Centova Cast

Reseller Reference Manual

Published May 04, 2015 Copyright 2015, Centova Technologies Inc.



Contents

1	Intro	oductio	n	3
2	Man	aging /	Accounts	4
2.1 Managing Existing Accounts		Manag	jing Existing Accounts	4
		2.1.1	Account List	4
		2.1.2	Editing an Account	5
		2.1.3	Batch Operations	5
		2.1.4	Searching, Filtering, Sorting	6
	2.2	Creatir	ng New Accounts	6
	2.3	User A	Account Settings	7
		2.3.1	Stream	7
		2.3.2	Limits	8
		2.3.3	AutoDJ	9
		2.3.4	Widgets	12
		2.3.5	Hosts	13
		2.3.6	Albums	13
		2.3.7	Server Overrides (SHOUTcast v1/v2)	15
		2.3.8	Relaying (SHOUTcast v1/v2)	16
		2.3.9	Master Relaying (IceCast)	16
		2.3.10	Mountpoint Relaying (IceCast)	17
		2.3.11	Mount Points	17
		2.3.12	Advanced	21
		2.3.13	User Account Operations	23

3 Statistics Report				
	3.1	Reporting Period	24	
3.2 Recent Activity		Recent Activity	24	
	3.3	Listeners	25	
		3.3.1 Period Overview	25	
		3.3.2 Listener Trends	26	
		3.3.3 Average Listener Session Length	26	
		3.3.4 Top Listeners by Listener Sessions	26	
		3.3.5 Top Listeners by Listener Minutes	26	
	3.4	User Agents	27	
		3.4.1 Top Agents by Listener Sessions	27	
		3.4.2 Top Agents by Listener Minutes	27	
	3.5	Countries	27	
		3.5.1 Top Countries by Listener Sessions	27	
		3.5.2 Top Countries by Listener Minutes	27	
	3.6	Historical Statistics	27	
		3.6.1 Graphs	28	
		3.6.2 Average Listeners Per Hour Chart	28	
	3.7	Basic Configuration	28	
	3.8 Albums		29	
	3.9	Reseller Options	30	
 4 Managing E-mail Messages 4.1 The Message List		aging E-mail Messages	31	
		The Message List	31	
	4.2	Editing Messages	31	
	4.3	Placeholders / Variables	32	
	4.4	Message Previews	32	
5 Account Templates		ount Templates	33	
5.1 The Account Templates List		The Account Templates List	33	
	52	Creating New Account Templates	33	
	5.3	Editing Account Templates	34	
	0.0		04	

Chapter 1

Introduction

This is the reseller'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 reseller area.

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

Chapter 2

Managing Accounts

Centova Cast includes a comprehensive account editor allowing the reseller to individually customize the operation of each client's streaming server.

To access the account manager, click Manage under the Accounts heading in the navigation menu.

2.1 Managing Existing Accounts

Accounts in Centova Cast may be managed via the account management page, which is displayed immediately after logging in, and may accessed at any time by clicking the Manage link under the *Accounts* heading.

2.1.1 Account List

The account list provides an overview of all accounts managed by this Centova Cast control panel.

The summary includes the following details:

• Username

Indicates the username for the account. Click on the username to view or modify the account details.

• Title

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

Server

Indicates the name of the server on which the account is hosted.

• Port

Indicates the port number on which this client's streaming server listens. Click on the port number to access the streaming server's built-in administrative interface.

Type

Indicates the type of server software (ShoutCast2, IceCast, etc.) used by the stream.

• Clients

Indicates the maximum number of *concurrent* listeners permitted for this stream. The stream can never have more than this number of listeners tuned-in at the same time.

Bitrate

Indicates the maximum bit rate for this stream.

Data Xfer

Indicates the current and maximum monthly data transfer for this stream. Centova Cast automatically keeps track of the amount of data transfer used by each stream each month, and will perform the actions defined in the server settings if a stream exceeds this limit. Note that the current data transfer usage for each account is not updated in realtime.

Disk Space

Indicates the current and maximum disk space utilization for this stream. Centova Cast automatically keeps track of the amount of disk space used by each stream, and will perform the actions defined in the server settings if a stream exceeds this limit. Note that the current disk space usage for each account is not updated in realtime.

