

Premium - Broadcasting With Mixxx

In this tutorial we are going to be taking a look at Mixxx and how to use it to broadcast to our premium service running under CentovaCast 3 and SHOUTcast 2. A free broadcasting tool that has many features of VirtualDJ as well as a voice-over option.

Differences Between ShoutCast v1 and v2 And Broadcasting Modes

Live Source Connections

Enter this information into your live source software to perform a live broadcast:

Server hostname: **50.22.211.228**
Maximum bit rate: **32**

If your live source client supports modern SHOUTcast v2-style source connections:

Server type: **SHOUTcast v2**
Server port: **8006**
Username: (The username of one of your **DJ accounts**)
Password: (The password for your DJ account)

If your live source client only supports old-style SHOUTcast v1-style source connections:

Server type: **SHOUTcast (v1)**
Server port: **8004**
Password: (The username and password of one of your **DJ accounts**, separated by a colon)
Example: **jsmith:secret**

There are several differences when it comes to broadcasting between ShoutCast 1 and ShoutCast 2. With ShoutCast 1 there were 2 broadcasting modes - live and AutoDJ. If you didn't want to use AutoDJ at all you could just broadcast live and if you wanted to use AutoDJ you would have to disable it when you wanted to broadcast live and then re-enable it when you stopped broadcasting live.

With ShoutCast 2 you can have AutoDJ enabled and if you start broadcasting it will automatically turn off AutoDJ while you are broadcasting live and once you stop broadcasting AutoDJ will automatically start again. If you don't want to use AutoDJ at all you can just broadcast as you would in ShoutCast 1, while you are broadcasting live that stream can be heard on your station and when you're not broadcasting there is nothing to be heard.

ShoutCast 2 also comes with backwards compatibility. What that means is that if you're using a software that doesn't support ShoutCast v2 yet you can still broadcast with it but you have to use a special port that is dedicated to the backwards compatibility for v1.

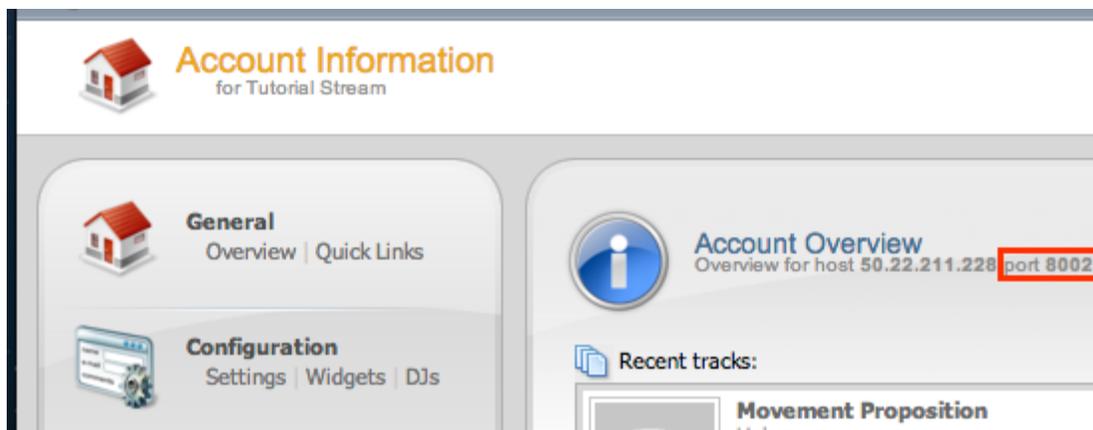
Because of these additions there are now 3 ports in ShoutCast 2 compared to the one port in ShoutCast 1, this can lead to some confusion so we are going to explain here what port serves for what

There are two ports in **Quick Links** - SHOUTCast v2 and SHOUTcast v1 and these ports are **ONLY** used when AutoDJ is **ON**, they **won't** work if you don't have AutoDJ enabled and playing.

If you want to make use of the feature that automatically turns AutoDJ on and off when you start/stop broadcasting these are the ports you need to use. The SHOUTcast v1 port is for the broadcasting software that hasn't been upgraded to support SHOUTcast v2 broadcasting that we mentioned before. If you are using such a software you will need to use the port listed under SHOUTcast v1, 8004 in our example.

If you are using a software that does support SHOUTcast v2 streaming you will be using the SHOUTcast v2 port. Another thing you need to do before you can start broadcasting using these ports is creating DJ accounts, when you have AutoDJ enabled you can't use the default source password for broadcasting, you have to create a separate DJ account for that. For instructions on how to create a DJ account please see the DJ Management tutorial in our knowledgebase.

Live Broadcasting Only



The ports located under Quick Links are **only** meant for broadcasting when you have AutoDJ enabled. If you try to connect using those ports when AutoDJ isn't enabled you won't be able to. If you don't want to use AutoDJ you can broadcast in live only mode and you will need to use a special port for that as well. To get that port go to the overview page of your account (click on

Overview under General) and to the right under **Account Overview** you will see the port (highlighted in the red rectangle in the image above). You will need to use that port if you want to broadcast live with AutoDJ **disabled**.

