



MediaCP Quickstart Guide

Software Usage Quickstart Guide

Table of Contents

- 1. Shoutcast Server 2
 - Configure a Shoutcast Server 2
 - Stream to your shoutcast server..... 2
 - Streaming video to a shoutcast service 3
 - Enabling an AutoDJ Source Plugin 4
 - Configuring a Relay Server 5
 - Stream Transcoding 5
- 2. Icecast Server 6
 - Create an Icecast Server 6
 - Stream to an Icecast Server 6
 - Enabling a AutoDJ Source Plugin 7
 - Stream Transcoding 7
- 3. Windows Media Service..... 8
 - Creating a Push Publishing Point 8
 - Stream to a Push Publishing Point (LIVE)..... 8
 - Streaming to a Push Publishing Point (MP3 Files on Disk)..... 9
 - Stream Authentication..... 10
- 4. Wowza Media Server 11
 - Live Audio/Video Broadcast..... 11
 - Broadcasting Live Audio/Video 12
 - Viewing Live Audio/Video 13
 - Ondemand Video Service..... 14
 - Viewing Ondemand Video 14
 - Shoutcast Relay / Restream (to flash/rtmp/rtsp) 15
- 5. Stream Transcoder V3..... 16
 - Transcoding Overview..... 16
 - Service Configuration..... 16



1. Shoutcast Server

Configure a Shoutcast Server

1. Login to the MediaCP via your web browser.
 2. Navigate to **Configure Media Services** listed under the side menu Administration heading then once loaded proceed to select **Create a new server**.
 3. Locate the Service Type field and select **shoutcast198**.
- ! You can configure limits such as Listeners, Bitrate & Bandwidth from the **Limits** tab.
4. Select **Create Server** to begin the creation and processing of your shoutcast server.
- ! Each service action (ie. start, stop, restart ect.) will be placed into a queue which is executed every 1 minute. The Queue will only process 10 actions every minute.

Stream to your shoutcast server

To stream to a shoutcast service you will first require software that is capable of doing so, the most recommended software is to use Winamp in combination with the SHOUTcast Source plugin available from www.winamp.com.

1. Open Winamp and build your playlist with audio files your system is capable of opening.
 2. Enable the SHOUTcast Source DSP by pressing CTRL + P and selecting **Plug-ins -> DSP/Effect** then selecting **Nullsoft SHOUTcast Source DSP**
 3. Select the **Encoder** tab then select your Encoding Type (recommended MP3) with an appropriate bitrate.
- ! It is important to use a bitrate of equal or less value then the limit applied in your server configuration otherwise you will be kicked automatically from streaming by Cast-Control MediaCP.
4. Select the **Output** tab if not selected already and configure your connection settings.

These details are provided for the customer's convenience under the **UserCP** after selecting **Manage** upon the appropriate server.



Streaming video to a shoutcast service

Shoutcast also supports the NSV ("Nullsoft Streaming Video") protocol and it is possible to stream to any shoutcast server in this format with no configuration changes.

By default, Cast-Control only allows up to 320Kbps streaming and this can be changed quite easily. We have written a [small how-to article regarding this](#).

To stream using the NSV protocol it is required that your video files are encoded with the NSV file format, the following range of tools are available to perform this.

Download and install the **[NSV tools](#)**, this is what we use to encode normal video files (avi ect) to nsv format.

Download **[NsvGui 2](#)**, this is what we use to stream to the shoutcast server.

Extract NSVGUI 2 to a location on your hard disk, I simply used c:/nsv/

Converting Video to NSV

Open **NSV Tools -> NSV Batch Encoder**

Select File -> Add Source Files and select a video file (avi, mpeg, mpg or mov)

Select **Edit Profiles** than select the **Default** Profile and finally **Edit**

These are the options available for video processing, select **NSV Encoder Configuration** to configure further options such as **Bitrate**

Once finished, setup the output destination and press OK

Select the files you wish to encode and press the green arrow to encode.

