Centova Cast

Client Reference Manual

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Introduction

This is the client's reference manual for Centova Cast, the leading Internet radio stream hosting solution.

This manual provides detailed reference information for the features and capabilities of the Centova Cast v3.x client area.

For more generalized operating instructions, please consult the Usage Guide instead.

Accessing Your Account

2.1 Logging In

Your hosting provider should have provided a username and password to access your account, as well as an URL at which you may log in. To access your account, simply launch the login URL and enter your username and password.

If you wish to skip this step when you subsequently access your account from the same computer, you may optionally tick the *Remember me* box to remember your account login information.

2.2 Retrieving Your Password

If you have forgotten your password, you may reset it using the Forgot password? link at the bottom of the login page. Simply enter the E-mail address on file for your account, and instructions for resetting your password will be sent to you via E-mail.

If you no longer have access to the E-mail account on file, you will need to contact your hosting provider to have your password changed manually.

Dashboard

Immediately after logging in, you will be presented with the dashboard view for your account.

3.1 Stream Overview

The dashboard provides the an overview of your stream, including following information:

Now Playing

The title of the current broadcast, as well as the stream title and bit rate, are displayed at the top of the dashboard. The complete details for the current track, including album cover if available, are displayed at the upper right-hand corner of the page.

Tune-in Controls

The "music note" icon at the upper right-hand corner of the page opens a pull-down menu containing tune-in links for various media player applications. To the right of the tune-in menu, the "play", "stop", and "volume" icons allow you to tune in to your stream from within your browser, without using an external player.

Current listeners

The current listeners meter indicates the number of listeners currently tuned in to your stream, as well as the maximum number of listeners your stream will accommodate.

Data transfer

The data transfer meter indicates the total data transfer used by your stream to for this month, as well as your monthly data transfer limit.

Disk usage

The disk usage meter indicates the amount of disk space used by your account's files (including uploaded media, if any), as well as your disk space limit.

Server status

The status of your server (online or offline) is indicated by the first icon to the right of the disk usage meter.

AutoDJ status

The status of your autoDJ (online or offline) is indicated by the second icon to the right of the disk usage meter.

Audio source status

The status of your server's audio source (be it the autoDJ or a live source) is indicated by the third and rightmost icon to the right of the disk usage meter.

Projected data transfer

Indicates the amount of data transfer that your stream will use this month if usage remains consistent for the remainder of the month.

Maximum bit rate

Indicates the total maximum bit rate at which your server is permitted to broadcast. This may be the sum of multiple separate mount points, if applicable.

Recent tracks

Provides a list of up to 10 of the most recently played songs or tracks on your stream, as well as the times at which those tracks were played.

3.2 The Navigation Menu

Almost all of the pages in the client area provide a navigation menu at the left of the screen. This menu provides options for managing your server, its configuration, and your autoDJ media.

The navigation menu options, shown grouped into sections at the left-hand side of the page, include:

General

- Overview

Launches the dashboard, described above.

Quick Links

Provides a number of useful links and login information for managing and working with your stream.

Configuration

- Settings

Provides access to the settings for your streaming server, described in the *Server Configu*ration section below.

- Widgets

Provides a number of widgets that you can use on your own web site to display information about your stream.

- DJs Provides access to the DJ management page, where individual accounts can be created for each of your DJs.
- Statistics

- Report

Provides access to the statistics report for your account, described in the *Statistics* section below.

Listeners

Provides information about the listeners who are currently tuned-in to your stream at the present time.

- Logs

Provides access to the logs for this account, described in the Server Logs section below.

Server

Start Server

Starts your streaming server (and autoDJ, if enabled). This option will only appear if your server is currently offline.

- Stop

Shuts down your streaming server (and autoDJ, if enabled). This will disconnect any listeners that may be tuned into your stream, and will take your stream offline. This option will only appear if your server is currently online.

Restart

Shuts down your streaming server, then immediately starts it again. This will disconnect any listeners that may be tuned into your stream. Restarting your server may be necessary to apply certain configuration changes, and is equivalent to manually stopping, then starting your server. This option will only appear if your server is currently online.

– Admin

Provides access to the internal server administration interface provided by your streaming server software (SHOUTcast or IceCast) outside of Centova Cast. For more information, please consult the documentation for your streaming server software.

AutoDJ

- Playlists

Launches the playlist manager for your autoDJ, described in the *Playlist Manager* section below.

Media

Launches the media library manager for your autoDJ, described under the *Media Library* section below.

- Files

Launches the file manager for your autoDJ, described under the File Manager section below.

- AutoDJ Settings (icon)

Opens the configuration settings for your autoDJ.

- Stop autoDJ (icon)

Stops the autoDJ without stopping the streaming server. This may be used prior to beginning a live broadcast.

- Skip Song (icon)

Stops the song currently being played by the autoDJ and skips to the next song in the playlist.

Session

Log out

Terminates the current administration session and securely logs you out from Centova Cast.

Configuration Settings

The Configuration Settings page is used to configure the behavior and appearance of your station and of Centova Cast.

To access the Configuration Settings page, click Settings under the *Configuration* heading in the navigation menu.

Centova Cast provides access to a wide range of settings for your account which are broken down into several tabbed pages. Some settings may differ based on the type of streaming server or autoDJ for which your account is configured, and those differences are noted below.

4.1 Stream

The stream tab contains the basic configuration settings for your station. The fields available include:

Stream title

Specifies the title for the stream. This will be displayed by listeners' media players when they tune into the stream.

• E-mail address

Specifies the E-mail of the person in charge of managing your stream. Centova Cast will automatically send notifications to this address when necessary.

Company/organization

Specifies your company/organization name. This may be used by the streaming server for various purposes.

Website URL

Specifies the URL to the web site associated with this stream (if any). This may be published by the streaming server.

Source password

Specifies the password required by streaming sources to connect to this stream and begin broadcasting. This password must be provided to DJs who will be connecting to your server via a live source to perform live broadcasts.

Administrator password

Specifies the password required to login to your Centova Cast account or the streaming server's internal administrative interface. Some streaming servers require that this password must differ from the source password, so it is best to use a unique password here.

Time zone

Specifies your time zone. The autoDJ's track scheduler uses this to ensure that the times configured for playlists (in the Playlist Manager) always reflect your local time zone.

• Locale

Specifies your locale. This determines the language and the date and time formats used in the control panel.

Character encoding

Specifies your preferred character encoding for reading MP3 ID3 (metadata) tags. MP3 audio files do not contain any information about the language or "character set" in which they were encoded, so if your MP3s' artist, album or track names use a non-Latin character set (Cyrillic, Asian, etc.), you will need to set your character encoding appropriately to ensure that all of the letters in the alphabet of your language are interpreted correctly from your media.

Note that this feature is only used for the interpretation of MP3 ID3 tags. Centova Cast itself uses Unicode (UTF-8) character encoding internally which can represent characters from virtually any language.

4.2 AutoDJ

The AutoDJ tab contains options for configuring your stream's autoDJ, if enabled by your stream hosting provider. These settings are only required if you are permitted to upload media (MP3 files, etc.) to the server. If you will be providing your own live source (using something like the Winamp DSP plugin or SAM Broadcaster) then the autoDJ may be disabled.

The autoDJ tab will differ depending on the type of autoDJ you have selected for your stream. Each variation is described in its own section below.

The following fields will always be displayed regardless of which autoDJ type has been selected:

AutoDJ status

Specifies whether the autoDJ should be enabled. This option will be unavailable if your stream is currently online; you will need to stop your stream if you want to change it. Options include:

- Disabled

If selected, autoDJ support is turned off. This setting is necessary if you plan to use a live streaming source.

- Enabled

If selected, autoDJ support will be turned on. This setting is necessary if you plan to upload your media to the server and will not be providing your own live streaming source. Note that if the autoDJ is enabled, but no media (eg: MP3 files) have been uploaded, or media has not been added to an enabled playlist, the server will fail to start. As such, be sure to upload at least one track, and add one or more tracks to an enabled General Rotation playlist, before starting the server with autoDJ support enabled.

Genre

Specifies the genre for your station. This is informational only and may be displayed to the public.

4.2.1 Liquidsoap autoDJ Settings

With Liquidsoap, the following additional autoDJ options are available:

Song title codes

If enabled, the autoDJ will include a small tracking code at the end of the song titles shown in your listeners' media players.

For example, instead of: Artist Name -- Song Title

You might see the following instead: Artist Name -- Song Title [C51B]

This allows detailed reports to be generated (on the *Tracks* tab of the *Statistics Report* page) containing most of the information needed to make reports to the appropriate entities for royalty determination purposes. If this option is disabled, the generated reports may be less detailed and may not contain sufficient information for accurate royalty reporting purposes.

Crossfade length

When crossfading is enabled, specifies how many seconds of the end of a track are blended into the beginning of the next track.

Crossfade fade-in

When crossfading is enabled, specifies the duration of the fade-in for the next track in seconds. Decimal values (eg: 0.5) are permitted.

Crossfade fade-out

When crossfading is enabled, specifies the duration of the fade-out for the current track in seconds. Decimal values (eg: 0.5) are permitted.

Crossfade mode

When crossfading is enabled, specifies how tracks are blended together during a crossfade. Options include:

- Normal

When selected, a standard crossfade algorithm is used in which the current and next track are crossfaded per the fade-in, fade-out, and length values.

- Smart

When selected, a "smart" crossfade algorithm is used in which the perceived loudness of the last few seconds of the current track and the first few seconds of the next track are used to determine the optimal method for the crossfade. In theory this should result in a better-sounding crossfade, however in practice (depending upon the media being streamed) the "Normal" crossfade mode may yield results closer to what most listeners expect to hear.

Apply replay gain Enable to use the replay gain values (if any) stored in the MP3 files to normalize the volume of the audio stream. This may be useful to avoid dramatic per-track changes in volume when using MP3s from different sources.

4.2.2 ices-cc autoDJ Settings

With ices-cc, the following additional autoDJ options are available:

Song title codes

If enabled, the autoDJ will include a small tracking code at the end of the song titles shown in your listeners' media players.

For example, instead of: Artist Name -- Song Title

You might see the following instead: Artist Name -- Song Title [C51B]

This allows detailed reports to be generated (on the *Tracks* tab of the *Statistics Report* page) containing most of the information needed to make reports to the appropriate entities for royalty determination purposes. If this option is disabled, the generated reports may be less detailed and may not contain sufficient information for accurate royalty reporting purposes.

