

SHOUTcast v2 - Broadcasting with Nicecast

In this tutorial we are going to explain how to broadcast using Nicecast to our SHOUTcast v2 servers running under CentovaCast 3.

listen2myradio nicecast discount

If you don't already have Nicecast and want to buy it, you can get a \$19 discount by using the coupon "listen2myradio" (without the quotes) on the order page at <http://www.rogueamoeba.com/>

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 to a dedicated port 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 broadcasting yet you can still broadcast with it but you have to use a special port that is dedicated to the backwards compatibility for v1.

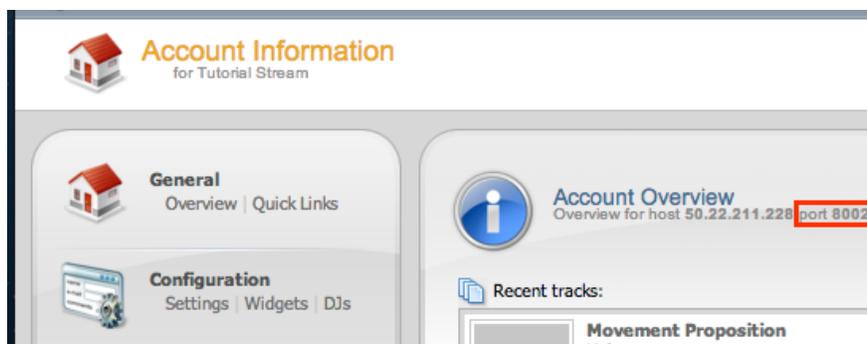
Because of these additions there are now 3 ports in ShoutCast 2 compared to the one port in ShoutCast 1, this can lead to some confusion so we are going to explain here what port serves for what

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 on.

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 this case.

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 the SHOUTcast DSP plugin while AutoDJ is enabled. If you want to only broadcast live without using AutoDJ just don't enable the AutoDJ and use the port 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.

SHOUTcast v2 Support In Nicecast

At the time of this writing Nicecast doesn't have full SHOUTcast v2 support so we can't broadcast to the SHOUTcast v2 port, instead we are going to be broadcasting to the backwards compatibility SHOUTcast v1 port.

Also because Nicecast doesn't have full SHOUTcast v2 support there is no Username field to fill in the DJ username, instead it is filled into the password field, together with the password in the following format - username:password. So if your username is dj123 and password is pass123 you would enter them into the Nicecast password field in the following format - **dj123:pass123**. So it's the username then a colon and then the password.

Required 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**

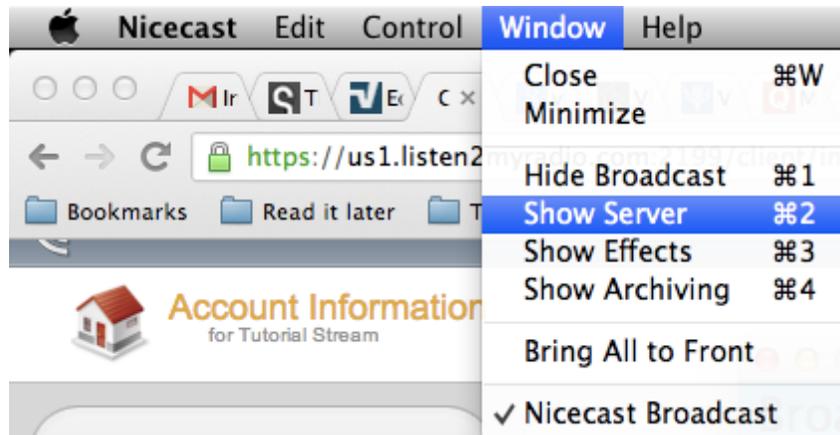
Password: (The username and password of one of your **DJ accounts**, separated by a colon)

Example: **jsmith:secret**

The first thing we need to do in Nicecast is setup the server to which we will be broadcasting, but before we can do that we first need to know some details. To get the details go back to CentovaCast and click on **Quick Links** in the left hand menu. Then scroll down to "Live Source Connections". To setup your broadcast you will need the IP (Server hostname), bit rate, dj username and password and the port. If you haven't already setup a DJ account head over to DJs under configuration and set one up now, for more details on how to do that see our DJ Management tutorial in the Knowledgebase.

