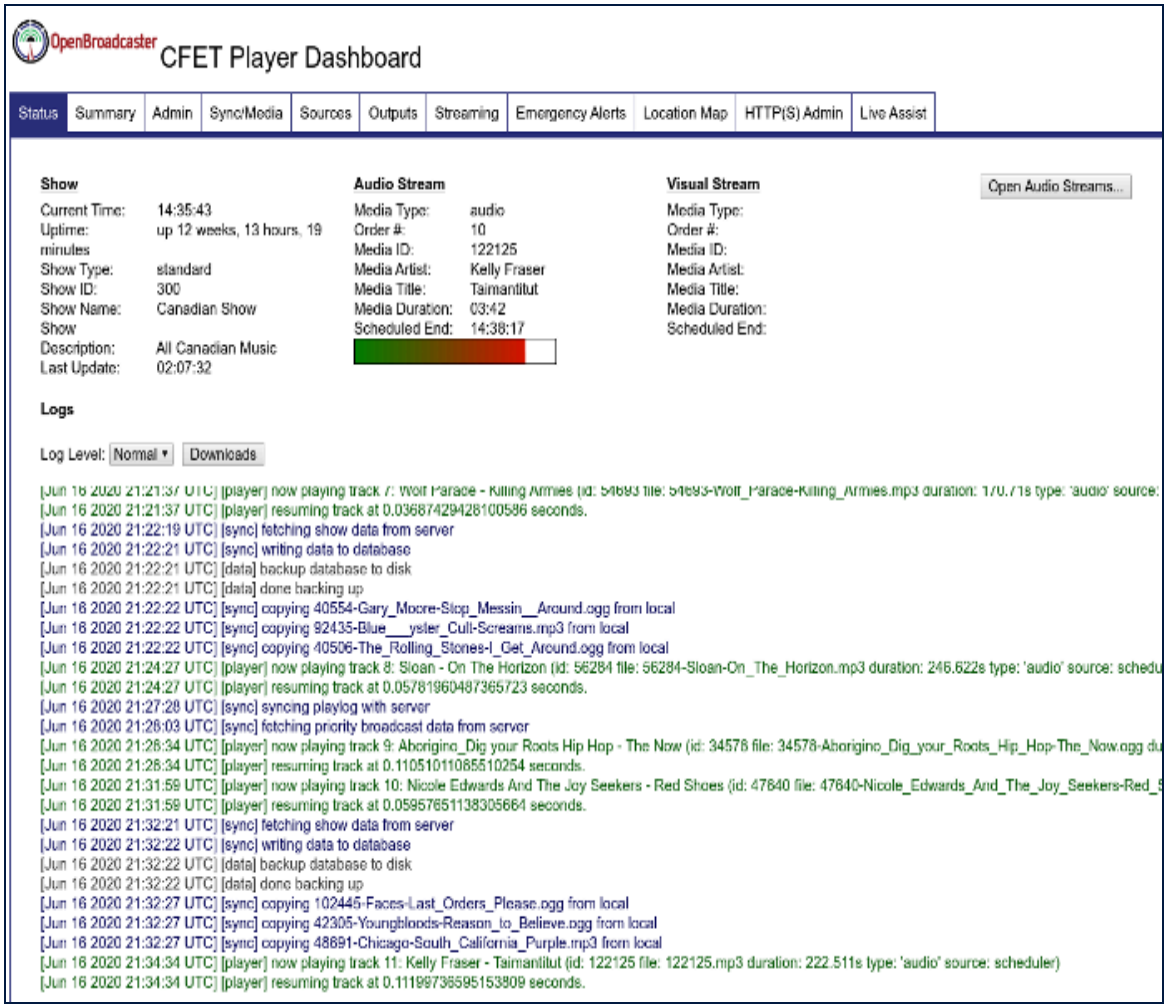
Player configuration and status monitoring is accomplished using a **Dashboard** interface. The Dashboard is available from any web browser, on default port 23233 of the Localhost IP address. For access to the Dashboard from outside the local area network, contact your network administrator to setup port forwarding on your router.

The `Admin` user can change configuration settings of the Player as required for activation in a broadcast setting as a standalone player. OBPlayer can also be managed by a OBServere reviewed **Quick Start (/quick-start)**.

Be sure to **Save** any changes on each Page, waiting for a green confirmation message then restarting with the `Quit` button to take effect. If audio or video hardware modes are changed, a reboot is recommended.

Dashboard access is for first time setup and advance troubleshooting. Once the Player is setup and configured it is typically entirely command and controlled from a managing OBServer.

Main Status



Displays real time information for the current state of the Player. If audio signal is present, a signal level indicator will respond to output from both audio channels. All system operations are displayed on a real time Log displayed on the __Status Page.

Log Level

Provides detailed logging by viewing the Debug log. The Debug log displays all CAP alert messages received by the Alert Player, before local filters have been applied. The status log will indicate status of connections to the NAAD server(s); only those alerts matching the SGC filters will actually be played

Log Colours

- Normal system operation Green Text.
- Player and Now playing Green Text.
- Schedule sync Teal
- Downloading Media Orange Text
- CAP XML Alerts received Lime Green Text (Only in Debug mode).
- CAP Alert playout and NAAD connection Magenta Text.
- Warning and advisory Olive Text
- Media DB sync Medium Blue Text
- Admin Modules and System Black Text
- Data Command and Control Dark Grey Text
- Network Error, Authentication failure and broken links Red Text

Downloads

Status Logs Text\CSV

- Daily Playlogs
- Daily Alerts Log

Audio Logs MP3

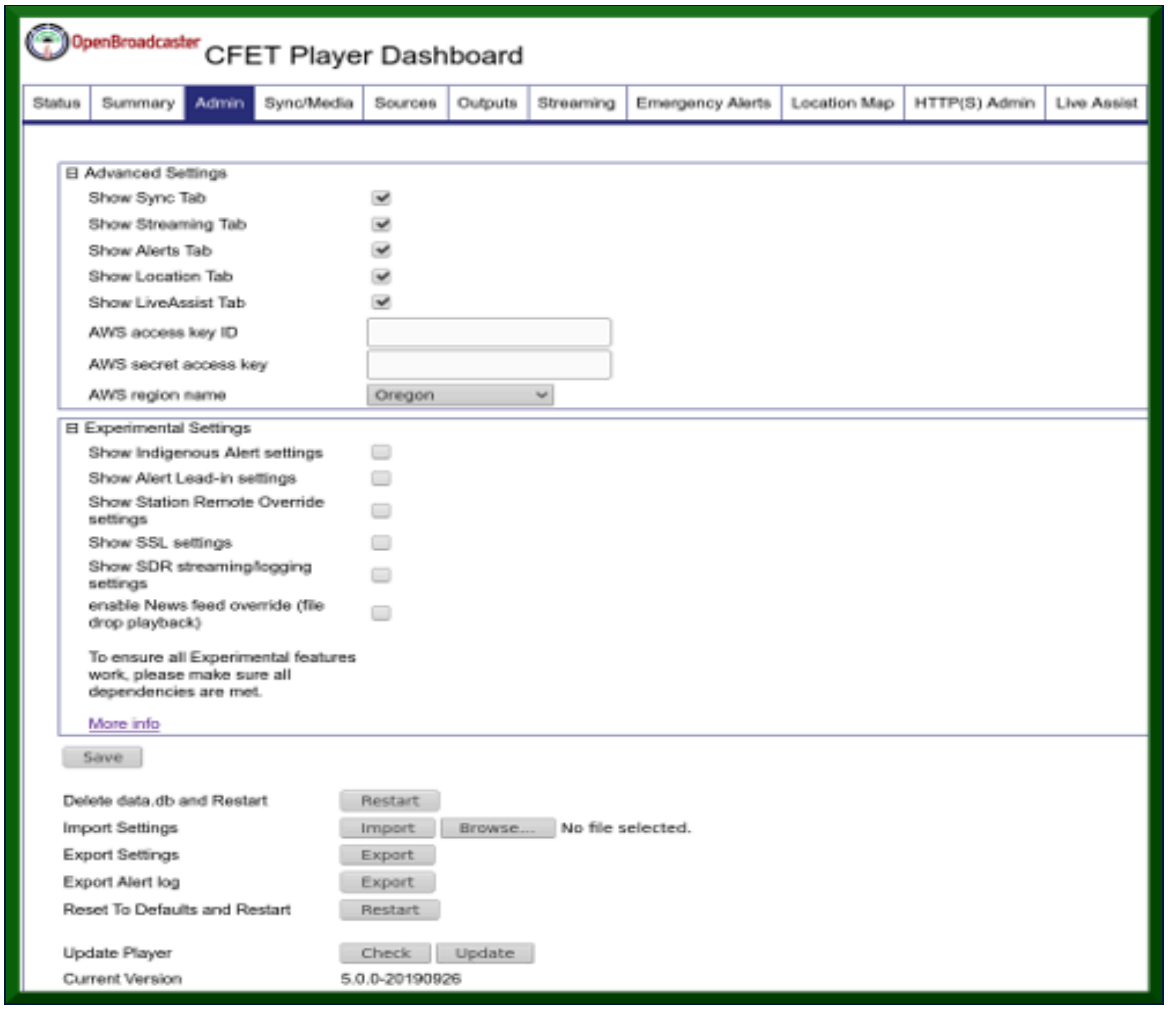
- On Board Audio Logs
- Off-air Audio Logs
- SDR Audio logs

Local Audio Streams

Mount points generated for Icecast monitoring enabled in the dashboard.

- Main Mount Point
- STL Mount Point
- Off-Air SDR
- Live OverRide

Administration



Admin Menu is visible to the Admin user only.

`Delete DB and Restore` deletes the Player DB that contains schedules. Deleting this and restart forces a sync for new media and schedules. This doesn't delete the settings of player.

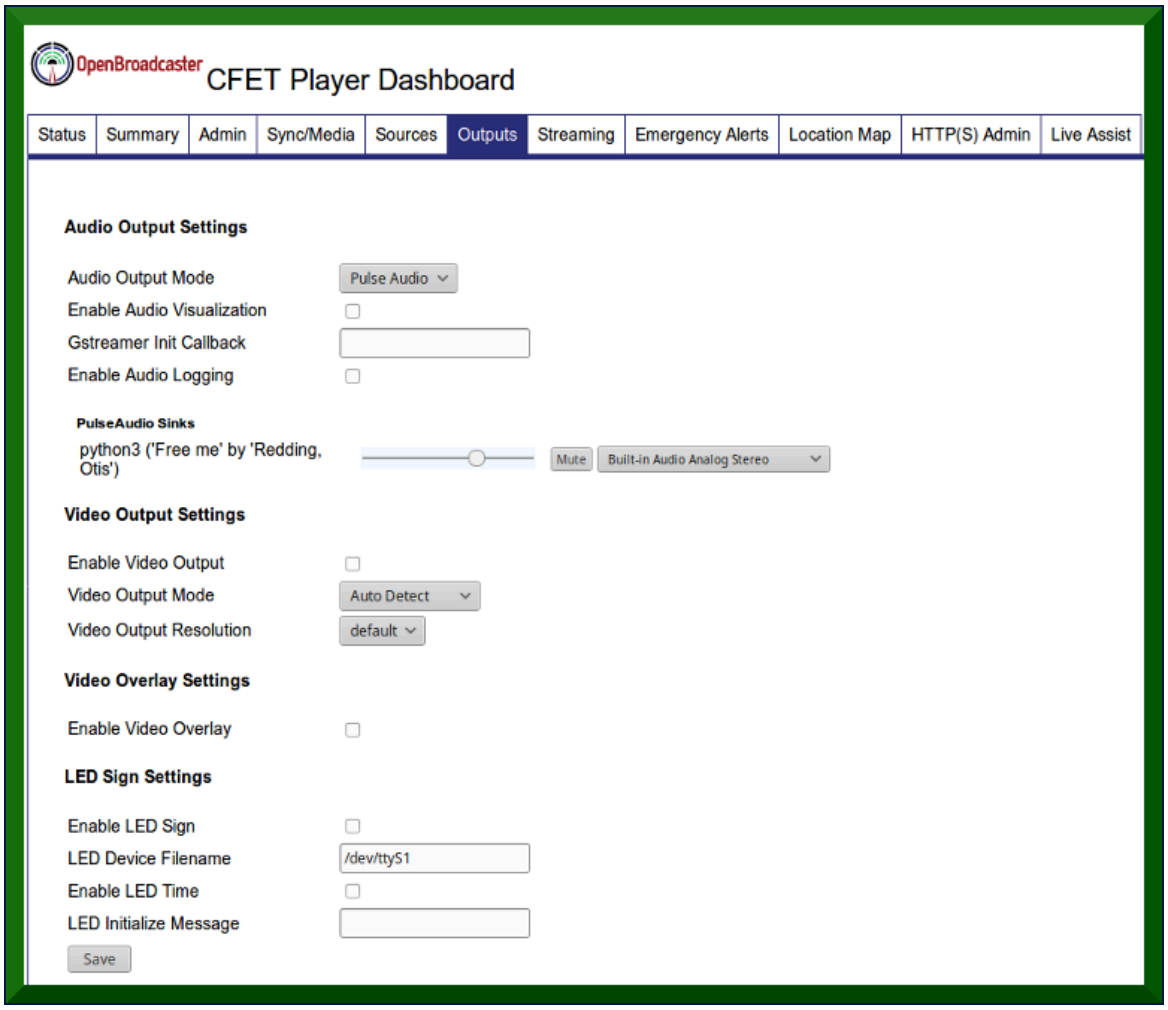
`Export` or `Import` settings to save or restore the configuration, if necessary. To create a backup of the configuration **export** the settings. To restore a configuration, **import** the settings file. Configuration settings are output in plain text form, **excluding** passwords. This file should be kept in a secure location. Preconfigured installations may be deployed using settings files.

Settings file and passwords Passwords will not be exported or revealed. Restoring the settings file will reset the player dashboard passwords to default (admin) retaining the created user account. Once the player has been restored, simply login with the user and default password and change in the Admin page to your desired password.

`Reset to Defaults` will restore the default configuration. Current configuration parameters will be overwritten, but may be restored from the backup settings file.

`Update Player` allows the user to confirm the installed Player version, check for updates to the Player software, and if desired, retrieve and install the updates. Changes will not take effect until the Player is restarted.

Audio and Video Outputs



`Audio Output Settings` modes available to Select:

- Alsa
- ESound
- JACK
- OSS
- Pulse
- No Audio - good for players in studio that do not want onboard audio coming out of built in speakers

`Enable Audio Logging` records one hour files available via `Admin>Downloads`

`Video Output Settings` Enables `Output Mode`

- X11
- Xvideo
- OpenGL
- EGL/GLES
- Wayland
- Coloured ASCII - *Set this mode on CATV for fundraising drives*

- No Output

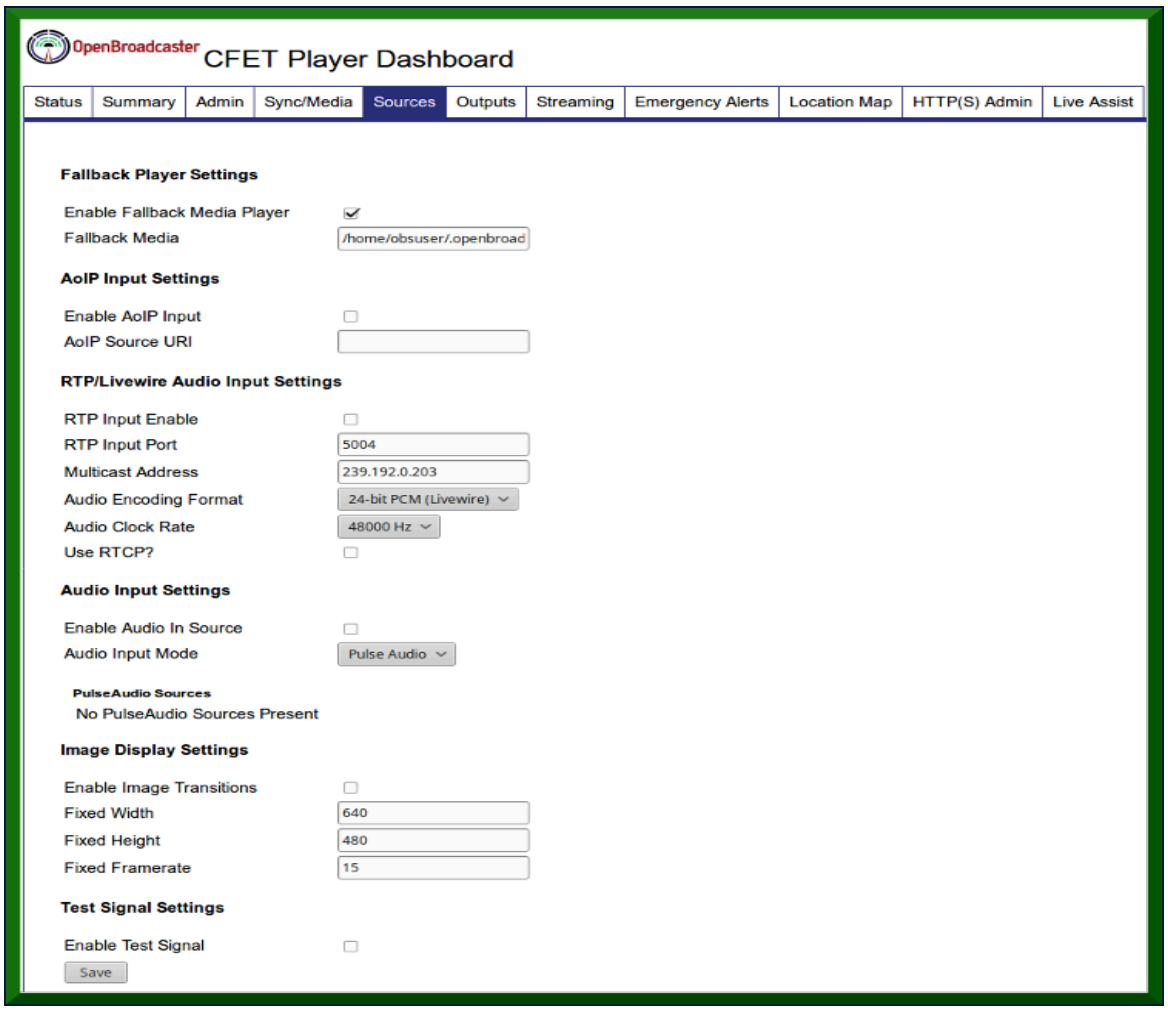
`Video Overlay Settings` Enables crawl of Alert messages across display

`LED Sign Settings` Configures serial LED signage

`Enable Test Signal` Turns on/off the 440Hz test signal

> Video output `Resolution` is automatically detected and displays values when video mode is enabled after restart.

Audio and Video Sources



`Fallback Player Settings` Enables and specifies file location of Fall Back Media. Fallback media directory and sub directory items are played at random, but all items will be played before any media items are played a second time. Default is 15 Seconds for image display.

`AoIP Input Settings` to specify AoIP Source URI

`RTP/Livewire Audio Input Settings` sets values for: `RTP Input, RTP Input Port and Multicast Address`

Select `Audio Encoding Format: OPUS, 16-bit PCM or 24-bit PCM (Livewire)`

`Audio Clock Rate 48000 Hz or 41000 Hz`

Enable `RTCP` Real-time Transport Control Protocol

Enable `Audio Input Settings` External Sources and enables pass-thru and capture of `Line-In`

`Audio Input Mode`

- Alsa
- ESound
- JACK
- OSS
- Pulse
- No Input

`Disable When Silence Is Detected`

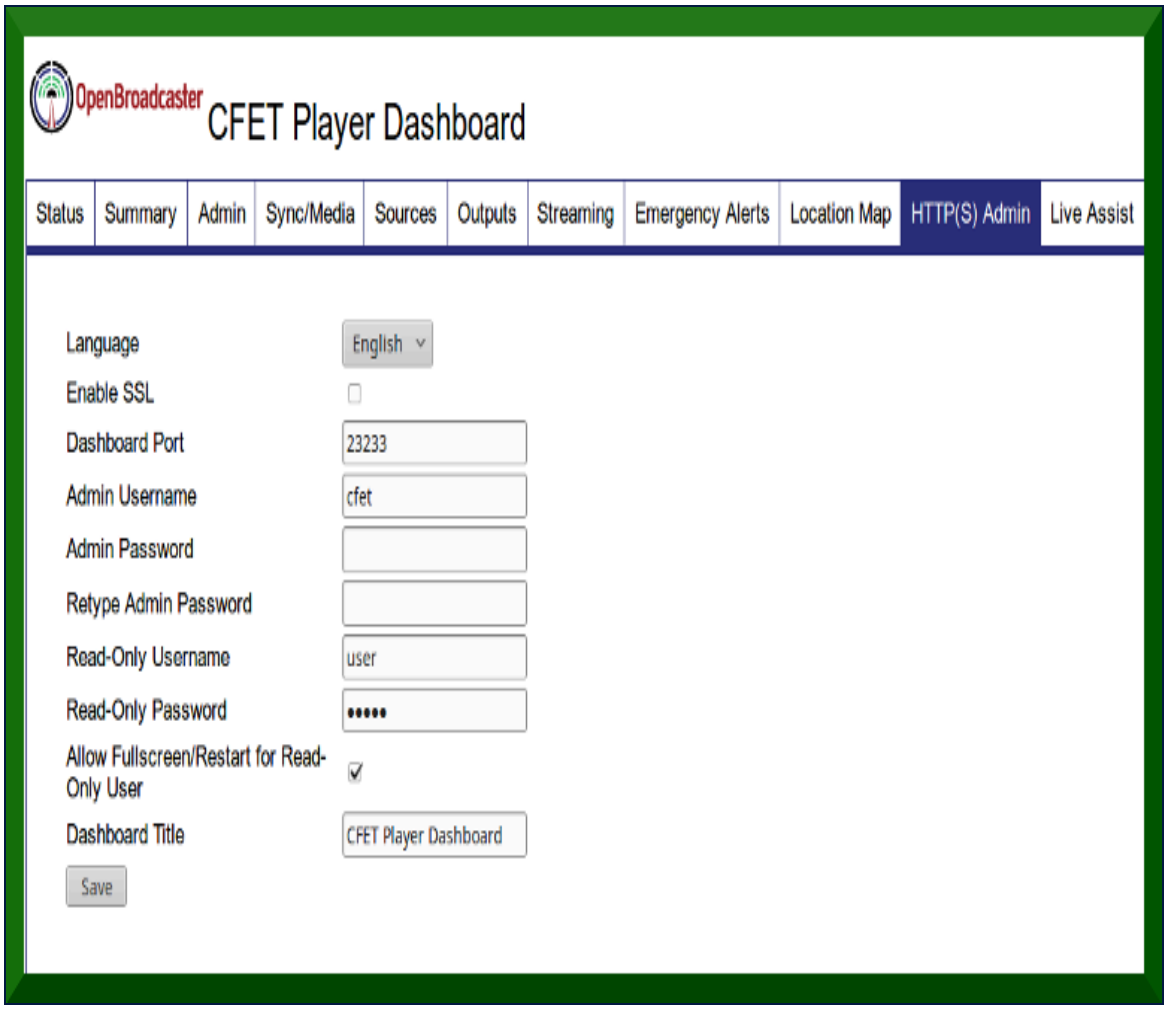
`Prioritize Above Scheduler` When source is detected on Lin In, to play that. .
`Silence/Signal Threshold (dB)` When to trigger switch over for detecting line in

`Time Before Enabling Input and Disabling Input(s)` Time Before Enabling\ Disabling Input (s) after it detects silence before it enables\disables the input.