You can also broadcast to this port using SHOUTcast v1 software.

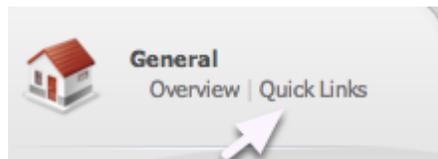
Setting Up AutoDJ

In this tutorial we are going to be explaining how to broadcast live using Mixxx while AutoDJ is enabled. If you want to only broadcast live without using AutoDJ just don't enable the AutoDJ and instead of using the port listed under Quick Links (Port 8006 in our example) use the one listed under **Account Overview** (Port 8002 in our example).

For complete instructions on how to enable and use AutoDJ please see the AutoDJ tutorial in our knowledgebase.

After you have completed the AutoDJ setup and it is broadcasting come back to this tutorial.

Getting The Details



At this point we need to get some details we will need for broadcasting, for this head back to CentovaCast and under **General**, on the left hand menu, click on **Quick Links**.

Streaming Details

Live Source Connections

Enter this information into your live source software to perform a live broadcast:

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Maximum bit rate: **32**

If your live source client supports modern SHOUTcast v2-style source connections:

Server type: **SHOUTcast v2**
Server port: **8006**
Username: (The username of one of your **DJ accounts**)
Password: (The password for your DJ account)

If your live source client only supports old-style SHOUTcast v1-style source connections:

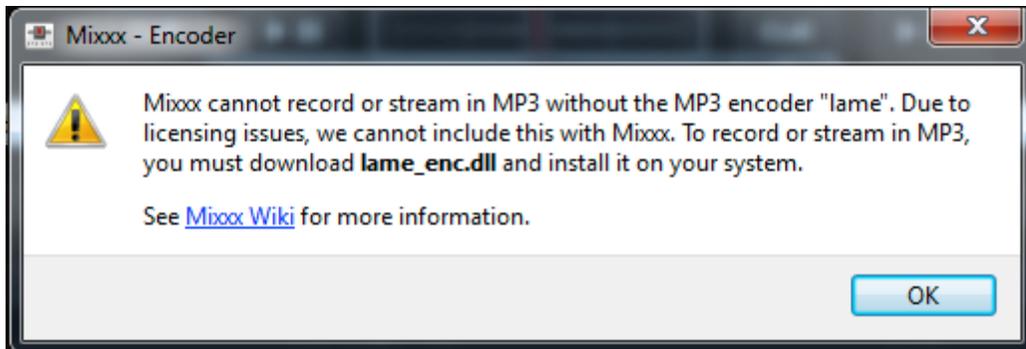
Server type: **SHOUTcast (v1)**
Server port: **8004**
Password: (The username and password of one of your **DJ accounts**, separated by a colon)
Example: **jsmith:secret**

Now scroll down to Live Source Connections. From here you will need the: **IP (Server hostname), the maximum bit rate and the port**. There are two ports here, in this tutorial we are going to be explaining how to broadcast while AutoDJ is running but if you just want to broadcast live without AutoDJ please see the "Live Broadcasting Only" step at the beginning of the tutorial. Because VirtualDJ doesn't support SHOUTcast v2 at the time of this writing we have to use the v1 port, which in our case is **8004**. Now that we have all the details we need to go to Mixxx and configure it to broadcast to our server.

Download and Install Mixxx

To get started first install Mixxx. Head over to <http://mixxx.org/download/> and download Mixxx for your operating system. It is cross-platform compatible and available for Windows, Mac OS and Linux. After the download is done install it like you would any other program.

Installing The MP3 Encoder



After the installation is done you need to download and install the MP3 encoder. Without it you won't be able to broadcast so this step is very important. When you try to enable Live broadcasting in Mixxx without the MP3 encoder installed you will get an error like the one above.

Download The MP3 Encoder

Downloads

LAME 3.98.2

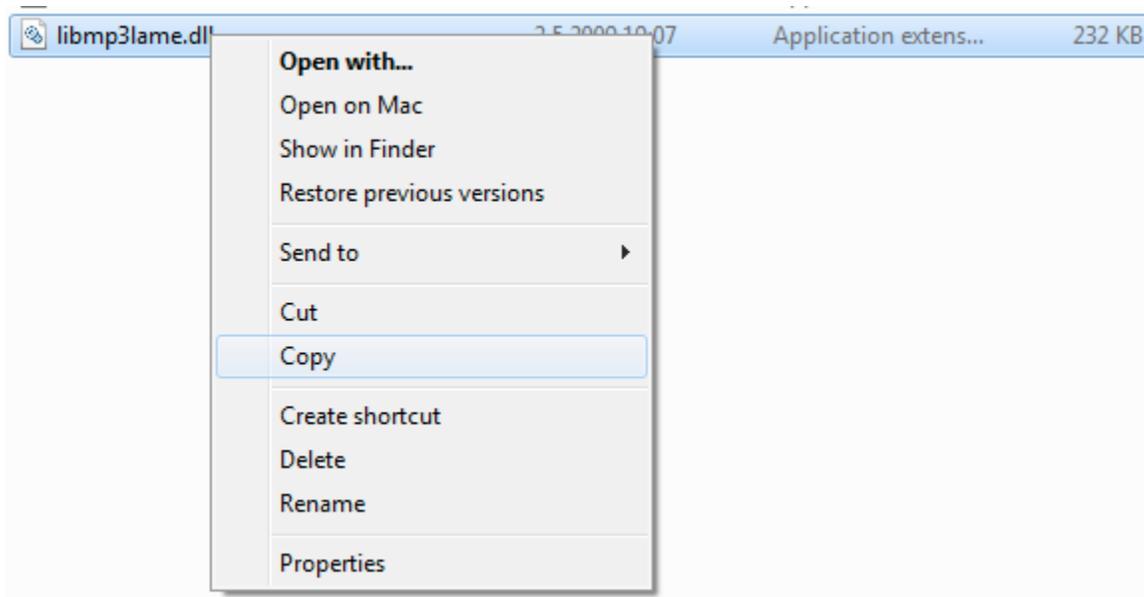
[LAME 3.98.2 \(409k\)](#)