Streaming NSV Video Files

1. Open NSVGUI 2
2. Locate the files you have just encoded and add these to the playlist.
3. Cnfigure the server address, port and password.
4. Ensure **Send File Name as Title** is selected, you might also want to use the **Loop** function
5. To connect to the server, select **Stream -> Let's Stream** noting that this will only connect and not start streaming just yet.
6. To actually stream to the server, select **Stream -> Let's Stream** again, this is useful if you are doing a presentation and require all to be connected before streaming.

Viewing the NSV Stream

Please note NSV stream only works with NSV players such as Winamp, Windows Media Player is NOT supported. To use Windows Media Player you must use Windows Media Services.



Enabling an AutoDJ Source Plugin

1. Navigate to **Administration -> Configure Media Services**, locate your shoutcast service and select **Manage** to enter the service overview page.
2. Select **Manage** from the provided options to enter the service configuration page.
3. Select the **Source** tab, this contains all your AutoDJ / Source information.
By default, No Source Plugin will be selected.
4. Select your preferred option, the default options will stream directly to your selected server – you may wish to modify the bitrate, channels and sample rate accordingly :

sctransv1

Shoutcast Transcoder V1

The original AutoDJ software provided by nullsoft.

Capable of transcoding: **MP3**
Ability to play files directly without transcoding: **NO**
(transcoding uses alot of CPU)

sctransv2

Shoutcast Transcoder V2 (BETA)

Beware, while this contains many more features then sctransv1 it is still only in BETA and is not suitable for commercial purposes.

Capable of transcoding: **MP3, AAC+**
Ability to play files directly without transcoding: **YES**
(transcoding uses alot of CPU)

ices04

ICES version 0.4

Recommended as it is possible to stream files directly without reencoding the file format. Will save on CPU Usage.

Capable of transcoding: **MP3**
Ability to play files directly without transcoding: **YES**
(transcoding uses alot of CPU)

5. You can now build and configure a playlist from the **AutoDJ** link available on the server overview page.



Configuring a Relay Server

! A relay server **PULLS** the stream from a **remote shoutcast server** and rebroadcasts in the **exact same format**. It is not possible to rebroadcast in another format without software such as Stream Transcoder V3.

Prerequisites:

You will need to configure the server you wish to rebroadcast from to allow relay connections

1. Navigate to **Administration -> Configure Media Services**, locate your shoutcast service you wish to **stream from** and select **Manage** to enter the service overview page.
2. Select the **Relay** tab then select **Allow Public Relay** as **Yes**.
3. Save the configuration by selecting **Update**. (A service restart **will** be required)

Configure your relay:

1. Navigate to **Administration -> Configure Media Services**, locate your shoutcast service you wish to act as a **rebroadcast** and select **Manage** to enter the service overview page.
2. Select the **Relay** tab then set the following options:
 - Allow Relay:** **Yes**
 - Relay Server:** The IP address or domain of the server you wish to relay **from**.
 - Relay Port:** The portbase of the server you wish to relay **from**.
3. Save the configuration by selecting **Update**. (A service restart **will** be required)

The service will begin rebroadcasting immediately upon being started.

Stream Transcoding

Please refer to section **4. Stream Transcoder V3**.



2. Icecast Server

Create an Icecast Server

1. Login to the MediaCP via your web browser.
2. Navigate to **Configure Media Services** listed under the side menu Administration heading then once loaded proceed to select **Create a new server**.
3. Locate the Service Type field and select **icecast**.

! You can configure limits such as Listeners, Bitrate & Bandwidth from the **Limits** tab.

4. Select **Create Server** to begin the creation and processing of your icecast server.

! Each service action (ie. start, stop, restart ect.) will be placed into a queue which is executed every 1 minute. The Queue will only process 10 actions every minute.

Stream to an Icecast Server

To stream to an icecast service you will first require software that is capable of doing so, the most recommended software is to use Winamp in combination with the SHOUTcast Source plugin available from www.winamp.com.

1. Ensure the Icecast server configuration has a mountpoint set to "stream" under the tab labelled **Plugin**.
2. Open Winamp and build your playlist with audio files your system is capable of opening.
3. Enable the SHOUTcast Source DSP by pressing CTRL + P and selecting **Plug-ins -> DSP/Effect** then selecting **Nullsoft SHOUTcast Source DSP**
4. Select the **Encoder** tab then select your Encoding Type (recommended MP3) with an appropriate bitrate.