Crossfade length

When crossfading is enabled, specifies how many seconds of the end of a track are blended into the beginning of the next track.

Crossfade style

When crossfading is enabled, specifies how tracks are blended together during a crossfade.

Minimum track length

When crossfading is enabled, tracks shorter in duration than the minimum length will not be crossfaded. This ensures that short clips (station branding, very short advertisements, etc.) remain audible.

4.2.3 sc_trans v2 autoDJ Settings

With sc_trans v2, the following additional autoDJ options are available:

Crossfade length

When crossfading is enabled, specifies how many seconds of the end of a track are blended into the beginning of the next track.

Crossfade threshold

Specifies the minimum track length (in seconds) for which crossfading should be enabled. Tracks shorter than this length of time will not be crossfaded.

- MP3 unlock name (SHOUTcast only)
 Specifies the name from your SHOUTcast license key for MP3 broadcasting.
- MP3 unlock code (SHOUTcast only) Specifies the code from your SHOUTcast license key for MP3 broadcasting.
- ICQ (SHOUTcast only) Specifies your ICQ UIN, which is published by SHOUTcast DNAS.
- AIM (SHOUTcast only) Specifies your AIM handle, which is published by SHOUTcast DNAS.

- IRC (SHOUTcast only) Specifies your IRC nick, which is published by SHOUTcast DNAS.
- Apply replay gain (SHOUTcast only)
 Enable to instruct sc_trans to honour the replay gain values stored in the MP3 files.
- Calculate replay gain (SHOUTcast only)
 Enable to instruct sc_trans to calculate the replay gain on the MP3 files.

4.3 Widgets

The Widgets tab contains options for configuring and customizing the widgets provided for use on your own web site. It is organized into sub-tabs representing the individual widgets available for configuration.

General

Configures the availability of various widgets and options.

- Activate start page

Specifies whether a start page is made available for your stream. See the separate section on start pages for details about this feature.

- Enable on-demand content widget

Specifies whether the on-demand content widget is made available for your stream. See the separate section on the On-demand Content widget for details about this feature.

- Enable Google Maps widget

Specifies whether the Google Maps widget is made available for your stream. See the separate section on the Google Maps widget for details about this feature.

Song Requests

Configures the Song Request widget. See also the separate section on the Song Request widget for details about this feature.

- Enable song request widget

Specifies whether the Song Request widget is made available for your stream.

Automatically queue requests

Specifies whether song requests submitted by users are automatically compared against your media library and queued for playback via the autoDJ.

If enabled, a best-effort attempt is made to match the artist name and song title provided by the user against a track in your media library. This does, however, largely rely upon the user to use correct spelling.

- Request delay

Specifies the length of time to wait after a song request is received before playing the requested track via the autoDJ. A delay of a specific period of time may be required by certain music licensing authorities when streaming copyrighted music.

Request probability

After the request delay has elapsed, a requested track will normally be queued for immediate

playback. Specifying a request probability less than 100% increases a further delay in the queueing of the requested track.

Example: If you specify a 60% request probability, then each time a track finishes playing (after the request delay has elapsed) there is a 60% probability of the requested track being selected for playback as the next track.

- E-mail unknown requests

Specifies whether requests for songs that could not be identified in the media library should be emailed to the stream administrator. If this option is set to No, the request is discarded if it cannot be found in the media library.

Recent Tracks

Configures the Recent Tracks widget. See also the separate section on the Recent Tracks widget for details about this feature.

- Enable recent tracks widget

Specifies whether the Recent Tracks widget is made available for your stream.

- Number of recent tracks

Specifies the number of tracks that will be shown in the Recent Tracks widget.

Player

Configures the Web Player widget. See also the separate section on the Web Player widget for details about this feature.

- Preferred web player

Specifies which web player you prefer to use. Depending on your stream type and format, options may include:

- * muses Muses Radio Player
- * jplayer jPlayer
- * **wmp** Windows Media Player

4.4 Files (SHOUTcast v1/v2)

The Files tab includes options for uploading various sound files for use by the streaming server. These include:

Introduction file

Specifies the introduction media file for the stream. The introduction file is an MP3 file that is played immediately after each listener connects, before tuning in to the live stream. This may be useful for for station identification or advertisement purposes.

Fallback file

Specifies the fallback media file for the stream. The fallback file is an MP3 file that is played in a loop if the source stream disconnects. Without a fallback file, listeners will either hear silence, or be disconnected entirely if the source stream disconnects.

IMPORTANT: The encoding options (bit rate, sample rate, channels, etc.) used in the introduction file and fallback file must *precisely* match the encoding options for your stream. If they are not identical, you will experience playback problems on your stream.

4.5 Albums

The Albums tab contains options for configuring the retrieval of album art and metadata for the tracks in your media library. Album data can be retrieved from a variety of sources, known as "album data sources".

Once retrieved, the album art can be displayed in the *Recent Tracks* widget and in other places in the control panel. Some data sources also provide links to purchase an album, which in some cases may allow the station operator to generate affiliate revenue. When available, a "Buy now" link is also included in the *Recent Tracks* widget.

The Albums page is organized into sub-tabs representing each of the supported album data sources. The tabs include:

Settings

Configures the order in which the album data sources are consulted when retrieving album data. If, for example, you prefer to retrieve covers from last.fm before using the iTunes store, you would drag the *last.fm* entry above the *iTunes Store* entry in the list.

Embedded (ID3/metadata)

Configures the retrieval of album covers from the internal metadata of your media files. Many media files include album covers and other data embedded directly within the file, and this data source will extract the embedded data and use it in your media library.

Folder images

Configures the use of images saved in your media library folders for use as album covers. This data source will search for JPEG (.jpg) images saved in your media folders in the following order:

- In a JPEG file with the same name as the MP3 file.
 Example:
 Uploaded MP3 filename: My Music\demo_track.mp3
 Cover image filename: My Music\demo_track.jpg
- In a JPEG file named <code>albumartsmall.jpg</code> in the same folder as the MP3 file. (This is a standard

filename also used by Windows explorer.)

Example:

Uploaded MP3 filename: My Music\demo_track.mp3 Cover image filename: My Music\albumartsmall.jpg

- In a JPEG file named folder.jpg in the same folder as the MP3 file. (Much like albumartsmall.jpg,

this is a standard filename also used by Windows explorer.) Example: Uploaded MP3 filename: My Music\demo_track.mp3

Cover image filename: My Music\folder.jpg

 In any JPEG file in the same folder as the MP3 file. If more than one JPEG exists, preference will be

given to those with filenames containing the words "front" or "cover". If no filenames contain "front"

or "cover", the first image Centova Cast finds will be used. Example: Uploaded MP3 filename: My Music\demo_track.mp3 Cover image filename: My Music\any_filename_will_work.jpg

last.fm

Configures the use of last.fm for album covers and data. This data source will retrieve album covers and data from the last.fm web site.

iTunes Store

Configures the use of the iTunes Store for album covers and data. This data source will retrieve album covers and data from the iTunes Store.

Amazon.com

Configures the use of Amazon.com for album covers and data. This data source will retrieve album covers and data from Amazon.com.

Amazon affiliate ID

Specifies your Amazon.com affiliate ID. If specified, Amazon will credit your affiliate account for any albums purchased by clicking the "Buy now" link in the Recent Tracks widget.

Custom

Configures the use of custom album covers and data. Custom album covers and data can be specified in the media library by right-clicking on an album and selecting Edit album details.

4.6 Server Overrides (SHOUTcast v1/v2)

The Server Overrides tab contains options for configuring values which will override any values provided by a live DJ via a live source application.

Stream title format

Configures the format string used to present the stream title to the end-user. If this is a plain text string, it will completely replace any stream title provided by a live source.

If the format string contains the characters %s, these characters will be replaced with the stream title provided by the live source.

Example: Stream title format: Station XYZ: %s Stream title provided by live source: Artist Foo - Album Bar Actual title displayed in listeners' media players: Station XYZ: Artist Foo - Album Bar

Stream URL format

Identical in nature to the Stream title format option above, but specifies the format for the stream URL presented to the end-user.

Public server

Specifies whether the stream should be published with directory services. Options include:

- Automatic (determined by source)

If selected, the live source can make the stream public or private at its discretion.

- Never
 If selected, the stream is never published.
- Always If selected, the stream is always published.

4.7 Relaying (SHOUTcast v1/v2)

The Relaying tab contains options for controlling the relaying of your stream by other servers.

Note that these options are used to control the ability of a *remote* server to rebroadcast *your* stream. If you wish to do the inverse, and rebroadcast a *remote* stream from *your* server, the relevant options are on the *Mount Points* tab.

- Allow other servers to relay stream
 Specifies whether or not remote servers are permitted to relay your stream.
- Allow relays to make stream public

Specifies whether or not remote servers relaying your stream are permitted to advertise their relays with directory services.

4.8 Master Relaying (IceCast)

The Master Relaying tab includes options for setting up a master relay from another IceCast server. Using Master Relay, the remote IceCast server essentially becomes the source for your own server, and all of the mount points from the remote server are made available on your server.

Options include:

- Master server
 Specifies the hostname or IP address of the master server whose stream(s) you wish to relay.
- Master port Specifies the port number of the master server whose stream(s) you wish to relay.
- Master update interval Specifies the interval at which the remote stream's configuration is replicated to the local server.
- Master username

Specifies the username required by the remote server for relaying.

Master password

Specifies the password required by the remote server for relaying.

Relay on demand

If enabled, your IceCast server will only connect to the remote IceCast server when one or more listeners are connected, and it will disconnect from the remote server when there are no more listeners. If disabled, your IceCast server will remain connected to the remote server and continue receiving the stream even if no listeners are connected.

Enabling this setting may reduce unnecessary bandwidth usage, but may slightly increase the time required to begin streaming when your first listener connects.

4.9 Mountpoint Relaying (IceCast)

The Mountpoint Relaying tab includes options for setting up a relay from a single mount point on a remote server. Using Mountpoint Relay, the remote mount point essentially becomes the source for your own server, and listeners tuning into your server will hear the remote server's stream.

Options include:

Stream server

Specifies the hostname or IP address of the remote server whose stream you wish to relay.

Stream port

Specifies the port number of the remote server whose stream you wish to relay.