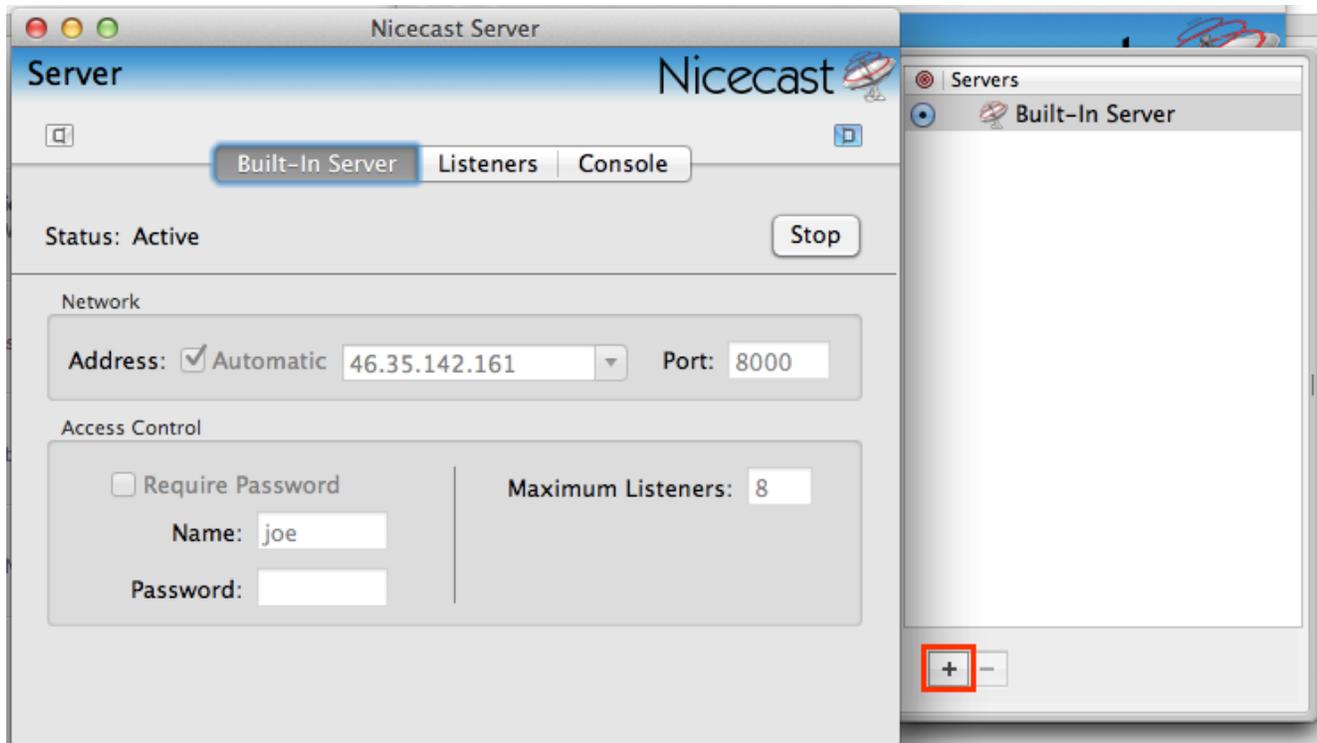
Once you have all of the details you can get back to Nicecast to start the setup.

Nicecast - Server Setup



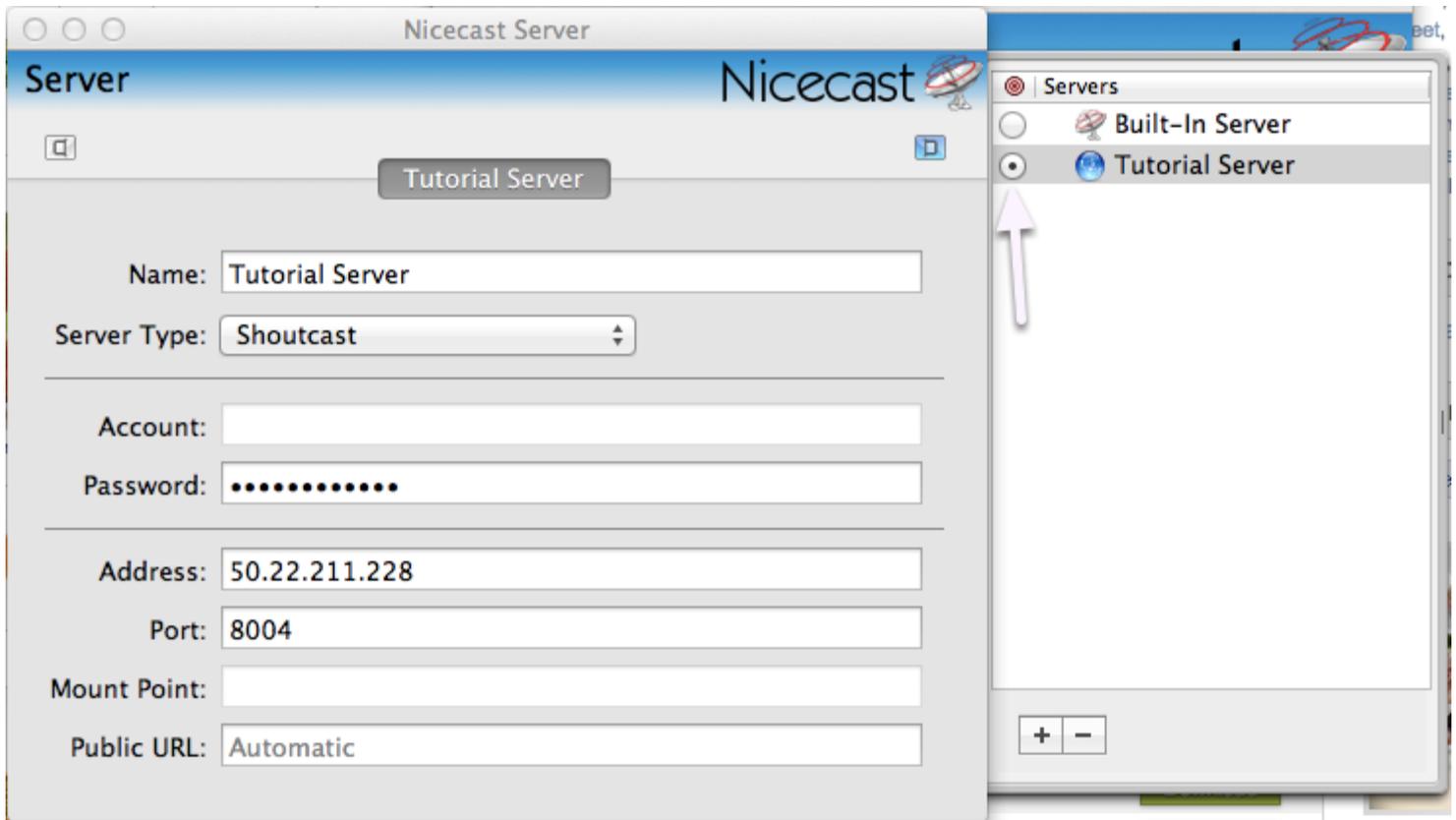
The first thing we need to do is setup the server. To do that go to Nicecast and in the menu bar click on **Window - Show Server**. Now you should see a new Nicecast window.