`Enable Audio Input Logging` Records one hour segments into `./openbroadcaster` and accessible via `Admin>Downloads`

`Image Display Settings` Slideshow display of image media and overlay

HTTP(s) Admin



Set Global language

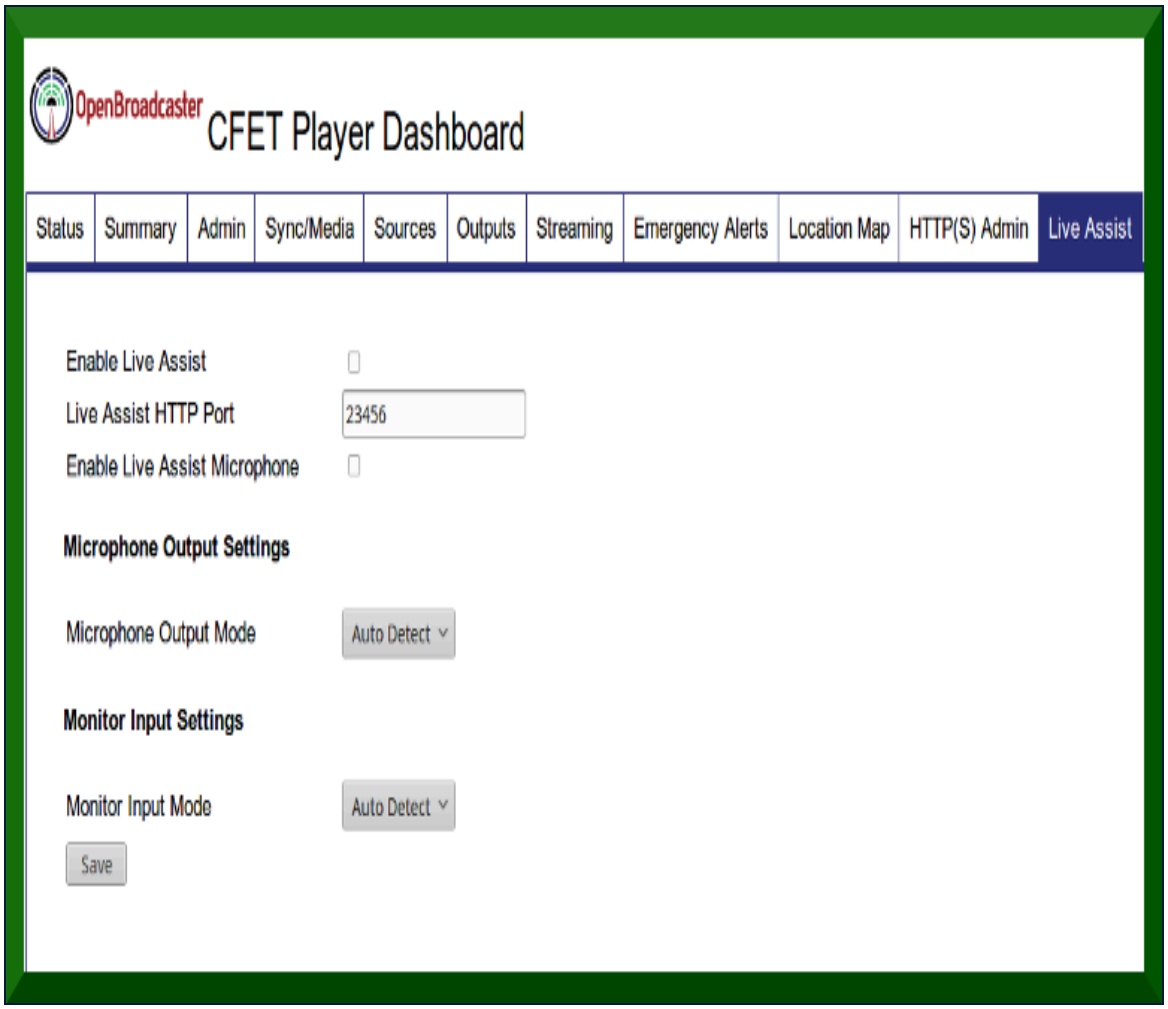
Change Admin user password

Set up Read only user and password

Allow read only user to access restarting through dashboard

Set Text to display in browser Tab and Bookmarks Shortcut

Live Assist



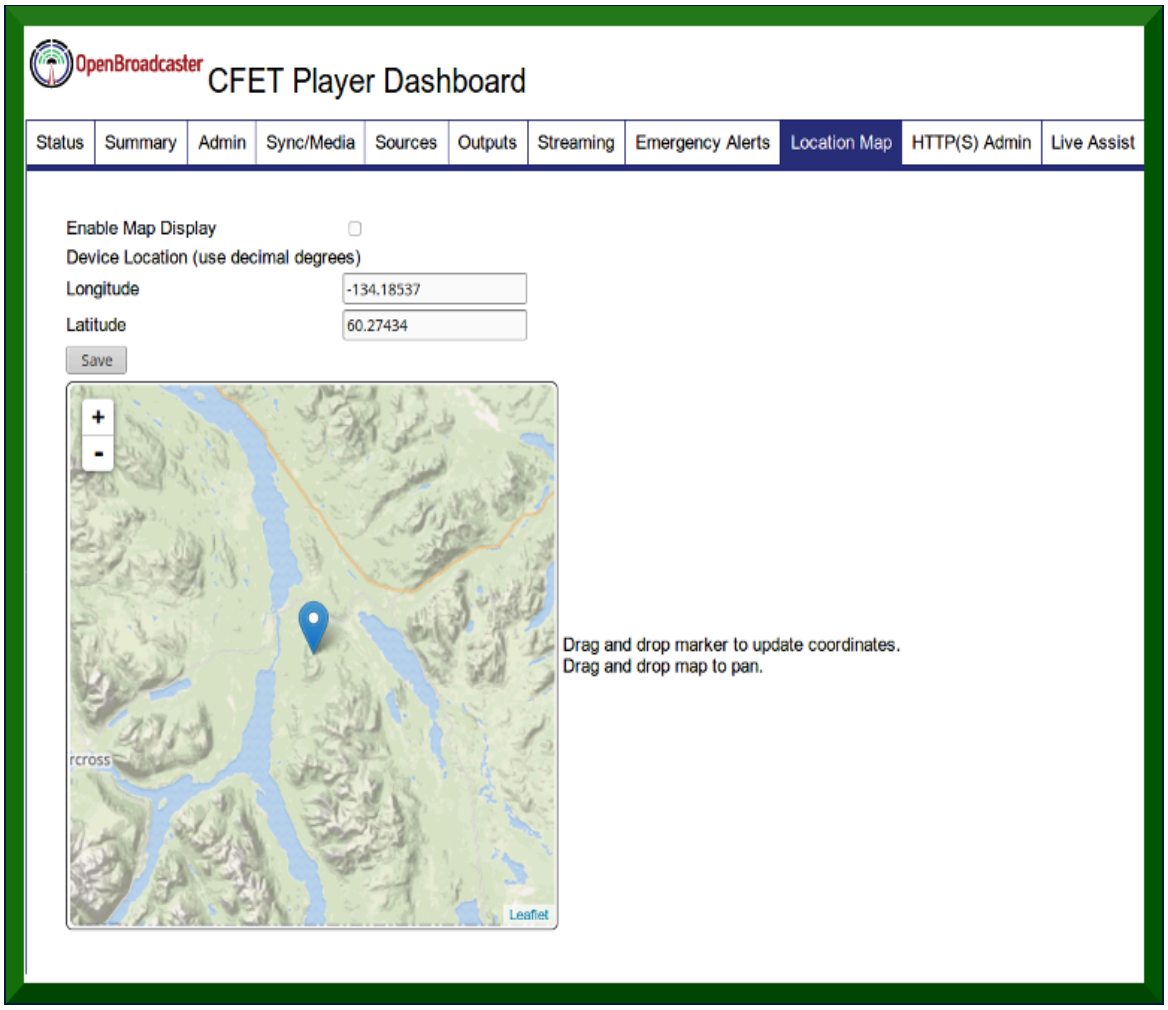
Enable `Live Assist`

Set HTTP(s) port (Default = 23456) to enable interactive touch screen interface

Specifying `Microphone` and `Monitor` sources

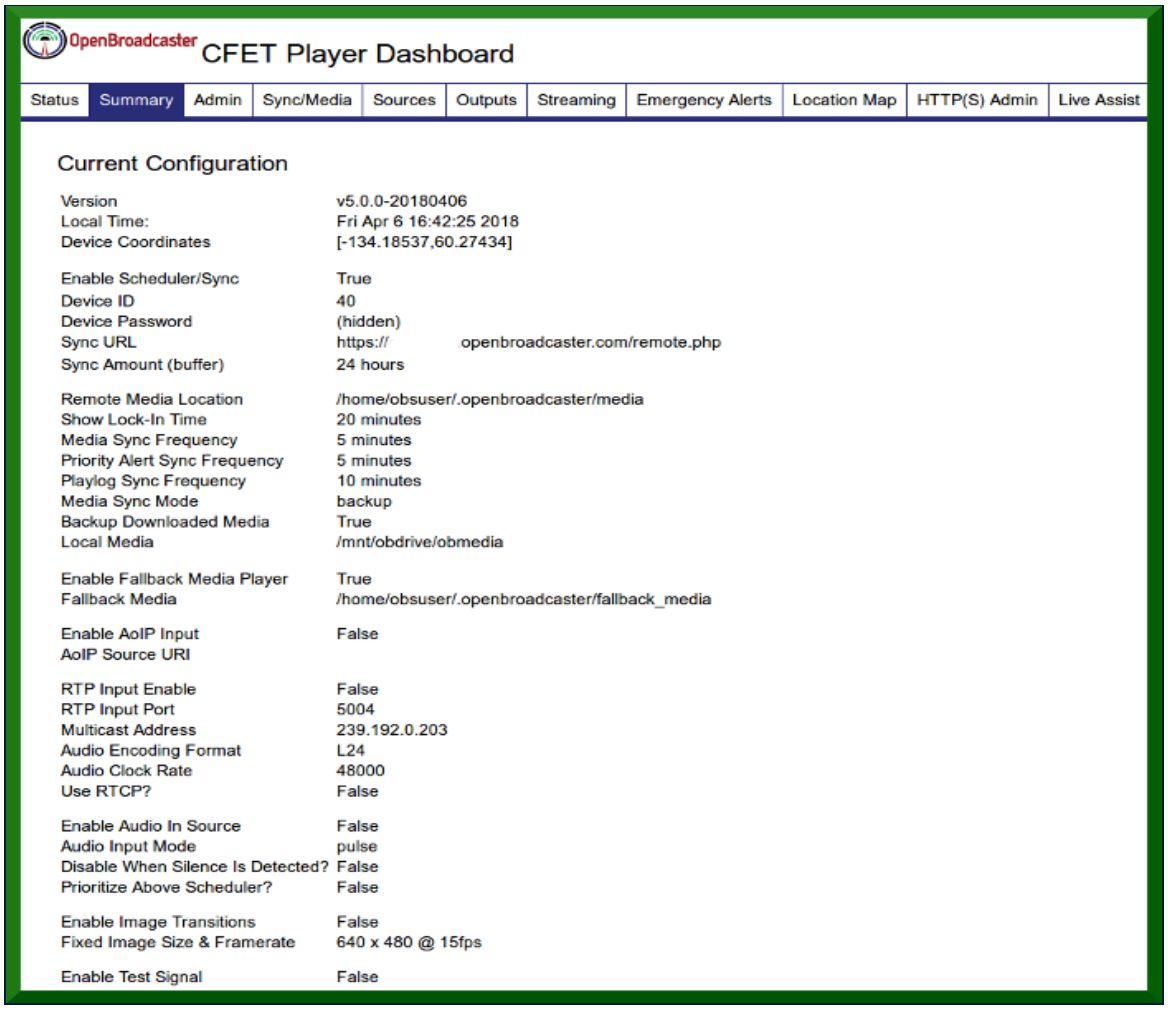
More info on using LIVE Assist **Here (https://support.openbroadcaster.com/live-assist)**

Location Map



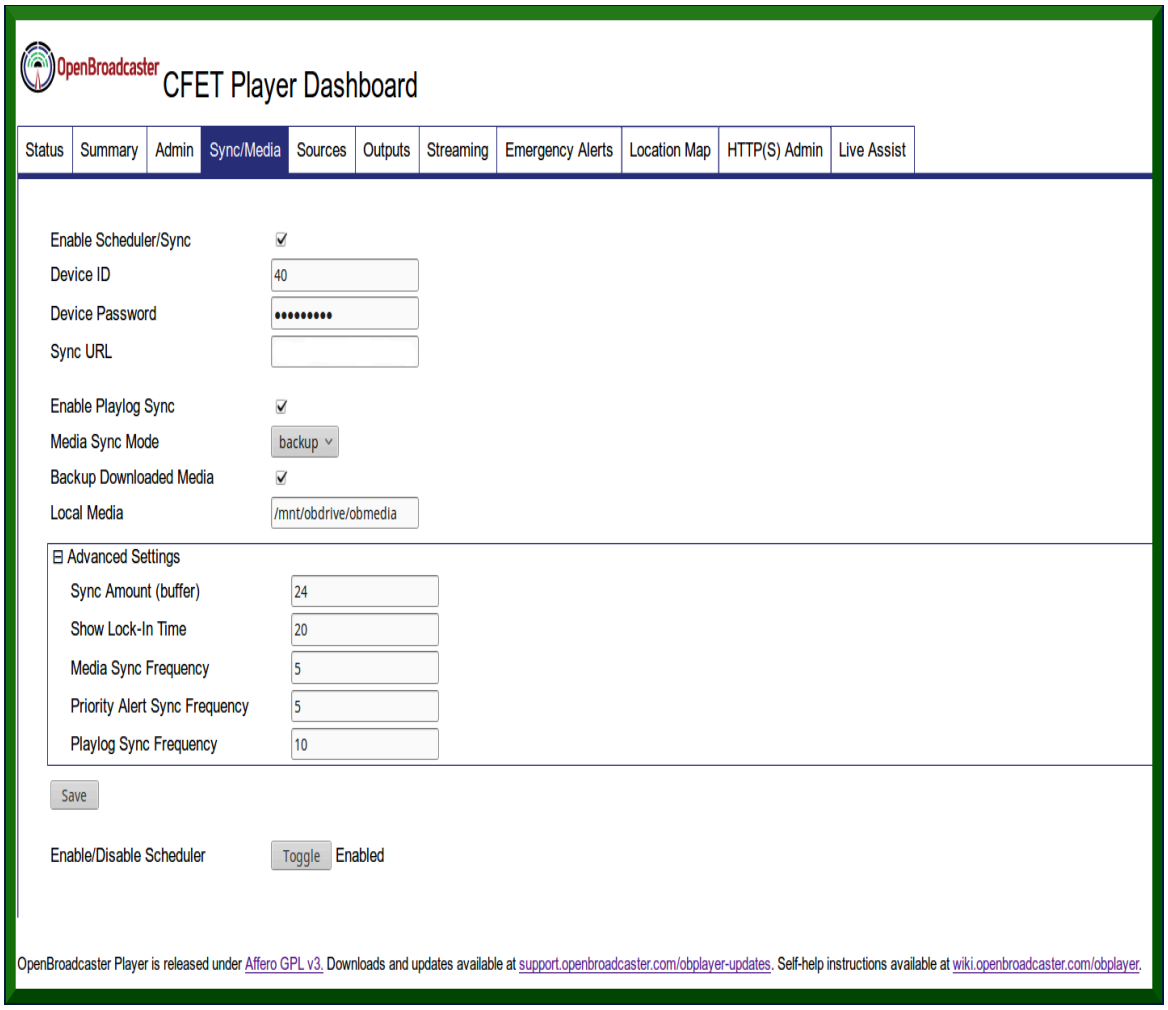
Establishes geographic coordinates for an installation. Coordinates are reported back to an OpenBroadcaster Server, if Sync is enabled to display players and status on a geo map using the **Geo Mapping (/mapping)** Module.

Summary Page



Displays all current configuration settings and additional info; `Current Version\Branch, GPS Coordinates and Local Time.`

Sync/Media



Sync URL should be in the format `http://server_ip_address/remote.php` or `https://server_ip_address/remote.php` Device ID and Password should match what was entered in server to provision player. These settings are ignored if Sync/Media settings are disabled such as configured for standalone alerting operation

`Media Sync Mode`

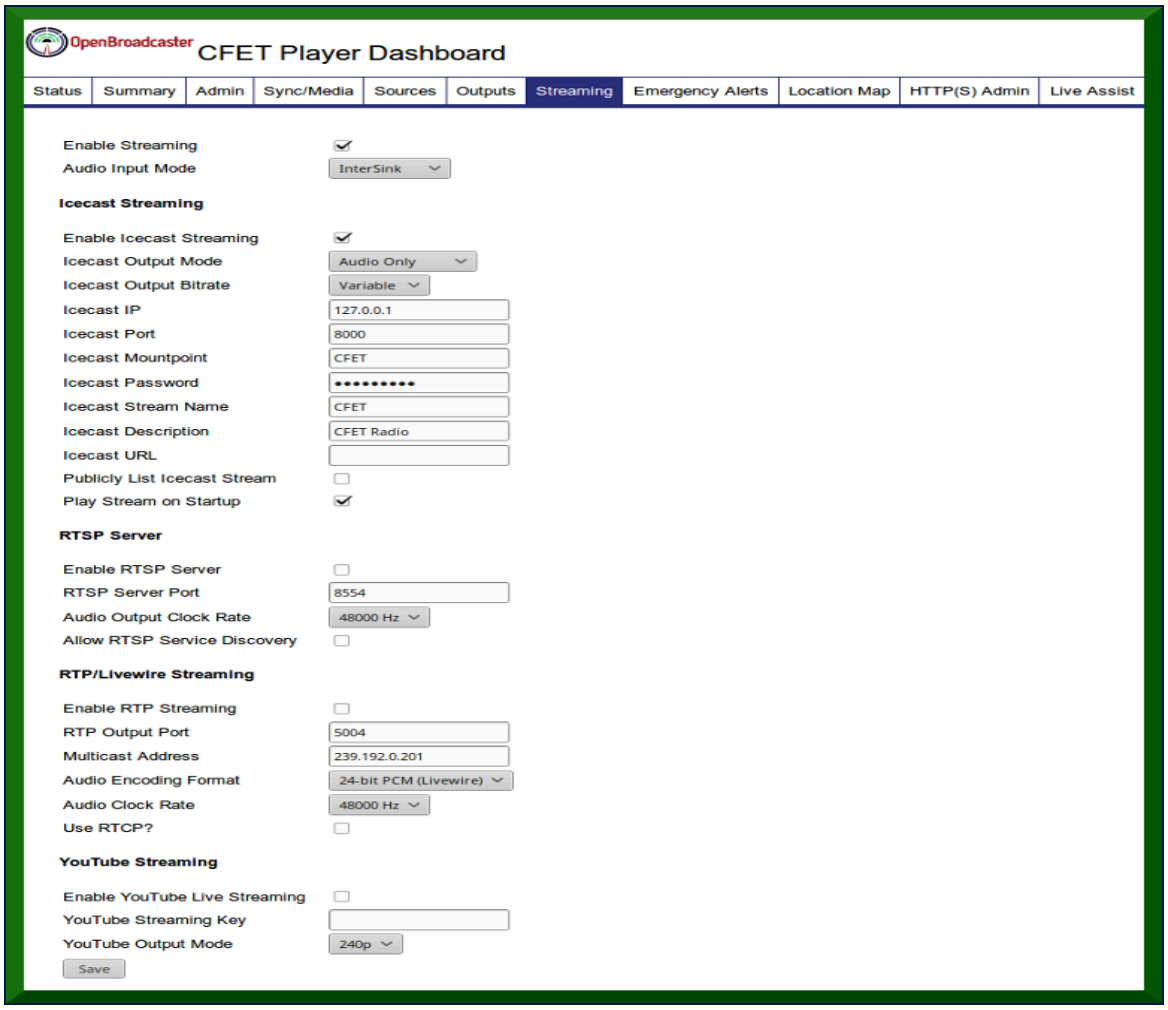
- `Remote` stores media under ./openbroadcaster
- `Backup` stores media locally or shared in a specified directory
- `Local` is used to access media library that is on the same machine as player

`Backup Downloaded Media` saves and caches a copy so it doesn't get downloaded reducing bandwidth.

`Maintenace Mode` toggles the scheduled material and puts player into lockdown mode with `Fall Back Media` to set audio levels.

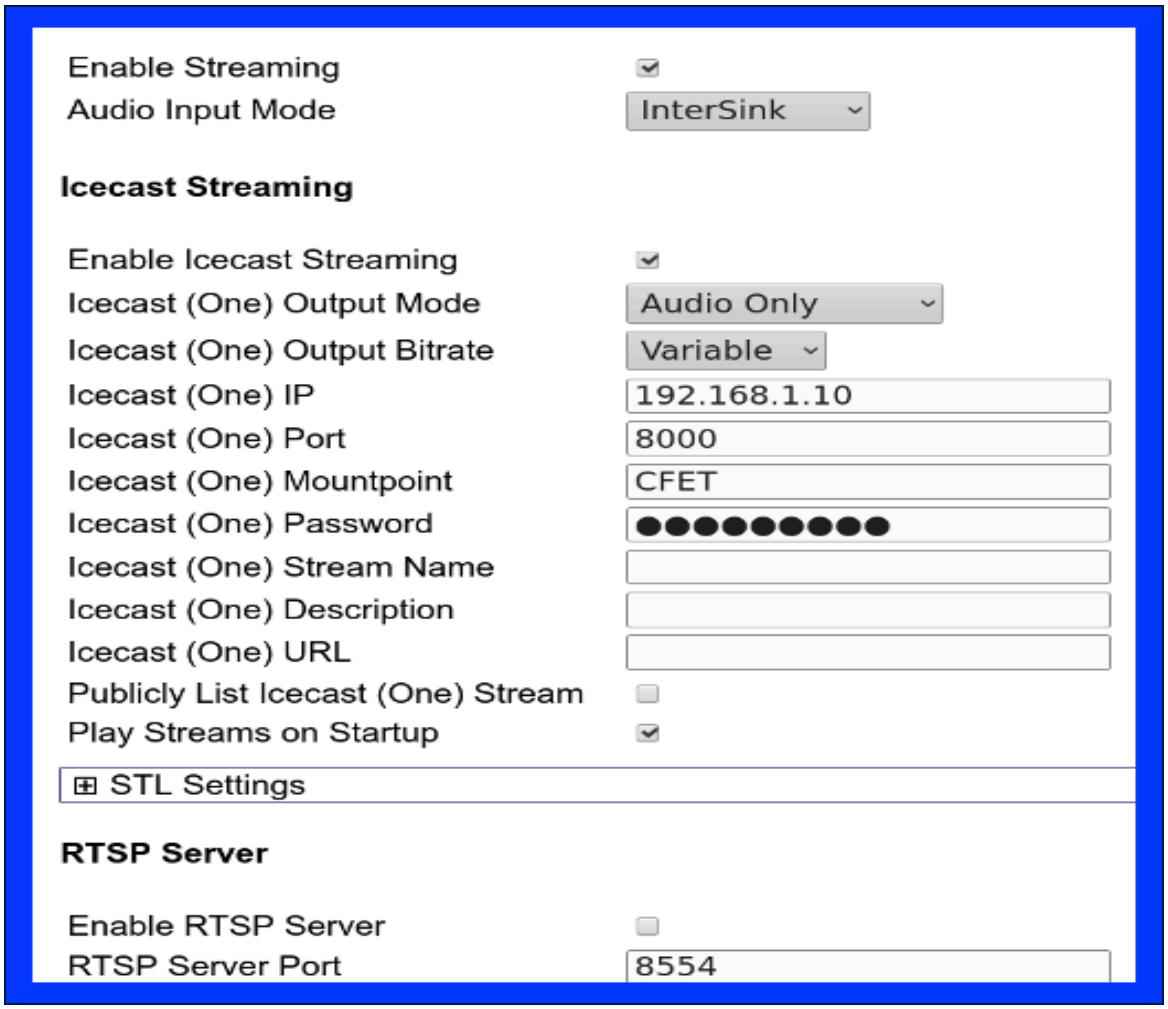
Disables the scheduler's request queue, so the core player loop will ignore any requests from the scheduler. The next highest priority request generator will take over. If a higher priority request comes in from the alert module, it will play the alert request. The feature will only affect the scheduled content. It's not quite the same as disabling the scheduler module, since it will still sync media and attempt to schedule content, but it will be ignored by the core player as if the scheduler module was disabled.