! It is important to use a bitrate of equal or less value then the limit applied in your server configuration otherwise you will be kicked automatically from streaming by Cast-Control MediaCP.

5. Select the **Output** tab if not selected already and configure your connection settings.

These details are provided for the customer's convenience under the **UserCP** after selecting **Manage** upon the appropriate server.



3. Windows Media Service

Creating a Push Publishing Point

1. Login to the MediaCP via your web browser.
2. Navigate to **Configure Media Services** listed under the side menu Administration heading then once loaded proceed to select **Create a new server**.
3. Locate the Service Type field and select **WindowsMediaServices**.
 - ! If this is not available Windows Media Services is not installed with your MediaCP.
4. Ensure the field **Source Location** contains **"Push:***"
 - ! You can configure limits such as Listeners, Bitrate & Bandwidth from the **Limits** tab.
 - ! You can configure the Publishing Point name from the **Plugin** tab.
5. Select **Create Server** to begin the creation and processing of your publishing point.
 - ! **Each service action (ie. start, stop, restart ect.) is executed IMMEDIATELY.**

Stream to a Push Publishing Point (LIVE)

Before continuing, you will require software capable of streaming to a Windows Media Service. You can download Windows Media Encoder from the [Microsoft.com website](http://Microsoft.com)

1. Start Windows Media Encoder and select **Broadcast a live event** from the wizard.
2. Select Your Audio Source and select next.
3. Select **Push to a Windows Media server** then **Next** to continue.
4. Enter the IP address and Publishing Point name for your service (located under **User Control Panel -> Configure Media Services -> Manage**)
Select **Next** to check the settings and continue.
5. You will be required to select a bitrate, it is important to select a bitrate below the limit applied to your account. Noting that a CBR bitrate is variable and not always exact, if your bitrate limit is 25Kbps you should select 23Kbps to be safe.
Press **Finish** to continue
6. You will be prompted to enter your Username and password.

Username:

Your username is, by default a combination of "cast:" and your selected portbase, for example "cast:8000".

Password:

Your password is available from the **User Control Panel -> Configure Media Services** then select Manage.



Streaming to a Push Publishing Point (MP3 Files on Disk)

Before continuing, you will require software capable of streaming to a Windows Media Service.

You can download Windows Media Encoder from the [Microsoft.com website](http://Microsoft.com)

1. Start Windows Media Encoder and select **Custom Session** from the wizard.
2. Select **Source from:** as **File**
3. Select from the dropdown menu from **At End**, the option **Roll over to next source.**
4. Select your video or audio files (you may select multiple files)

Multiple files will automatically add to the sources.

5. Select the **Output** tab then tick **Push to server.**
Make sure **Pull from encoder** is deselected.

Enter the IP address and Publishing Point name for your service
(located under **User Control Panel -> Configure Media Services -> Manage**)
Select **Next** to check the settings and continue.

6. Select the **Compression** tab.
You will be required to select a bitrate, it is important to select a bitrate below the limit applied to your account. Noting that a CBR bitrate is variable and not always exact, if your bitrate limit is 25Kbps you should select 23Kbps to be safe.
Press **Apply** to continue
7. You will be prompted to enter your Username and password.

Username:

Your username is, by default a combination of "cast:" and your selected portbase, for example "cast:8000".

Password:

Your password is available from the **User Control Panel -> Configure Media Services** then select **Manage**.



Stream Authentication

Enabling Stream Authentication will by default block all IPs that attempt to connect to the stream. By using the listen links provided by cast-control MediaCP then entering an associated username and password, our software will automatically allow the listeners IP address to access the stream.

- ! **Stream Authentication must be first enabled by an administrator**
- ! **All Access will be granted until the Encoder IP field is entered within the control panel.**

Enabling Stream Authentication

1. Navigate to **Administration -> Configure Media Services**, locate your WMS service and select **Manage** to enter the service overview page.
2. Select **Manage** from the provided options to enter the service configuration page.
3. Select the **Feature** tab then ensure **Stream Authentication Support** is Enabled.
4. You will now be required to enter an **Encoder IP**, this is the IP that your stream source (if using Push, your local PC that pushes content) will be streaming from. If this is not entered, you will receive Access Denied.
5. Update and restart service to apply these new changes.

