



Installation Manual

Cast-Control Documentation

Table of Contents

1. Installing Cast-control	3
1.1 System Requirements Overview	3
1.1.1 Supported Operating Systems	3
1.1.2 Webserver Configuration	3
1.1.3 Disk Space	4
1.1.4 PHP Configuration	4
1.1.5 MySQL Configuration	4
1.1.6 Network / DNS Configuration	4
1.1.7 3 rd Party Control Panel Information	5
1.2 Prerequisites	6
1.2.1 CentOS, Fedora, RHEL based Linux Distributions.....	6
1.2.2 Debian Based Linux Distributions	6
1.2.3 FreeBSD Based Distributions.....	6
1.3 Ioncube Installation	7
1.3.1 Download & Install.....	7
1.4 RRDTOOL Installation.....	8
1.4.1 cPanel Site.....	8
1.4.2 CentOS, Fedora, and RHEL distributions.....	8
1.4.2.1 Manual Compilation.....	8
1.4.3 Debian Linux Distributions	9
1.4.4 FreeBSD Distrubutions	9
1.5 Installation	10
1.5.1 Uploading & Extracting	10
1.5.2 GUI Installation	10
1.5.3 Crucial Settings.....	11
1.5.4 Scheduled Tasks	11
2. Installing Additional Features	12
2.1 SMS Sending / Receiving Features.....	12



2.1.1 Overview	12
2.1.2 SMS Configuration	12
2.1.3 Supported Gateways.....	12
2.1.4 Usage Documentation	12
2.2 MSN Messenger Service	13
2.2.1 Requirements.....	13
2.2.2 Configuration	13
2.2.3 Troubleshooting.....	13
2.3 Google Listener Maps	14
2.4 FTP Integration.....	15
2.4.1 Prerequisites	15
2.4.1 ProFTPD (File Based)	16
2.5 Increasing File Manager Upload Limit	17
2.5.1 Detailed Guide	17
3. Moving Cast-Control to a new site.....	18
3.1 Prerequisites	18
3.3 New Site / Location.....	19



Control Panel Specific Guides

cPanel	.docx	.doc	.pdf
DirectAdmin	.docx	.doc	.pdf
Plesk	.docx	.doc	.pdf
WebMin	.docx	.doc	.pdf

Download this guide

[.docx](#) [.doc](#) [.pdf](#)

1. Installing Cast-control

1.1 System Requirements Overview

1.1.1 Supported Operating Systems

While Cast-Control will function fine on most operating systems, the following is a list of all officially supported, tested and recommended operating systems:

- Linux (Most Distributions supporting the LibC6 kernel)
- FreeBSD 4 & 5 (6 will work with the FreeBSD 5 compatibility libraries)
- Windows (2003, XP Professional, Vista Ultimate)
- Mac OS X

Cast-Control requires the following software to be pre-installed and specified, we can also install and configure the software as required for a small service fee at <http://www.cast-control.net/>

We also require that your server have at least ONE **static IP address** for licensing.

1.1.2 Webserver Configuration

Most web servers will function perfectly with cast-control but we especially recommend apache which is available for most operating systems. We have noted that on windows installations IIS requires very strict permissions and policy changes to be made for PHP to access the cmd.exe as to start and control shoutcast instances. In these cases we highly recommend configuring XAMPP.



1.1.3 Disk Space

Cast-Control uses minimal disk space and in fact the software itself including Ioncube encoders and shoutcast executables is approximately 10MB. Additional space may be required for customers using the [AutoDJ](#) features and this is to be determined by the hosting provider.

1.1.4 PHP Configuration

The following modules & extensions are the bare minimum that cast-control requires to function:

- PHP Sessions
- PHP MySQL Extensions
- PHP FTP Extensions
- PHP GD 2 Extensions
- PHP PCRE
- PHP XML Extensions

The following settings are required to run cast-control in an optimal environment:

1. PHP Version 4.3.0 or newer
2. [PHP Ioncube Encoders](#)
3. PHP Safe Mode Disabled
4. PHP GD Extensions
5. PHP Functions: `exec()`, `system()`, `shell_exec()`
6. PHP `magic_quotes_runtime` [Off](#)
7. PHP `register_globals` [Off](#)
8. PHP `allow_url_fopen` [On](#)
9. PHP `allow_short_tags` [On](#)

1.1.5 MySQL Configuration

- Version 4.0.1.6 or newer
- Strict mode [Disabled](#)

If a condition above is not met, you may experience issues with some features throughout the control panel. PHP Safe Mode can be tweaked to operate with cast-control but this user manual does not cover these specifics.