Streaming Media



Icecast Streaming

Main streaming mount point



Streaming of player output (audio and video) using Icecast

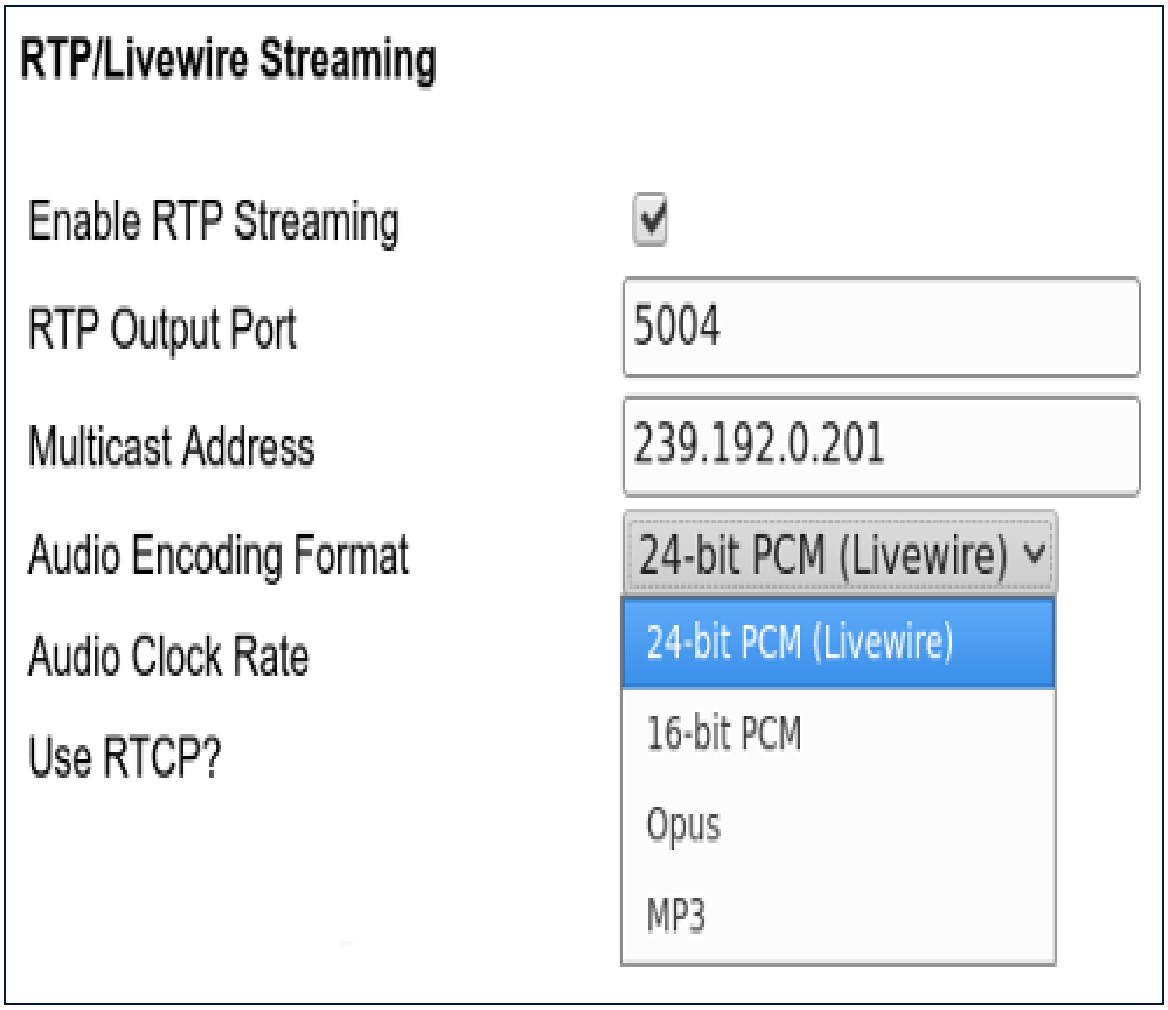
`Audio Input Mode`

- Intersink - Bypass processing and sends the source material direct to Icecast server
- Pulse Audio - Use this mode if you wish to fine tune input and output levels
- Alsa
- Jack
- OSS
- No Input

STL (Studio Transmitter Link)

Allows creating a separate feed at a different quality to be sent to a STL. ie Stream 1 sends to outside relay server at 128 KB while the STL Stream 2 sends to transmitter at 320K on internal network.

RTP Livewire Multicast Streaming



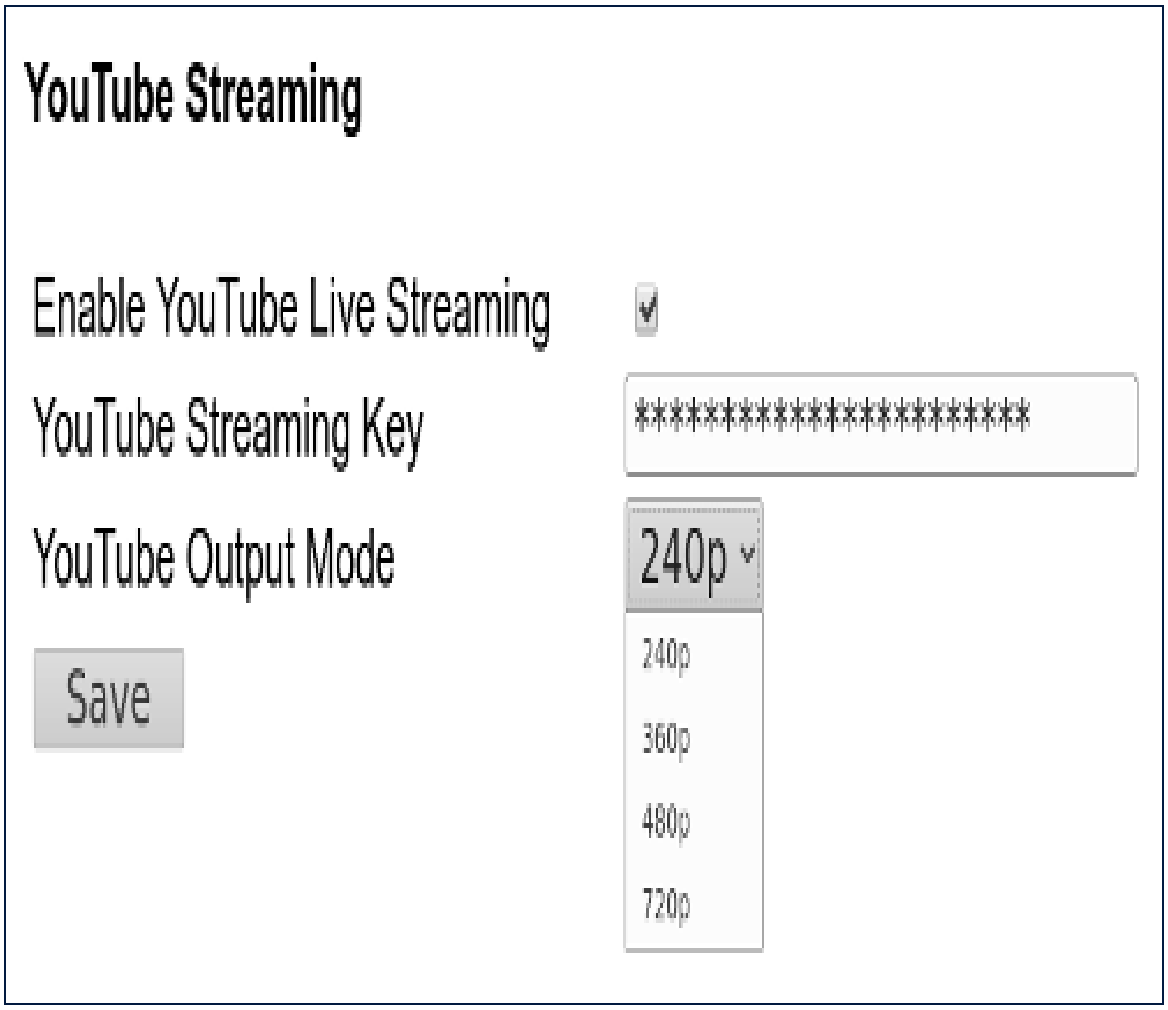
Send and receive AoIP to RTP devices and AXIA Digital Consoles.

Enable RTP Streaming

Specify the multicast address

Select Encoding Format; 24-bit PCM Livewire, 16-bit PCM, Opus and Mp3

YouTube Live Channel



Create LIVE YouTube channel

1. Enable YouTube streaming
2. Enter your secret YouTube key to authenticate
3. `Output` Mode supports encoding rates 240p - 720p

Restart player and begin streaming!

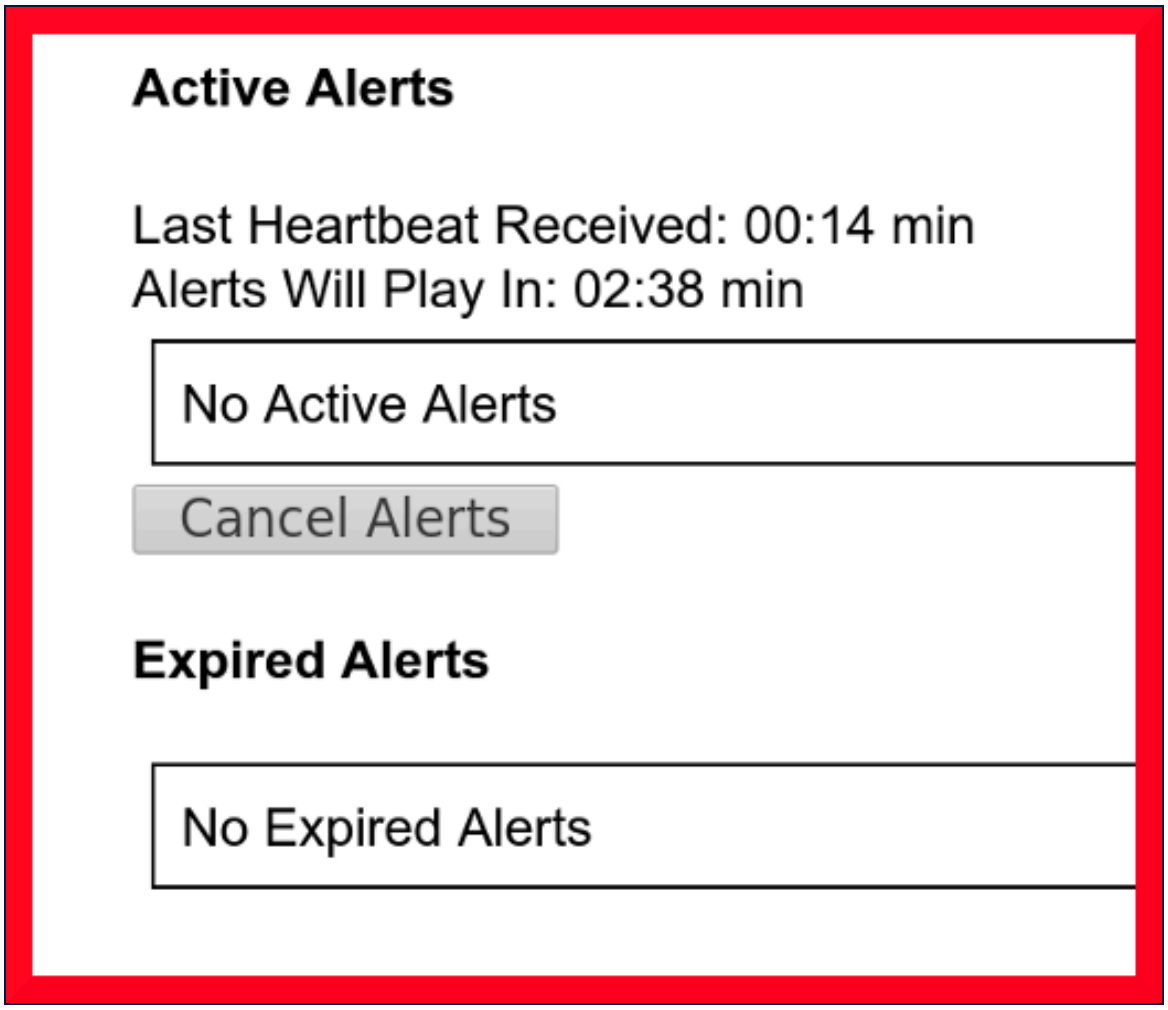
CAP Emergency Alert Player

Emergency messages issued from NAAD (Pelmorex) may be issued as a string of text, digital audio file and/or with an included graphic image. These will automatically be received and broadcast with our systems. In the event the attached alert is missing or corrupted, relayed from Environment Canada or issued using a text source, your system will play the audio using built in TTS(text-to-speech). For video installations it will also display a scroll along bottom of screen and/or a full screen red slide with descriptive text and accompanying audio alerts.

Alert messages will continue to broadcast at the *Alert Repeat Interval* until the Alert expiry time is reached or when the NAAD sends a command to terminate playing of message. Broadcast Intrusive alert messages are required to play at least once. To limit the number of repeats of an Alert message, it is possible to change this setting.

> Please refer to the National Public Alerting System **Common Look and Feel Guidance Ver 2 (https://www.publicsafety.gc.ca/cnt/mrgnc-mngmnt/mrgnc-prprdnss/npas/clf-lng-20-en.aspx)** for more detail on specifications and recommended practices relating to public alerts.

Heart Beats



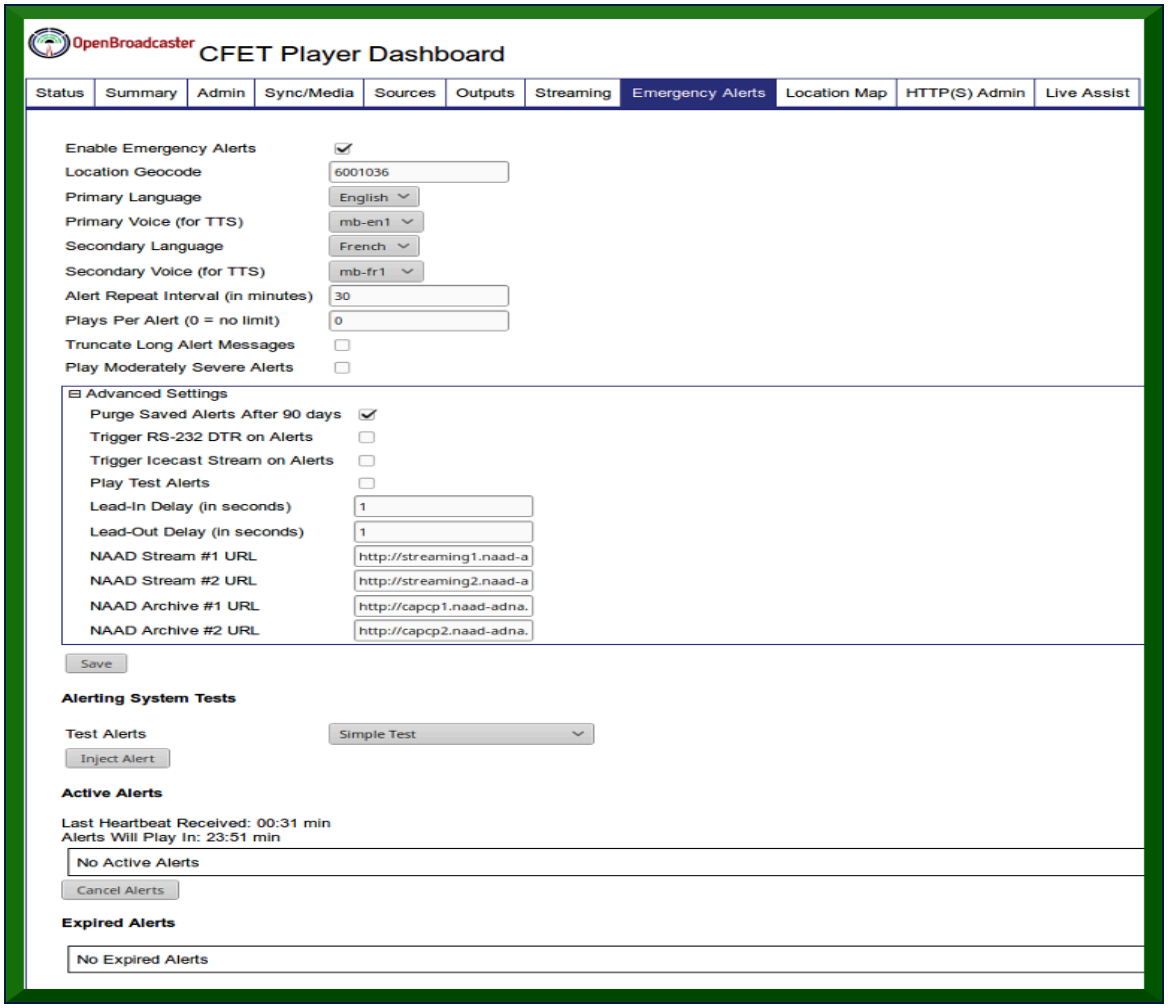
Pelmorex sends out keep alive heart beats that our player monitors to ensure connectivity to receive alerts. A stable internet connection must be available to receive heart beats and CAP alert messages.

Pro Tip In the `Admin` menu set `Log Level` to only show heart beats and alerts.

Location Geocodes

In Canada, a **Standard Geographical Classification (https://en.wikipedia.org/wiki/Standard_Geographical_Classification_code_%28Canada%29)** uses a numeric code to identify discrete areas, based on census districts. Alerts will be filtered to include only those that match, contain, or are contained by the set Alerting District.

CAP Alerts Configuration Page



Initial Setup

Emergency alerting dashboard is built into OBPlayer and configured in the dash board **Emergency Alerts**.

For initial setup, disconnect any USB audio device **before** powering up the unit, and use the internal green speaker/headphone jack to monitor audio output for testing. Do not setup and provision unit on air in a production environment until it is understood how it works.

Open the Dashboard to configure and ensure Emergency Alerts are enabled

Set Alerting Locale

A single **SGC Geocode** is required for your alerting locale. In the `Location Geocode` window, simply enter your region's name and a current list with the SGC code will display. Multiple region SGC geocodes may be used and separated by commas eg: "6001036,6001018" would play alerts for both Tagish AND Haines Junction. Entering "6001" would capture both districts, as well as any others in the immediate locale.

Set TTS (Text to Speech)

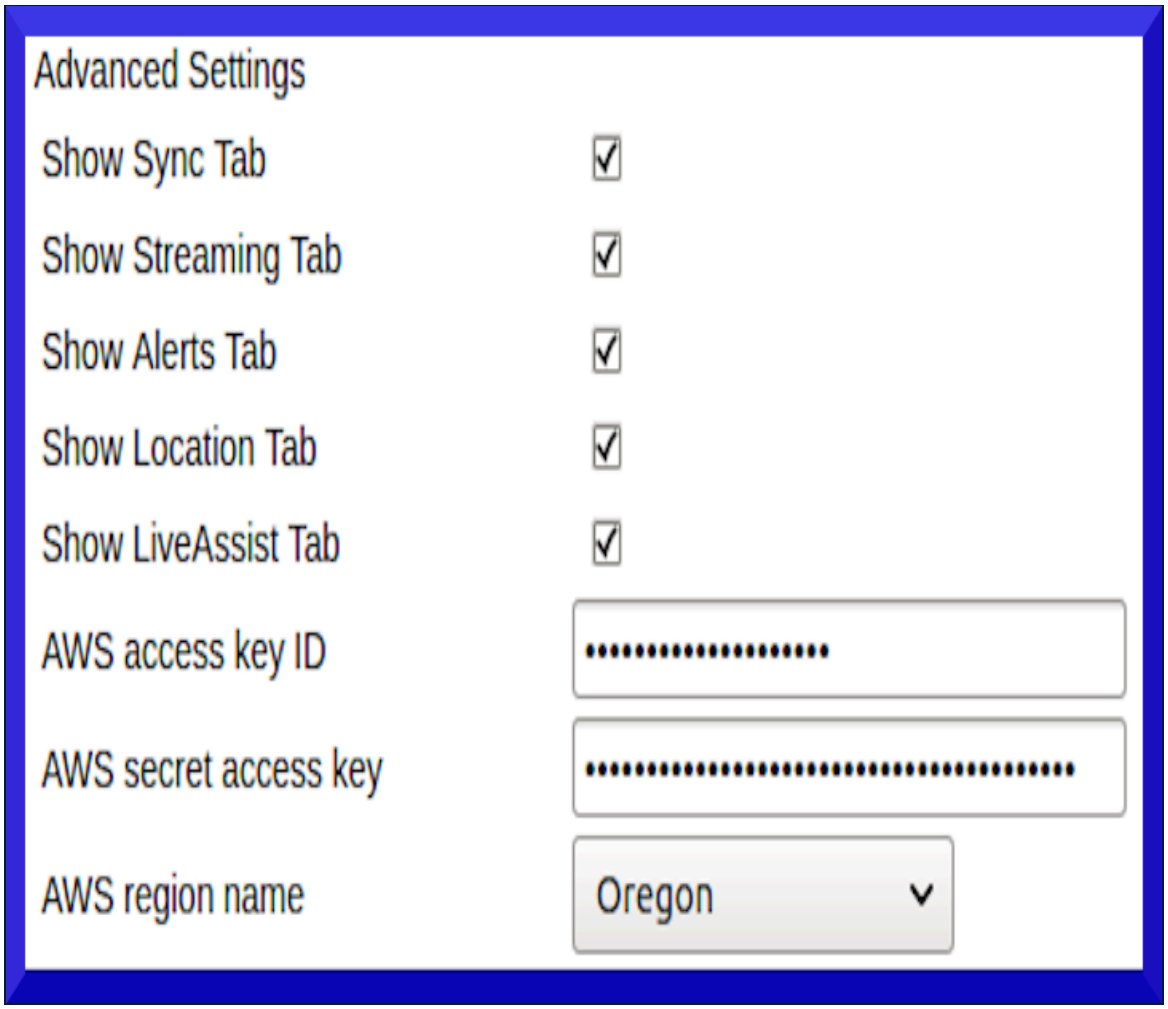
Select and configure `Primary and Secondary` Language options.

1. Onboard TTS - Mediocre quality at best (recommended to change on first setup)
2. ESpeak Mbrola Voices - Not much better quality as above, but an improvement. Select Language i.e. English then associate MB-en1 as primary language voice. Select French and primary voice of MB-fr1

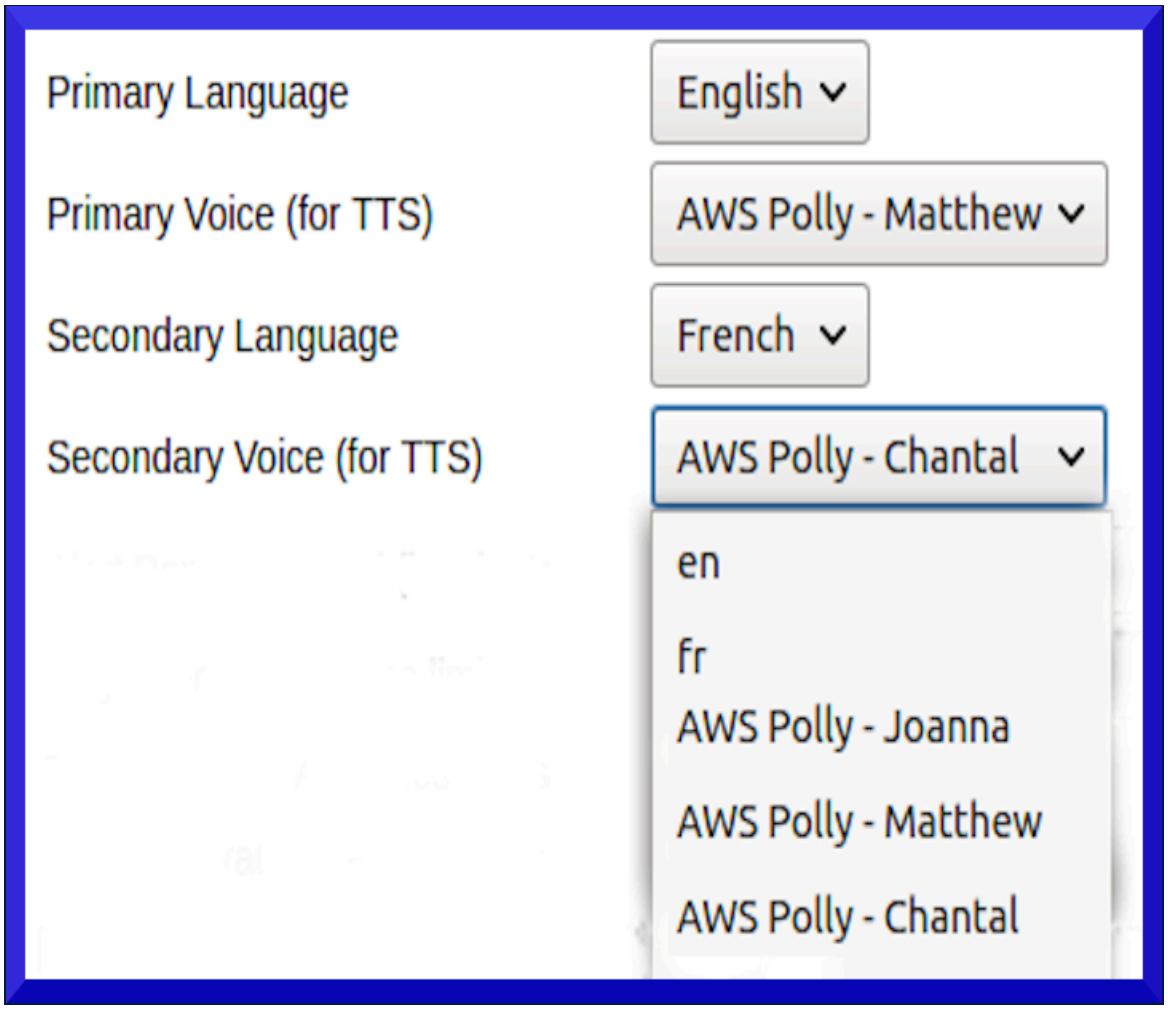
POLLY AI Voices

Best possible solution for TTS. Sounds very natural. Configured and enabled, when a valid CAP message is recieved, the text of this message is sent to AWS and produced as an mp3 file, sent back for airplay.