Stream mount point

Specifies the mount point for the desired stream on the remote server. If the remote server is a SHOUTcast server, you should specify /stream here.

Local mount point

Specifies the mount point for the relayed stream on the local server. If in doubt, you can specify /stream here as a default value.

Stream username
 Specifies the username required by the remete on

Specifies the username required by the remote server for relaying.

Stream password

Specifies the password required by the remote server for relaying.

Relay on demand

If enabled, your IceCast server will only connect to the remote IceCast server when one or more listeners are connected, and it will disconnect from the remote server when there are no more listeners. If disabled, your IceCast server will remain connected to the remote server and continue receiving the stream even if no listeners are connected.

Enabling this setting may reduce unnecessary bandwidth usage, but may slightly increase the time required to begin streaming when your first listener connects.

Relay metadata

If enabled, the metadata provided by the remote streaming server will be passed through to your own listeners. If disabled, the locally-configured metadata will be used instead.

4.10 Mount Points

The Mount Points tab provides an interface for managing the mount points on your server. Mount points allow you to create multiple, distinct broadcasts within your streaming server.

By convention, a mount point named /stream should always exist and be your default mount point. Additional mount points may, however, be created to allow for additional broadcasts.

4.10.1 Creating Mount Points

To create a new mount point, click the Create new button below the mount point list. Then, configure the mount point fields per the appropriate *Mount Point Options* section below.

4.10.2 Editing Mount Points

To edit an existing mount point, simply click on its entry in the mount point list. Then, configure the mount point fields per the appropriate *Mount Point Options* section below.

4.10.3 Removing Mount Points

To remove an existing mount point, simply click on its entry in the mount point list, then click the Remove button below the mount point list.

4.10.4 Mount Point Options (SHOUTcast v2)

The mount point editor is arranged into tabs which logically group sets of options for the mount point. The tabs available include:

Settings

Configures the basic options for the mount point.

- Stream path

Specifies the path (name) for the mount point. The name should always begin with a forward slash (/), for example: /stream

AutoDJ Settings

Each mount point may either be independent, or use the autoDJ.

If the mount point is independent, it may be used with a live source to create a separate broadcast that is completely independent of any other mount points on the server.

An account can only have a single autoDJ, however, so if the mount point uses the autoDJ, it can only be used to rebroadcast the main autoDJ stream (for example, to create multiple streams for the same station at different bit rates).

Use autoDJ

Specifies whether or not this mount point should use the autoDJ. If this is set to No, the rest of the options on this tab are disabled.

Audio encoder

Specifies the audio format to use for this mount point. Supported options include AAC+, for a low-bandwidth AAC+ stream, or MP3, for a more common MP3-format stream.

Bit rate

Specifies the bit rate at which the autoDJ will encode the audio on this mount point. Note that the combined total bit rates of your mount points may not exceed the maximum bit rate for your account.

– Channels

Specifies whether the autoDJ will encode in Stereo or Mono on this mount point.

- Sample rate

Specifies the sample rate at which the autoDJ will encode the audio on this mount point.

- MP3 CBR/VBR mode

Specifies CBR (constant bit rate)/VBR (variable bit rate) encoding mode used for this mount point. Consult the SHOUTcast DNAS v2 documentation for details.

- Optimize for

Specifies the optimization method used for this mount point. Consult the SHOUTcast DNAS v2 documentation for details.

Relaying

If an autoDJ is not being used on the mount point, the mount point may be used to relay a remote stream.

- Relay URL

Specifies the URL of the remote stream to relay through this mount point.

4.10.5 Mount Point Options (IceCast)

The mount point editor is arranged into tabs which logically group sets of options for the mount point. The tabs available include:

Settings

Configures the basic options for the mount point.

- Mount point

Specifies the name for the mount point. The name should always begin with a forward slash (/), for example: /stream

- Intro clip

Specifies the introduction media file for the stream. The introduction file is an MP3 file that is played immediately after each listener connects, before tuning in to the live stream. This may be useful for for station identification or advertisement purposes.

- Fallback clip

Specifies the fallback media file for the stream. The fallback file is an MP3 file that is played in a loop if the source stream disconnects. Without a fallback file, listeners will either hear silence, or be disconnected entirely if the source stream disconnects.

IMPORTANT: The encoding options (bit rate, sample rate, channels, etc.) used in the introduction and fallback clips must *precisely* match the encoding options for your stream. If they are not identical, you will experience playback problems on your stream.

AutoDJ Settings

Each mount point may either be independent, or use the autoDJ.

If the mount point is independent, it may be used with a live source to create a separate broadcast that is completely independent of any other mount points on the server.

An account can only have a single autoDJ, however, so if the mount point uses the autoDJ, it can only be used to rebroadcast the main autoDJ stream (for example, to create multiple streams for the same station at different bit rates).

Use autoDJ

Specifies whether or not this mount point should use the autoDJ. If this is set to No, the rest of the options on this tab are disabled.

- Mount point name

Specifies a title for this mount point. Commonly this is the name of your station.

- Description

Specifies a description of this mount point.

- Genre

Specifies a genre for this mount point.

– Genre

Specifies whether or not this mount point should be advertised on directory services.

- Re-encoding

Specifies whether or not the audio for this mount point should be re-encoded before broadcast.

– Channels

Specifies whether the autoDJ will encode in Stereo or Mono on this mount point.

- Sample rate

Specifies the sample rate at which the autoDJ will encode the audio on this mount point.

 Bit rate Specifies the bit rate at which the autoDJ will encode the audio on this mount point. Note that the combined total bit rates of your mount points may not exceed the maximum bit rate for your account.

Fallback Mount

In the event that the current mount point does not have a source connected (or the source disconnects during a broadcast), a fallback mount allows IceCast to redirect all listeners to a different mount point.

- Fallback mount point

Specifies the mount point to redirect listeners to when this mount point is not sourced.

- Fallback override

If the source disconnects from this mount point, listeners will be redirected to the fallback mount. If *Fallback override* is Enabled, listeners will be moved *back* to this mount point when its source reconnects. If *Fallback override* is Disabled, listeners will remain on the fallback mount even when the source reconnects to this mount point.

- Fallback when full

Specifies whether listeners should be redirected to the fallback mount if the current mount point is at its listener capacity.

Setting Overrides

Configures settings for this mount point that override the global defaults.

- Advertise in directory

Specifies whether or not this mount point should be advertised with directory services.

- Source username

Specifies a custom username for live DJs to use when connecting to this mount point with a live source.

- Source password

Specifies a custom password for live DJs to use when connecting to this mount point with a live source.

Maximum listeners

Specifies the maximum number of listeners for this mount point. Once the mount point reaches capacity, further listeners will be refused (or redirected to a different mount point if the *Fallback when full* option on the *Fallback Mount* tab is used.)

- Disconnect listeners after

Specifies the number of seconds after which listeners on this mount point will be disconnected. Leave blank or enter 0 to impose no time limit.

Metadata Overrides

Configures metadata values for this mount point that override the global defaults.

```
- **Stream name**
Specifies a custom stream name.
```

- **Stream description** Specifies a custom stream description.
- **Stream URL** Specifies a custom stream URL.
- **Stream genre** Specifies a custom stream genre.
- **Advertised bit rate** Specifies a custom advertised bit rate.
- **MIME type** Specifies a custom MIME type.

4.11 Advanced

The Advanced tab includes options for configuring various advanced settings which normally do not need to be adjusted.

4.11.1 Advanced (SHOUTcast v2)

When using SHOUTcast v2 as your streaming server, options include the following. Please consult the SHOUTcast v2 documentation for more information about these options.

UVOX cipher key

Specifies the UVOX cipher key for your stream.

Disconnect idle sources after

Specifies the number of seconds after which idle sources should be disconnected. Idle sources are sources which are connected to the server but not actually sending any audio data.

Disconnect listeners if source connects

Specifies whether listeners should be disconnected from the server if the source disconnects from the server. Typically this is unwanted and should be set to No.

Always disconnect listeners after

Specifies the number of seconds after which listeners should be disconnected.

Use YP v2

Specifies whether or not to contact the directory service to advertise your stream.

YP server address

Specifies the Internet address for the directory server to use.

• YP server path

Specifies the URI for the directory service.

YP report interval

Specifies the frequency (in seconds) at which the streaming server should update the directory server.

· YP request retries

Specifies the number of times the streaming server should retry a connection to the directory server upon failure.

• YP server port

Specifies the port number for the directory server to use.

YP request timeout

Specifies the number of seconds after which the streaming server should time out while attempting to connect to the directory server.

YP minimum report interval

Specifies the minimum report interval.

4.11.2 Advanced (IceCast)

When using IceCast as your streaming server, options include the following. Please consult the IceCast documentation for more information about these options.

Directory listings URL

Specifies the URL to your directory service.

Directory listings port

Specifies the port number of your directory service.

Suppress metadata

Prevents IceCast from sending song artist/title information to your listeners.

Relay password

Specifies the password required to relay your stream, if any.

Song length detect limit

Specifies the maximum expected length of time for a song played on your station.

This is necessary as IceCast's logs only include the start time of each track; they do not provide information about the length of each song. As such, Centova Cast must determine the length by checking the duration between the start times of each song. If the server is stopped between songs, however, the song will appear to last for the duration of the outage. This limit is used to ensure that if any song 'appears' to last longer than a certain number of seconds, it will not be included in the track statistics.

Widgets

Centova Cast provides a number of widgets which you can include in your own web pages to display information about your stream. No programming knowledge is required – anyone who understands HTML (and, ideally, CSS) can make use of these snippets to easily add custom stream information to a web page.

The code for each of these snippets can be obtained using the Widgets link under the *Configuration* heading in your Centova Cast control panel. Each widget is documented individually in its own section.

5.1 Using the Widgets

Each widget is provided as a set of two HTML tags which, together, provide the complete functionality of the widget.

The first of the two HTML tags essentially provides a "marker" to indicate where on the page you want the widget to appear. This tag should be embedded in your HTML page wherever you want the widget to be inserted.

The second HTML tag is a script reference which includes the "logic" for the widget in your page. This should be placed at the end of your HTML page, just before the closing </body> tag.

Once you have added these two tags to your HTML, simply save your changes and refresh your page. The new widgets should appear instantly.

5.2 Alternate Character Encodings

If you find that the code snippets show certain accented characters incorrectly when used on your web site, it is possible that you are not using UTF-8 encoding on your web page.