1.1.6 Network / DNS Configuration

In order for our licensing system to function correctly, it is required that your system be able to connect to www.cast-control.net (Primary License Server within AU) or www.cast-hosting.com (Secondary License Server within Chicago). License files not requiring a connection to our servers are valid for a maximum period of 3 months are available to clients that have been with us for 6 months or more and may incur additional fees. No exceptions can be made to this policy!



1.1.7 3rd Party Control Panel Information

Cast-Control does not discriminate between any other control panels that may be installed on your system and will also work fine without any other control panels.

Please take note of the Supplement Control Panel documentation for specific installation instructions for certain control panels.

The following is a list of Control panels that are known to be compatible with cast-control in order of our customers preference:

- cPanel 10 & 11
- Plesk
- DirectAdmin
- InterWorx
- IxAdmin
- WebMin



1.2 Prerequisites

In most cases you can install the prerequisite software with a single command assuming a package manager such as YUM or APT has been installed.

1.2.1 CentOS, Fedora, RHEL based Linux Distributions

The following command will install Apache, PHP and all required extensions, MySQL, RRDTOOL and a few other system specific software.

```
yum -y install httpd mysql-server mysqladmin php php-gd php-ftp php-bcmath php-curl  
php-pcre php-mhash php-mcrypt php-bcmath php-openssl php-soa php-mysql rrdtool  
proftpd
```

1.2.2 Debian Based Linux Distributions

The following command will install Apache, PHP and all required extensions, MySQL, RRDTOOL and a few other system specific software.

```
apt-get install mysql-server apache2 php5 php5-gd php5-mysql php5-cli wget tar gzip  
build-essential debianutils rrdtool proftpd
```

1.2.3 FreeBSD Based Distributions

The shoutcast binary is only compatible with FreeBSD 4 & 5, to use FreeBSD 6 you must install the FreeBSD 5 compat libraries. You can do this by performing the following:

```
su;  
cd /usr/ports/misc/compat5x;  
make clean install;  
rehash;
```

Please consult the following guides for installing Apache, MySQL, PHP ect

<http://www.freebsdmadeeasy.com/tutorials/web-server/install-php-5-for-web-hosting.php>

<http://www.mydigitallife.info/2006/04/14/installing-web-server-in-freebsd-60-with-apache-22-mysql-50-and-php-5-part-5/all-comments/>



1.3 Ioncube Installation

The Cast-Control Panel is encoded with Ioncube PHP Encoder, this software protects our source code as well as speeding up the processing time of PHP of in some cases up to 60%.

Please note it is very important to ensure you select the correct operating system or the encoder will not function.

1.3.1 Download & Install

In most cases the ioncube loader is automatically installed at run-time, if this is not the case and you receive ioncube errors than please download encoders for your system from

<http://www.ioncube.com/loaders.php>

Installation instructions are available at http://www.ioncube.com/loader_installation.php



1.4 RRDTOOL Installation

1.4.1 cPanel Site

RRDTools is already installed on the majority of cPanel Installations. Use the following RRDTool Path in cast-control when prompted.

```
/usr/local/cpanel/3rdparty/bin/rrdtool
```

1.4.2 CentOS, Fedora, and RHEL distributions

The simplest method of installing rrdtool would be to install the DAG repo into YUM.

```
nano /etc/yum.repos.d/dag.repo
```

This should create a new file, within this file place the following:

```
[dag].
name=Dag RPM Repository for Red Hat Enterprise Linux
baseurl=http://apt.sw.be/redhat/el$releasever/en/$basearch/dag
gpgcheck=1
gpgkey=http://dag.wieers.com/rpm/packages/RPM-GPG-KEY.dag.txtenabled=1
```