Next to each account, Centova Cast also displays the following icons:

• Login

Represented by a yellow lightning bolt, this icon can be used to login to the account.

• Edit

Represented by a gray cog, this icon can be clicked to access the account editor.

2.1.2 Editing an Account

To edit an account, click on its username or click the gray cog icon next to its entry.

The account editor interface is described under User Account Settings.

2.1.3 Batch Operations

Centova Cast supports performing an action on multiple accounts simultaneously, known as "batch operation". To perform a batch operation, click the checkbox next to each of the accounts you want to operate on, and then click one of the buttons below the account list.

The following batch operation buttons are available:

- Start Starts the streaming servers for the selected account(s).
- Stop
 Stops the streaming servers for the selected account(s).
- Suspend

Suspends the selected account(s).

Unsuspend

Unsuspends the selected account(s).

- Delete
 - Permanently deletes the selected account(s).

2.1.4 Searching, Filtering, Sorting

Searching

To display only the accounts whose username, title, or other basic information contain a specific keyword, enter your keyword in the Search ... box on the toolbar above the account list. The Search ... box can also be accessed by pressing the backslash ($\$) key on the keyboard.

Filtering

To filter the account list by other criteria, click the View button on the toolbar just above the account list. The following filter/search options are available:

By server

Displays only accounts hosted on the specified server.

By streaming server type

Displays only accounts using the specified streaming server type (eg: SHOUTcast DNAS v2, IceCast, etc.)

Sorting

To sort the account list by a specific set of criteria, click the View button on the toolbar just above the account list. Select your sort criteria from the Sort dropdown box.

2.2 Creating New Accounts

New accounts may be created using the New account link near the top of the page. The *New Account* dialog prompts for the following options:

Type

Specifies the type of account which should be created:

- Manual entry Specifies that you want to manually enter the settings for this account.
- From template Specifies that the account should be created based on an Account Template you have already created. Consult the Account Templates section for more information about account templates.

Template

Specifies the account template to use to create the account. This option is only available if From template is selected in the *Type* field.

• Host

Specifies the hosting server on which the account should be created. Leaving this option set to Automatically choose best will choose the server which has the fewest existing accounts.

Server Type

Indicates the type of server software to use for the account – currently, ShoutCast2, ShoutCast, and IceCast are supported. Note that Centova Cast will only display server types which have been installed and enabled on your server.

AutoDJ Type

Indicates the type of autoDJ software to use for the account. Note that Centova Cast will only display autoDJ types which have been installed and enabled on your server and are compatible with the *Server type* you have chosen above.

After setting your account options, click the Create button to proceed to the account editor to create your new account.

The account editor interface is described under User Account Settings.

2.3 User Account Settings

A "User account" could more accurately be described as a "stream account" – each user account corresponds to precisely one audio stream.

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

2.3.1 Stream

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

• Username

Specifies the username for this streaming server. Note that this is only displayed while creating the account; after the account is created, its username cannot be changed through the account editor.

Hostname

Specifies the hostname for this streaming server. This is used by the streaming server software to generate self-referencing links, and must be specified. If no hostname is configured in DNS for this server, you should enter server's IP address here.

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 the stream. Centova Cast will automatically send notifications to this address when necessary.

Company/organization

Specifies the 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 the server via a live source to perform live broadcasts.

Administrator password

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

Locale

Specifies the client's preferred locale. This determines the language and the date and time formats used in the control panel.

Character encoding

Specifies the client's 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 the client's MP3s' artist, album or track names use a non-Latin character set (Cyrillic, Asian, etc.), the character encoding must be appropriately to ensure that all of the letters in the alphabet of the client's language are interpreted correctly from the client's 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.

2.3.2 Limits

The limits page configures the limits and restrictions imposed on the stream.

Options include:

Maximum listeners

Specifies the maximum number of concurrent listeners for this stream. The streaming server will never allow more than this number of listeners to be tuned in at the same time.