To correct this, you should set the "Character encoding" setting on the *Widgets* page to the correct character encoding for your web page. This will re-load the *Widgets* page and update each snippet to use the correct character encoding. Note that after changing the character encoding, you must copy and paste the updated widget code into your web site, replacing the old code.

5.3 Stream Status Summary

5.3.1 About the Widget

The Stream Status Summary widget displays a brief line of information about the current status of your stream. Typically, this will look something like the following:

Station Name - Artist Name - Track Title

The above text is hyperlinked such that clicking it will launch the visitor's default media player to tune in to the stream.

The status summary is automatically updated at regular intervals such that it always displays the correct song artist and title.

5.3.2 Advanced Customization

Developers familiar with JavaScript may embed in their pages a code block similar to the following to customize the behavior of the widget.

This configuration block *must* appear before the JavaScript code for the widget.

```
<script language="javascript">
(function(){ var centovacast = (window.centovacast||(window.centovacast={}));
(centovacast.streaminfo||(centovacast.streaminfo={})).config = {
```

poll_limit: 60, // specify how many times to poll the server poll_frequency: 60000 // specify the poll frequency in milliseconds

};})();
</script>

5.4 Stream Details

5.4.1 About the Widget

The Stream Details widget is a more flexible version of the Stream Status Summary widget, and is designed for more advanced users who wish to customize the placement of the individual elements of stream information.

Using this snippet, you can individually place the elements for the current song, stream title, bit rate, and many more status indicators anywhere on your web page, and Centova Cast will automatically fill them in.

Much like the Stream Status Summary widget, all of the elements of the Stream Details widget are automatically updated at regular intervals such that they always display the correct information.

5.4.2 Available Elements

As of this writing, the Stream Details widget provides the following status elements:

Current song

The current track information, formatted as Artist – Title, and hyperlinked such that clicking launches the visitor's default media player to tune in to the stream.

Stream title

The title for the stream.

• Bit rate The bit rate at which the stream is currently broadcasting.

Current listeners

- The number of listeners currently connected to the stream.
- Maximum listeners

The maximum number of listeners which may connect to the stream.

Server status

The current status of the stream (either Online or Offline).

AutoDJ status

The current status of the autoDJ (either Online or Offline).

Source connected

An indication of whether a source is currently connected to the stream (either Yes or No).

Station time

The current date and time relative to the station's time zone, formatted per the station's locale settings.

Current playlist

The name of the playlist from which the current track was selected, if the autoDJ is active.

Track artist

The artist of the current track.

- Track title The title of the current track.
- **Track album** The album of the current track.
- Album image The album cover image for the current track.
- Album URL

The album URL (if available) for the current track.

5.4.3 Advanced Customization

Developers familiar with JavaScript may embed in their pages a code block similar to the following to customize the behavior of the widget.

This configuration block *must* appear before the JavaScript code for the widget.

```
<script language="javascript">
(function(){ var centovacast = (window.centovacast||(window.centovacast={}));
(centovacast.streaminfo||(centovacast.streaminfo={})).config = {
```

```
poll_limit: 60, // specify how many times to poll the server
poll_frequency: 60000 // specify the poll frequency in milliseconds
```

};})();
</script>

5.5 Recent Tracks

5.5.1 About the Widget

The Recent Tracks widget displays a list of the tracks that were most recently played on your stream, along with the name of the artist, album, and broadcast time associated with each.

If available, the album cover image and a "Buy now" link are also displayed next to each track.

The track list is automatically updated at regular intervals such that it always reflects the most recently played tracks.

This widget can be configured on the Widgets tab of the Configuration Settings page.

5.5.2 Advanced Customization

Developers familiar with JavaScript may embed in their pages a code block similar to the following to customize the behavior of the widget.

This configuration block *must* appear before the JavaScript code for the widget.

```
<script language="javascript">
(function(){ var centovacast = (window.centovacast||(window.centovacast={}));
(centovacast.recenttracks||(centovacast.recenttracks={})).config = {
```

```
buy_target: '_blank' // target frame for "buy now" links
```

};})();
</script>

5.6 Listener Map

5.6.1 About the Widget

The Listener Map widget displays an interactive map, powered by the Google Maps mapping service, on which the geographic locations of your listeners and your stream are plotted.

This widget can be configured on the Widgets tab of the Configuration Settings page.

5.6.2 Advanced Customization

Developers familiar with JavaScript may embed in their pages a code block similar to the following to customize the behavior of the widget.

This configuration block *must* appear before the JavaScript code for the widget.

```
<script language="javascript">
 (function(){ var centovacast = (window.centovacast||(window.centovacast={}));
 (centovacast.googlemaps||(centovacast.googlemaps={})).config = {
```

```
show_server_location: true, // specify whether to plot server location on map
server_location: null, // textual name of server location (eg: city)
server_country_code: null // country code to display flag at server location
```

};})();
</script>

5.7 On-demand Content

5.7.1 About the Widget

The On-demand Content widget provides a file browser for your on-demand content, allowing visitors to browse, stream, or download the media you've published in your "ondemand" folder in the File Manager.

This widget is commonly used to allow visitors to download podcasts or other pre-recorded content from your station.

Like all of the widgets, the On-demand Content widget operates using AJAX requests such that the page never re-loads, and thus can be safely embedded into any web page.

This widget can be configured on the Widgets tab of the Configuration Settings page.

5.7.2 Publishing On-demand Content

To add files for clients to download or stream:

- 1. Click the Files link under the AutoDJ heading in your client area.
- 2. Click the ondemand folder in the left-hand folder pane.
- 3. Click the Upload button to upload files into the ondemand folder. Any files you upload to this folder will immediately be published in your On-demand Content widget.

To remove files from the widget, simply select the file(s) to remove and click the Delete button at the bottom of the page.

5.8 Song Requests

5.8.1 About the Widget

The Song Requests widget displays a form allowing your visitors to submit song requests.

Depending on how the widget has been configured, the request can be handled in one of two ways. Either:

- 1. The request can be emailed to the stream administrator for manual review and processing, or
- 2. The request can be processed automatically. In this case, the artist and song title are compared against the tracks in the media library. If a matching track is found, the track can be queued for playback automatically.

This widget can be configured on the Widgets tab of the Configuration Settings page.

5.9 Tune In

5.9.1 About the Widget

The Tune In widget is not actually a widget, but rather just a collection of tune-in links for various media formats.

Embedding this widget in an HTML page simply displays a set of icons for a variety of popular media formats. Clicking on an icon will launch the user's default player for the selected media format.

5.10 Stream Directory

5.10.1 About the Widget

The Stream Directory widget displays a list of all stations currently broadcasting from your hosting server. The stream title, listener count, and current track information are provided for each station, with a clickable link to tune in.

The list is automatically updated at regular intervals such that it always displays the latest stream information.

Note that for privacy reasons your administrator may have disabled this feature, so this widget may not appear on your Widgets page.

5.11 Web Player

5.11.1 About the Widget

The Web Player widget provides a web-based media player that your clients can use to tune in to your stream without leaving your web page, and without using an external media player.

This widget can be configured on the Widgets tab of the Configuration Settings page.

5.11.2 Basic Customization

The placeholder <div> element provided for the widget supports some additional options for basic customization of the widget.

- skin Specifies the name of the skin to use for the player.
 - When using Muses, a skin can be chosen on the Widgets page.
 - When using jPlayer, the skins blue.monday (the default) and pink.flag are available. Alternately, you can specify custom as the theme name and embed your own jPlayer skin stylesheet in your web page.
- width Specifies the width of the player (in pixels). Normally this is autodetected from the skin, but may be overridden here.
- height Specifies the height of the player (in pixels).
 Normally this is autodetected from the skin, but may be overridden here.
- **autoplay** Specifies whether or not to automatically begin playing when the page loads. Set to 1 to automatically play, or 0 to require the user to press play.

These options may be added to the <div> placeholder as HTML5 data attributes. For example, to specify skin foobar and turn on autoplay, you could use:

```
<div class="cc_player" data-username="user" data-skin="foobar" data-autoplay="1">
    Loading ...
</div>
```

5.11.3 Advanced Customization

Developers familiar with JavaScript may embed in their pages a code block similar to the following to customize the behavior of the widget.

This configuration block must appear before the JavaScript code for the widget.

```
<script language="javascript">
(function(){ var centovacast = (window.centovacast]|(window.centovacast=}));
(centovacast.player||(centovacast.player={})).config = {
muses: { // configuration used when Muses is your configured player
lang: 'auto', // force a specific language for the Muses interface
volume: 75, // set initial volume
autoplay: false, // automatically begin playing on page load
buffering: 5, // number of seconds of audio to buffer
bgcolor: '#FFFFF', // background color (change to match your page)
//width: 180, // set a custom widget width (defaults to skin width)
//height: 60, // set a custom title (defaults to skin width)
//kkin: 'http://example.com/skin.xml', // use a custom Muses skin URL
},
jplayer: { // configuration used when JPlayer is your configured player
autostart: 0, // automatically begin playing on page load
showcontrols: 1, // show WMP playback controls
showstatusbar: 1, // show WMP display
//width: 180, // set a custom widget width
//height: 60, // set a custom widget width
//height: 60, // set a custom begin playing on page load
showcontrols: 1, // show WMP display
//width: 180, // set a custom widget width
//height: 60, // set a custom widget height
};)();
```

DJ Management

The DJ manager allows you to create and configure DJ accounts allowing your station's DJs to have limited access to the features of your control panel.

Once an account has been created for a DJ, the DJ can log in with his DJ account's username and password using the same login form you use to access Centova Cast.

For SHOUTcast DNAS v2 servers, DJ accounts can also be used to perform live broadcasts. The DJ account's username and password become the source username and password for connecting to sc_trans v2.

The DJ Management page may be accessed using the DJs link under the *Configuration* heading in the navigation menu.

6.1 Creating a DJ Account

To create a new DJ account, click the Create DJ Account link in the upper, right-hand corner of the page. This will launch the DJ account editor, described under *DJ Account Editor* below.

6.2 Editing a DJ Account

To edit an existing DJ account, click the *Edit DJ Account* icon next to the DJ account you wish to edit. This will launch the DJ account editor, described under *DJ Account Editor* below.

6.3 Deleting a DJ Account

To delete an existing DJ Account, click the *Delete DJ Account* icon next to the DJ account you wish to delete. This will permanently remove the DJ Account.