Now install rrdtool from YUM:

```
yum install rrdtool
```

1.4.2.1 Manual Compilation

If the above fails than it might be necessary to manually compile rrdtool's from the latest source.

```
yum install make gcc gettext cairo-devel php-gd libpng-devel freetype freetype-devel
libart_lgpl-devel libxml2 libxml2-devel pango-devel dejavu-lgc-fonts;

wget http://oss.oetiker.ch/rrdtool/pub/rrdtool.tar.gz;

tar xvzf rrdtool*.tar.gz;
cd rrdtool*/;
./configure;
make;
make install;
```

Once completed you can use the following command to find the exact path to the new binary:

```
which rrdtool
```



1.4.3 Debian Linux Distributions

```
apt-get update --fix-missing;  
apt-get install freetype*;  
apt-get install rrdtool;
```

Once completed you can use the following command to find the exact path to the new binary:

```
which rrdtool
```

1.4.4 FreeBSD Distributions

```
cd /usr/ports/databases/rrdtool && make install clean
```

The full path to rrdtool should be [/usr/local/bin/rrdtool](#)



1.5 Installation

1.5.1 Uploading & Extracting

- a) Login to http://www.cast-control.net/billing/client_area.php
- b) Navigate to "View your licenses", find your license and select "View and Download".
- c) Download the latest STABLE release for your operating system and make sure it is NOT a Cluster version, this is something different.

1.5.2 GUI Installation

1. Navigate to the URL that you have uploaded cast-control too.
2. As prompted, enter the appropriate license key – this is found in the cast-control client area. If you are unsure of your key, please [contact us](#).
3. You will be prompted to select your operating system, in most cases this is selected automatically. If you are unsure you can double check by issuing the following command from SSH:

```
uname -a
```

Click Continue to proceed.

4. If you are prompted with incorrect file permissions on the following page you will need to navigate to the directory you have uploaded cast-control and set the permissions on these files and directories:

```
cd /var/www/html/panel/  
chmod 777 content;  
chmod 777 temp;  
chmod 777 logs;  
chmod 777 database.php;
```

You will also need to set the permissions on the server executables using the following command. **Make sure to replace %OS% with the appropriate operating system**

```
chmod 777 ./files/1-9-8-%OS%*/sc_*
```

Alternatively if you are unsure you can chmod the whole files directory using the following command.

```
chmod -R 777 ./files/
```



5. Cast-Control will now automatically attempt to start a shoutcast process on the port you specified in the first step. If this is unsuccessful, you will be advised on how to correct the issue.

If you still have difficulty, make sure there are no shoutcast processes running on your system and try again. Finally try restarting the installation with a different port.

6. That is it; if you get to this stage you have successfully installed cast-control.

1.5.3 Crucial Settings

You will now be prompted to enter critical details for use with cast-control panel, it is important to ensure these are accurate.

The Path to RRDtools can be found by issuing the following via SSH.

```
which rrdtool
```

1.5.4 Scheduled Tasks

The scheduled tasks, or cron jobs are most important as they control the shoutcast process starting and stopping among many other critical system tasks.

Generally you should install these under the user account used with your webserver, for instance "apache" or "www-data". If suPHP or phpSuExec is configured it is important to run the cron jobs under that specific user.

To enter the crontab enter the following, replacing "root" with your username:

```
crontab -u root -e
```

Copy & Paste the cron's directly from cast-control, they should look something like this:

```
**** php -q /var/www/html/scanner/cron.php queue=1 >/dev/null 2>&1
*/5 **** php -q /var/www/html/scanner/cron.php bitrate=1 logfiles=1 playedsongs=1 messenger=1 >/dev/null 2>&1
00 **** php -q /var/www/html/scanner/cron.php playedsongs=1 mailplayedsongs=1 >/dev/null 2>&1
```



2. Installing Additional Features

2.1 SMS Sending / Receiving Features

2.1.1 Overview

The SMS Modules allow you to both send and receive messages through Cast-Control. It is possible to configure SMS events alongside the standard email event templates.