Maximum bit rate

Specifies the maximum bit rate for this stream, in kilobits per second (kbps). The autoDJ will be configured such that it cannot exceed this bit rate. To enforce the bit rate on live broadcasts as well, Centova Cast will periodically check each stream and if the live broadcast is exceeding the bit rate limit, it will shut down the server (without suspending it) and send a notification E-mail to the stream owner and administrator.

Transfer limit

Specifies the maximum monthly data transfer limit for this stream, in megabytes (MB). This includes all data transfer recorded by the streaming server in its log files. Centova Cast automatically keeps track of the amount of data transfer used by each stream each month, and will perform the actions defined in your master settings if a stream exceeds this limit.

Disk quota

Specifies the maximum amount of disk space that this account may consume. This includes all data for the account, including logs, playlists, and media such as MP3 files for the autoDJ. Centova Cast automatically keeps track of the disk usage for each stream, and will perform the actions defined in your master settings if a stream exceeds this limit.

Mount point limit

Specifies the maximum number of mount points that may be created for this account.

Raw configuration

Specifies whether or not the user may edit the raw configuration files for the streaming server and autoDJ software. Typically this should not be enabled as it would permit the client to bypass most of the limits imposed upon his account.

Port 80 proxy

Specifies whether the client is allowed to use Centova Cast's port 80 proxy. This option will only be displayed if the port 80 proxy has been enabled.

2.3.3 AutoDJ

The AutoDJ tab contains options for configuring the stream's autoDJ, if enabled.

The autoDJ tab will differ depending on the type of autoDJ you have selected for the 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 the stream is currently online; the stream will need to be stopped to change this option. Options include:

Prohibited (stream MUST use an offsite source)
 If selected, autoDJ support will be entirely disabled for this account. In this case, the client must provide his own live source (such as WinAmp with the DSP plugin, or SAM Broadcaster).

- Permitted, but disabled

If selected, autoDJ support will be turned off by default, but the client may choose to turn it on. This allows the client to switch from a live source to the autoDJ on demand.

- Permitted and enabled

If selected, autoDJ support will be turned on by default, but the client may choose to turn it off. This allows the client to switch from the autoDJ to a live source on demand.

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, the client must 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 the station. This is informational only and may be displayed to the public.

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.

ices-cc autoDJ Settings

With ices-cc, the following 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.

sc_trans v2 autoDJ Settings

With sc_trans v2, the following 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 the client's SHOUTcast license key for MP3 broadcasting.
- MP3 unlock code (SHOUTcast only) Specifies the code from the client's 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.

2.3.4 Widgets

The Widgets tab contains options for configuring and customizing the widgets provided for use on the client's 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 the 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 the 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 the 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 the stream.

- Automatically queue requests

Specifies whether song requests submitted by users are automatically compared against the 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 the 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 the stream.

Number of recent tracks

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

2.3.5 Hosts

The Hosts tab includes options for configuring the hosting server on which the stream is hosted.

Options include:

Hosted on

Specifies the server on which the account is hosted. This is only modifiable when initially creating the account; after the account is created, this field becomes static and simply displays the hosting server on which the account is hosted.

2.3.6 Albums

The Albums tab contains options for configuring the retrieval of album art and metadata for the tracks in the 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 the 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 the media library.

Folder images

Configures the use of images saved in the media library folders for use as album covers. This data source will search for JPEG (.jpg) images saved in the 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 albumartsmall.jpg 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 the client's 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.

2.3.7 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.

2.3.8 Relaying (SHOUTcast v1/v2)

The Relaying tab contains options for controlling the relaying of the client's stream by other servers.

Note that these options are used to control the ability of a *remote* server to rebroadcast *the client's* stream. If you wish to do the inverse, and rebroadcast a *remote* stream from *the client's* 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 the client's stream.

Allow relays to make stream public

Specifies whether or not remote servers relaying the client's stream are permitted to advertise their relays with directory services.

2.3.9 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 the client's server, and all of the mount points from the remote server are made available on the client's server.

Options include:

Master server

Specifies the hostname or IP address of the master server whose stream(s) the client wants to relay.

Master port

Specifies the port number of the master server whose stream(s) the clietn wants 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, the client's 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, the client's 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 the client's first listener connects.

2.3.10 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 the client's server, and listeners tuning into the client's server will hear the remote server's stream.

