Centova Cast

Reseller Usage Guide

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Chapter 1

Introduction

This is the reseller's usage guide for Centova Cast, the leading Internet radio stream hosting solution.

This guideprovides general operating instructions and usage information for the Centova Cast v3.x reseller area.

For detailed reference information regarding the features and capabilities of Centova Cast, please consult the Reference Manual instead.

Chapter 2

Installing and Upgrading Centova Cast

Please refer to the separate installation guide for instructions for installing or upgrading Centova Cast.

Chapter 3

Cluster Configuration

3.1 Introduction

Centova Cast's Remote Servers feature provides a single sign-on system for managing multiple Centova Cast servers from a single interface. If you maintain more than one Centova Cast server, you may find this to be a convenient way to manage all of your servers from a single control panel via a single administrative login.

3.2 Preparing for Single Sign-On

To begin managing your servers from a centralized interface, you must first decide which Centova Cast server will be your "master" server. You will use this server to login and control all of the other servers that you maintain. All of the other servers are referred to as "slave" servers.

Next, you must enable single sign-on functionality on each of your slave servers. To do so, login to Centova Cast on each server, access the `Settings` page, and set the `Allow this server to be controlled remotely` option to `Yes`.

Once remote control has been enabled on each slave server, login to your Centova Cast master server and setup each of your slave servers as described in the following section.

3.3 Configuring Remote Servers

To access the Remote Servers list, click the `Remote Servers` link under the `Management` heading in the administration area. The Remote Servers list provides an overview of all of the slave servers that Centova Cast is configured to manage.

To edit or delete an existing server, simply click the corresponding icon next to each server. To add a new server, click the `Add remote server link` at the upper right-hand side of the page. Refer to the following section for more information about editing or creating a remote server.

3.4 Remote Server Settings

When editing or creating a remote server, the following settings are available:

- **Server title**
  Specifies a name for the server. This is simply to help you identify the server in the account list, and can be any unique name of your choosing.
- **Centova Cast URL**
  Specifies the URL to the Centova Cast installation on the remote server. For example: `http://www.example.com/centovacast/`
- **Administrator password**
  Specifies the administrator password for the remote server. This is necessary in order to facilitate automated logins to the remote server.

3.5 Accessing Remote Servers

After your slave servers have been configured per the instructions above, they will automatically appear on the `Manage Accounts` page when you login to the master server. Simply make use of the standard account editing features to manage the accounts on your remote servers.

3.6 API Clustering

If you have a number of Centova Cast servers and would like to be able to provision accounts on them from your billing system such that the accounts are distributed evenly to each server, you'll need to use Centova Cast's API clustering feature.

To begin, choose one of your Centova Cast servers to act as the "primary" server in your cluster. This will be the server to which your billing system connects to provision accounts across the cluster of servers.To enable API clustering, you must edit your Centova Cast system configuration file (usually `/home/centovacast/system/config.php`) on your primary Centova Cast server and add the following line:

```
define('ENABLE_API_CLUSTERING',true);
```

Once this line has been added, perform the following steps:

- Login to the primary Centova Cast server's administration area.
- Click the Remote Servers link (in the left-hand column) to launch the Remote Servers page.
- On the Remote Servers page, add each of the servers that you want to use for new accounts. When adding each server, be sure to set the "Include in API cluster" option to "Yes".
- Click the "Settings" link (in the left-hand column) to launch the Settings page.
- On the settings page, under "Single Sign-on", set the "Provisioning server for API clustering" option to the server on which all new accounts should be provisioned. If you want to evenly distribute the accounts, set it to "The server with the fewest accounts".

Centova Cast is now ready for distributed account provisioning. Now you must set up Centova Cast in your billing system. Do this as per the instructions in the Centova Cast installation guide. Note that you do not need to set up all of your Centova Cast servers in the billing system; you should only setup the “primary” server (which you chose in step 1 above) in your billing system, and Centova Cast will automatically ensure that the accounts are provisioned on the correct servers.

Chapter 4

Port 80 Proxying

4.1 Overview

Centova Cast includes a port-80 proxy that can be enabled on the Settings page of the Centova Cast administration area. This enables listeners to tune in to audio streams using TCP port 80 (the port normally used for serving web pages) which may be useful for listeners who are behind restrictive firewalls that prevent access to the port numbers normally used by streaming servers.

When enabled, a link will be displayed on the stream start page (also available in the client's control panel in the "Tune-in" section in the lower right-hand corner) allowing the listener to optionally tune in through the proxy.

4.2 Technical Considerations

Be advised that there are serious technical considerations when using any port-80 proxy implementation that works through a web server. Because of the way Apache works, every listener connected to a stream you host will require one dedicated Apache server process for the entire time they are connected and listening to the stream. The exact memory consumption of each Apache process can be determined on a Linux server by running "ps aux" and checking the "RSS" column for an httpd process. Typical memory consumption is somewhere between 10MB - 25MB per process, as a fairly conservative estimate.

The result of this limitation is that every listener connected to a stream hosted on your server will use 10-25MB of your server's memory, in addition to the memory used by ShoutCast. Even if the server is not very busy, this will result in a significant allocation of memory – with 20 simultaneous listeners, for example, the server would use 200 - 500MB of memory just for proxying. With 100 simultaneous listeners, that figure would rise to 1GB - 2.5GB, which would cause many servers to run out of memory.

While this issue is not advertised by most companies, this limitation is *not specific to Centova Cast*, and is true of all web-based ShoutCast/IceCast proxy scripts. Proxying through Apache is supported by Centova Cast only because of significant client demand, and Centova Technologies does not recommend their use.

Chapter 5

AutoDJs

Streaming hosting providers often require that end-users provide their own streaming sources; for example, clients may use SAM Broadcaster, or WinAmp with the Oddcast plugin, to transmit a live stream to the streaming server. This provides great flexibility for the client, however it requires that the client keep his personal computer running 24 hours a day. If the client's computer or Internet connection goes offline for any reason, his stream will also become unavailable.

In addition to remote (client-provided) sources, Centova Cast also supports the use of server-side sources, known as an "autoDJ". When using an autoDJ, clients upload their media library (eg: MP3 files) to the hosting server's hard drive, and the media is locally delivered directly to the stream. This allows the stream to remain entirely self-contained on the hosting server, and completely independent of the client's computer.

Centova Cast includes modules for integration with Pure-FTPd and ProFTPd FTP servers, which will allow your users to login via FTP with their Centova Cast usernames to upload their media. Instructions for installing these modules are included in the Centova Cast Installation Guide, available from the Centova Cast web site.

In most cases, FTP integration is configured automatically during installation and requires no further effort on the administrator's part.

If you prefer to provide media for the clients' streams through other means, you will need to arrange for the client's media to be stored in the following directory:

`CENTOVAROOT/vhosts/USERNAME/var/spool/media/`

In the above example, `CENTOVAROOT` represents the path to Centova Cast (usually `/home/centovacast`), and `USERNAME` represents the client's username within Centova Cast. This directory must be readable both by the Centova Cast UNIX user account (usually `centovacast`) as well as the user account under which your web server runs (usually `nobody` or `www-data`).