1) Select `Enable AWS POLLY` enter the API key into the advanced menu in `Admin` . Restart player.



2) `Emergency Tab` now displays a selection of bilingual male and female voices to choose from: Joanna, Matthew and Chantal (more to come)



Obtaining AWS Polly Key

You'll need an API key from Amazon Web Services (AWS) using a free plan. If running a large network of POLLY devices, there is a very small fee to use this service, approx 4.00 USD for one million characters for thousands of hours of spoken word.

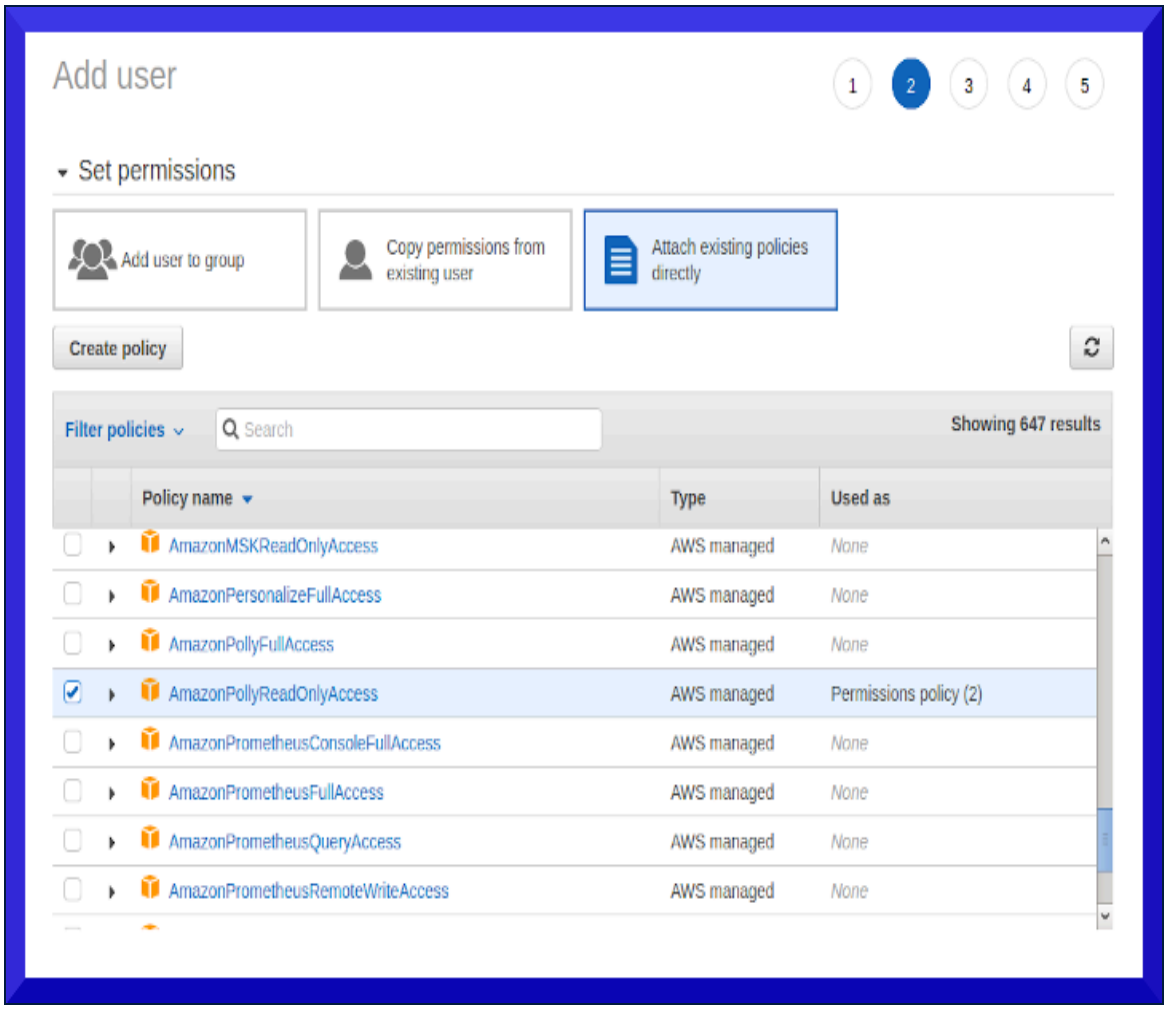
Register at **AWS POLLY (https://aws.amazon.com/)**

Go to Identity and Access Management (IAM)

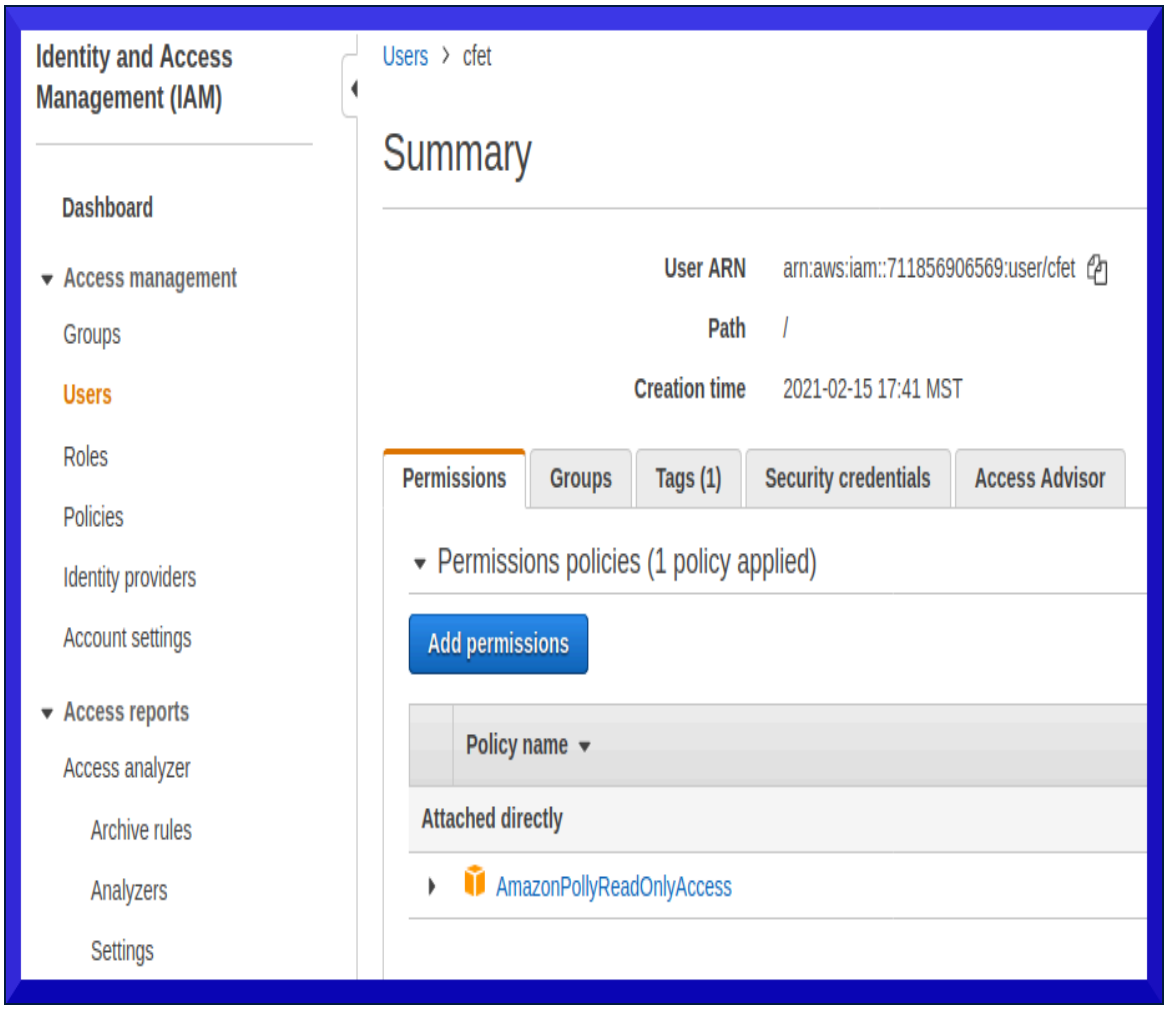
Create User with `Access type = Programmatic access`

Attach existing policies directly by scrolling through list and selecting with a check box AmazonPollyReadOnlyAccess

Add POLLY policy to user



View POLLY service attached to user



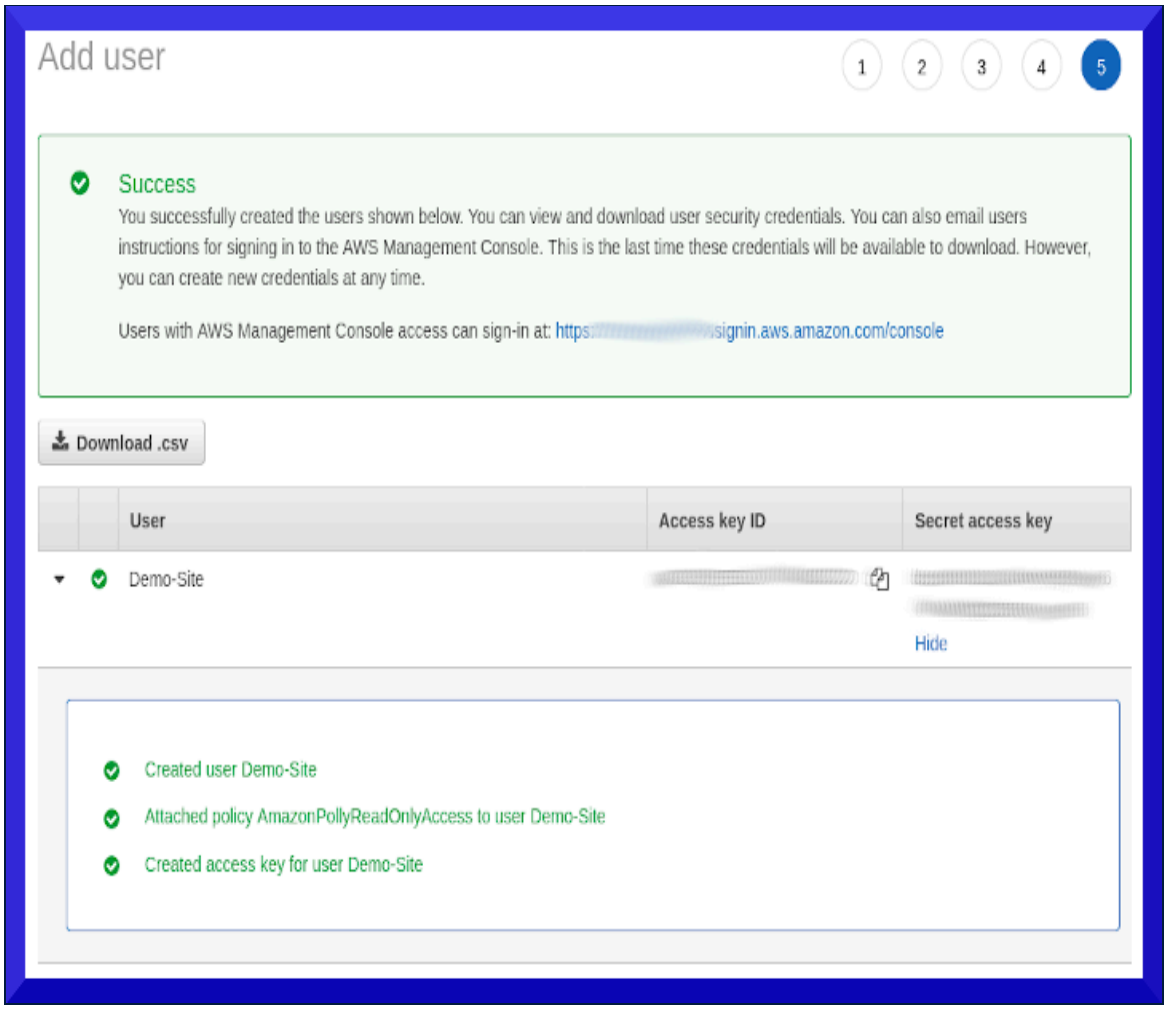
View API Key. It has 3 parts

Export User Key

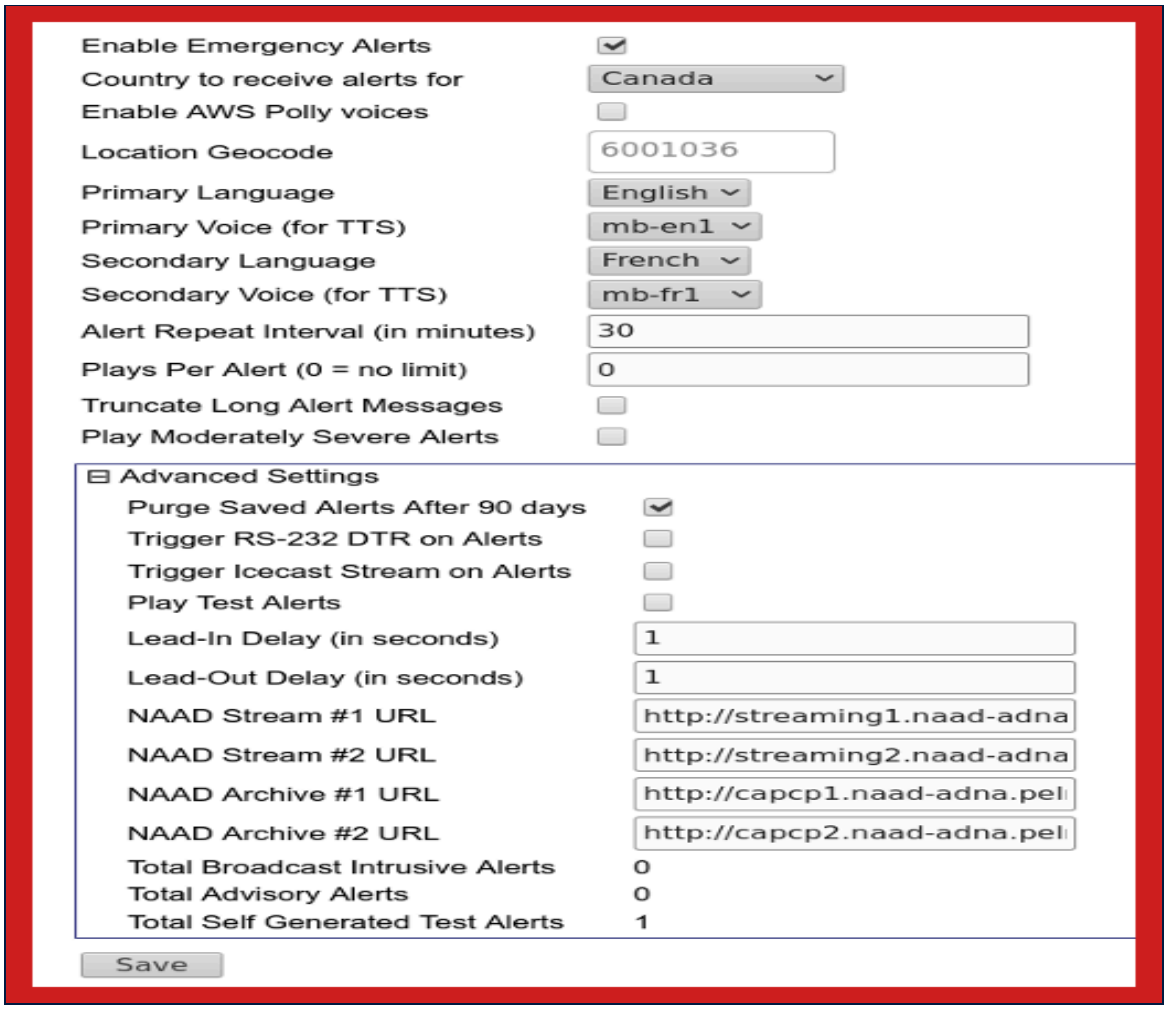
After creating user and attaching policy you will be able to generate the Key. A single use menu will appear allowing you to copy and paste the keys and/or download link a small csv file with credentials for backup. Download this file and stash securely. If AWS key is lost or cannot remember, simply generate a new one

AWS Region should be set to the data centre closest to player.

Once you enter the key and enable Polly, restarting player will populate the alerting voices with available voices.


Add user
1
2
3
4
5
Success
You successfully created the users shown below. You can view and download user security credentials. You can also email users instructions for signing in to the AWS Management Console. This is the last time these credentials will be available to download. However, you can create new credentials at any time.
Users with AWS Management Console access can sign-in at: https signin.aws.amazon.com/console
Download .csv
User
Access key ID
Secret access key
Demo-Site
Hide
Created user Demo-Site
Attached policy AmazonPollyReadOnlyAccess to user Demo-Site
Created access key for user Demo-Site

Advanced Settings



Adjust the `Alert Repeat Interval` time between repeated plays of queued alert messages. Setting this value to 0 will cause an alert message to play until the Expiry time stated within that message has passed

Use the `Play Moderately Severe Alerts` setting to enable optional, non-broadcast intrusive alert messages, if desired. Provides a setting to `Truncate Long Alert Messages` to shorten long alert messages to include only the first section To play the entire CAP alert, including the entire lengthy description, disable the `Truncate Long Alert Messages` setting .

Provides an override to `Play Moderately Severe Alerts` that do not have a Broadcast Immediate status

`Trigger Icecast Stream on Alerts` creates an on demand mountpoint

`Lead in/Out times` used with a streaming service to allow entire message to not get cut off while buffering

`Play Test Alerts` These are not scheduled test of the alert systems, but internal system test not normally heard by public (Default = Off) Note: These alerts are not related to scheduled tests from Pelmorex.

`Purge Saved Alerts` after 90 days will free up your disk space, even more of a concern now with the large multimedia attachments being sent along with the CAP message.

`GPIO Trigger` to issue a DTR serial signal upon commencement of CAP-CP Alerts. When an alert cycle starts, the serial port will be opened and the DTR control signal (positive pin voltage) will be transmitted. After the alert cycle has completed, the DTR signal will drop (negative pin voltage).

`Lead-in and Lead-out delay` timings may be adjusted to prevent 'clipping' of messages.

`Trigger Icecast Alerts` is used to generate an on demand Icecast mountpoint.

`Logging of Alerts` shows the count of played alerts; broadcast intrusive, moderate advisories and self generated tests. This can also be downloaded from the `Admin` main menu.

Injecting CAP Alerts into the broadcast chain

Every station is setup different with several ways to inject audio and visual alerts into the broadcast chain. CAP alerts are received and authenticated by the standalone alert player and put into the broadcast chain each with their own merits, listed below in no particular order.

Audio

When an alert is received, audio is sent out for your systems to receive in several ways. Generally there is no audio present unless a message is being issued; either a valid CAP message, Pelmorex test message or when a internal test alert is issued.

• Onboard analog stereo 1/8" mini output using Realtek ALC888S codec. Audio present only when a valid CAP message is being broadcast.

• GPIO trigger reverses DTR voltage on pin 4 using RS232 DB9 when CAP message is played to switch an **External relay (/accessories#mechanical-rs232-switching-relay)**.

• Using **BARIX exstreamer (/obplayer#cap-alerts-with-barix-exstreamer)** at transmitter to listen to a priority port of incoming stream of CAP message

• Configuring ICECAST server to detect new mount point of on demand stream

• Silence Detection using external third party hardware used to sense audio coming out of the Alert Player and mechanically switch a relay on your board.

• Windows playout machine may use free Silence Detection software from **Pira CZ Silence Detector (https://pira.cz/)** to switch broadcast audio source when CAP message is played.

• Integrating to AXIA Digital AOIP Consoles to sense an on demand Livewire stream of CAP message in conjunction with the Qor's GPIO to switch channels on the console while EAS is in progress and switch back.

CAP Alerts with Barix Exstreamer

OBPlayer creates an on demand IceCast mount point when an alert is present with a Barix Exstreamer receiver at transmitter to play CAP alerts. Stations normally will be supplying audio to Exstreamer at transmitter. Barix will be configured to detect and automatically switch to the generated alert mount point the new mount point stream, cut over and play alert, switch back to normal programming when alert stops.

Prerequisites

In order to make the priority streaming work, so that OBPlayer only outputs the alerts and nothing else; disable the scheduler, fallback player, audio in, and the test signal.

Configure OBPlayer

Streaming Page Create a mount point on local machine's IceCast server. Exstreamer will switch to the generated alert mount point and switch back when it stops. There is a minor delay in the switching with Barix Exstreamer. Set the lead-in delay to 1 second and the lead-out delay to 5 seconds to catch the whole alert cycle without having too much delay before and after.

Barix Configuration Set the first URL as priority for the alert stream. Second URL is set to the normal stream coming from the studio.

When a CAP message matches your region, a mount point will be temporarily created, overriding your studio. When the alert is finished playing, normal programming from your studio will resume.

GPIO Audio Relay

If using the GPIO switching Relay, connect a serial cable from the Player to the Switching Relay. On the Emergency Alerts tab, under Advanced Settings, enable the RS-232 DTR Alert signal.

Visual

Applicable for; over the air TV, Cable TV and digital signage applications. Normal visual content will be displayed. When there is a valid CAP alert, a red scrolling overlay will display the text of message with accompanying audio of the alert. Graphis sent as attachments will display full screen if present.

• Onboard local video with (HDMI\DP\DSUB) where an overlay will be displayed when a valid CAP message is being broadcast.

• GPIO trigger on pin 4 (high) using RS232 DB9 when CAP message is played to switch CATV channel on digital cable head end.

• Configuring ICECAST server to detect new mount point of on demand stream of CAP Alert

Test Alerts

We offer several ways to test and set levels.