LAME 3.98.4

[LAME 3.98.4 \(335k\)](#)

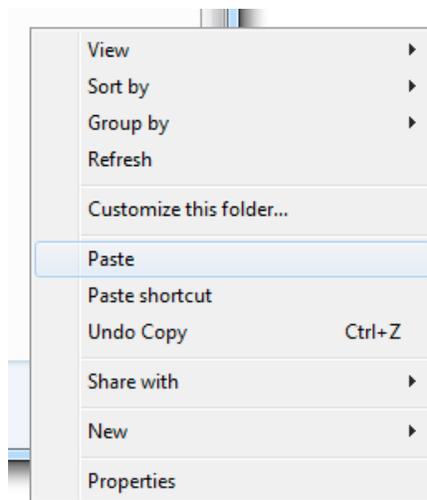
Head over to <http://lame.bakerweb.biz/> and scroll down. Under Downloads click on the first download link to start the download of the encoder.

Locating The Encoder



Once you have downloaded the file extract it and you should see two folders - x64 and x86. Depending on whether your system is x64 or x86 you will need to go into the proper folder. Once you're in the folder you should see the **libmp3lame.dll** file. Copy that file.

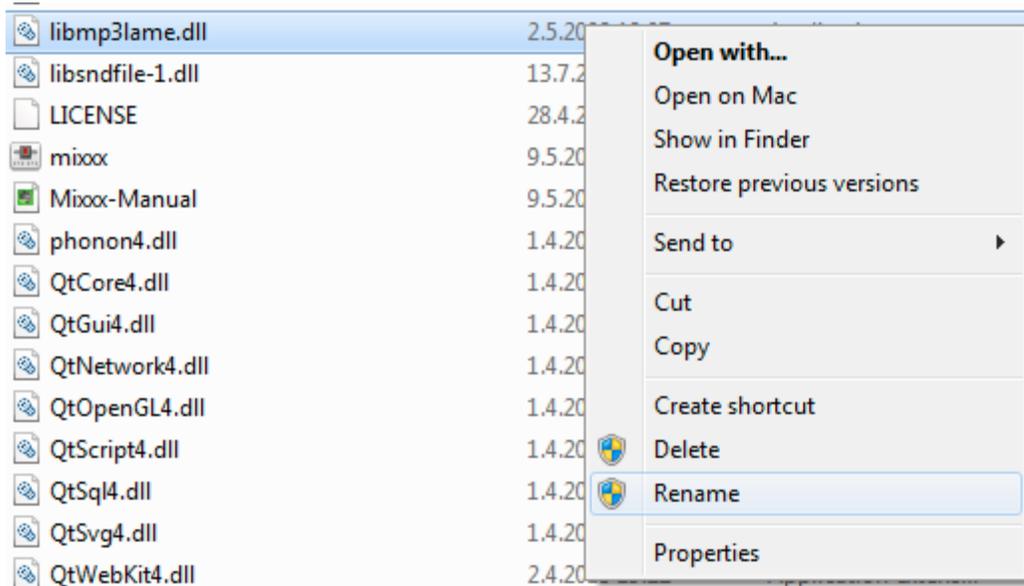
Copy The Encoder Into The Mixxx Folder



Once you have copied the file go to **My Computer**, the **C: drive** and into **Program Files**. If you're running a x64 system you will have 2 program files folders, go into the **Program Files (x86)** folder. Once you're in there look for the **Mixxx** folder. Once you're in the Mixxx folder paste the