6.4 Enabling or Disabling a DJ Account

To enable or disable an existing DJ account, click the *Enable DJ Account* icon next to the DJ account you wish to delete. A disabled DJ account will be prohibited from logging in.

6.5 DJ Account Editor

The DJ account editor allows you to modify and configure DJ accounts. The following fields are available:

• Username

Specifies the username for this DJ account. This will be used by the DJ to log in.

Password

Specifies the password for this DJ account. This will be used by the DJ to log in.

Real name

Specifies the real name for the DJ. This is informational only and is not used internally by Centova Cast.

Status

Specifies the status for the DJ account. If a DJ account is Disabled, the DJ cannot log in.

Permissions

Specifies the permissions for the DJ account. The following permissions are available:

- Start/stop the stream

Allows the DJ to start or stop the streaming server.

Start/stop the autoDJ

Allows the DJ to start or stop the autoDJ only.

- Manage playlist settings

Allows the DJ to modify the autoDJ's playlists. This controls the DJ's access to the playlist settings only; see the *Access media library* permission below to control access to playlist track management.

- Access media library

Allows the DJ to access the media library and add/remove tracks to/from playlists.

- Manage media files

Allows the DJ to access the file manager and upload, move, rename, delete, and otherwise manipulate the files for your stream.

- Full FTP access

Allows the DJ to use his username and password to log in via FTP and access all files for your stream. Also implicitly grants the *Manage media files* permission above to allow the same privileges via the file manager.

- Private FTP folder

Provides a private folder under media/dj/djusername/ in which the DJ can upload and manage his own private set of media files via FTP or via the file manager. Files uploaded to this private folder are automatically added to the media library per usual. The DJ cannot view or manipulate any files outside of his private directory.

- View statistics

Allows the DJ to view the statistics for the stream.

View listeners

Allows the DJ to view the current listeners for the stream.

- View logs

Allows the DJ to view the log files for the stream.

Allow logins

Specifies the days of the week on which the DJ is allowed to log in. If no days are selected, the DJ will not be permitted to log in.

Allow from

Specifies the earliest time of day at which the DJ is allowed to log in.

Allow until

Specifies the latest time of day at which the DJ is allowed to log in.

Statistics Report

Centova Cast provides the most comprehensive streaming radio statistics system commercially available today. It provides information about listener trends and demographics, data transfer, track performances and popularity, user agents, and much, much more.

The statistics page may be accessed using the Report link under the *Statistics* heading in the navigation menu.

7.1 Reporting Period

All of the metrics provided on the statistics page – with the exception those on the *Recent Activity* tab, and the *Track Broadcast Reports* on the *Tracks* tab – are valid for the current selected reporting period.

The default reporting period is the past 14 days. To change the reporting period, click one of the timeframe links – Yesterday, 7 days, 14 days, or 30 days – to report for the corresponding timeframe, or click Custom and select your own period for which you would like to view statistics.

Centova Cast can report by the following intervals:

- activity for the last *x* days
- activity from a specific start date, until a specific end date
- · activity for a specific calendar month

Reports may be generated for any period of up to 90 days.

The statistics available are described in the following sections.

7.2 Recent Activity

The recent activity report provides a high-level overview of your stream statistics for the *past 48 hours*, including details of listener trends, average session times, total listening hours, data transfer, track playback, and more.

Listener Minutes

This section contains information about listener activity during the past 48 hours. The *total minutes* and *total listening hours* (TLH) indicate your stream's overall volume of listeners, and the *average session length* indicates the length of time for which your listeners are typically remaining tuned-in to your station.

Listeners

This section provides information about your listeners. *Total listener sessions* describes the number of times a listener has tuned in. *Unique listeners* and *unique countries* indicate the number of distinct listeners and countries (respectively) which have tuned in during the reporting period.

Data Transfer

This section provides details of your stream's data transfer during the past 48 hours, including the total aggregate and per-session data transfer amounts.

Tracks

This section provides details of the tracks played during the past 48 hours, including the *number* of tracks and the *number of unique tracks* played during that period. The average number of tracks per hour and average track length are also provided.

Peak Period

This section provides information about the time at which the greatest number of listeners were connected during the past 48 hours. The *number of listeners*, the *track name*, and the *date* of that occasion are provided.

Listeners Graph

Provides a graph of the total number listeners connections established during each hour throughout the past 48 hours.

7.3 Listeners

The listener overview provides information about listeners' usage of your station for the selected reporting period.

7.3.1 Period Overview

Total listener minutes

Provides the total number of aggregate listener minutes for your station for the reporting period.

Total listening hours

Provides the total listening hours (TLH) for your station for the reporting period. This metric is commonly used to report listener volume with music licensing authorities.

The total listening hours is calculated by simply adding up the number of minutes for which each listener was tuned-in to your station during the reporting period.

Total sessions

Provides the total number of listener sessions for the reporting period.

This value is incremented each time a listener connects to your station during the reporting period.

Average session length

Provides the average length of a listening session during the reporting period, in minutes.

Total data transfer

Provides the total data transfer, in MB, for the reporting period.

Average data transfer

Provides the average data transfer per listener session, in MB, for the reporting period.

Unique listeners

Provides the number of unique listeners for the reporting period.

A listener is considered "unique" if nobody else from the listener's IP address connected to the station with the same user-agent string as the listener during the reporting period.

Unique countries

Provides the number of unique listener countries for the reporting period.

Each listener's country is determined solely based on his IP address.

7.3.2 Listener Trends

Provides information about listener trends over the past 7, 14, and 30 days, which help you determine how your stream's audience is developing over time.

Average Listener Session Length

The average length of a listener session is broken down into common intervals and charted and graphed.

7.3.3 Top Listeners by Listener Sessions

Top listeners are ranked according to the total number of times they have connected to your stream during the reporting period.

Centova Cast automatically determines the countries from which your listeners were connected based on their IP addresses, and the software used by the listener to tune into the stream is noted and identified as a media player or stream ripper to assist in abuse detection.

7.3.4 Top Listeners by Listener Minutes

Top listeners are ranked according to the total number of minutes they have spent connected to your stream during the reporting period.

Centova Cast automatically determines the countries from which your listeners were connected based on their IP addresses, and the software used by the listener to tune into the stream is noted and identified as a media player or stream ripper to assist in abuse detection.

7.4 User Agents

The user agents report provides an overview of the software programs your listeners are using to tune in to your stream.

Each user agent is classified as a legitimate media player (such as WinAmp, iTunes, etc.), or a stream ripper (a program used to steal music from your stream) to assist in abuse detection.

7.4.1 Top Agents by Listener Sessions

The top software used to connect to your stream is charted and graphed according to the number of times each software application has connected to your stream during the reporting period.

7.4.2 Top Agents by Listener Minutes

The top software used to connect to your stream is charted and graphed according to the total amount of time each software application has spent connected to your stream during the reporting period.

7.5 Countries

The country overview provides information about the countries from which the majority of your listeners are tuning in.

Each country is identified (where possible) based on the listener's IP address, and the appropriate flag is displayed to aid in identification at a glance.

7.5.1 Top Countries by Listener Sessions

The top countries connecting to your stream are charted and graphed according to the number of times a listener from each country has connected to your stream during the reporting period.

7.5.2 Top Countries by Listener Minutes

The top countries connecting to your stream are charted and graphed according to the total amount of time listeners from each country have spent connected to your stream during the reporting period.

7.6 Tracks

The tracks report provides information about the frequency and popularity of the tracks played on your stream.

7.6.1 Period Overview

The period overview provides aggregate information about the tracks played during the reporting period.

- Total tracks Provides the total number of tracks played during the reporting period.
- Unique tracks Provides the total number of different (unique) tracks played during the reporting period.
- Average per hour Provides the average number of tracks played each hour during the reporting period.
- Average length Provides the average length, in seconds or minutes, of a track played during the reporting period.
- **Peak listeners** Provides the peak number of listeners during the reporting period.
- Peak track

Provides the name of the track that was playing at the peak time during the reporting period.

 Peak time Provides the time of the peak period during the reporting period.

7.6.2 Most Popular Tracks

Provides an overview of the most popular tracks played during the reporting period, by connections per minute. The popularity of a track is calculated by determining the number of times a listener connected or "tuned-in" to the stream while the track was playing, averaged over the total number of minutes the song was played throughout the reporting period.

7.6.3 Least Popular Tracks

Provides an overview of the least popular tracks played during the reporting period, by disconnections per minute. This is calculated in the same manner as the *Most Popular Tracks* report.

While this may be a somewhat fuzzy metric (as disconnections may not always directly correspond with a distaste in the current song), the average value over a period of time may serve as a useful indicator of a track's popularity.

7.6.4 Top Tracks by Playbacks

Provides a list of the songs most frequently played during the reporting period, according to the total number of times the song was played.

7.6.5 Top Tracks by Airtime

Provides a list of the songs which received the most "air time", or total minutes, during the reporting period.

7.6.6 Track Broadcast Reports

Provides access to your monthly broadcast reports for the past several months. These downloadable (CSV-format spreadsheet) reports provide information about each and every song that was played on your stream during the reporting period, along with information about how many listeners heard each song.

For more information about track broadcast reports, see the Broadcast Reports section.

Note that broadcast reports are generated on a monthly basis, and this section will not appear until at least one report has been generated.

7.7 Historical Statistics

Historical statistics provide detailed data transfer and listener statistics, complete with graphs, allowing you to track listener trends and resource usage over a period of time.

7.7.1 Graphs

The graphs on the Historical Statistics page are dynamic and interactive. Hovering your mouse over any point on the graph will display a summary of the sample taken at that point. For more detailed reporting, you may make a selection on the timeline below each graph to "zoom" into a specific portion of the reporting period.

Each graph also includes a link to download a CSV-format spreadsheet file containing the raw data used to generate the graph.

Graphs provided include:

- Peak Listeners
 Indicates the peak number of simultaneous listeners during each hour of the reporting period.
- Listener Minutes Indicates the total listener minutes for your stream for each hour of the reporting period.
- Data Transfer

Indicates the data transfer for your stream for each hour of the reporting period.

7.7.2 Average Listeners Per Hour Chart

The Average Listeners Per Hour chart provides an overview of the popularity of your stream at specific times of the day on specific days of the week.