Self Generated Test Alerts

To confirm that Alert messages are working correctly, select one of the four sample valid CAP messages:

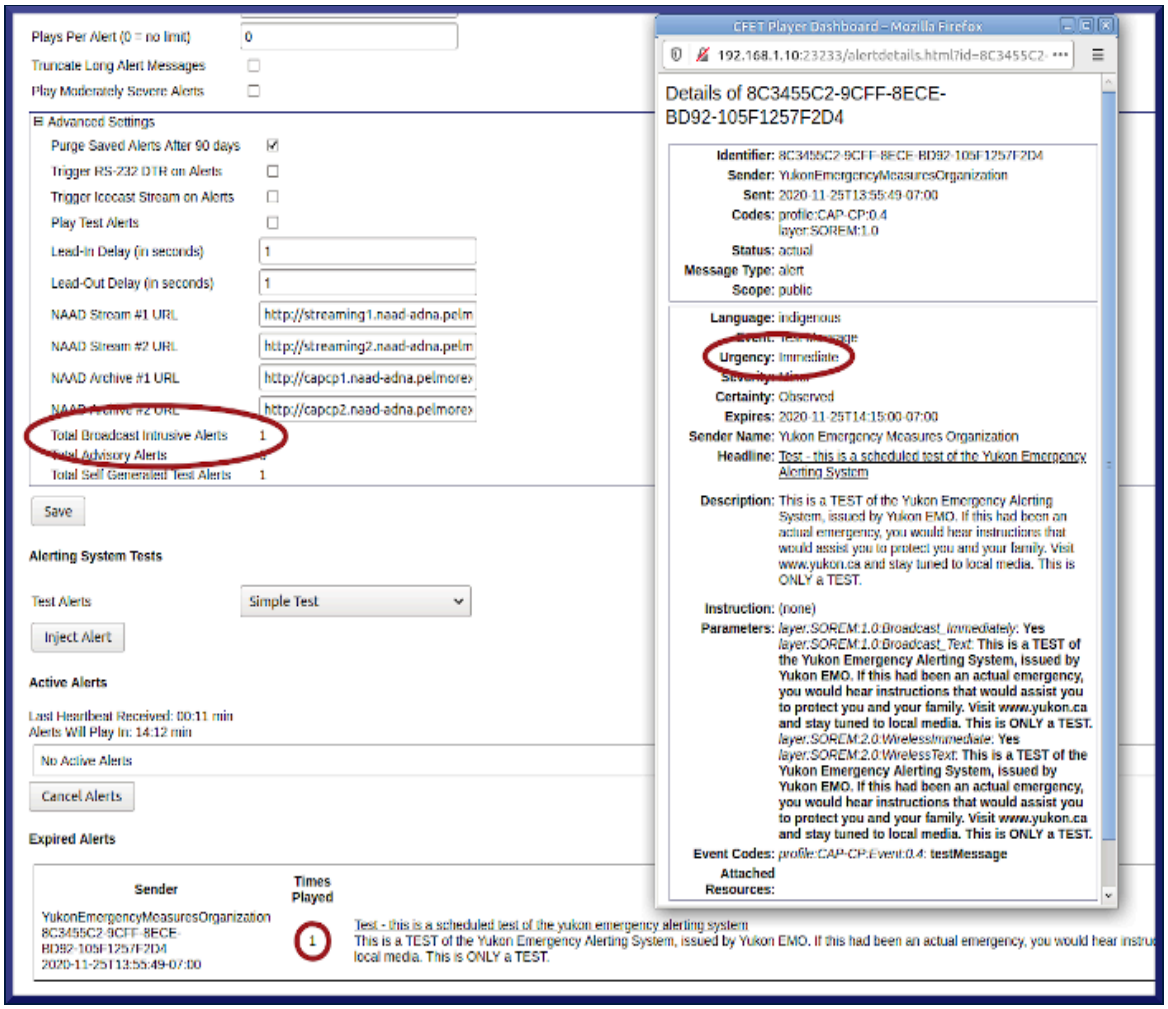
1. Simple Test. Generates an internal CAP formated message and plays using TTS
2. Embedded Audio Test. Generates an internal CAP message and plays a supplied MP3 file instead of TTS.
3. External Audio Test. Generates an internal CAP alert message, fetches and plays a test MP3 file from Pelmorex.
4. Embedded Audio and Image Test. Generates an internal CAP test the displays a JPG image and plays audio recording.
5. Click `Inject` to add the message to the Active Alerts queue; a 20 second countdown begins. If another incoming message is received, the countdown timer is rest at 20 seconds. Once the countdown reaches 0 secs, queued messages will play through the active audio output and can be observed in real time on the player's main `Status Page` displaying the current state of the Player with live display of system events.

Pro Tip Try different text-to-speech voices when testing alerts, before placing on air.

Scheduled Testing

In Canada, national tests are done every 6 months. Contact **Alert Ready (https://www.alertready.ca/)** for more info on scheduled testing.

CFET Player Dashboard
Status
Summary
Admin
Sync/Media
Sources
Outputs
Streaming
Emergency Alerts
Location Map
HTTP(S) Admin
Live Assist
Restart
Fullscreen (N/A)
Show
Audio Stream
Visual Stream
Open Audio Streams...
Logs
Log Level:
Normal
Downloads



Ad Hoc LIVE testing

It is possible to monitor and receive real alerts by entering high level SGC geocodes for provinces (Atlantic Canada=1; Quebec=2; Ontario=3; Prairies=4; British Columbia=5; Northern Canada=6) and test with moderate advisories.

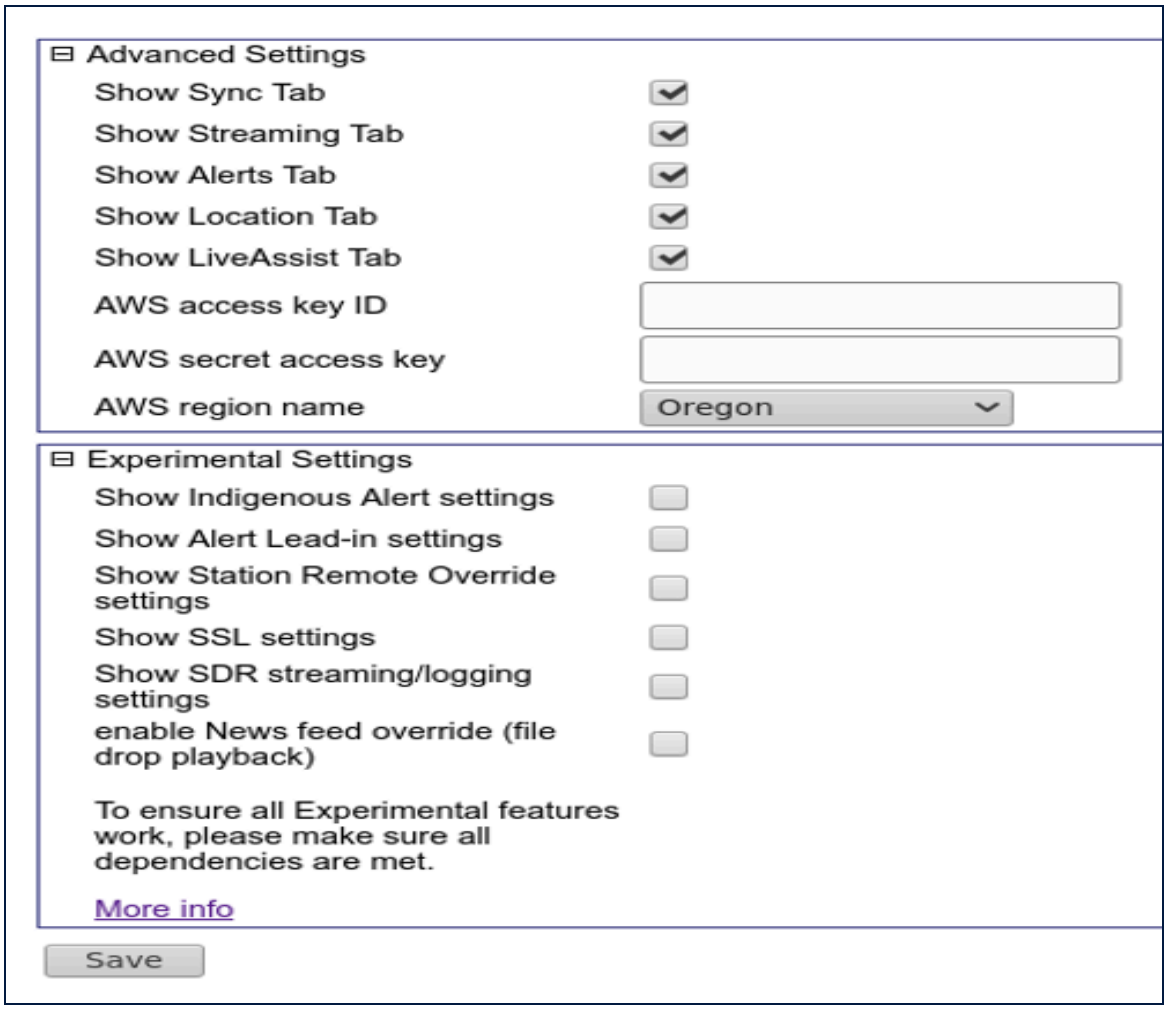
Enable the `Play Moderately Severe Alerts` setting to receive and play additional warning messages.

Set your levels, testing and be sure to reset the Location Geocode back for your specific alerting locale before proceeding to **Production Operation**.

Pro Tip `Admin` Menu has a button to export a text log of all Broadcast Intrusive messages ever played on your alert player

Indigenous Alerts

Experimental Features



Use these at your own risk for experimenting with of new features that are not recommended for production environments. Enable the feature from `Admin` advanced menu and restart player.
More info about experimental features is found **Here (https://support.openbroadcaster.com/experimental)**

Feedback

Find a bug? Want to request a feature? Submit your issue to **OBServer (https://github.com/openbroadcaster/observer/issues/new)** or **OBPlayer (https://github.com/openbroadcaster/obplayer/issues/new)**

Have some Gstreamer, PHP or Python coding skills? Help **Contribute (https://github.com/openbroadcaster/.github/blob/main/docs/CONTRIBUTING.md)** and **Sponsor (https://github.com/sponsors/openbroadcaster)** to make the OpenBroadcaster community even better

We really appreciate your feedback!

OBServer Advisories

No OBServer Security Issues

OBPlayer Advisories

No OBPLayer Security Issues

Open Server Bugs

124 - Double clicking media item, show details or editing PL, loses the work in progress.

Open Player Bugs

147 - Live Assist playlist can cause dead air when no host intervenes
127 - LA Cannot Advance up, stuck at Break Point
126 - LA Missing > indicator after pressing Hot Button
16 - LA not switching to Fall Back Media

Made by Openbroadcaster.

With ❤ from Friends of Cake

Media and Management Server

- Getting Around
  - Profile and Account
  - Language
  - Accessibly Themes
- Media
  - Media Formats
  - Metadata
  - Uploading
  - Edit and Update
  - Bulk Edit
  - Media Settings
  - View Details
  - View Versions

    - **Language and Country**
    - **Media Field Settings**
- **Search**
    - **Advanced Searches**
    - **Saved Searches**
    - **Default Search View**
- **Playlists**
    - **Types of PlayLists**
    - **Create Playlist**
    - **Edit Playlist**
    - **Dynamic Segment**
    - **Default Play List (DPL)**
    - **View Details**
- **Schedules**
    - **Media and Shows**
    - **Scheduling Permissions**
    - **User Time Slots**
    - **Priority Announcements**
    - **Scheduling Line In**
- **User Management**
    - **New User Sign up**
    - **User List**
    - **Permissions**
    - **Create Group**
- **Player Management**
    - **New Player**
    - **Connection Messages**
    - **Cloning Playout Devices as Parent and Child**
- **Logging and Monitoring**
- **Modules**
- **Client Settings**

Getting Around

The main screen comprises three areas: a center ‘work’ area, media sidebar, and a menu panel.

The **centre work area** is the main window workspace. This is where users can create play lists, add and edit media, schedule shows, update system settings, install modules and manage users. In the example above, a *Schedule* is loaded into the main window workspace.

To the right of the center 'work' area is the **sidebar** , comprising two tabs, `Media` and `Playlists` , as well as a `Preview` window. Users can toggle between tabs and perform dynamic searches to filter a list of items based on a metadata query. One or more items from the list may be selected. Actions triggered by clicking on buttons below the list operate on selected items. Additional functions are available by right clicking on items in the list. To preview items (any supported media including audio, image or video), simply drag and drop any media into the `Preview` window above the sidebar tabs. At the bottom of the sidebar, the number of items in the (filtered) list is shown.

Along the bottom of the screen is the **menu panel**. Depending on user permissions some menus will remain hidden.

Profile and Account

Login to the [OpenBroadcaster Server] application as the `admin` user (default password is ‘admin’)

Here you are able to custom tailor your session. Using the `account` menu to access the `admin` account settings. Some of the things you can change on a per user basis.

1. Change your display name
2. Update password
3. Set `Email`
4. Set the number of search results to display in media sidebar
5. Select a `Theme`
6. Enable Dyslexic Font making it easier to read and comprehend for some users
7. `Sidebar Display` to appear from Left or Right

Language

User menus, form fields and system messages are displayed in English by default. Available language options are displayed in a dropdown menu. These settings are **not** system-wide. Each user may choose their own language settings. Select the desired language of menus, help and tool tips.

Save and refresh browser.

Accessibly Themes

Background/foreground color and font options are designed to enhance accessibility of the interface using bright/dark contrast settings or using dyslexia friendly fonts. These settings are **not** system-wide. Each user may choose their own theme and font settings.

Select desired `Themes` ranging from high contrast, light\dark backgrounds. Tanzanite is the Default theme.

Save and refresh refresh your browser to take effect.

Media

OpenBroadcaster allows media of different types (audio, video, images) to be managed within a single catalogue or media library. Using radio buttons admins can select which formats the system will accept and recognize. If media is tried to be uploaded that isn't supported, then it will not be allowed to be added to the library. Files are screened a number of ways for authenticity including MD5 checksum. Renaming a text file to *.mp3 will not be accepted.

The `MY` button when selected filters to only show media created and uploaded by user.

Media Formats

Compatible media codecs and containers are listed below:

Format	Description	File extension
Audio Formats		
FLAC	Free lossless audio codec	.flac
MP3	MPEG-1 Layer-3 Audio ☼	.mp3
MP4	MPEG-4 Audio ☼	.mp4
Ogg Vorbis	Ogg Container Format	.ogg
WAV	Waveform Audio	.wav
Video Formats		
AVI	Audio Video Interleave, Container Format	.avi
MOV	Apple Quicktime ☼	.mov
MPEG	Moving Picture Experts Group ☼	.mpg

Format	Description	File extension
Ogg Video	Ogg Container Format	.ogv
WMV	Windows Media Video ☼	.wmv

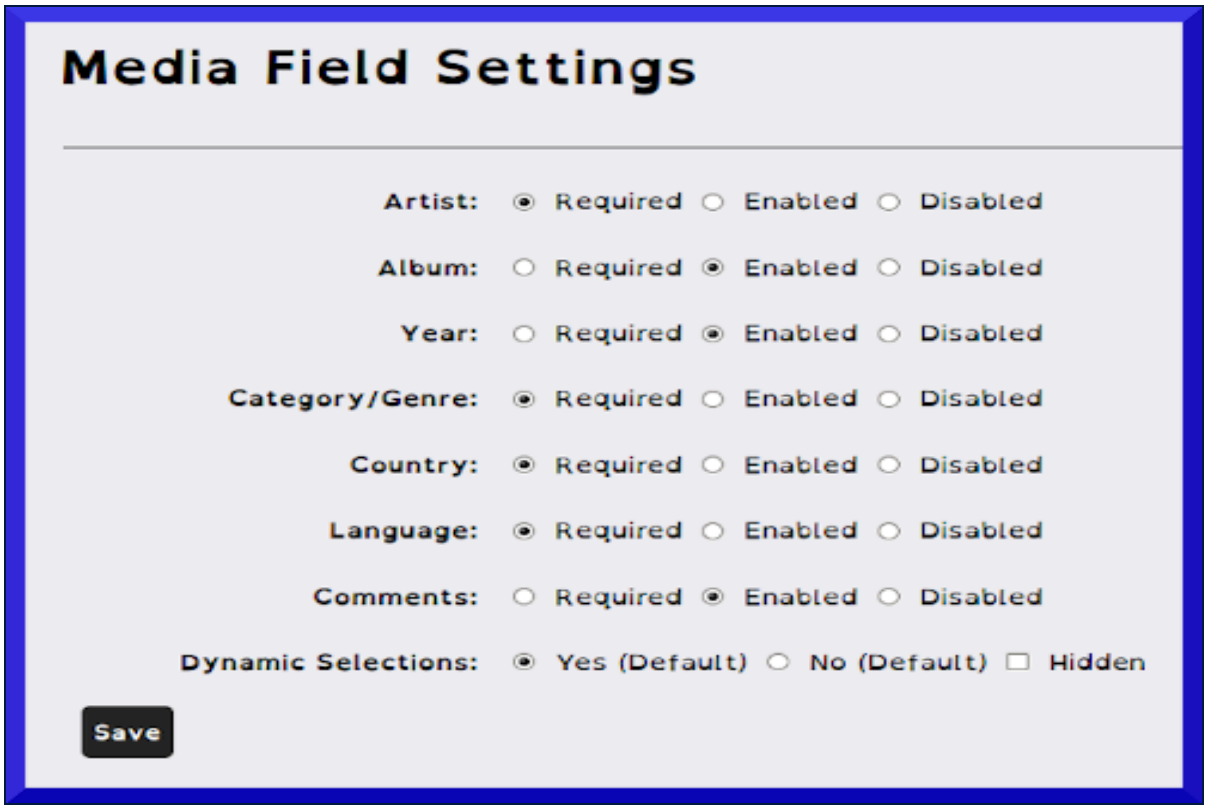
Image Formats

JPEG	Joint Photographic Experts Group	.jpg
PNG	Portable Network Graphics	.png
SVG	Scalable Vector Graphics	.svg

☼ Non-Free Proprietary - Licence Required

The System Administrator may choose to restrict uploads to a subset of the compatible formats.

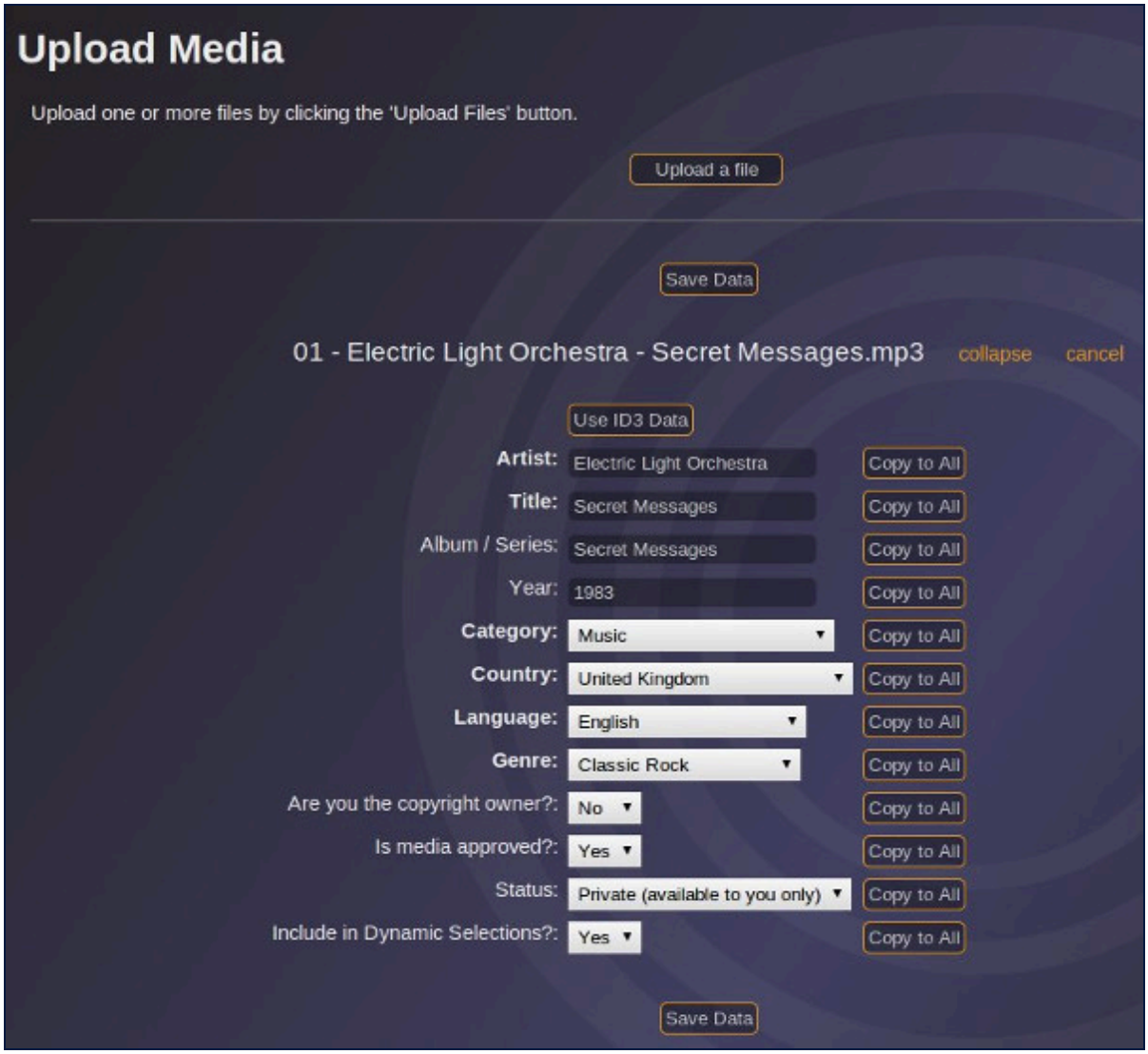
Global default media fields and behaviour.



Complete list of Codecs and Containers

Audio
Video

Metadata

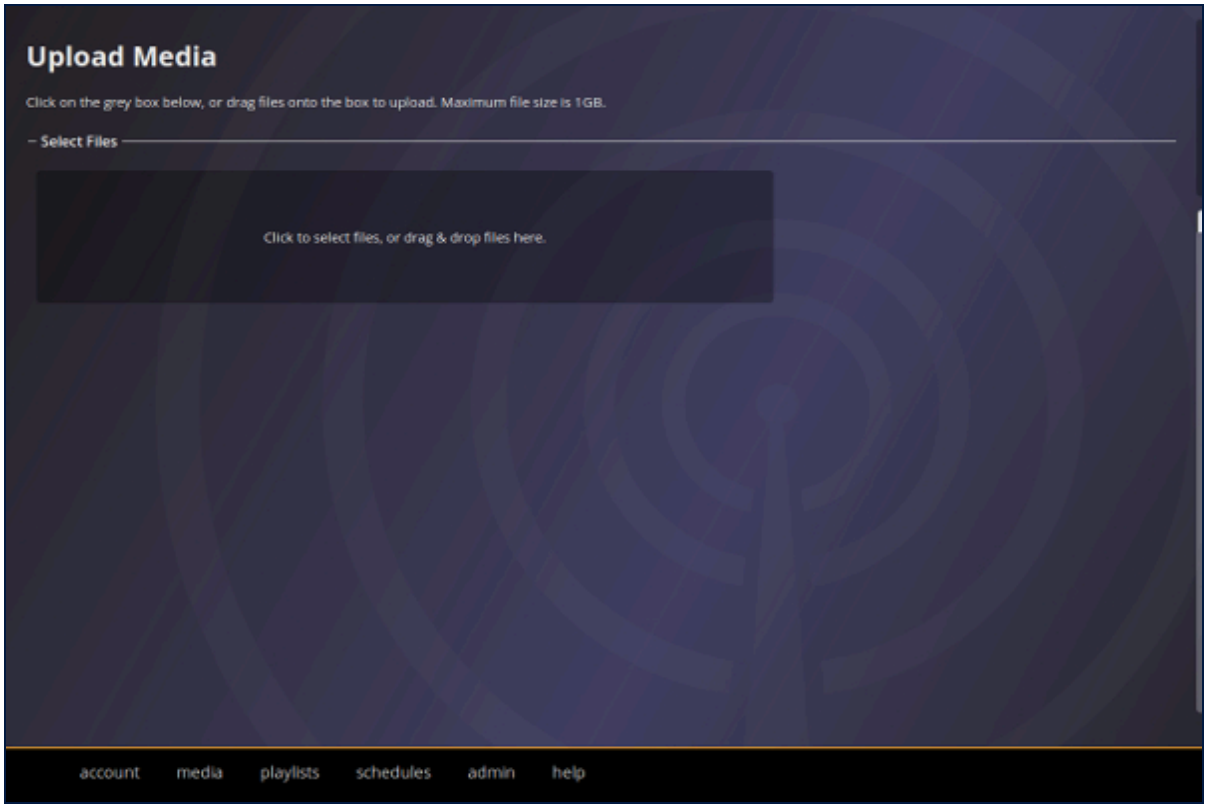


If available, ID3 data are automatically entered into the upload form, otherwise, enter the **Artist** , **Title** , along with other known metadata for each file. For metadata common to all items, the `Copy to All` button may be used to facilitate data entry. Use the **Category** item to facilitate use of Station ID or Priority Broadcasts messages in **Playlists**.

Depending on permissions, user may or may not be able to set the *is media approved* flag. If not then the media will remain in an 'awaiting approval' queue until the Moderator approves it for inclusion in the music library. A *Status* of 'Public' will allow others to include the selection in their own Playlists. Private media will not be available for other users to browse. *Dynamic Selection* should be enabled for media such as music and station IDs, so that these items are accessible as Dynamic Playlist selections.

Once metadata have been entered, `Save` the items in the queue to add them the library. Incompatible file formats are flagged, and will not be processed in the upload queue.

Uploading



New Media may be added to the library using the media uploader, accessed from the **media** menu.

Drag and drop one or more media files to the uploader, or click within the shaded box to open a file selection window. Each file is uploaded in sequence, and added to a queue. Progress of the current upload is displayed alongside the filename.

Pro Tip Max Limit set to 1GB _(may be increased)

Edit and Update

Select media from sidebar. Either click `Edit` or right click `Edit` Media info may be edited.