You can now configure the user accounts for stream authentication through the link provided on the service overview page.



4. Wowza Media Server

Wowza Media Server allows you to stream both video and audio to multiple devices such as a flash player, iphone, ipad, blackberry, android and set top box.

There are three primary configurations that Cast-Control MCP supports:

1. Live Audio/Video Broadcasting
2. Ondemand Video(with FTP)
3. Shoutcast Relay (to flash format)

Live Audio/Video Broadcast

1. Login to the MediaCP via your web browser.
2. Navigate to **Configure Media Services** listed under the side menu Administration heading then once loaded proceed to select **Create a new server**.
3. Locate the Service Type field and select **Wowza Media Server**.

! You can configure limits such as Listeners, Bitrate & Bandwidth from the **Limits** tab.

4. Select the **Plugin** tab to configure the Service Type of "Live Streaming".
5. Select **Create Server** to begin the creation and processing of your icecast server.

! **Wowza Media Services are created instantaneously.**

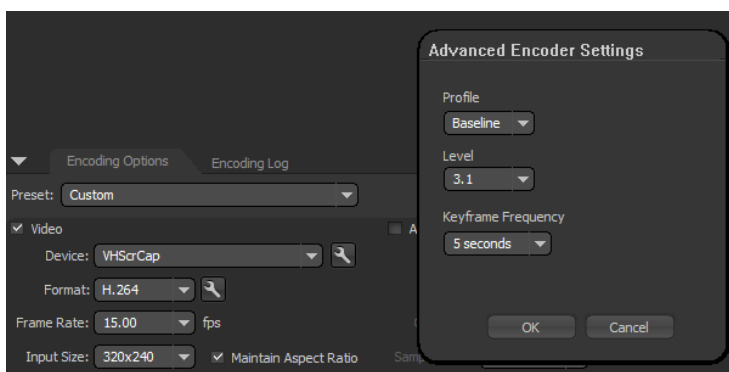
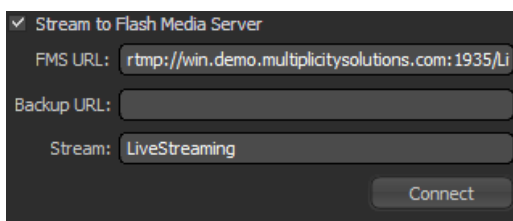
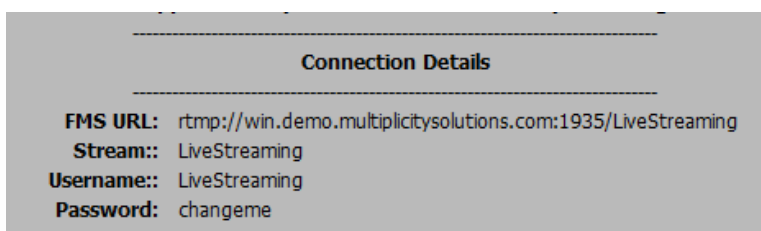
Please note that updates to the service after creation might not be applied until you physically restart Wowza Media Server. On Linux/Debian you can generally use the following to restart the system service "service WowzaMediaService restart".



Broadcasting Live Audio/Video

1. Download and install Adobe Flash Media Encoder 3.2 from Adobe Website:
<http://www.adobe.com/products/flashmediaserver/flashmediaencoder/>
 2. Start Adobe Flash Media Encoder.
 3. The connection settings are available from the service overview page.
Select **User Control Panel** -> **Configure Media Services** then select the service you have created above. The FMS URL and Stream name are presented on the overview page, these are the settings you will require for Adobe Flash Media Encoder:
- ! It is important that the "Stream" be the Unique ID or Publishing Point of the service. Statistics and other control panel functionality will only work using this Stream.
 - ! For Streaming to Iphone, we find a Baseline 3.1 (not lower) profile is required. This can be configured by pressing the Tools icon next to the Format (see below).
 - ! Read here for [Blackberry & Other Mobile Phone Devices](#)

Example





Viewing Live Audio/Video

You can view the stream using a variety of devices.