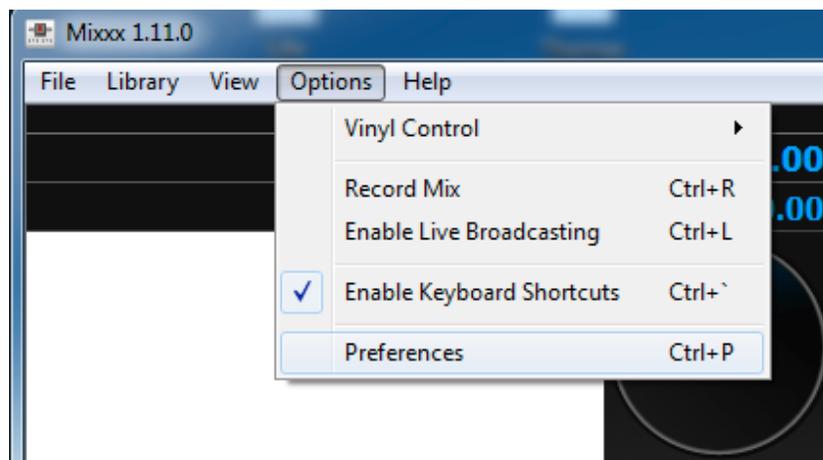
libmp3lame.dll file there.

Rename The Encoder



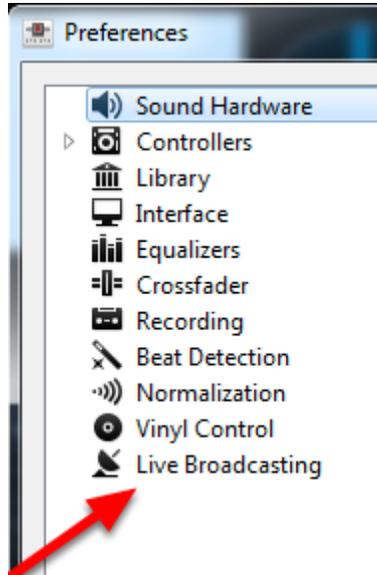
Once you have pasted libmp3lame.dll into the folder find it and rename it to **lame_enc.dll**

Configure Live Broadcasting



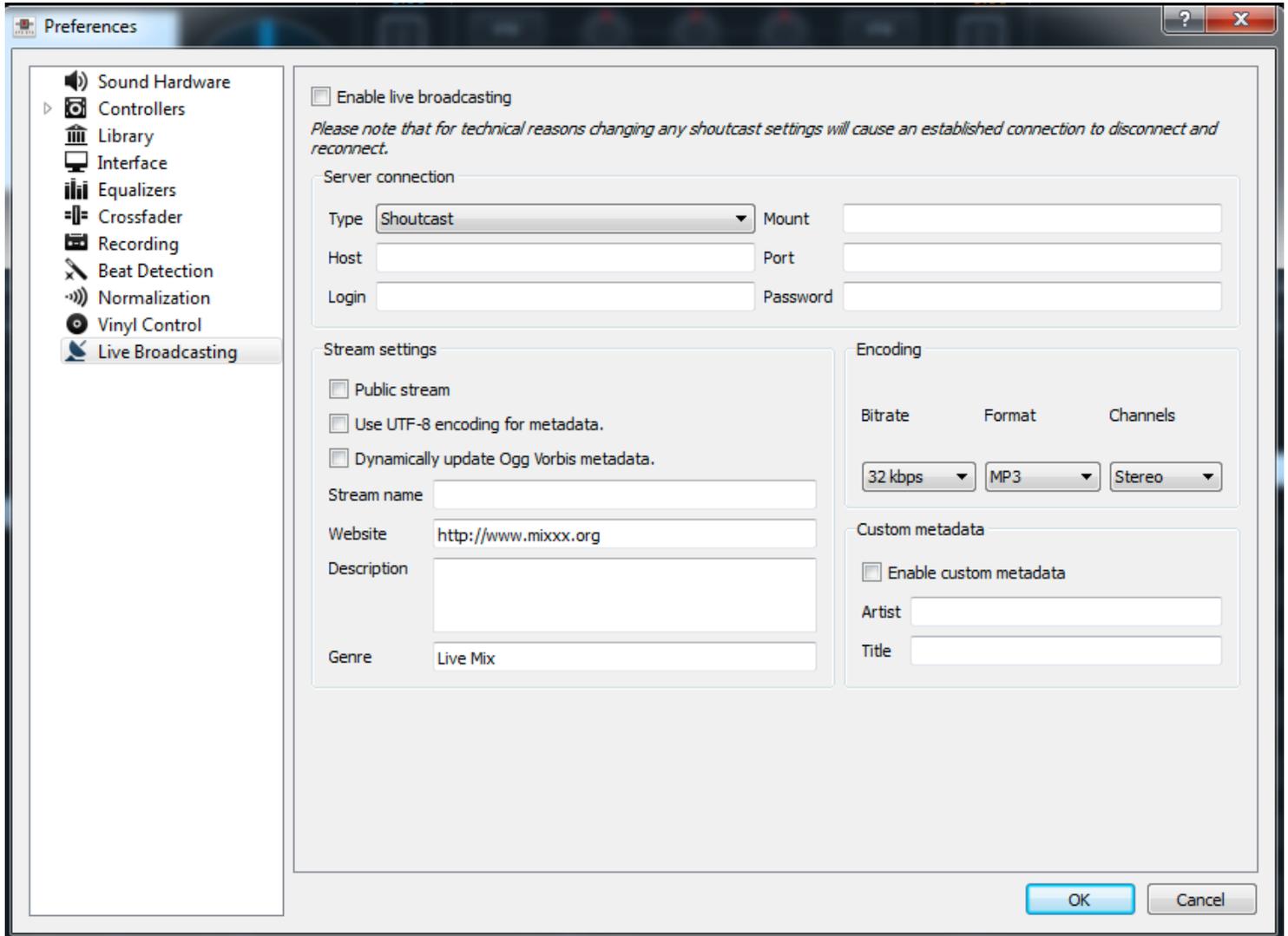
Now that we have installed the encoder we can start configuring the connection parameters. To do that go to Mixxx and click on Options in the top menu and then click on Preferences. A new window will pop up.