The Modules can also be used to control purchased services by starting, stopping, restarting shoutcast & AutoDJ services or updating passwords, scheduling playlists ect.

2.1.2 SMS Configuration

There are currently four options with the SMS configuration which are explained here.

Gateway:

Select your preferred gateway, it is best to select a gateway that deals closest with your country as not all gateways will provide premium international access. For example, txtlocal.co.uk have a premium link with mobile connections in the UK while only a standard link for most international locations. This means that numbers that have been either created or changed in the last 6-12 months might not be available.

Use Secure Socket:

This functionality creates a secure socket to your provider, most providers will support this functionality and this is recommended.

Service Control:

Allow customers to send commands to the number to control their shoutcast & autodj services. The notification URL should be set to <http://yourdomain.com/panel/castcontrol/receivesms.php>. See the configuration documentation specific to your gateway for more information.

Reply:

Send a confirmation to authorised numbers that send a command to the sms service control. Please note that if your gateway charges per message, this will incur the standard fee PER MESSAGE.

2.1.3 Supported Gateways

[UK - www.txtlocal.co.uk](http://www.txtlocal.co.uk)

2.1.4 Usage Documentation

<http://cast-control.net/docs/?documentId=137>



2.2 MSN Messenger Service

2.2.1 Requirements

The following PHP Extensions are required to run the messenger control service.

- Curl, Curlwrappers, CurlSSL
- Mhash
- Mcrypt
- Bcmath
- OpenSSL
- SOAP
- Ports 1863 and 443 are also required to be open, both are required to establish secure communications with the messenger service.

2.2.2 Configuration

1. Login to Cast-Control
2. Navigate to Administration -> Configuration -> Messenger
3. Configure your Messenger login details

Messenger Service Control: Select Enabled.

MSN Email: Enter the newly created messenger account email

MSN Password: Enter the newly created messenger account password

Alias: This is the Display name of the Messenger Bot

Personal Message: This is the Personal Message that is displayed

4. Click "Save Configuration"
5. Select the Messenger tab yet again than select " Click here to save and restart the Messenger Service "

The Messenger service should now start within the next 5 minutes, if it still does not start than you should follow the Troubleshooting options below.

2.2.3 Troubleshooting

Please Note: All items in blue should be replaced with their actual values.

1. Login to your SSH terminal.
2. Run the following which will display any errors that arise, make sure to replace the path with your actual path.

[/usr/bin/php /path/to/cast-control/scanner/msnbot.php](#)

If there are connectivity problems, please ensure the ports listed in the requirements are accessible.



2.3 Google Listener Maps

Please Note: The GeoLiteCity.dat.gz is a free binary database provided by MaxMind and is not as accurate as the commercial database. You can purchase the commercial version from <http://www.maxmind.com/app/city>

1. Register a Google API Key from <http://code.google.com/apis/maps/signup.html>

2. a) Linux, FreeBSD

Perform the following under SSH

```
mkdir /usr/local/share/GeoIP
wget http://www.maxmind.com/download/geoip/database/GeoLiteCity.dat.gz
gzip -d GeoLiteCity.dat.gz
rm GeoLiteCity.dat.gz
mv GeoLiteCity.dat /usr/local/share/GeoIP/GeoLiteCity.dat
```

2. b) Windows

Download and extract the latest [GeoIPCity Database](#)

Create a new directory under %ProgramFiles%/ called **CastControl** and copy the GeoLiteCity.dat file into this directory.

3. Login to Cast-Control, Navigate to Administration -> Configuration and select GeoIP

4. Select 'Enabled' and enter your google API Key.

5. Navigate to Server Management -> Select a server and now select GeoIP.



2.4 FTP Integration

It is possible to integrate an FTP service such as ProFTPD into cast-control and allow your customers to upload audio files to use with their service.