Options include:

Stream server

Specifies the hostname or IP address of the remote server whose stream the client wants to relay.

Stream port

Specifies the port number of the remote server whose stream the client wants 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 remote server for relaying.

Stream password

Specifies the password required by the remote server for relaying.

Relay on demand

If enabled, the client's 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, the client's 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 the client's first listener connects.

Relay metadata

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

2.3.11 Mount Points

The Mount Points tab provides an interface for managing the mount points on the client's server. Mount points allow the creation of multiple, distinct broadcasts within the streaming server.

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

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.

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.

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.

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 all mount points may not exceed the maximum bit rate for the client's 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.

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 the client's stream. If they are not identical, the client will experience playback problems on his 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 the 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 all mount points may not exceed the maximum bit rate for the 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.

2.3.12 Advanced

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

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.

Hostname lookups

Specifies whether the streaming server should look up the IP addresses of all incoming clients in DNS, and log the client's hostname to the access log. This may cause dramatic delays during tune-in if the DNS server is slow or unresponsive.

• Use server

For internal use. Do not modify.

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.

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.

Maximum sources

Specifies the maximum number of sources that may be connected to the IceCast server simultaneously.

Thread pool

Specifies the thread pool size for the IceCast server.

Queue size

Specifies the queue size for the IceCast server.

Client timeout

Specifies the client timeout value for the IceCast server.

Header timeout

Specifies the header timeout value for the IceCast server.

Source timeout

Specifies the source timeout value for the IceCast server.

Burst size

Specifies the burst size value for the IceCast server.

Burst on connect

Specifies the whether IceCast's burst-on-connect feature should be enabled. Enabling this may help reduce buffer underruns.

2.3.13 User Account Operations

The account editor page includes a number of additional buttons at the bottom of the page to assist in managing user accounts. These buttons include:

· Login to this account

Logs in to the account as if you had entered the user's username and password.

Change account username

Changes the username assigned to the account.

Chapter 3

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 Statistics link under the *Accounts* heading in the navigation menu.

3.1 Reporting Period

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

The default reporting period is the past 14 days. To change the reporting period, click the Change reporting feature link at the top of the page, and select the 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.

3.2 Recent Activity

The recent activity report provides a high-level overview of your server-wide 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 server's overall volume of listeners, and the *average session length* indicates the length of time for which listeners are typically remaining tuned-in to a station.

• Listeners

This section provides information about listeners tuned in to your server's streams. *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 server'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.

3.3 Listeners

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

3.3.1 Period Overview

Total listener minutes

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

Total listening hours

Provides the total listening hours (TLH) for your server 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 a 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 a 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 a 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.

3.3.2 Listener Trends

Provides information about listener trends over the past 7, 14, and 30 days.

3.3.3 Average Listener Session Length

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

3.3.4 Top Listeners by Listener Sessions

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

Centova Cast automatically determines the countries from which 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.

3.3.5 Top Listeners by Listener Minutes

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

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

3.4 User Agents

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

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.

3.4.1 Top Agents by Listener Sessions

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

3.4.2 Top Agents by Listener Minutes

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

3.5 Countries

The country overview provides information about the countries from which the majority of 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.

3.5.1 Top Countries by Listener Sessions

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

3.5.2 Top Countries by Listener Minutes

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

3.6 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.

3.6.1 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:

- Listeners
 Indicates the number of simultaneous listeners at each hour during the reporting period.
- **Minutes** Indicates the listener minutes at each hour during the reporting period.
- Data Transfer Indicates the data transfer at each hour during the reporting period.

3.6.2 Average Listeners Per Hour Chart

The Average Listeners Per Hour chart provides an overview of the popularity of the streams on your server 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.

3.7 Basic Configuration

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

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.

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.

3.8 Albums

The Albums tab contains options for configuring the retrieval of album art and metadata for the tracks in your clients' media libraries. 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:

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 albumartsmall.jpg 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.

3.9 Reseller Options

The reseller options tab contains additional settings for your reseller account. The fields available include:

Character encoding for new accounts

Specifies the character encoding to use for new accounts. The purpose of the character encoding option is explained in the User's Manual.

Sender 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.