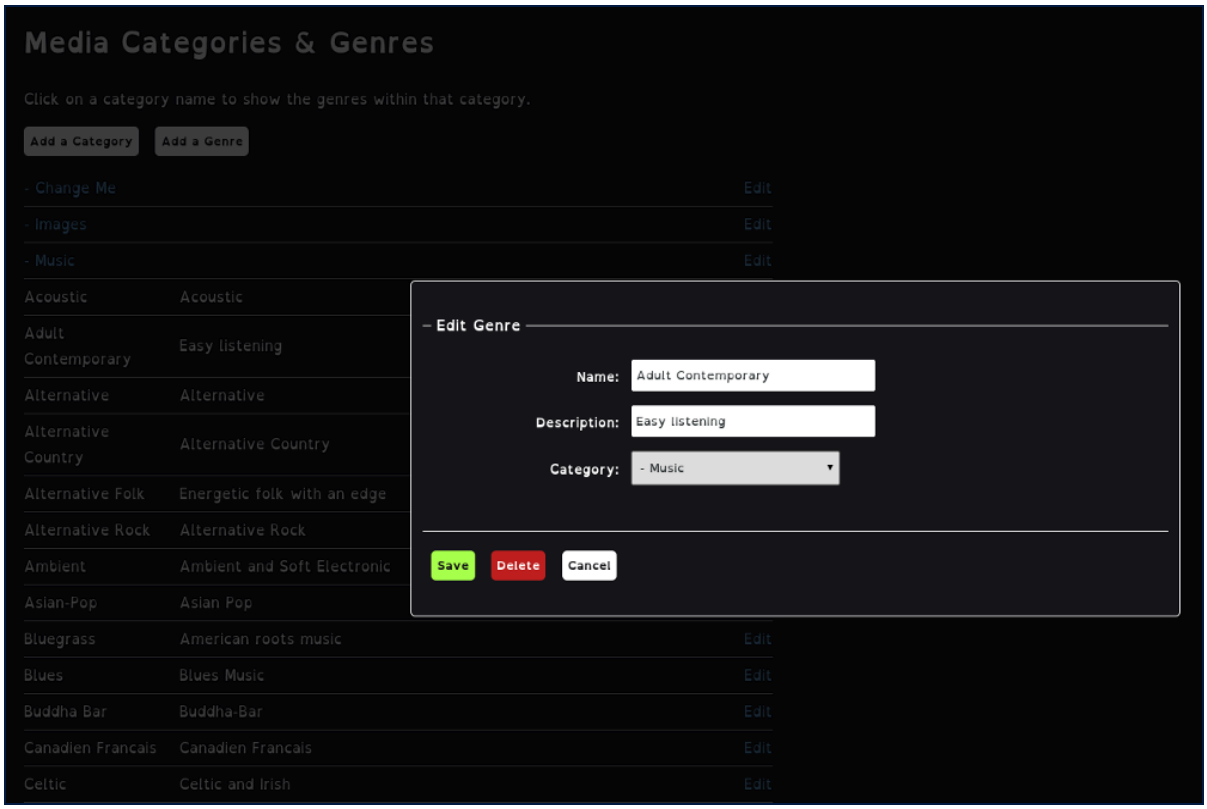
Bulk Edit

Batch Processing

1. Selecting multiple Media items (CTRL + Click, Click + Shift) and Click
2. Click `Edit` from media sidebar. Opens all selected media.
3. Use `Copy All` icon beside the field you wish to copy to all.

Media Settings

Categories and Genres



Create and edit unlimited categories and associated genres of media. e.g. Audio-Inuktitut, Images-Unicorns, Video-28mmPathe

Each `Category` and `Genre` can be specificied as default

View Details

From the `Media Sidebar` , hightlight, right click (double click) and select `Details` to find out where the PL is used, who created it and when it was last modified.

Displays info This is where the

- Who uploaded and when
- `Media ID` can be found including usage of media
- Where it is being used

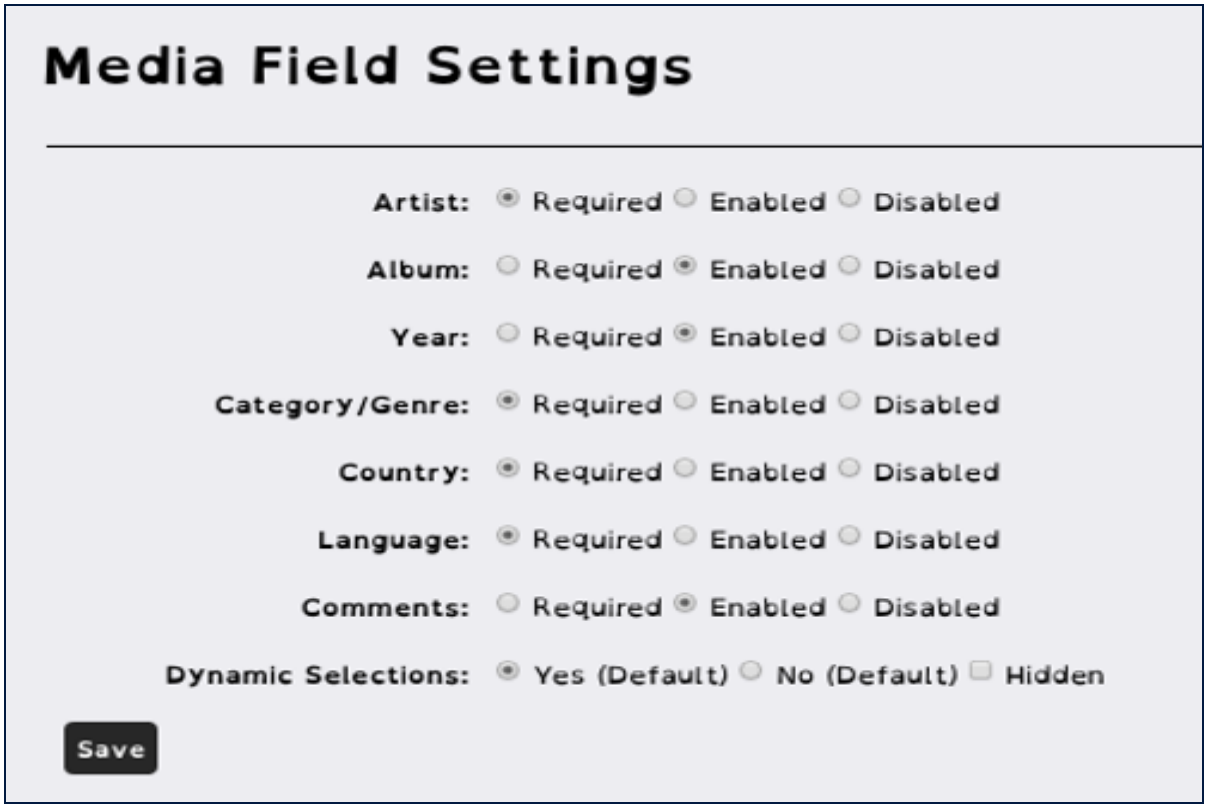
View Versions

Update media by adding a new version.

Language and Country

Use drop down menus to select applicable `Language` and `Country`

Media Field Settings



Default Settings and mandatory fields can be applied globally

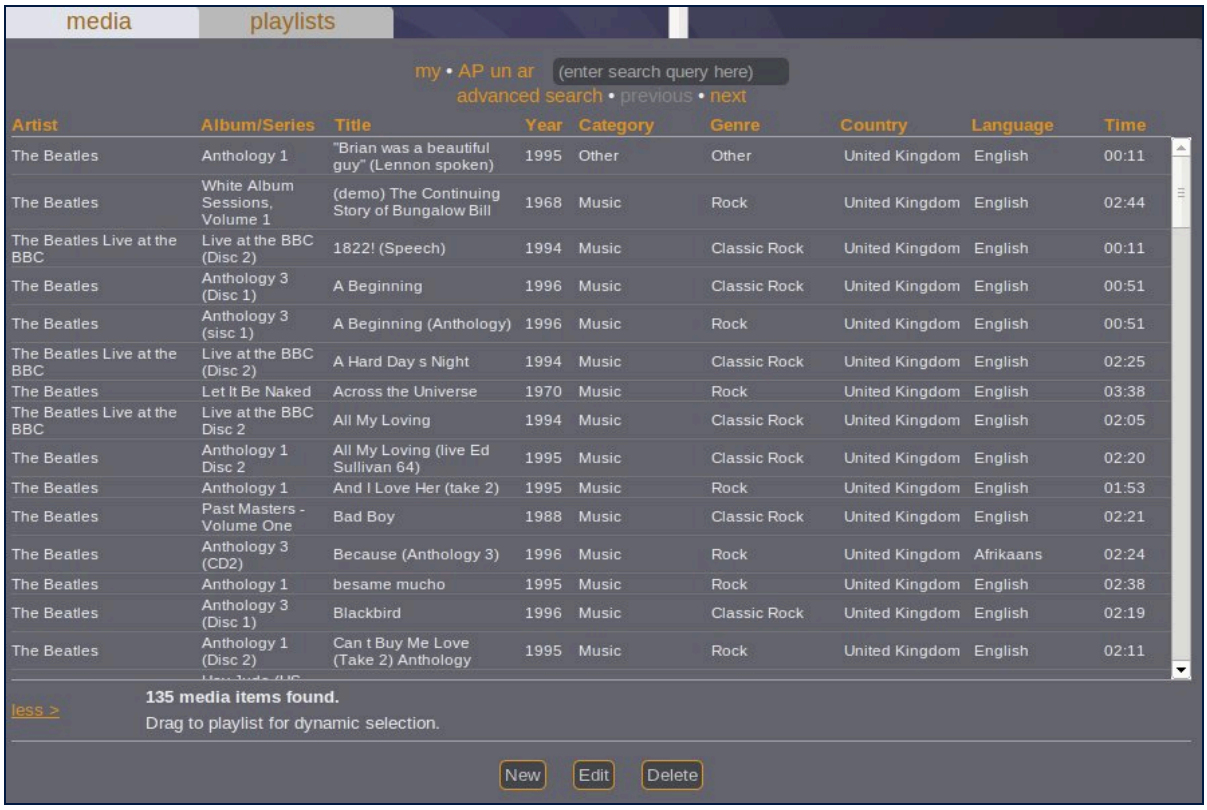
Search

Sidebar tabs used to search the media library or Playlist catalogue. Items are filtered to displayed only items to which the current user has permission, those which are marked as approved(`ap`), or further restricted to include only those media owned(`my`) by that user. With additional privileges, searches may also be conducted on archived(`ar`) or unapproved(`un`) media. Deleted media items go into a special directory called Archive. Authorized users are able to go into this archive, purge delete the actual media from the file system, or restore the media back to the library. The active filter is indicated by the use of uppercase notation (e.g. `AP`).

Simple search mode, users enter terms (i.e. a word or phrase) in the query window, application returns all media with title or artist containing those terms, or PlayLists with matching name/description. Click simple to clear or clear test and press enter

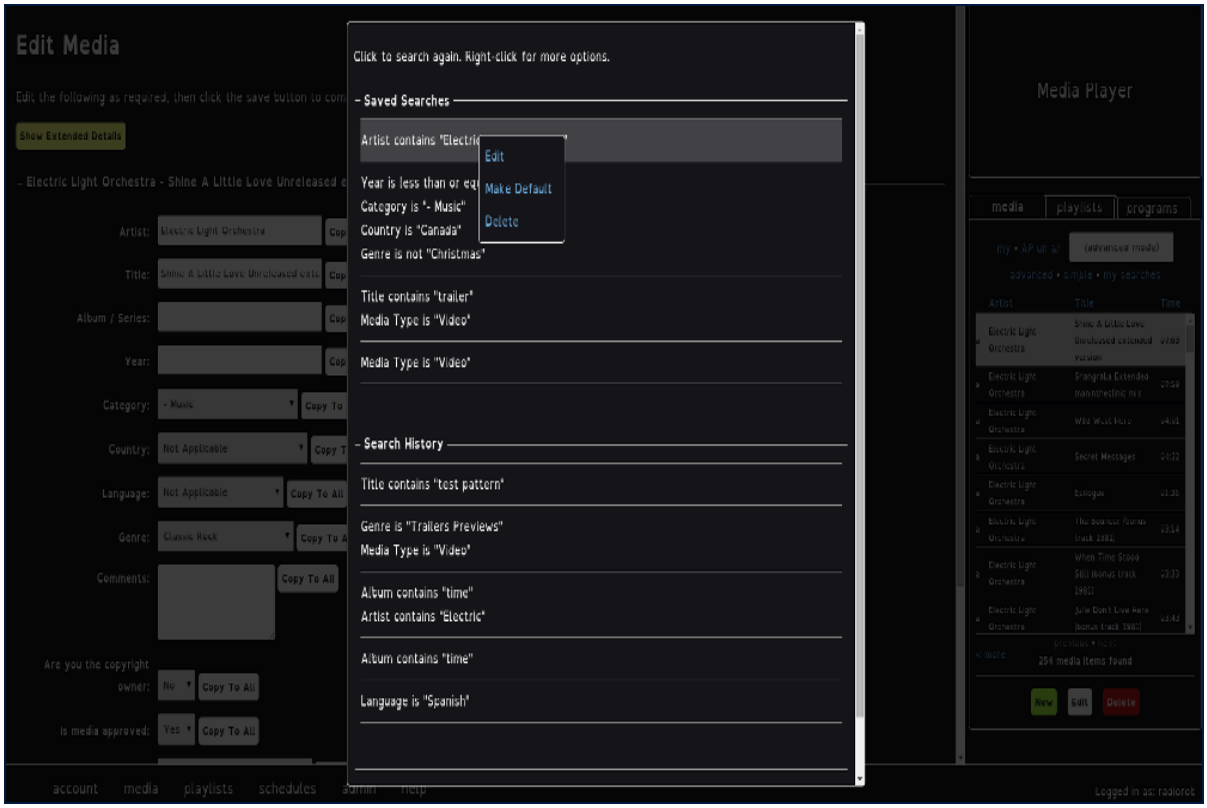
Advanced Searches

Advanced search mode, users combine search criteria to query and filter large libraries. Query fields and search terms may be specified and added to a list of search criteria.



Once a search is conducted, items matching all listed criteria will be returned and the number of results is displayed at the bottom of the search tab. Further sorting or returns can be done by clicking on the headers of columns on the list to display in “Ascending\Descending” order. To clear the search results, clear the search window and press enter. Use the previous and next buttons to display the next page of results. The number of results to display per page may be set in the user profile settings. Select and reload previous search results using `my searches` .

Saved Searches



Search history results are recalled and used edited again for personalized results.

Default Search View

May be saved and one can be set as default. When a default search is set, results will be displayed when logging into your profile.

Pro Tip Remembers the last search result queries to be modified or save

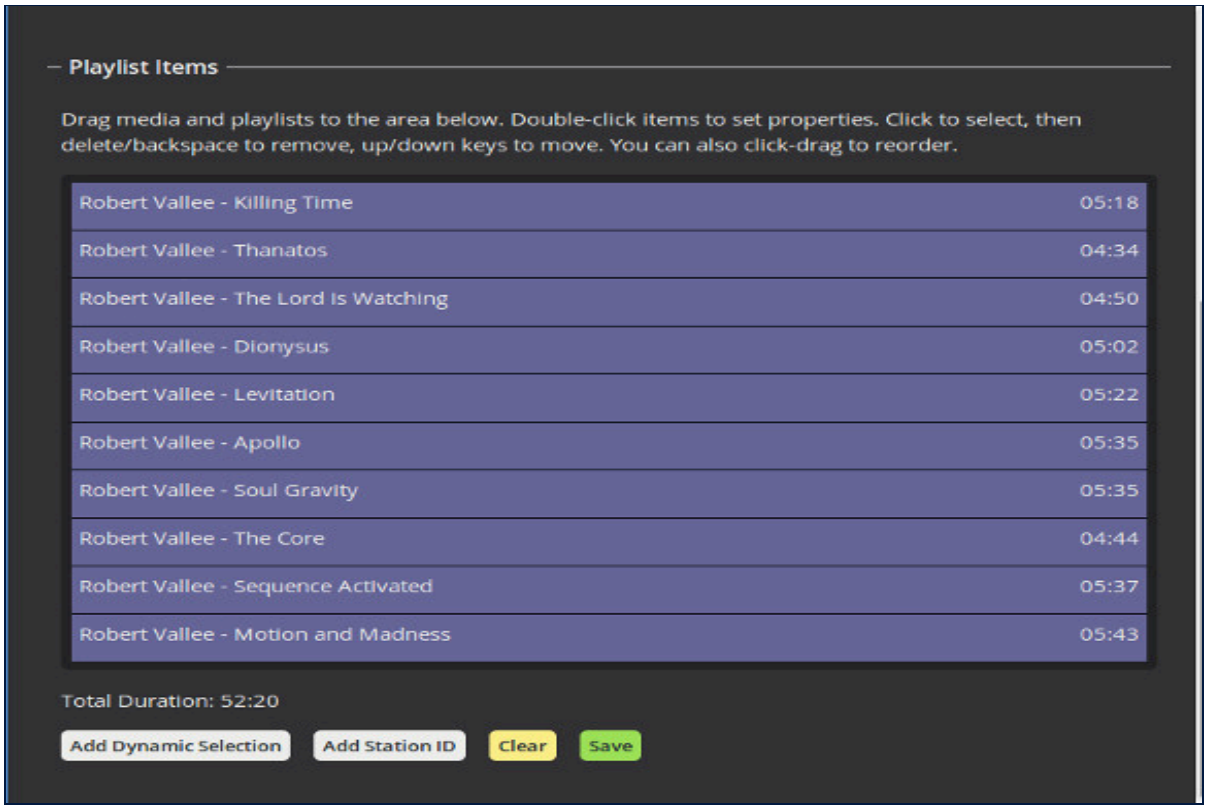
Playlists

A **Playlist** groups selections from the media library for scheduled or recurring broadcast and may contain individual media selections or combinations of media may be combined in PlayLists. Buttons along bottom `Add Dynamic Selection` and `Station ID` add functionality.

The `MY` button when selected filters to only show Play Lists created and managed by user.

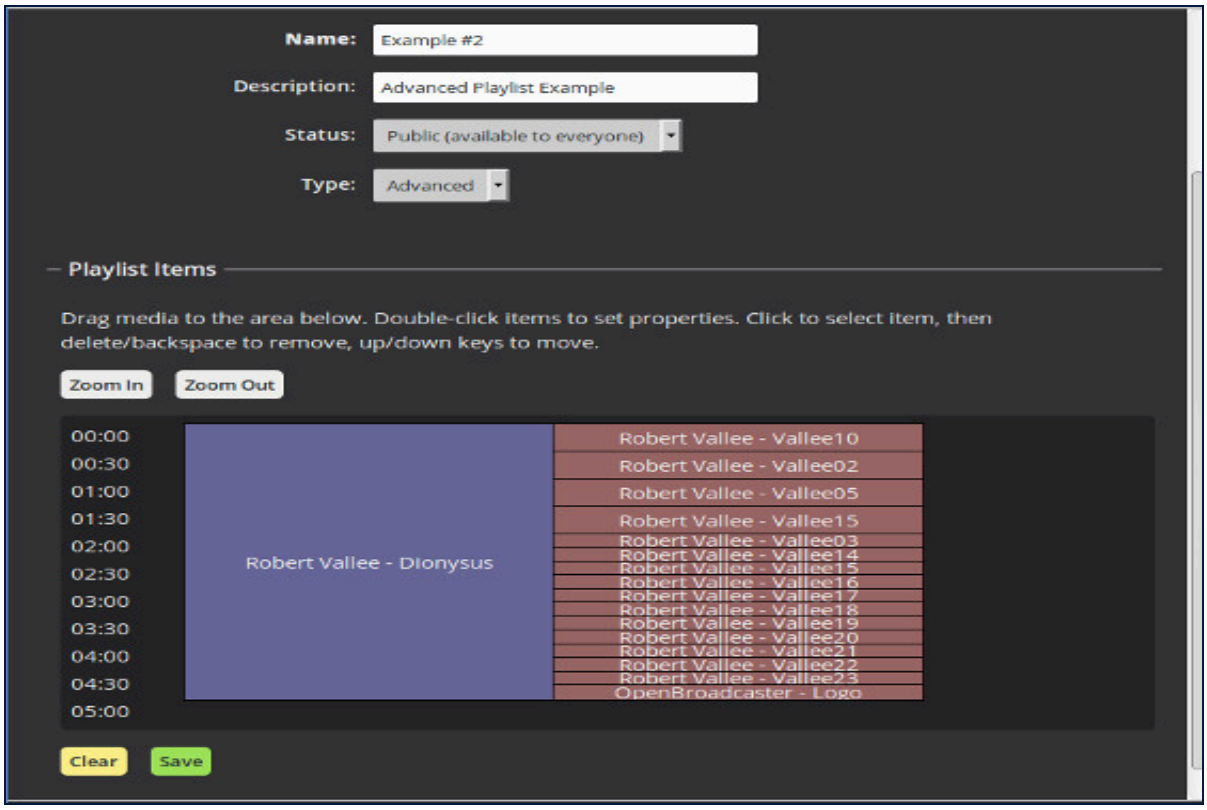
Types of PlayLists

Standard_Playlist



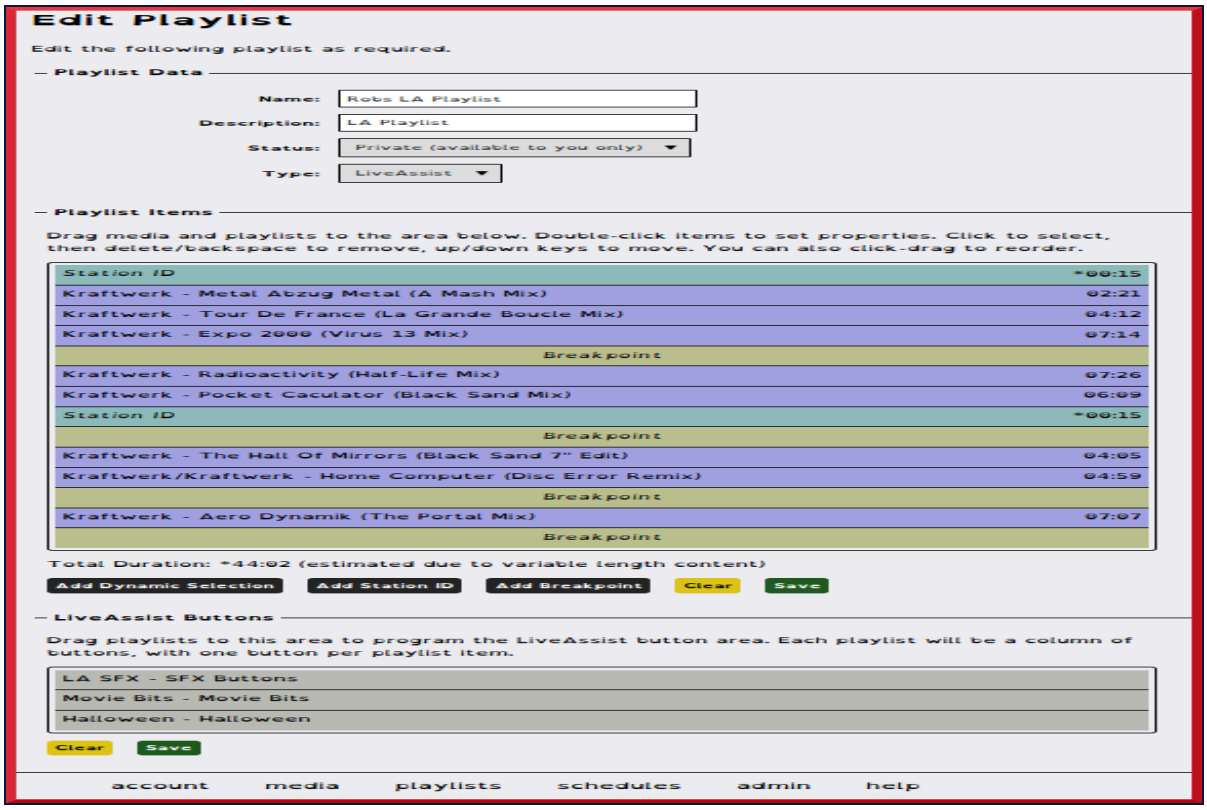
A basic Playlist that you can add `media` , `dynamic segments` and `station IDs` Playlist(s) may be searched, saved and edited later.

Advanced Playlist



Mixes Image slide show with accompanying Audio. Cuts into Video section. Audio and image data may be played simultaneously. Image media will be added to the list on the right of the Playlist items, audio tracks on the left. `zoom in/zoom out` on the schedule of Playlist items to increase the resolution of the time scale. To create an Advanced Playlist containing `Dynamic Selections`, first create a **Standard** Playlist containing Dynamic Selections, then add that Playlist to the Advanced Playlist.