The average number of listeners for each day, and each time of day, are then charted based on the following time periods:

- Graveyard (00:00 07:00)
- Morning (07:00 11:00)
- Lunch (11:00 13:00)
- Afternoon (13:00 19:00)
- Evening (19:00 00:00)

This chart is extremely useful for scheduling advertisements and planning shows to take advantage of your peak listening audience.

Broadcast Reports

Centova Cast's track broadcast reports are downloadable (CSV-format) spreadsheets generated on a monthly basis which provide detailed information about each and every song that was played on your stream during a reporting month.

These reports are commonly used to submit performance reports to royalty/music licensing authorities.

CSV files are compatible with most common spreadsheet applications, including Microsoft Office and LibreOffice Calc, and are also convenient for advanced users who may wish to perform more advanced report processing using other custom software.

Reports are generated for the preceding month on the first day of each calendar month, and may be found on the *Tracks* tab of the <u>Statistics</u> page. Each report contains two spreadsheets: a playback report, which reports every track played during the reporting period, and a performance report, which reports aggregate playback information for each unique song played during the reporting period.

8.1 Playback Report

The playback report contains a comprehensive listing of every track played during the reporting period. The columns in this spreadsheet include:

- Artist name the name of the artist for the track played, if available
- Album name the name of the album for the track played, if available
- Track title the title of the track played
- **ISRC** the ISRC code for the track played, if the track was played by the autoDJ and the ISRC value was set in the ID3 tags for the track's MP3 file
- Start time the date and time at which the track began playing (YYYY-MM-DD HH:MM:SS format, UTC/GMT time zone)
- End time the date and time at which the track finished playing (YYYY-MM-DD HH:MM:SS format, UTC/GMT time zone)

- · Listeners the number of listeners who heard any portion of the track
- · Duration the length of the track, in seconds
- TLH the total listening hours for the track played
- **Type** indicates how Centova Cast identified the details for this track; see *Track Identification* below
- · Other reserved for future use

8.2 Performance Report

The performance report contains aggregate playback and listener information for each unique track played during the reporting period. The columns in this spreadsheet include:

- Artist name the name of the artist for the track played, if available
- Album name the name of the album for the track played, if available
- Track title the title of the track played
- ISRC the ISRC code for the track played, if the track was played by the autoDJ and the ISRC value was set in the ID3 tags for the track's MP3 file
- Duration the length of the track, in seconds
- Frequency the number of times the track was played during the reporting period
- **Performances** the number of listeners who heard any portion of the track play during the reporting period (essentially, the sum of the number of listeners who were connected any time the track was played)
- TLH the total listening hours for this track during the reporting period
- **Type** indicates how Centova Cast identified the details for this track; see *Track Identification* below
- Other reserved for future use

8.3 Track Identification

Streaming servers do not record precise information about each track that was played; instead, they simply record a metadata string which commonly (but not always) indicates the artist and title of the track. In order to correlate that metadata string with a distinct track in the stream's media library, Centova Cast may use one of three approaches, each of of which varies in its accuracy.

As the accuracy of the track identification may be be of concern in cases such as royalty reporting, it is included in the *Type* field in each report. The *Type* field may specify one of the following three numeric values, in decreasing order of accuracy:

• 1 - Song Title Code Match

Indicates that song title codes were enabled and that a valid code was found in the metadata. This means that the track was played by the autoDJ and was definitively identified from the media library. The artist, album, title, ISRC, and duration should precisely match the values for the correct track in your media library.

• 2 - Heuristic Media Library Match

Indicates that song title codes were disabled (or that no valid code was found in the metadata) but that Centova Cast was able to find a track in the media library that seemed to match the artist and title from the metadata with a high degree of accuracy. The artist, album, title, ISRC, and duration will precisely match the values of a track in your media library, but there is a slight possibility that it could be the wrong track (particularly if you have multiple editions of the same track, such as a live edition and a studio edition, which share the same artist and title).

• 3 - No Media Library Match

Indicates that no matching track could be found in the media library, so the metadata was simply parsed as-is from the streaming server, and a best-effort approach was taken to identify the artist, album, and title. The ISRC value will be empty, and the duration will reflect the actual time for which the track played. If the track was played by a live source (rather than by the autoDJ) it will not exist in the media library, and thus it will be recorded as Type 3.

Current Listeners

The Current Listeners report provides a comprehensive overview of the listeners who are currently tuned into your stream.

The Current Listeners report may be accessed using the Listeners link under the *Statistics* heading in the navigation menu.

9.1 Current Listener Chart

The current listener chart provides a list of every listener currently connected to your stream. The following information is provided for each listener:

Country

Indicates the country in which the listener is located, if this information available.

IP Address

Indicates the IP address of the listener.

User Agent

Indicates the name and version of the software with which the user has connected to your stream.

Agent Type

Indicates the type of software being used by the user; either a player (a standard media player used to listen to music) or a ripper (a program which is capable of allowing the listener to "steal" music from your stream and save it on the listener's PC).

Listen Time

Indicates the total length of this listener's session so far.

9.2 Top Countries Chart

The Top Countries chart provides a breakdown of the top countries from which listeners are currently tuned in to you stream. The list is ranked by number of listeners from each country.

9.3 Top User Agents Chart

The Top User Agents chart provides a breakdown of the most popular software with which your listeners are connecting to your stream.

9.4 Listener Locations Map

The Listener Locations Map provides a realtime world overview of your current listeners' geographic locations, plotted on a world map. This service is provided by Google Maps and may or may not be available depending on how your administrator has configured Centova Cast.

Server Logs

Centova Cast provides direct access to the log files created by your streaming server.

The server logs may be accessed using the Logs link under the *Statistics* heading in the navigation menu.

10.1 Log Types

By default, the access log for your server is displayed. To view the error or autoDJ logs, click the appropriate link at the upper right-hand corner of the log viewer.

Each log has a distinct and important purpose:

Access Log

The access log is generated by your streaming server, and records information about each successful connection between a listener and your streaming server. This information is used by Centova Cast to generate statistics for your stream.

Error Log

The error log is generated by your streaming server and, despite its name, it records much more than just errors – it is a general record of diagnostic information about the various internal activities of the streaming server.

If a problem occurs with your streaming server, the diagnostic information in the error log will be very useful in diagnosing the problem.

AutoDJ Log

The autoDJ log is generated by your autoDJ software, and records diagnostic information about the various internal activities of the autoDJ.

If a problem occurs with your autoDJ, the diagnostic information in the autoDJ log can help in diagnosing the problem.

The precise format of the logs displayed will vary depending on the streaming server and autoDJ software being used by your hosting provider. If you require assistance, please contact your hosting provider.

10.2 Downloading the Logs

If your hosting provider has enabled this option, you may see a Download link at the upper right-hand corner of the log viewer.

This link allows you to download all log files in a ZIP archive for offline review and/or archival.

Server Controls

Centova Cast's server control options provide access to the core feature of Centova Cast – the management of your streaming server software.

The server controls are provided under the *Server* heading in the navigation menu, and are explained in the following sections.

11.1 Start Server

Displayed only if your server is currently in the Offline state, this link will start your streaming server.

If autoDJ support is enabled for your stream, the autoDJ will also be started.

11.2 Stop Server

Displayed only if your server is currently in the *Online* state, this link will shut down your streaming server, disconnecting all listeners and preventing any further listeners from tuning in.

If autoDJ support is enabled for your stream, the autoDJ will also be stopped.

11.3 Reload

Displayed only if your server is currently in the *Online* state, this link will reload your streaming server's configuration *without* disrupting any listeners.

If autoDJ support is enabled for your stream, the autoDJ's configuration will also be loaded.

Note that not all configuration changes can be applied with the Reload feature; in some cases it may be necessary to fully stop and then restart your server to apply certain changes.

11.4 Admin

Displayed only if your server is currently in the *Online* state, this link opens the administrative interface for your streaming server.

Note that when you click this link, you are actually leaving Centova Cast and interacting directly with your streaming server software. If you require further assistance, consult the documentation for your streaming server for information about its administrative interface.

AutoDJ Controls

Centova Cast's autoDJ control options provide management functionality for your autoDJ.

The autoDJ controls are provided via button icons to the immediate right of the *AutoDJ* heading in the navigation menu, and are explained in the following sections.

Note that if autoDJ support is disabled for your stream, this entire heading will not be shown.

12.1 AutoDJ Settings

Provides a quick shortcut to the *AutoDJ* tab of the Configuration Settings page.

12.2 Start AutoDJ

Displayed only if your autoDJ is currently in the Offline state, this button will start your autoDJ.

12.3 Stop autoDJ

Displayed only if your autoDJ is currently in the *Online* state, this link will shut down your autoDJ without stopping your streaming server. This may be necessary to begin a live broadcast with a live source.

12.4 Skip Track

Displayed only if your autoDJ is currently in the *Online* state, this link will immediately terminate the current playing track and advance to the next track.

Playlist Manager

The playlist manager allows you to create and configure playlists to control how and when your media is played. You can create as many playlists as you like, each with its own distinct settings, and Centova Cast will automatically determine when to play each one based on your settings.

13.1 Creating a Playlist

To create a new playlist, click the *Create Playlist* link in the upper, right-hand corner of the page. This will launch the playlist editor, described under *Playlist Editor* below.

13.2 Editing a Playlist

To edit an existing playlist, click the *Edit Playlist* icon next to the playlist you wish to edit. This will launch the playlist editor, described under *Playlist Editor* below.

13.3 Deleting a Playlist

To delete an existing playlist, click the *Delete Playlist* icon next to the playlist you wish to delete. This will permanently remove the playlist, its settings, and its list of tracks.

13.4 Enabling or Disabling a Playlist

To enable or disable an existing playlist, click the *Enable Playlist* icon next to the playlist you wish to delete. A disabled playlist will be ignored by Centova Cast.

13.5 Playlist Editor

The playlist editor allow you to configure a playlist.

13.5.1 Playlist Settings

The following fields are available:

• Title

Specifies the title for the playlist. This is used only to help you identify the playlist, and is completely ignored by Centova Cast. Use a descriptive name like "Heavy rotation" or "Friday night's top 10 countdown" to ensure that you'll remember what this playlist is for.

Status

Specifies the status of the playlist. If the playlist is Enabled, it will be included in your stream; if it is Disabled, it will be ignored by Centova Cast and its tracks will never be played.