Logo image

Provides the option to upload a logo which will be displayed in your clients' control panels instead of the logo of your reseller account provider.

Chapter 4

Managing E-mail Messages

Every E-mail message sent by Centova Cast to administrators or clients can be customized via the *E-mail management* page.

To access the *E-mail management* page, click the *E-mails* link under the Settings heading in the navigation menu.

4.1 The Message List

The message list displays all available E-mail messages. Click on the Edit Message icon next to a message to launch the message editor.

4.2 Editing Messages

The message editor provides the following fields:

Subject

Specifies the text to use in the "subject" line of the E-mail message.

Message text

Specifies the plain text content for the E-mail message. This represents the body of the message, and will be displayed by E-mail mail clients which do not support HTML messages.

After composing a text version of your message, you may optionally click the To HTML button to automatically generate an HTML version of the message based on your text version.

Message HTML

Specifies the HTML content for the message. This represents the body of the message, and will be displayed for the majority of mail clients which support HTML E-mail. If this field is left blank, an HTML version of the message will be constructed automatically based on the text version.

After composing an HTML version of your message, you may optionally click the To Text button to automatically generate a text version of the message based on your HTML version.

4.3 Placeholders / Variables

Each message may include "placeholder" values that will be replaced with alternate text before the message is sent. These are typically used to insert content such as the client's name or E-mail address into the message template.

Placeholders are enclosed in braces, and typically look something like {\$account.username}.

The selection of available placeholders will vary per message; it is recommended that you base your custom messages on the default messages and retain any placeholders that already exist in each one.

4.4 Message Previews

At any time while editing your message content, click the Preview button at the bottom of the page to display a preview of your messages.

The preview feature displays both the HTML and text messages as they would appear in a user's E-mail client, with all variable placeholders replaced with sample text. This feature is especially useful when composing HTML messages, to ensure that your HTML code is valid and correct.

Chapter 5

Account Templates

Account templates allow the administrator to configure groups of settings to be applied to new accounts. At account creation time, you can simply select the desired account template and all of those settings will be applied directly to the newly-created account. For busy administrators this can save hours of time per week in repetitive account configuration.

The account templates page may be accessed using the Templates link under the *Management* heading in the navigation menu.

5.1 The Account Templates List

The account templates list displays all of the account templates you have previously created. Click on the Edit Template icon next to a template to launch the template editor, or create a new account template as described in the following section.

5.2 Creating New Account Templates

New account templates may be created using the New account template link near the top of the page. This process is very similar to that of creating a new account. The following options must be specified to create the account template:

• Type

Specifies the type of account which should be created:

- User Specifies that a user account should be created. This option is used to set up new streaming accounts.
- Reseller Specifies that a reseller account should be created. Reseller accounts are much like limited administrator accounts, and can independently create and manage their own user accounts.

Server Type

Indicates the type of server software to use for the account - currently, ShoutCast2, ShoutCast,

and IceCast are supported. Note that Centova Cast will only display server types which have been installed and enabled on your server.

AutoDJ Type

Indicates the type of autoDJ software to use for the account. Note that Centova Cast will only display autoDJ types which have been installed and enabled on your server and are compatible with the *Server type* you have chosen above.

After setting your account template options, click the Create button to proceed to the account template editor and customize your account template settings.

The account template creation interface is identical to the account template editor interface described in the Editing Account Templates section below.

5.3 Editing Account Templates

The account template editor is virtually identical to the account editor described in the User Account Settings for user accounts, and under Reseller Account Settings for reseller accounts. This is because when you set up an account template, you are essential "pre-configuring" an account just as you would when you create a new account.

The only significant differences between the template editor and the account editor are the absence of a few fields (such as the username) which cannot be configured until an account is actually created, and the addition of two fields which are specific to the account template editor:

Template name

Indicates the identifying name for the template. This is used internally (and by billing systems if you're using billing integration) and must consist of letters, digits, and underscores only. No spaces or other symbols are permitted.

Template description

Specifies a description for the template. This is displayed in the interface whenever a template selection is required, so you should be as detailed as necessary to help yourself identify the template by its description.

For assistance with all other options provided by the account template editor, please refer to the User Account Settings and Reseller Account Settings sections.