Live Broadcasting



In the new window look for the Live Broadcasting Option.

Entering The Details



The screenshot shows the 'Preferences' dialog box with the 'Live Broadcasting' section selected in the left-hand menu. The main area contains the following settings:

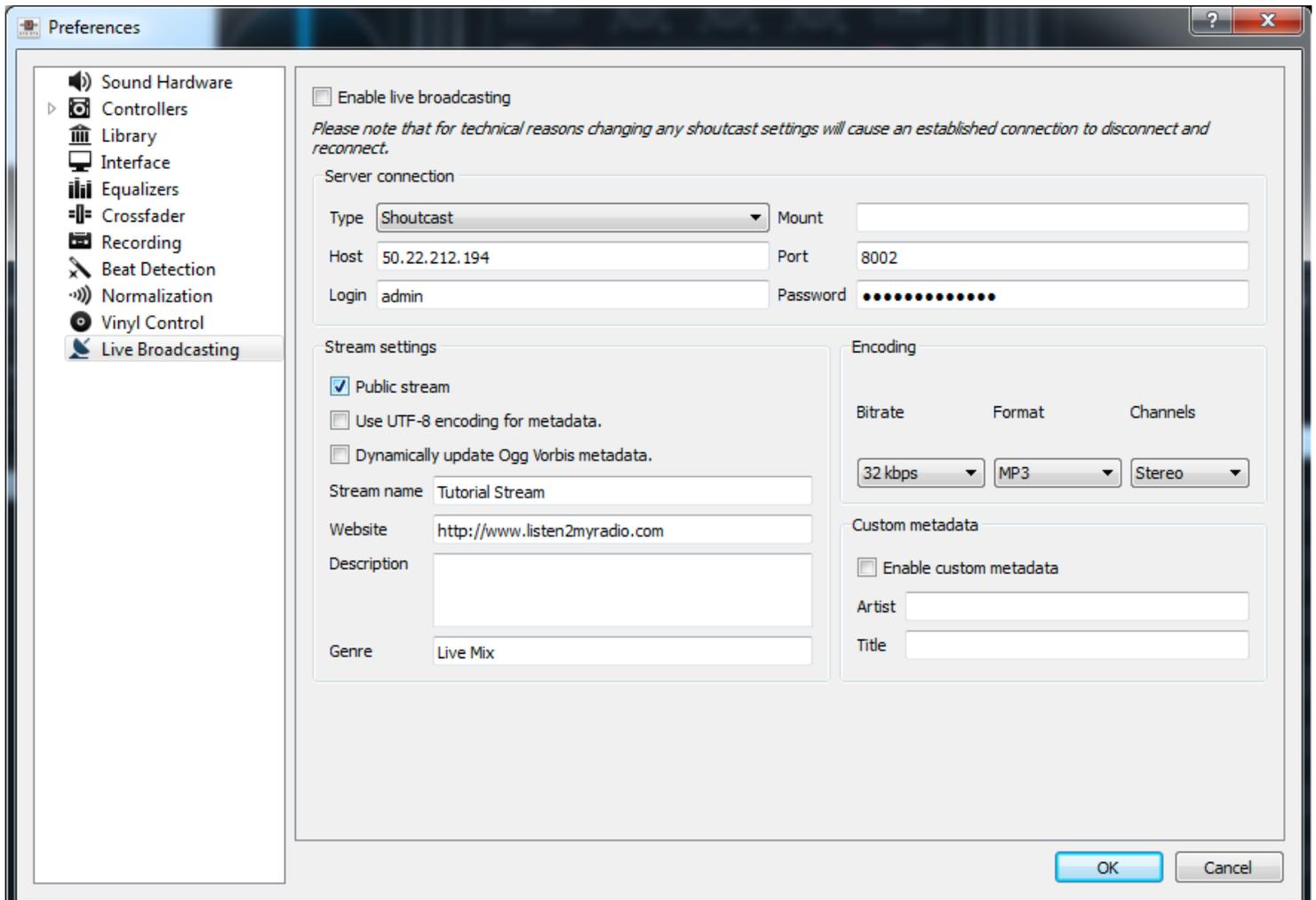
- Enable live broadcasting
- Please note that for technical reasons changing any shoutcast settings will cause an established connection to disconnect and reconnect.*
- Server connection**
 - Type: Shoutcast (dropdown)
 - Mount: [Empty text box]
 - Host: [Empty text box]
 - Port: [Empty text box]
 - Login: [Empty text box]
 - Password: [Empty text box]
- Stream settings**
 - Public stream
 - Use UTF-8 encoding for metadata.
 - Dynamically update Ogg Vorbis metadata.
 - Stream name: [Empty text box]
 - Website: <http://www.mixxx.org>
 - Description: [Empty text box]
 - Genre: Live Mix
- Encoding**

Bitrate	Format	Channels
32 kbps (dropdown)	MP3 (dropdown)	Stereo (dropdown)
- Custom metadata**
 - Enable custom metadata
 - Artist: [Empty text box]
 - Title: [Empty text box]

At the bottom right, there are 'OK' and 'Cancel' buttons.