LIVE Assist Playlist



Used with LA Touch screen interface and hot button Player. Special Playlist that contains break points and button player. Accepts incoming live RTP Streams

Runs on a touch screen computer for LIVE Radio operation accepting incoming audio streams.

See **LIVE Assist QuickStart (/live-assist)**

Create Playlist

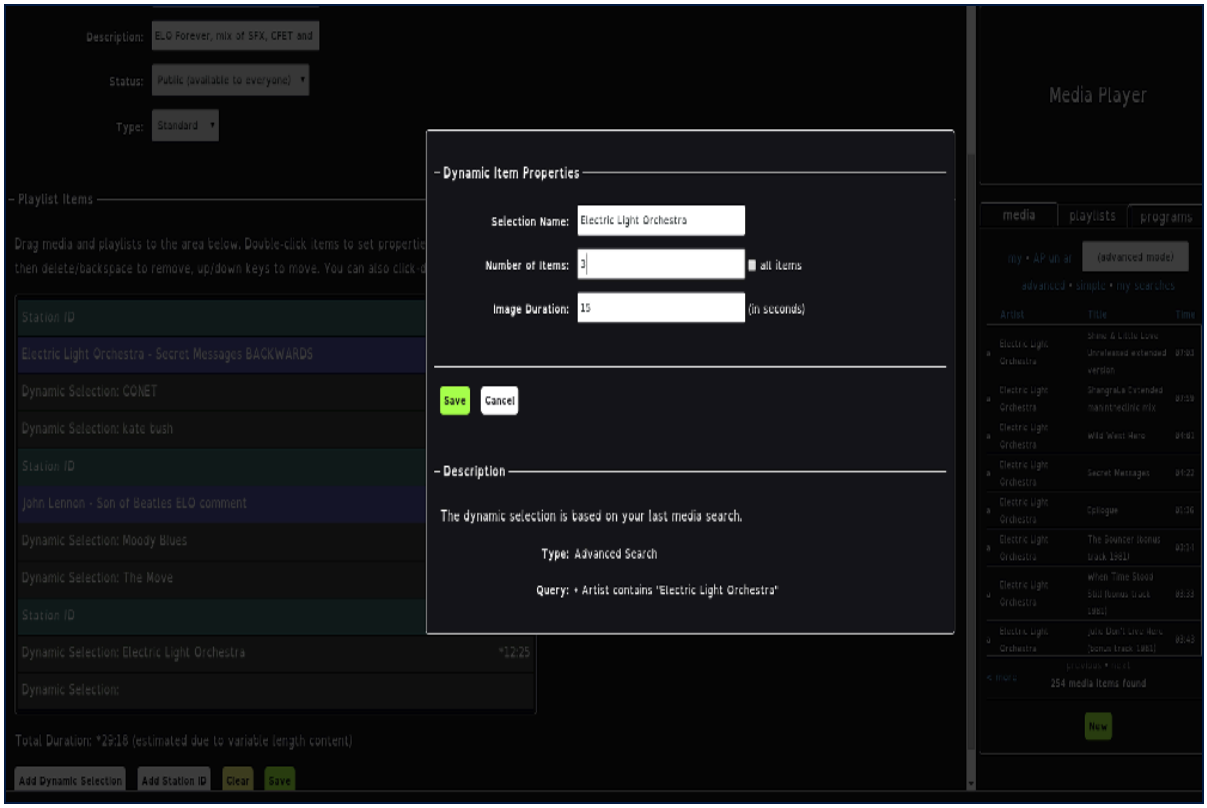
Using the `playlist->new playlist` menu option:

1. Provide a `Name` and `Description` for the Playlist so it can be easily identified.
2. Give your Playlist a `Status` of **public** so other users can use your Playlist in their PlayLists and schedules (private PlayLists are only available to their owners).
3. Drag items from the media sidebar search results for media to the drop zone in the **centre work area**
4. Click Save

Edit Playlist

To Edit, Select Playlist and click `Edit` or right click, `Edit`

Dynamic Segment



Plays a specified number of media as a segment. Once a dynamic section is setup, additional media items added later that match the search filters will automatically be included as items to play.

1. Use a search to generate dynamic selections for a specified time segment. eg. Filter media on the right to show **The Beatles**
2. Edit or create new Playlist.
3. At bottom of PL, click Add Dynamic Segments
4. Set number of `Dynamic Selections` to be drawn from the last search of the media library.

In image below we have set 3 items to play out of a search results of 254 items. Automatically estimates the time of this segment.

`Station ID` Button adds a special segment that automatically inserts Station IDs assigned to the specific player. This will play a `Station ID` into the Play List when it plays in a different station. EG CFET Station IDs will play on CFET and the same Play List will play CJHJ Station IDs when it plays on CJHJ. Split Feed programming.

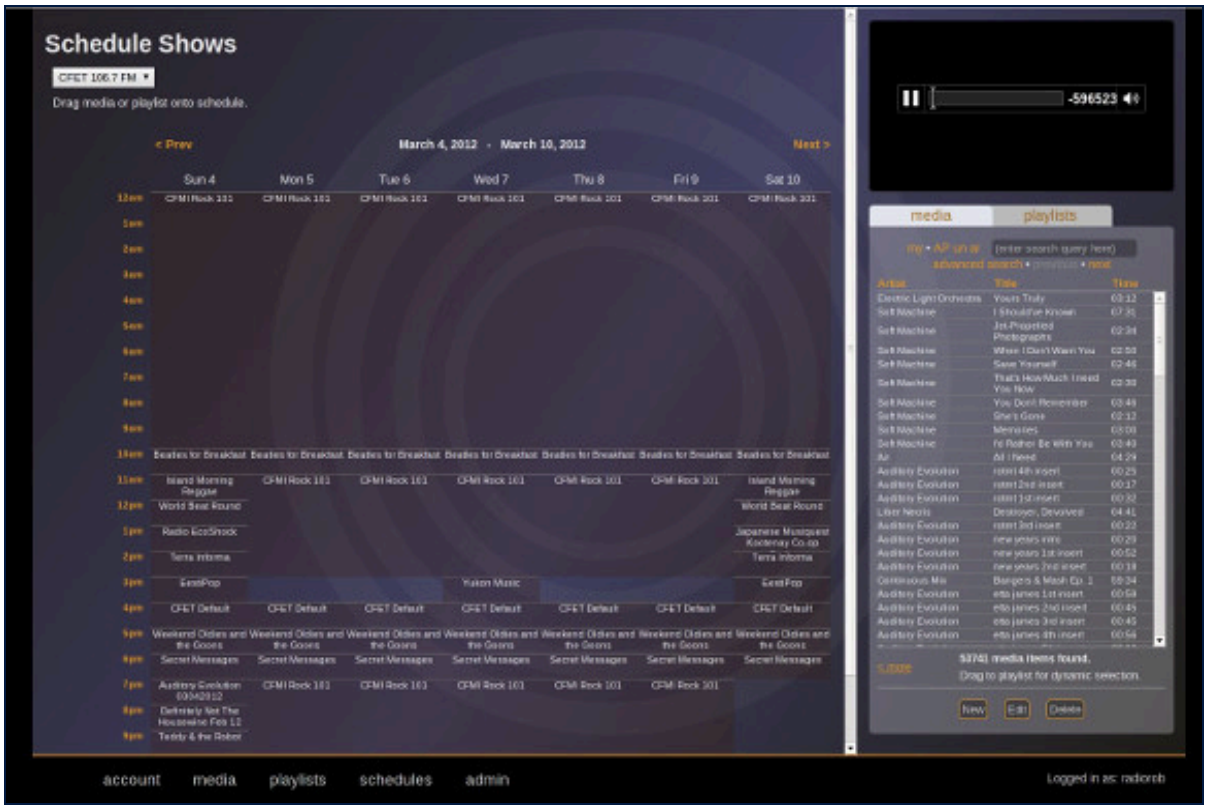
Default Play List (DPL)

This Playlist is assigned to the `Player` to fill in when there is nothing scheduled.

View Details

From the Playlist sidebar, right click and select `Details` to find out where the PL is used, who created it and when it was last modified.

Schedules



Server schedule grid portrays a week of programming, with shaded, titled blocks indicating the content spanning those dedicated timeslots. Hover the cursor over a program block to view a summary of the scheduled show. Double-clicking a block accesses Show editor, if the current user's permissions allow this.

Media and Shows

Schedule a single piece of media or a Playlist (Show) or External Line IN Audio source.

Duration is automatically calculated for individual media tracks and estimated for `dynamic segments`.

DPL (Default Play List) assigned to that Player automatically starts to avoid dead air filling gaps with dynamic music segments. eg. 60 minute slot containing 50 minutes of programming, DPL will fill to top of the hour for next Time slot.

Flexible methods to schedule media and shows listed in ease of task.

1. Create and assign a DPL to player
2. Upload media. Drag to schedule and set to play in a time slot.
3. Select uploaded media and drag into an existing scheduled Playlist.

Note _CAP Emergency Alerts automatically override all schedules, currently playing media and internal Priority Announcements. _

The date/time of timeslots available for scheduling by any user are based on group permissions associated with that users profile. Permissions are managed by the `Administrator` group, although this may be delegated to another group. Only one Player may be scheduled at a time, although a Player may act as `Parent` to one or more players for scheduling. See **Advanced Scheduling**.

Open the schedule grid using the `schedules->schedule shows` menu option:

1. Select the Player you have permission to schedule for.
2. Move the schedule grid to the desired week, using `<Prev` and `Next>` navigation aids.
3. Display the Playlist Tab in the sidebar.
4. Drag a Playlist from the sidebar onto the schedule.
5. Select from the available timeslots. Start time/date and duration are fixed to the time slot.
6. **Save** .

If the new show conflicts with any scheduled show, an error will be displayed and the new show will not be saved. Review the schedule. Look for an open time slot, advancing to the following week(s) if necessary.

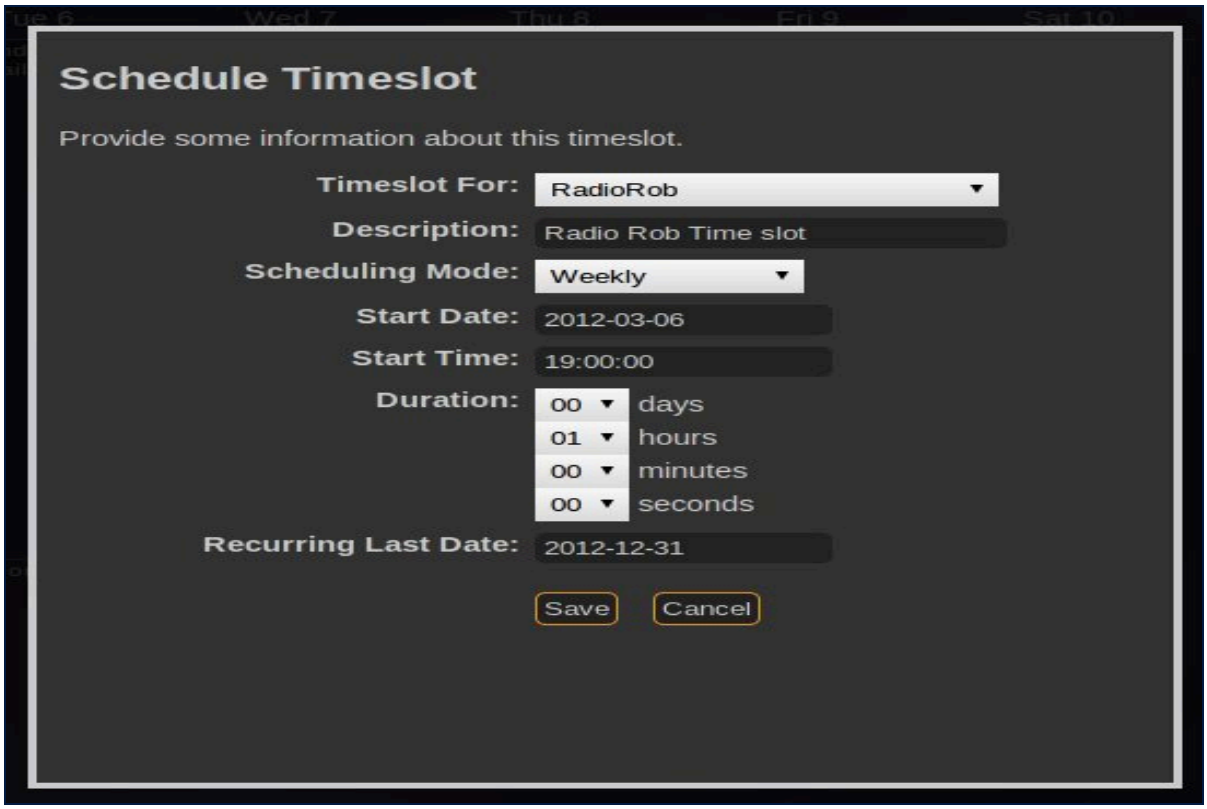
Shows must be scheduled with adequate lead-time in order to be synchronized with a Player for broadcast. Allow at least **30 minutes lead time** to ensure scheduled media can be uploaded to the Player before show time. Sufficient lead time is required to account for `Show Lockout Time` on the destination Player.

Scheduling Permissions

User with advance permissions can drag Media, Playlist or a Program and override basic users time-slots. If a slot is already scheduled, advanced user can remove or edit spots they are trying to program.

Advance users can have access to many options including, start and stop of time and date, duration. Scheduling Mode is available with options for daily, weekly, monthly as well as every x, day, week month

User Time Slots

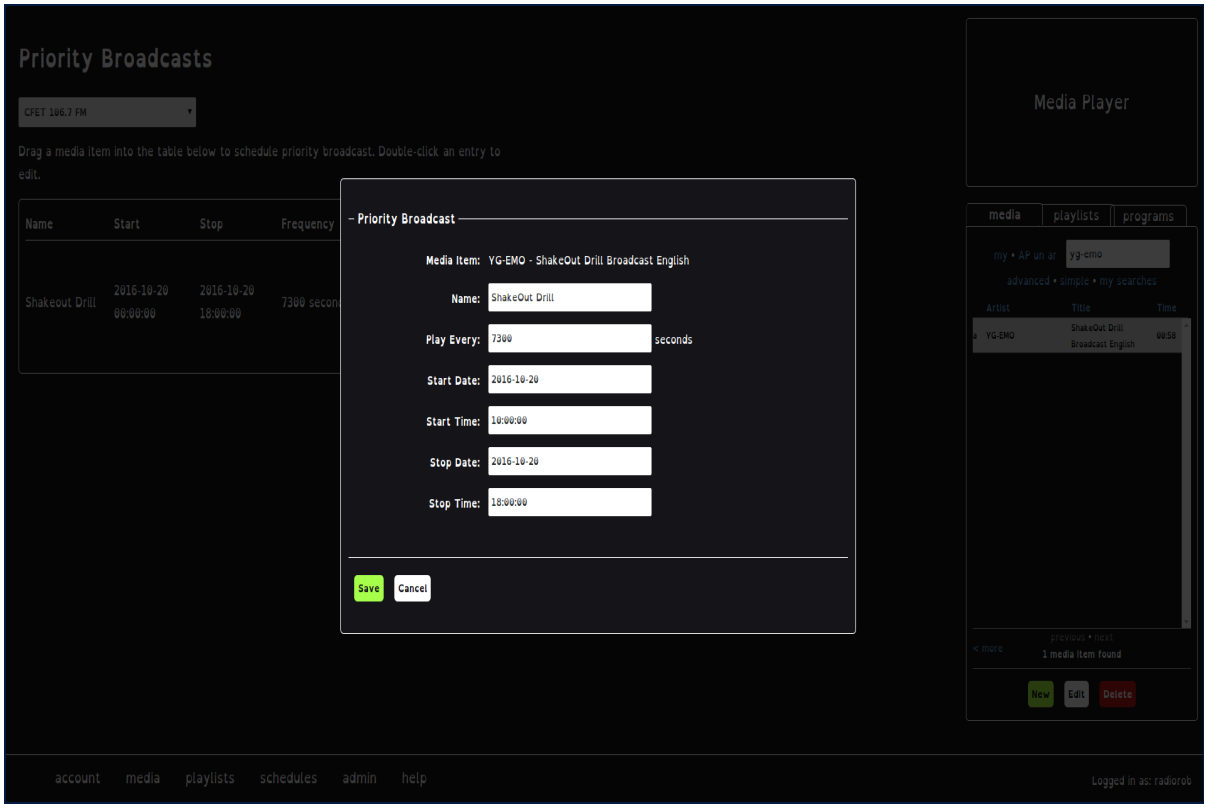


Create Time Slots and Assign Users

1. Double click on screen and a menu will pop up
2. Select user to assign from the drop down menu. This will display a list of all registered and active users.
3. Select the event mode; Single, Daily, Weekly, Monthly or every x, day, week or month
4. Select the start day (default is current date) and the time(s) when user can program a content time slot
5. Set duration. In this example the time-slot is one hour and it can be any duration. Time Slot cannot conflict with an existing time-slot.

In the event that a user is assigned a time-slot that is not utilized or does not contain any media or Play list containing media the DPL (Default Play List) assigned to that Player will automatically start to avoid dead air

Priority Announcements



Priority Announcements will start with minimal delay as specified in OBPlayer Dashboard how often to sync for priority messages. Priority Announcement function to play every N seconds. Set start and stop dates. Use sparingly. Only 1 Priority Announcement may run simultaneous per player. Selecting the default time of 00:00:00 for 3PM will start the broadcast immediately. In order to access this feature the user must have the required permissions and time must be authorized for the media to arrive at the Player in order to play.

1. Begin by selecting the Player where the Priority Announcement is to be scheduled. Drag and drop a single media from the media window. A menu will pop up asking for information.
2. Give the Priority Announcement a name.
3. Enter in the frequency of the broadcast in seconds

eg 600 sec = 5 minutes.

1. Enter in start/stop times and date range with pop up calendar
2. Click Save

Scheduling Line In

When enabled in `Player Manager` a `Line-In` button appears in top right of scheduler. Drag `Schedule Line-In` onto schedule. What ever is plugged into the Line-in of local machine running OBPlayer will be passed through. Example source is a satellite audio receiver.

CAP Emergency messaging will over ride this source, play the announcement and resume normal programming.

User Management

New User Sign up

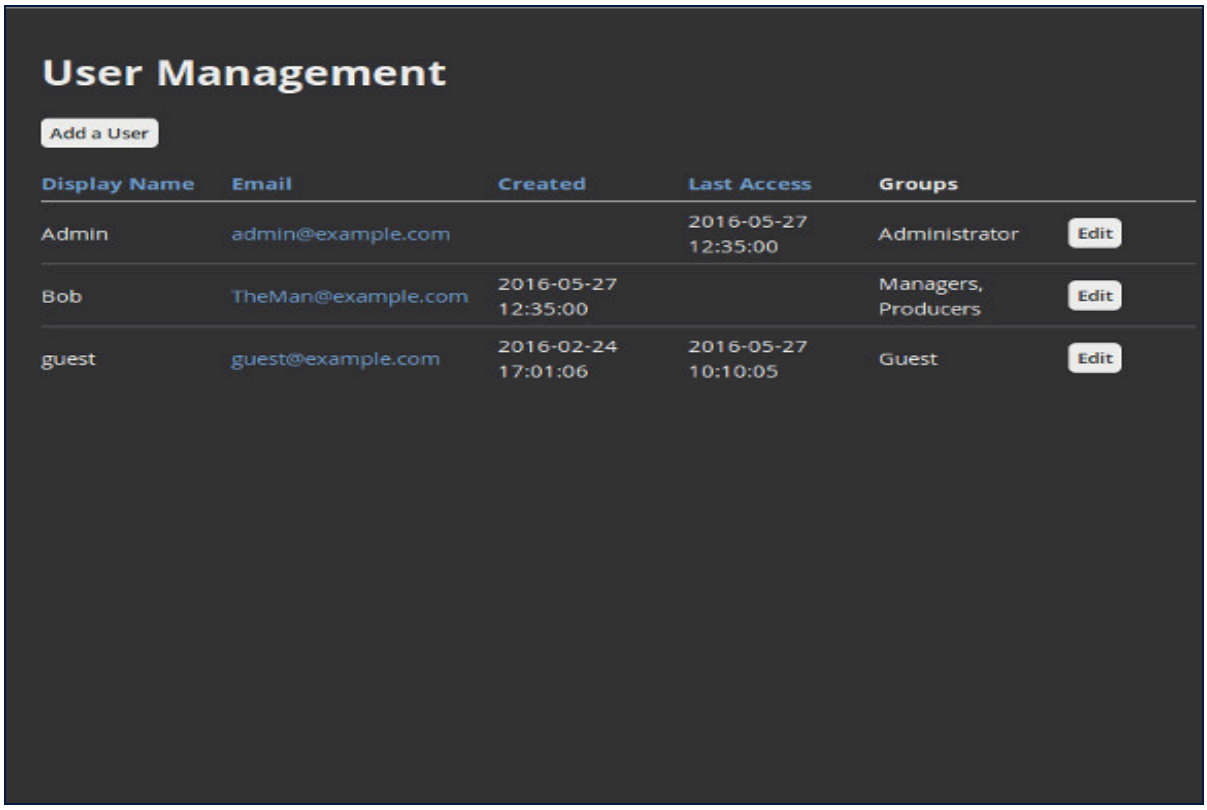
Users may create an account from a link on the Welcome page. This may also be disable if you do not want public to sign up for new accounts in `User Admin` .

Only one registration is allowed at any given email address. Users are notified of a new, random password by email, upon registration or when a password reminder is requested. Once a user has registered, a notice is sent to the **Administrator** . Until a user is assigned to a group, they are limited to read only browse/preview of the media library.

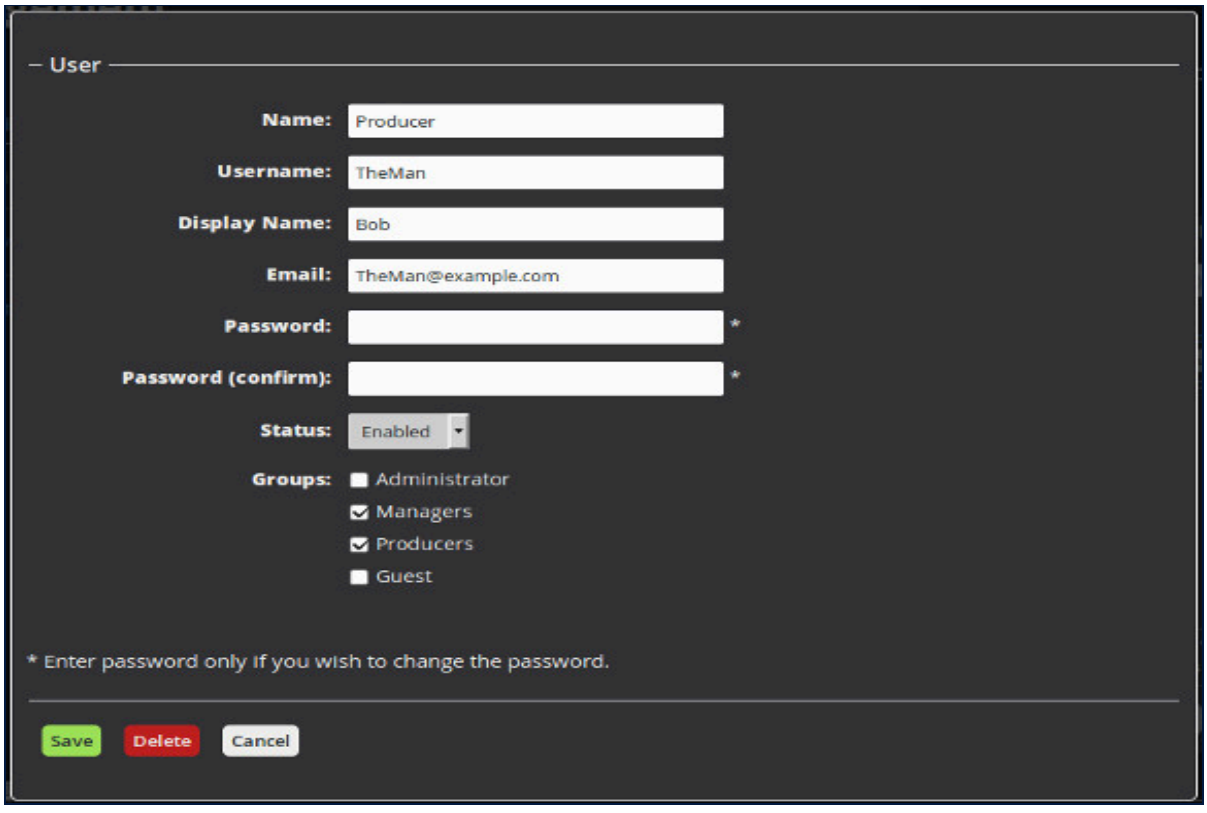
The `admin` user has access to all media, playlists and schedules. As new users are added, they are assigned to a group with the appropriate set of permissions. For example, a `guest` user may browse, but not add/edit/delete items in the media library.