• Type

Specifies the type of playlist. There are presently 4 playlist types available:

- General Rotation

General rotation playlists are used to play media from your library when no scheduled, interval, or immediate playlists are due to be played. This is the "default" playlist type, and most stations spend the majority of their air time playing random tracks from general rotation playlists.

- Scheduled

Scheduled playlists allow you to schedule a list of tracks to be played at a specific date and time. These playlists can also be setup to repeat on a schedule, making them ideal for daily/weekly countdowns or pre-recorded shows.

Interval

Interval playlists allow you to play tracks at regular intervals of several minutes or several songs. These playlists are useful for playing frequently-recurring content, such as station identification or commercial advertisements.

Immediate

Immediate playlists allow you to queue tracks to be played immediately after the end of the current track. These playlists are useful for playing tracks on demand, such as song requests.

For more information about how tracks are selected when multiple playlists of different types are activated, please see the section entitled *Track Selection* below.

Playback order

Specifies the track playback order for *General Rotation*, *Scheduled*, and *Immediate* playlists. If set to Random (shuffled), tracks will be selected at random from the playlist. If set to Sequential (in order), tracks will be selected in order from the playlist, starting with the first track, and restarting when the end of the playlist is reached.

The playlist editor also includes a number of additional fields depending on the playlist type. Those are discussed in the sections following immediately below.

13.5.2 General Rotation Playlist Options

General Rotation playlists include the following additional fields in the playlist editor:

Playback weight

Specifies the "weight" for the playlist, which controls how often tracks from this playlist are played relative to tracks from other General Rotation playlists. This can be used to ensure that, for example, new releases (in one playlist) are played more frequently than older tracks (in another playlist).

Take, for example, a scenario in which you have the following General Rotation playlists:

| Power | rotation | Weight: | 6 |
|-------|----------|---------|---|
| Heavy | rotation | Weight: | 3 |
| Light | rotation | Weight: | 1 |

In this example, for every 10 tracks that are played, on average, 6 will be selected from the *Power rotation* playlist, 3 will be selected from the *Heavy rotation* playlist, and 1 will be selected from the *Light rotation* playlist.

As such, you might place your most popular tracks (new releases, for example) in your *Power rotation playlist*, to ensure that they are played most frequently. You might place older favorites in the *Heavy rotation* playlist to ensure that they are still played often, though less often than the new releases. And you might place your less popular tracks in the *Light rotation* playlist to ensure that they are played only occasionally.

Activation period

General rotation playlists can also be limited to a specific period of the day. This can be used to play lighter songs in the morning and heavier songs in the afternoon, for example. If no time period is selected, the playlist will be active for the entire day.

Note that setting a time period for a general rotation playlist is different than creating an actual *Scheduled Playlist*. Scheduled playlists are exclusive to their time periods, and no general rotation tracks will play during a scheduled playlist. In contrast, if a general rotation playlist has a time frame configured, and there are other general rotation playlists configured for the same period (or with no time restriction at all), Centova Cast will select tracks from each of the playlists according to their weighting as described above.

Also note that at least one general rotation playlist must always exist *without* any time restrictions. This playlist is used as a failsafe in case Centova Cast ever encounters a scenario in which it needs to select a track, but no other active playlists are scheduled. In the event that all active general rotation playlists are configured with a time restriction, Centova Cast will ignore the time restrictions on *all* of the general rotation playlists and treat them all as if they were active for the entire day.

For more information about how tracks are selected when multiple playlists are activated, please see the section entitled *Track Selection* below.

13.5.3 Scheduled Playlist Options

Scheduled playlists include the following additional fields in the playlist editor:

Scheduled date

Specifies the date on which this playlist should be activated. The playlist will remain inactive until this date. You may optionally click the "..." button to choose the date visually on a calendar.

Scheduled time

Specifies the time at which this playlist should be activated, on the date specified in the *Scheduled date* field. The playlist will remain inactive until the scheduled date at the scheduled time.

Important scheduling note: All dates and times will be in the time zone configured on the "Stream" tab of the Configuration Settings page.

Repeat schedule

Specifies when (if ever) this playlist should repeat. If enabled, this allows you to have the tracks in the playlist automatically re-played several times per week, month, or year.

Possible values for this field include:

- Never (one time only)

If selected, the playlist will play only at the scheduled date/time. After it has played, it will effectively be disabled.

- Daily

If selected, the playlist will play every day at the scheduled time, starting on the scheduled date.

- Weekly

If selected, the playlist will play every week on the selected weekdays, at the scheduled time, starting on the scheduled date (or rather, on the first selected weekday after the scheduled date). The weekdays on which the playlist should be activated can be selected using the *Repeat on* field, which appears only when the *Weekly* repeat schedule is selected.

- Monthly

If selected, the playlist will play every month, on the scheduled day of the month, at the scheduled time. You can alternately use the *Repeat on* field, which only appears when the *Monthly* repeat schedule is selected, to have the playlist played on the first or last day of the month instead of on the scheduled day of the month.

- Yearly

If selected, the playlist will play every year, on the scheduled day and month, at the scheduled time.

Playback style

Specifies how tracks are selected from the playlist.

Possible values for this field include:

- Play all tracks sequentially (in order)

When selected, Centova Cast will play *all* tracks from the playlist, in order, at the scheduled time.

- Play all tracks randomly (shuffled)

When selected, Centova Cast will play *all* tracks from the playlist, in random order, at the scheduled time.

- Play only one randomly selected track from this playlist

When selected, Centova Cast will randomly play a single track from the playlist at the scheduled time.

Interruptible

Specifies whether or not this playlist may be interrupted by other scheduled playlists. Possible values for this field include:

- No, always play to completion

If selected, the playlist will always play through to completion before any other scheduled playlists are permitted to play. If any other scheduled playlists have been scheduled to start while this playlist is still playing, they will be delayed until this playlist finishes.

- Yes, terminate if another scheduled playlist is due to begin

If selected, this playlist will be aborted if another scheduled playlist is due to start while this playlist is still playing. Note that for technical (and aesthetic) reasons, Centova Cast cannot interrupt individual tracks while they are still playing, so the new playlist will be started at the next available opportunity (i.e., when the current track finishes).

Stop after

Specifies the maximum number of minutes for which this playlist should remain active once started.

Note that this setting is subject to the standard playlist rules enforced by Centova Cast; specifically, Centova Cast will never interrupt a playing track. For example, if your limit is set to 5 minutes, and an 8 minute track is started, the track will play through to completion even though it will exceed your limit by 3 minutes.

Also note that this limit is relative to the time at which the playlist *actually* started, not the time at which it was scheduled. Take the following scenario for example: say you scheduled your playlist for 3:00 and configured it to stop after 20 minutes, but it started 5 minutes late because of a lateplaying track in an earlier playlist. In this case, the timer will be started at 3:05 (instead of 3:00), and thus the playlist won't be stopped until 3:25 instead of 3:20.

For more information about how tracks are selected when multiple playlists are activated, please see the section entitled *Track Selection* below.

13.5.4 Interval Playlist Options

Interval playlists include the following additional fields in the playlist editor:

Repeat every

Specifies how often the playlist should repeat. You may specify that the playlist should repeat either after every few songs, or after every few minutes. You may also specify an interval (in songs or minutes) at which the playlist should repeat.

Playback style

Specifies how tracks are selected from the playlist. If *Play only one randomly selected track from this playlist* is selected, Centova Cast will choose a single track from the playlist, then consider

it "inactive" until the next interval. If *Play all tracks from this playlist in order* is selected, then Centova Cast will play the *all* tracks from the playlist, in order, at each interval.

For more information about how tracks are selected when multiple playlists are activated, please see the section entitled *Track Selection* below.

13.6 Track Selection

When creating playlists, it is important to understand how Centova Cast will select tracks when multiple playlists are activated. At the end of each song, Centova Cast performs a number of checks, in a specific order, to determine which playlist to select a track from next.

Note that Centova Cast *will never interrupt a track* to change playlists. That is, if a playlist is scheduled to start at 10:30, and a 10 minute track starts at 10:25, the scheduled playlist will be deferred until 10:35 to allow the track to finish. This is a common cause for concern for stations which play "mix tracks" which may be an hour or more in length.

The following checks are performed in the order shown to determine the playlist from which to select a frack:

1. Immediate Playlists

If an *Immediate* playlist is enabled, it will always take precedence over *all* other playlist types, and it will be played through to completion before any other playlists will be consulted, even if this requires interrupting another playlist. Upon completion, the status of the *Immediate* playlist will be set to *disabled* to ensure that it is not repeated.

2. Scheduled Playlists

If it is time to play a *Scheduled* playlist, it will always take precedence over all other playlist types (except *Immediate* playlists). Once a *Scheduled* playlist starts, it will be played through to completion, or to its scheduled stop time, before any other playlists are consulted.

If two *Scheduled* playlists conflict (i.e., if one is scheduled to start while another is still playing), Centova Cast will consult the active playlist's "Interruptible" flag. If the active playlist is configured to be interruptible, Centova Cast will immediately abort the active playlist (leaving the remaining tracks unplayed) and begin the second playlist. If the active playlist is *not* configured to be interruptible, the second playlist will be deferred until the active playlist finishes.

3. Interval Playlists

If it is time to play an *Interval* playlist, it will always take precedence over *General Rotation* and *Song Request* playlists.

4. Song Requests

If song requests are pending and due to be queued (based on the stream's request settings), they will always take precedence over *General Rotation* playlists.

5. General Rotation playlists

If no other playlists are due for playback, a track will be selected from one of the *General Rotation* playlists. Selection of tracks from *General Rotation* playlists is "weighted" as described under *General Rotation Playlist Options* above, to ensure that tracks from "heavier" playlists are chosen more often than those from "lighter" playlists.

If a *General Rotation* playlist has been configured for only a specific time period, it will only be included in the rotation during that time period. During that period, it will be treated just like any other *General Rotation* playlist, and included in the rotation based on its weight. Outside of the configured time period, the playlist will be treated as if it is disabled.

Media Library

The media library provides a powerful, convenient way to browse and search your media and organize it into the playlists you created in the previous section.

To access the Media Library, click Media under the AutoDJ heading in the navigation menu.

14.1 Media Browser

To browse the media in your library, click the *Media Library* folder in the upper left-hand corner of the page. This will launch the media browser, which is organized into the following panes:

14.1.1 Playlist List

Displayed along the entire height of the left edge of the window, this pane lists all of the playlists you have created (as described in the previous section), as well as an entry for your media itself.