In Live Broadcasting on the right side you will now have a number of fields and options to configure Mixxx to broadcast to your server. Get the details we earlier got from Quick Links.

Enter Details



The screenshot shows the 'Preferences' dialog box with the 'Live Broadcasting' tab selected. The 'Server connection' section is expanded, showing 'Type' set to 'Shoutcast', 'Host' as '50.22.212.194', 'Port' as '8002', and 'Login' as 'admin'. The 'Stream settings' section has 'Public stream' checked, 'Stream name' as 'Tutorial Stream', 'Website' as 'http://www.listen2myradio.com', and 'Genre' as 'Live Mix'. The 'Encoding' section shows 'Bitrate' as '32 kbps', 'Format' as 'MP3', and 'Channels' as 'Stereo'. There are 'OK' and 'Cancel' buttons at the bottom right.

Under **Server Connection** first select the **Type** and set it to **Shoutcast**.

Under **Login** enter **admin**

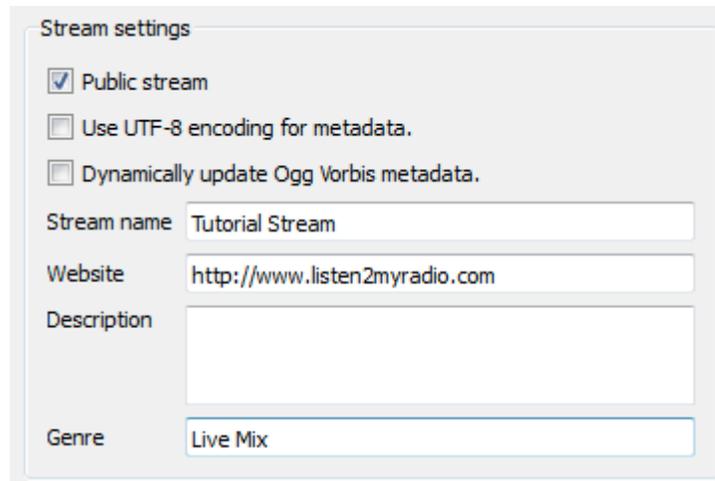
Under **Host** enter the IP address or host address you got from Quick Links.

At the time of this writing Mixxx doesn't support SHOUTcast 2 so we have to use the SHOUTcast 1 port. Under **Port** enter the SHOUTcast 1 port.

Leave the **Mount** field empty.

Under **Encoding** set the **maximum bit rate** of your package. You can find the maximum bit rate of your package under Quick Links. In our case that's 32kbps.

Other Stream Settings



Stream settings

Public stream

Use UTF-8 encoding for metadata.

Dynamically update Ogg Vorbis metadata.

Stream name

Website

Description

Genre

As you may have noticed there are a few other stream settings on the page. If you want your station to be listed on shoutcast.com you can check the **public stream** option. Under **Stream Name** you can enter the name of your station. If your radio has a web site you can enter it under **Website**. If your station has a main Genre you can also enter that under **Genre**.

The Password

When you are broadcasting in SHOUTcast 2 with AutoDJ enabled you need to configure a DJ account in order to broadcast live. So if you haven't done that already we need to configure an account before we can finish the setup.

DJ Account Setup

DJ Account Settings

Username:

Password:

Confirm password:

Real name:

Status: ▾

Privileges

Permissions:

(Hold Ctrl to select multiple.)

Login Restrictions

Allow logins:

(Hold Ctrl to select multiple.)

Allow from: :

Allow until: :

Save

To setup an DJ account go to the left hand menu in CentovaCast and under the **Configuration** menu click on **DJs**.

Once you're in DJ Management look to the right and you should see **Create DJ account**.

In the **username** field fill in the username you want this account to have.



Under **password and confirm password** fill in the password you want this account to have.

The real name serves mostly as a way for you to differentiate the accounts from one another if you end up using usernames that you can't easily recognize, you don't have to necessarily enter a name into that field, it can be anything you want.

Leave the Status to Enabled if you want to use this account.

Under Privileges you can set how much access to different functions this user has in CentovaCast. You can select all of the permissions to give full access by holding down **SHIFT** and then clicking on the first and last item in the list. If you just want to select one permission you can just click on that item and if you want to select several you can hold the **CTRL** button and clicking on each of the items you want to have enabled.

Login Restrictions

If you want you can also make time based restrictions on the account. By default it is set to be active 24/7 but you can set it to any time you want. You select the days the same way you did with the permissions. You can also set the hours from and until the account will be active.