Admin can disable new user sign up.

User List



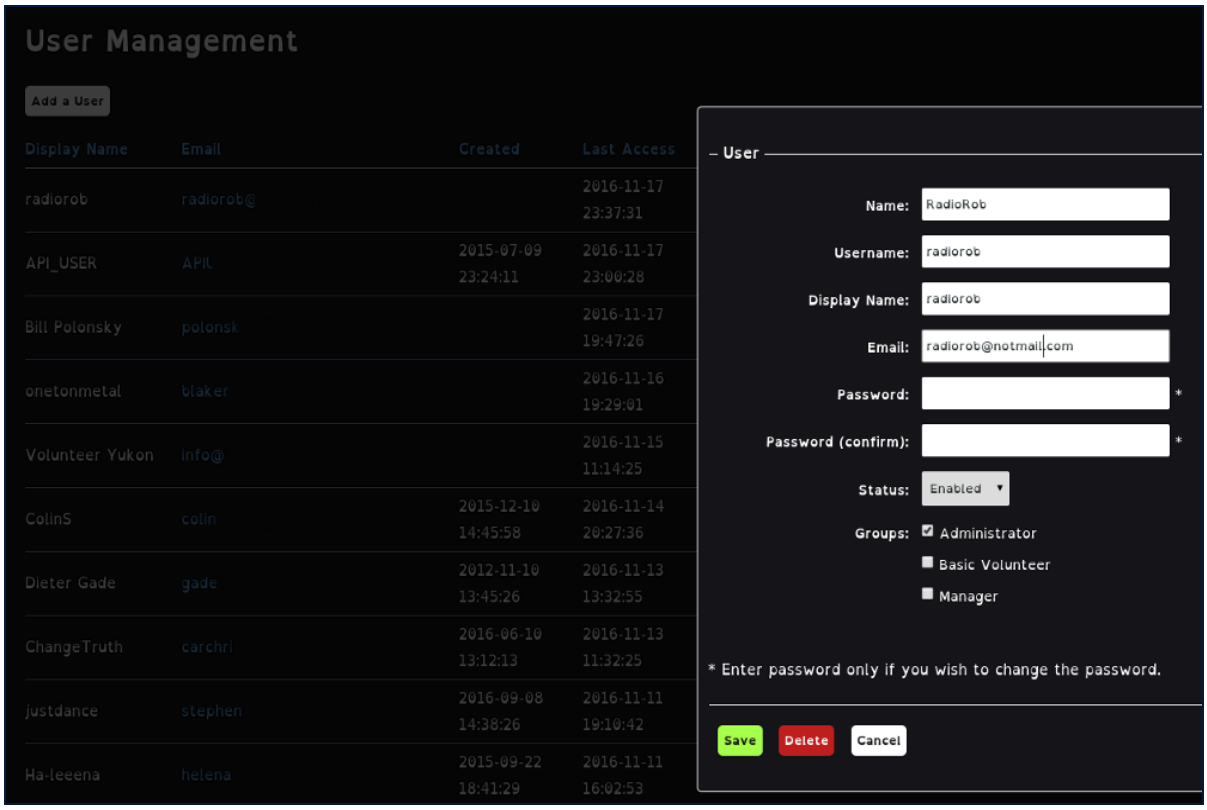
The `user management` menu provides a list of user accounts, indicating group membership and most recent access. Sort by name, last login and creation date.



Add or Edit User account settings.

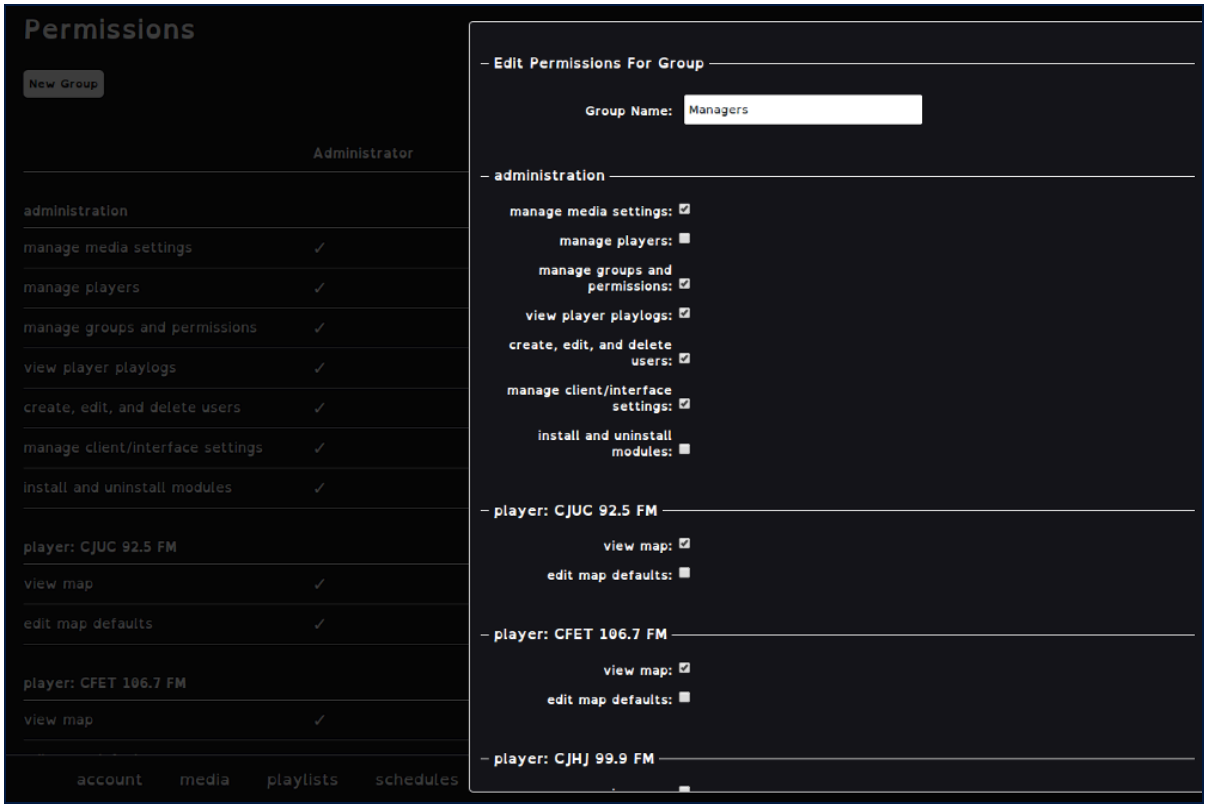
1. Change Display\User Name
2. Specify email address for reset and notifications
3. Assign user to permissions group(s)
4. Enable\Disable User Status

Permissions



The `permission` menu accesses a grid for fine-grained control over access to media, Playlist and scheduling functions, on a Player by Player basis. Users in the **Administrator** group may assign or revoke permissions to other user groups. Additional groups may be created for granting users' permission to upload and/or download media, schedule PlayLists, or view playlogs. For example, approval for media and allocation of time slots could be delegated to a group that grants permissions on only one Player device, and has no other administrative privileges. **Advanced Admin** functions establish hooks for remote Player connections.

Create Group



1. Name of new group
2. Select Tasks and Resources this group should have access.
3. Save

Player Management

Players can be a physical playout device or virtual process located on the same hardware as the player or located in another location.

New Player

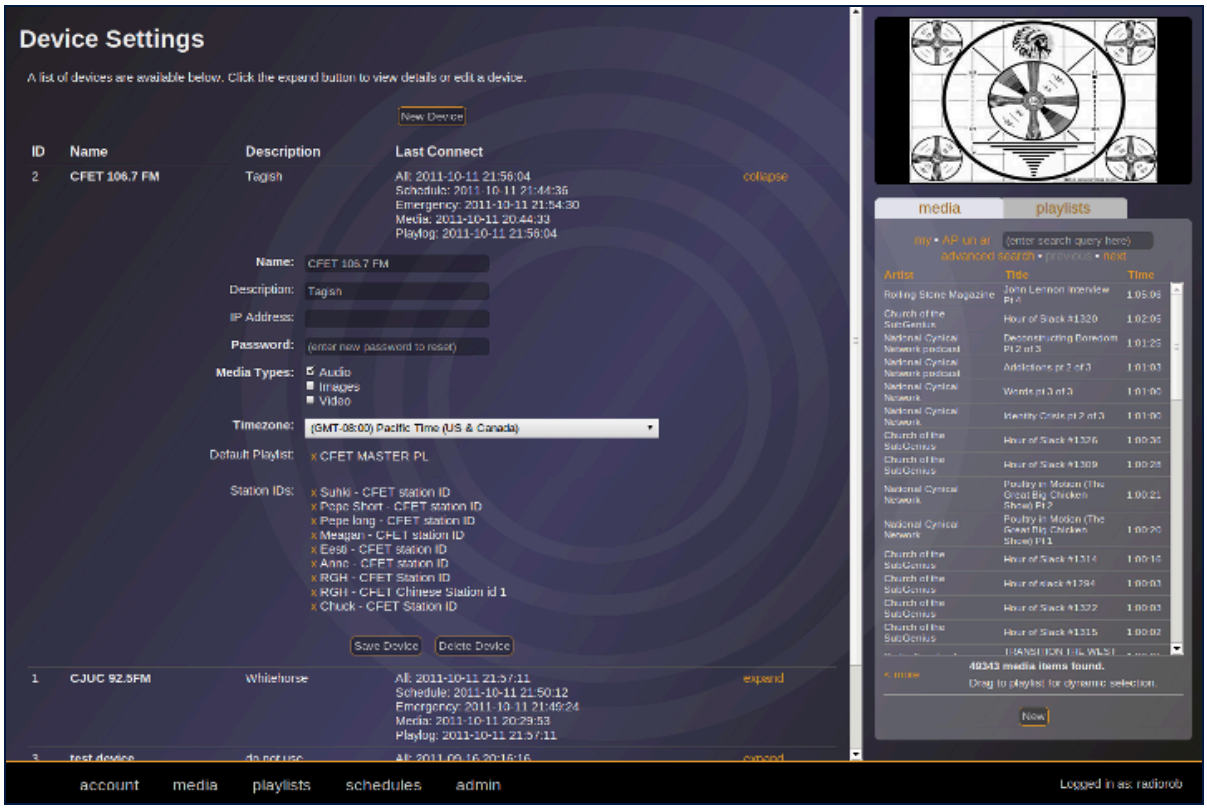
1. Begin by giving the Player a unique name, This name will be displayed when, scheduling, emergency broadcasts and generating reports.
2. Give a description of the Player.
3. Enter in the stream URL
4. Enter a password that matched with the one that was entered when setting up the Player. *See below*
5. Using the radio buttons select the types of media that the Player will be supporting
6. Set time zone where the Player is located. This is also required for the creating of Play logs which are all done in GMT

7. From the Play List window, drag and drop the DPL (Default Play List) that will be associated with this Player. If the Player cannot locate a schedule of media to be played, it will play the DPL in a loop to avoid dead air.
8. Drag and drop station ID that you wish to associate with this Player.
9. Save Player

Note *Leave IP address field empty*

The Player ID is automatically generated and the assigned password will be needed when configuring the remote OBPlayer playout device. See **Player Sync Settings (https://support.openbroadcaster.com/obplayer/#syncmedia)**

Connection Messages

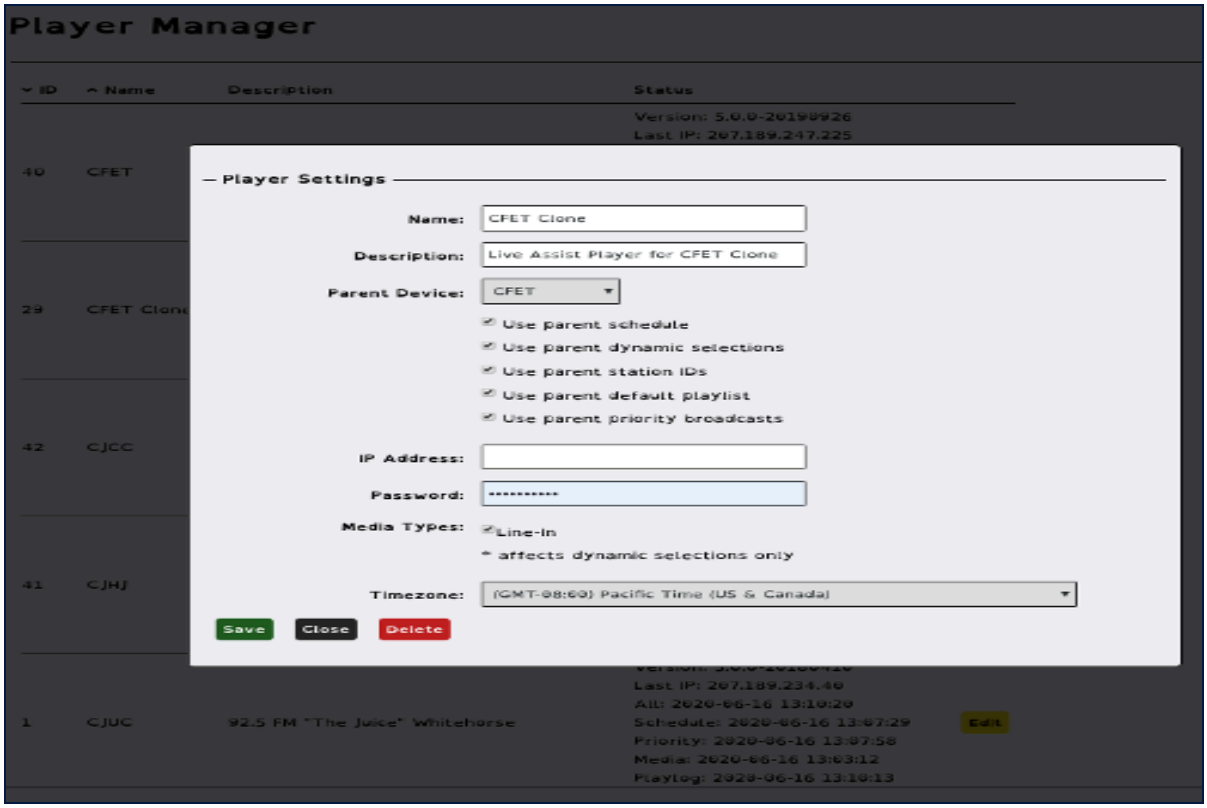


Connection Messages for Players connect back to the server at predetermined times as set in the Player dashboard. The “last Connect” info is continuously being updated and a graphic icon of a green check mark indicates that all connections are current and the device is in operation and communicating properly. Displays to right of newly created player showing times when last connected. Top line shows status of Priority, Media and Playlog sync last connections time to server. **”!”** icon if there is no heartbeat.

Displays the Version of connected player, GPS Coordinates and Last known external IP

Pro Tip *Connection info is also displayed with Station Icon status using Mapping Module*

Cloning Playout Devices as Parent and Child

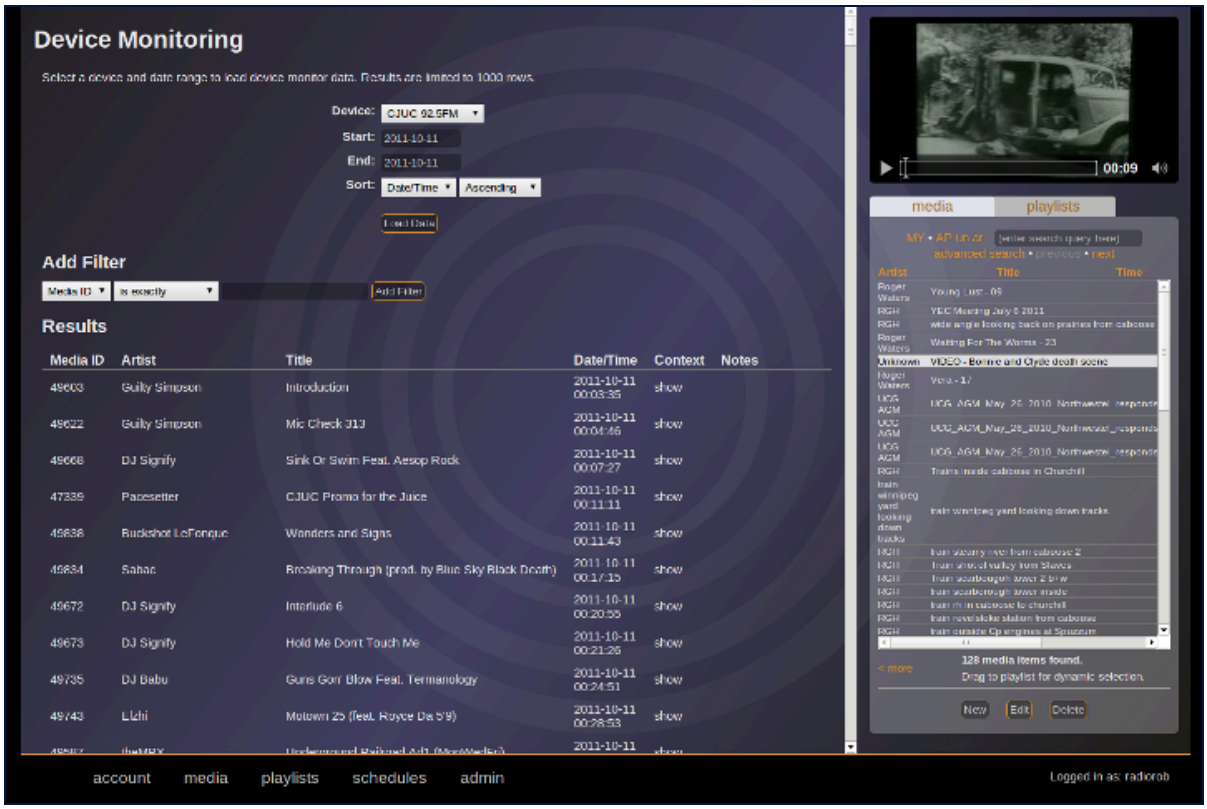


Share a common schedule among a network of players.

Customize the roles of each individual player, fine tuning Parent characteristics and controls.

- Schedules - Dynamic Selections - Station IDs - Default Play Lists - Priority Broadcasts

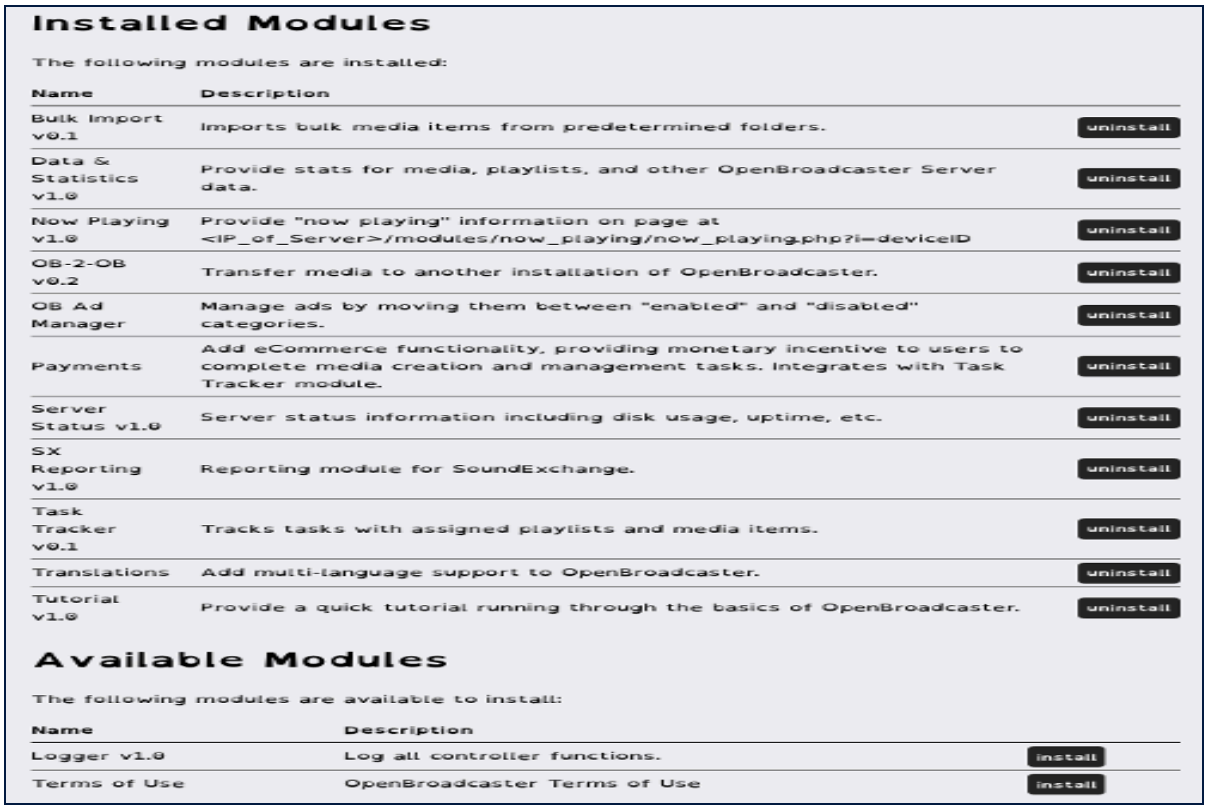
Logging and Monitoring



Play logs are generated from the Player and sent back to OBServer via TCP/IP according to the frequency specified in the Player Dashboard settings. Reports may be generated using filters for a combination of parameters including:

- Player
- Time and Date range
- Artist
- Title
- Media ID

Modules



Installed Modules

The following modules are installed:

Name	Description	
Bulk Import v0.1	Imports bulk media items from predetermined folders.	uninstall
Data & Statistics v1.0	Provide stats for media, playlists, and other OpenBroadcaster Server data.	uninstall
Now Playing v1.0	Provide "now playing" information on page at <IP_of_Server>/modules/now_playing/now_playing.php?i=deviceID	uninstall
OB-2-OB v0.2	Transfer media to another installation of OpenBroadcaster.	uninstall
OB Ad Manager	Manage ads by moving them between "enabled" and "disabled" categories.	uninstall
Payments	Add eCommerce functionality, providing monetary incentive to users to complete media creation and management tasks. Integrates with Task Tracker module.	uninstall
Server Status v1.0	Server status information including disk usage, uptime, etc.	uninstall
SX Reporting v1.0	Reporting module for SoundExchange.	uninstall
Task Tracker v0.1	Tracks tasks with assigned playlists and media items.	uninstall
Translations	Add multi-language support to OpenBroadcaster.	uninstall
Tutorial v1.0	Provide a quick tutorial running through the basics of OpenBroadcaster.	uninstall

Available Modules

The following modules are available to install:

Name	Description	
Logger v1.0	Log all controller functions.	install
Terms of Use	OpenBroadcaster Terms of Use	install

We include a couple of sample modules; Logger, Tutorial and Now Playing. There are dozens of modules avaible to provide added features and functionality.

Additional features may be introduced into the OB environment by third-party developers.

Check for updated list of **Modules (https://github.com/openbroadcaster)**

Client Settings

Login Message of the Day and a default Welcome page displayed on the initial log in screen using an inline editor.

Feedback

Find a bug? Want to request a feature? Submit your issue to **OBServer (https://github.com/openbroadcaster/observer/issues/new)** or **OBPlayer (https://github.com/openbroadcaster/obplayer/issues/new)**

Have some Gstreamer, PHP or Python coding skills? Help **Contribute (https://github.com/openbroadcaster/.github/blob/main/docs/CONTRIBUTING.md)** and **Sponsor (https://github.com/sponsors/openbroadcaster)** to make the OpenBroadcaster community even better

We really appreciate your feedback!

OBServer Advisories

No OBServer Security Issues

OBPlayer Advisories

No OBPLayer Security Issues

Open Server Bugs

124 - Double clicking media item, show details or editing PL, loses the work in progress.

Open Player Bugs

147 - Live Assist playlist can cause dead air when no host intervenes
127 - LA Cannot Advance up, stuck at Break Point
126 - LA Missing > indicator after pressing Hot Button
16 - LA not switching to Fall Back Media

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