2.4.1 Prerequisites

1. Find out the UID and GID used with cast-control

```
ls -l /var/www/html/panel/
```

This should return something similar to the following, note i have highlighted the USER and GROUP, you will need these in the next step.

```
total 48      UID  GID
drwxrwx---  8 matt matt 4096
drwxrwxrwx  5 matt matt 4096
```

2. Discover the UID and GID of the above by executing similar to the following:

```
id matt;
```

You will now be presented with the UID and GID of the user, in my case the UID is **500** and the GID is also **500**.

```
[root@mainserver ~]# id matt
uid=500(matt) gid=500(matt) groups=500(matt)
```

3. Open the database.php for editing, on the last line before the “?” enter the following, replacing the UID, GID, FTP Host & Domain.

```
$setting['ftpsrvr_integration'] = 'enabled';
$setting['ftpsrvr_host']       = 'yourdomain.com';
$setting['ftpsrvr_domain']    = 'yourdomain.com';

$setting['uid'] = 500;
$setting['gid'] = 500;
```



2.4.1 ProFTPD (File Based)

1. Create the following two files and **chown** these to your cast-control user account:

```
touch /etc/cc_passwd;  
touch /etc/cc_group;  
  
chown castcontrol:root /etc/cc_passwd;  
chown castcontrol:root /etc/cc_group;
```

2. Open your /etc/proftpd.conf for editing:

3. FIND the line containing **AuthOrder** and add the following to this line if not already:

```
mod_auth_file.c
```

4. Add the following to the file replacing **x.x.x.x** with your servers IP address:

```
<Virtualhost x.x.x.x>  
AuthUserFile /etc/cc_passwd  
AuthGroupFile /etc/cc_group  
RequireValidShell off  
ServerName "CastControl FTP Service"  
IdentLookups off  
DefaultRoot ~  
</Virtualhost>
```

That is it, restart ProFTPD and navigate to the FTP Details within Cast-Control for the ftp details.



2.5 Increasing File Manager Upload Limit

This value is obtained from your php.ini, if you wish your clients to be able to upload more than the limit you will need to change the values "**post_max_size**" and "**upload_max_filesize**" in the php.ini. You will then need to restart Apache to apply the changes.

2.5.1 Detailed Guide

1. Create file called **phpinfo.php** with the following contents and upload to your webserver

```
<?php
    phpinfo();
?>
```

2. Open the file in your web browser and search for the location of your PHP.INI
This is usually /etc/php.ini but can vary on many operating systems and distributions.
3. Modify your php.ini with a text editor and locate **post_max_size** and **upload_max_filesize**
We recommend you set this value to 12MB.



3. Moving Cast-Control to a new site

3.1 Prerequisites

Please create a database and user account associated with the database on the new remote server.

All items highlighted blue should be changed according to your configuration.

Do not include the hash ('#') when entering commands into the terminal.

3.2 Current Site / Location

1. Change to an appropriate directory such as /root

```
#cd root
```

2. Create a backup of your current files, be sure to change the path as appropriate to your configuration.

```
# tar -cvvf castcontrol.files.tar /home/MyDomain/public_html/myCast/
```

3. Create a backup of your current database, be sure to modify anything in blue

```
# mysqldump -u root -p databaseName > castcontrol.database.sql
```

4. Move the two backup files to your web directory so we can then grab the files directly from the other server

```
# mv castcontrol.files.tar /home/MyDomani/public_html/; mv castcontrol.database.sql /home/MyDomani/public_html/;
```



3.3 New Site / Location

1. Download both files using wget

```
# wget http://myDomain.com/castcontrol.database.sql; wget  
http://myDomain.com/castcontrol.files.tar2. Install the database  
# mysql -u root -p newDatabaseName < castcontrol.database.sql
```

3. Install the files

```
# mv castcontrol.files.tar /home/newDomain/public_html/;  
# cd /home/newDomain/public_html/;  
# tar -xvzf castcontrol.files.tar;
```

4. Configure database.php

You should make any database username, password, name or prefix changes to the database.php if using different details to the old installation.

5. Reissue Cast-Control License

1. Simply login to the billing system at http://www.cast-control.net/billing/client_area.php
2. Select "**View Your Licenses**", Select "**View and Download**" on your license.
3. You will now see a button to "**Reissue**" your license.

6. Configure Cast-Control

Login to cast-control on the new server and navigate to **Administration -> Configuration**. You will need to modify the **Cast-Control Path** and **Host Address** to suit the new server.