We will just leave it at the default which makes it active 24/7.

Once you have filled in all the details click on **Save** to create the account. Then you also need to restart the server to apply the change. To restart the server look for the **Server** menu on the left and click on **Restart**.

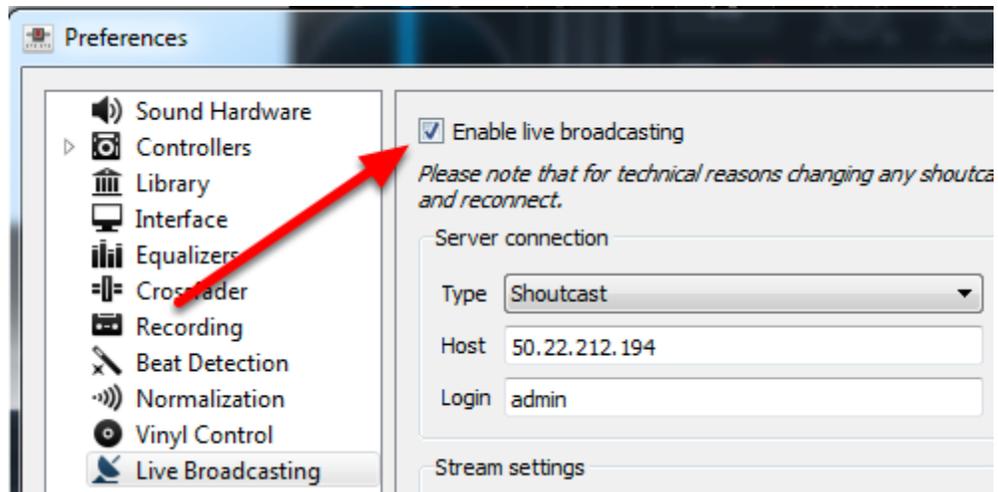
After the restart is done you can return to Mixxx to continue with the configuration.

Entering The Password Into Mixxx

Now that we have configured a DJ account we just need to enter the password into the password field into Mixxx but because Mixxx doesn't support SHOUTcast 2 we have no place to enter the username. To get around this we need to enter both the username and the password into the password field using a special format. First enter the DJ username then a colon and then the password.

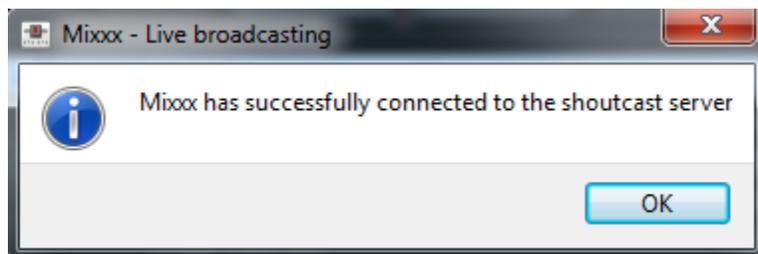
So you need to enter **username:password** without any spaces.

Enable Live Broadcasting



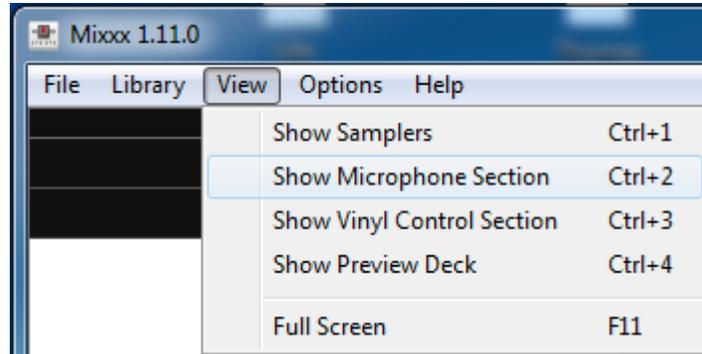
After you have entered and configured all of the details click on **Enable live broadcasting** and then click OK in the bottom right corner.

Successfully Connected



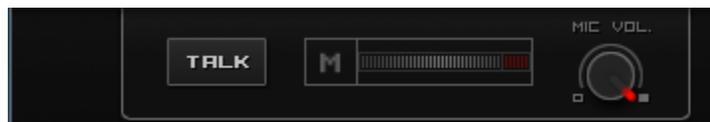
If you did everything correctly a few seconds after you click the OK button you should see the window above. If you get an error instead of this window go back to the configuration window and double check the settings and make sure that everything is correct. Also make sure that there are no blank spaces before or after the IP, Port or password. The safest way to ensure that is to type them all in manually.

Enabling Voice Over



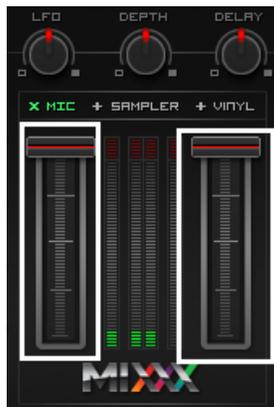
To enable voice over click on **View** in the top menu in mix and click on **Show Microphone Section**.