1. Navigate to **Configure Media Services** and select the overview.
2. Select **User Control Panel -> Configure Media Services** then select the overview icon of the service you have just created.

You should be able to view through the provided flash player instantly.

3. Select the Media Links Icon to view links for popular devices.
If you have difficulties, please refer to [Blackberry & Other Mobile Phone Devices](#)



Ondemand Video Service

Ondemand Video service allows you to view content ondemand from a repository of videos.

1. Login to the MediaCP via your web browser.
2. Navigate to **Configure Media Services** listed under the side menu Administration heading then once loaded proceed to select **Create a new server**.
3. Locate the Service Type field and select **Wowza Media Server**.

! You can configure limits such as Listeners, Bitrate & Bandwidth from the **Limits** tab.

4. Select the **Plugin** tab to configure the Service Type of "Ondemand Streaming".
5. Select **Create Server** to begin the creation and processing of your Wowza service.

! **Wowza Media Services are created instantaneously.**

Please note that updates to the service after creation might not be applied until you physically restart Wowza Media Server. On Linux/Debian you can generally use the following to restart the system service "service WowzaMediaService restart".

6. If an FTP Integration is configured, an FTP account will automatically be created for each ondemand wowza service. The FTP account is configured with the "unique_id" of the service and a password of the configured "Publish Password".

For example, Unique ID of 8000 would be:

FTP Host: yourdomainname
Username: 8000
Password: changeme

*Refer to the Installation Guide for configuration of FTP Integration.

Viewing Ondemand Video

1. Navigate to **Configure Media Services** and select the overview.
2. Select **User Control Panel -> Configure Media Services** then select the overview icon of the service you have just created.

You should be able to view through the provided flash player instantly.

3. The Flash Player and Media Links will be for the default "Extremists.mp4" file. If you look at the embed code, you can change the code to use a different file on your website. You can also use the Popup Wowza Player and change the stream name from the player.

! More information on file fomats, refer to <http://www.wowzamedia.com/forums/content.php>



Shoutcast Relay / Restream (to flash/rtmp/rtsp)

By default, shoutcast server is not 100% compatible with a flash player – using a shoutcast server in combination with Wowza Media Service as a relay allows the use of a flash player such as JWPlayer as well as stream support to many devices such as Flash, Iphone, Ipod, Android & Blackberry.

4. Login to the MediaCP via your web browser.
5. Navigate to **Configure Media Services** listed under the side menu Administration heading then once loaded proceed to select **Create a new server**.
6. Locate the Service Type field and select **Wowza Media Server**.

! You can configure limits such as Listeners, Bitrate & Bandwidth from the **Limits** tab.

7. Select the **Plugin** tab to configure the Service Type of “Shoutcast / Icecast”.
8. Configure the Shoutcast/Icecast address for the service you wish to relay **from**.
9. Select **Create Server** to begin the creation and processing of your Wowza service

! **Wowza Media Services are created instantaneously.**

Please note that updates to the service after creation might not be applied until you physically restart Wowza Media Server. On Linux/Debian you can generally use the following to restart the system service “service WowzaMediaService restart”.

10. Select **User Control Panel** -> **Configure Media Services** then select the overview icon of the service you have just created. You should be able to listen through the provided flash player instantly.



5. Stream Transcoder V3

Transcoding Overview

Stream Transcoder V3 is available as a **Source** for **Shoutcast & Icecast**, not as an independent service

The concept is to take the stream from the STV3 host service and rebroadcast at a different rate to another service.

It is possible to stream between different services, for instance rebroadcast from Shoutcast to an Icecast stream.

Service Configuration

1. Navigate to **Administration -> Configure Media Services**, locate your WMS service and select **Manage** to enter the service overview page.
2. Select **Manage** from the provided options to enter the service configuration page.
3. Select the **Source.** tab to configure the StreamTranscoderV3 source configuration.

Bitrate The bitrate that you wish to rebroadcast in.
Channels The channels you wish to rebroadcast in.
Sample Rate The samplerate you wish to rebroadcast in.

Server Details You will be required to enter the service details of the service you wish to rebroadcast to.

You can ignore the mountpoint for shoutcast streams.