- To manage the tracks in a playlist (described under *Managing Playlist Tracks* below), click on one of the playlists in the list.
- To enable or disable a playlist, right-click on the playlist and select Enable/Disable Playlist.
- To return to your media library, click on the *Media Library* entry at the top of the list.

14.1.2 Artist List

Displayed in the upper-middle area of the window, this pane contains the list of all of the artists in your media library (or, if performing a search, only the artist matching your search criteria are displayed).

- To select an artist, click on its entry in the list. To select multiple artists, hold Ctrl or Shift while clicking. When an artist is selected, its albums are displayed in the *Albums List* (described below).
- To add all of an artist's tracks to a playlist, select one or more artist(s), then drag them with your mouse and drop them on the desired playlist.
- To rename an artist, right-click on its entry in the list and select Rename artist.

14.1.3 Album List

Displayed in the upper-right area of the window, this pane contains the list of all of the albums by the artists selected in the *Artist List* (described above). If no artists are selected, no albums will be displayed.

- To select an album, click on its entry in the list. To select multiple albums, hold Ctrl or Shift while clicking. When an album is selected, its tracks are displayed in the *Tracks List* (described below).
- To add all of an album's tracks to a playlist, select one or more album(s), then drag them with your mouse and drop them on the desired playlist.
- To access the context menu for the album, right-click on its entry in the list. The album context menu includes the following options:
 - Edit album details

Edit the details for the album, including its title, album cover, and other details.

Remove cover image
 Removes the album's current cover image.

- Re-index album

Discards any customizations made to the album details and reloads the album details from its tracks' metadata. Also re-downloads the album's cover art using the current album data source settings.

14.1.4 Track List

Displayed across the lower portion of the page, this pane contains the list of all of the tracks in the albums selected in the *Album List* (described above). If no albums are selected, no tracks will be displayed.

- To select a track, click on its entry in the list. To select multiple tracks, hold Ctrl or Shift while clicking.
- To add the selected track(s) to a playlist, drag them with your mouse and drop them on the desired playlist.
- To access the context menu for the track, right-click on its entry in the list. The track context menu includes the following options:

Rename track

Edit the title for the track.

Listen to preview
 Plays a short (several second) sample of the selected track.

Note that when you drag and drop an artist, album, or track onto a playlist, it is immediately and instantly added to that playlist. No further saving is necessary.

If the playlist's status is "enabled", the new track(s) will immediately become eligible for playback after the current song completes.

14.2 Options

To access the media library options, click the Options button in the upper-right corner of the page. The following options are available:

Show album covers

Toggles the display of album cover images next to each album in the album list.

Browse by folders

Switches from the *Media Browser* view to the *Folder Browser* view and back. See the following section for details about the folder browser.

14.3 Folder Browser

The folder browser provides an alternate interface to the media library, wherein tracks are organized by their pathnames on disk rather than by artists and albums.

To launch the folder browser interface, click the Options button in the upper-right corner of the page and select Browser by Folders.

- To expand or collapse a folder, double-click on its entry in the list or click the plus (+) or minus (-) icon next to its entry in the list.
- To select a media file or folder, click on its entry in the list. To select multiple tracks, hold Ctrl or Shift while clicking.
- To add the selected media file(s) or folder(s) to a playlist, drag them with your mouse and drop them on the desired playlist.

14.4 Searching your Media

Centova Cast includes a powerful search feature allowing you to quickly and easily locate specific artists, albums, and tracks in media libraries of all sizes. The search feature is located at the top of the page, above the playlist and artist lists, and is composed of the following fields:

Keyword field

Enter the word or phrase for which you want to search in the keyword field.

Criteria field

The criteria field is located to the immediate right of the keyword field, and contains the following options:

- Artists

Specifies that the search should match only the names of artists in your library.

– Albums

Specifies that the search should match only the names of albums in your library.

Tracks

Specifies that the search should match only the titles of tracks in your library.

– All

Specifies that the search should match artist names, album names, or track titles.

Genre field

The genre field is located to the immediate right of the criteria field, and contains a list of the music genres found in your media library. By default, *All genres* is selected, which specifies that you do not want to filter your results by any particular genre. Selecting a genre will limit the search results to tracks of that genre.

Note that Centova Cast has no control over the genres associated with each track in your library. The genre for each track is specified by the person who created the media file at the time at which the media file was created, and Centova Cast simply uses that information verbatim to classify the track by genre.

14.5 Playlist Track Manager

After creating your playlists (as described in the previous section) and adding media to them (as described earlier in this section), you will likely need to re-organize or remove tracks from a playlist at some point in time.

To display the list of tracks in a playlist, click on the name of the playlist in the playlist list at the left-hand side of the media library page. This will display the list of tracks currently assigned to the playlist.

14.5.1 Re-organizing Tracks

To change the sort order of the tracks in a playlist, select the track(s) to be moved (by clicking on the track title, optionally while holding Ctrl or Shift to select multiple tracks), and then use one of the directional buttons at the bottom of the page to move the track(s). The directional buttons include:

• Top

Moves the selected track(s) to the top of the playlist.

- Up Moves the selected track(s) up one position in the playlist.
- Down

Moves the selected track(s) down one position in the playlist.

Bottom

Moves the selected track(s) to the bottom of the playlist.

To more quickly reorder tracks, hold the Ctrl or Shift keys while clicking the Up or Down buttons. While the *Shift* key is pressed, the *Up* and *Down* buttons move the selected track(s) up or down 25 tracks. While the *Ctrl* key is pressed, the *Up* and *Down* buttons move the selected track(s) up or down 100 track(s).

14.5.2 Removing Tracks

To remove tracks from a playlist, select the track(s) (by clicking on the track title, optionally while holding Ctrl or Shift to select multiple tracks), then use the Remove button at the bottom of the page to remove the selected track(s) from the playlist.

Note that removing a track from a playlist in this manner *only* removes it from the playlist – it does not delete the track. The track will still appear in your media library and you can still add it to other playlists if desired.

Saving Changes

After re-organizing or removing tracks from a playlist, the playlist *must* be saved or the changes will be lost. To save your changes, click the Save button at the bottom of the page.

Playlist changes will immediately take effect after the current song completes.

14.5.3 Discarding Changes

If, after re-organizing or removing tracks from a playlist, you decide that you wish to discard your changes instead of saving them, click the Revert button at the bottom of the page. This will destroy any changes made since the last time you saved this playlist, and revert the playlist to its previous track list.

File Manager

The file manager provides a complete management interface for uploading and organizing your station's media files.

To access the File Manager, click Files under the AutoDJ heading in the navigation menu.

15.1 Folder Browser

The folder browser is displayed along the left-hand side of the window, and provides an overview of the folders in your station's account.

- To expand or collapse a folder, double-click on its entry in the list or click the plus (+) or minus (-) icon next to its entry in the list.
- To view the files in a folder, click on its entry in the list. The files contained in the folder will be displayed in the *File Browser*, described below.
- To access the context menu for the folder, right-click on its entry in the list. The folder context menu includes the following options:

- Upload

Launches the file upload interface to upload file(s) to the selected folder. See the *Uploading Files* section below for details.

Paste

Pastes any files from the clipboard into the selected folder. See the *File Operations* section below for details about cutting, copying, and pasting files.

15.2 File Browser

The file browser occupies the majority of the window, and provides a list of the files and sub-folders in the current selected folder.

• To select a file or sub-folder, click on its entry in the list. To select multiple files or sub-folders, hold Ctrl or Shift while clicking.

- To open a sub-folder, double-click on its entry in the list.
- To access the content menu for a file or sub-folder, right-click on its entry in the list. The context menu options correspond directly to the buttons described in the *File Operations* section below.

15.3 File Operations

The toolbar along the bottom of the window provides buttons to perform a number of common file operations. These buttons include:

Upload

Launches the file upload interface to upload file(s) to the selected folder. See the *Uploading Files* section below for details.

• Copy

Copies the selected file(s) to the clipboard. Once on the clipboard, the files can be copied to another folder by opening a target folder and using the *Paste* option.

• Cut

Cuts the selected file(s) to the clipboard. Once on the clipboard, the files can be moved to another folder by opening a target folder and using the *Paste* option.

Paste

Pastes any files from the clipboard into the current folder. This will either copy (if the *Copy* option was previously used) or move (if the *Cut* option was previously used) the files from their original folder into the current folder.

Delete

Deletes the selected file(s). This is a permanent operation and cannot be undone.

• Rename

Renames the selected file or folder.

15.4 Uploading Files

The file upload interface may be accessed by clicking Upload, either in a context menu or on the toolbar at the bottom of the window.

15.4.1 Queuing Files for Upload

To select one or more file(s) to upload, click the Select files button at the right-hand side of the window, then select the desired files and click the Open button.

The selected files will be added to the upload queue and will immediately begin uploading to the server.

15.4.2 Upload Progress

The progress of each individual upload, and the overall queue progress, is displayed in realtime as the upload is performed.

The *File progress* meter at the bottom left-hand side of the window displays the upload progress for the current file. The *Overall progress* meter at the bottom right-hand side of the window displays the progress for the entire queue.

As each upload completes, its status is recorded in the queue in the middle of the window. Any upload errors will be noted there as well. Successful uploads will be removed from the queue after a few seconds.

15.4.3 Aborting an Upload

To cancel an upload for a single file, click the Cancel link to the right of the file's entry in the queue.

To cancel all uploads, click the Cancel all button at the right-hand side of the window.

15.5 Special Folders

While users are free to create their own folders for organizational purposes, there are several special folders that have specific meanings within Centova Cast. These folders include:

• /media

This folder contains all of the media files for your station's media libraries. Files uploaded to this folder are automatically processed by Centova Cast and added to your station's media library. When files are removed from this folder, they are automatically removed from the media library as well.

/ondemand

This folder contains the files to be served by your station's *On-demand Content* widget. Adding or removing files in this folder will automatically cause them to appear in (or disappear from) the on-demand content widget. For more information about on-demand content, see the <u>On-demand</u> Content section of the manual.

• /sounds

This folder contains sound files used on your stream for introduction jingles, fallback audio, and other similar content. Files in this folder typically should not be altered from within the file manager.

Some streaming server types and/or autoDJ types may also create folders of their own in your station's account. Typically it is best not to remove or alter the contents of these folders as doing so may negatively impact the operation of your station.