Enabling Voice Over - 2



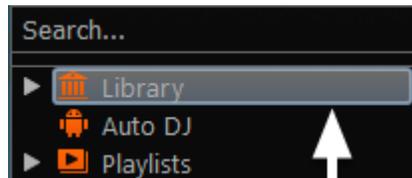
Now a new option should have appeared in Mixxx. By clicking on the **TALK** button your microphone feed will be included into the stream. You can also control the microphone volume using the knob under **MIC VOL.**

Enabling Voice Over - 3



If you find that the music is too loud and that you can't properly hear the microphone you can lower it using the controllers above. If your current song is in the left deck you lower the left controller and same for the right deck and the right controller.

Playing Songs



When you first installed Mixxx you were prompted to select the folder that holds your music. If you did that all of the music from that folder will now be listed in the Library option in Mixxx. On the right you should now see all the songs from the folder you selected.

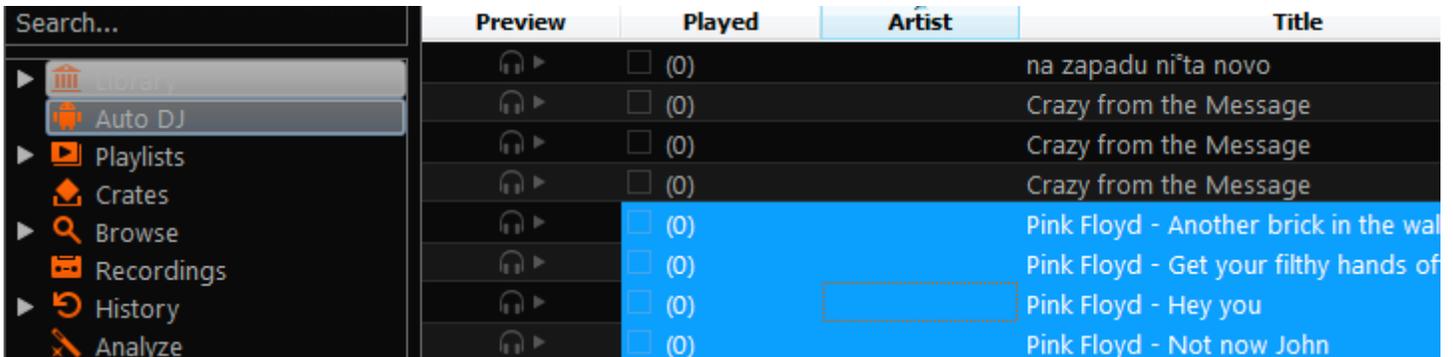
If you want to change the library folder go to **Options** in the top menu bar, click on **Preferences** and select **Library** on the left. The first option will be to change the library folder or **music directory**.

Playing Songs



Once you have songs listed in Mixxx just double click on one and it will load into the left hand deck. After that you can just click on the left play button and it will start playing. Because of the way Mixxx works after this song is done the playing will stop. If you want to play an entire playlist you need to use the AutoDJ feature in Mixxx (different from the CentovaCast AutoDJ system).

Mixxx AutoDJ (Running Playlists)

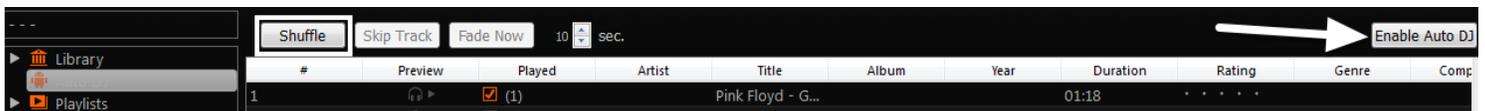


If you want to play a whole playlist instead of having to select each song and load it into the deck yourself you need to use the Mixxx AutoDJ feature. First go to the **Library** tab in Mixxx and select the songs you want to play as a playlist. Then just drag and drop them onto the AutoDJ option in the left hand menu as illustrated in the image above.

Starting Playlist

Once you have added files into the AutoDJ tab click on the AutoDJ option.

Configuring Mixxx AutoDj



Once you're in the Mixxx AutoDJ option you may want to set the order of your songs. To do that just click on the song that you want to order and then drag and drop it to the desired position in the playlist. If you want the songs to play randomly click on the **Shuffle** option.

Once you have added songs and ordered them the way you like click on the **Enable AutoDJ** option on the right to start playing the songs.

The songs will now start playing and will continue to play until there are no more songs in the AutoDJ playlist.

Listening To Your Stream



Now that you are actually broadcasting it's time to hear how your stream sounds.

The easiest way to listen to your stream is to use the built in player in CentovaCast at the top of the page. Just click on the play button and your stream should start playing after a second or two.

Alternatively you can go to **Quick Links** and use one of the tune in links to download a playlist file and listen from a desktop player like Winamp.

For your listeners you can either provide them with the link for listening on their desktop players or you can embed a player into your web site and have them listen there. For instructions on how to embed a player please see the RadioToolBox and player embed tutorial in our knowledgebase.