Nicecast - Add New Server



To get started we need to add a new server first. Click on the + button in the red rectangle to add a new server to the list.

Nicecast - Server Setup - Filling In The Details



In the first field, Name, you can set the title and name of your station. Server type should be **Shoutcast**.

For password you need to get username and password of the DJ account you setup earlier under DJ Management. Because Nicecast doesn't have full SHOUTcast v2 support you will have to enter both the username and password into the password field but it is very important that you use the correct formatting. For example if your DJ useranme is dj123 and your password is pass123 you would have to enter them in the following formatting into the password field - **dj123:pass123**. Username then a colon and then the password with no spaces in between.

After the password you need to enter the Address, that's the IP we got earlier from Quick Links. The last item is the Port. Because Nicecast (at the time of this writing) doesn't support SHOUTcast v2 we will need to use the backward compatibility built in, so you will need to use the **SHOUTcast v1 port** that we got from Quick Links, in our case that's port 8004.

The last thing we need to do in this window is set the new server we created as the default one, to

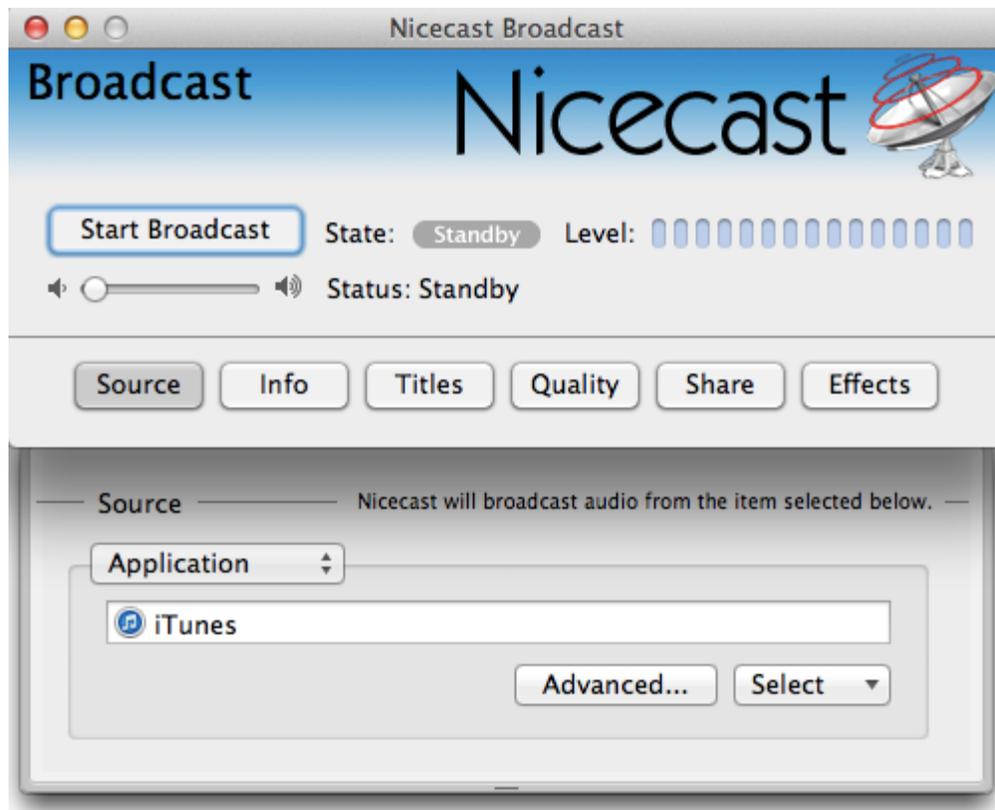
do that click on the bubble next to the server name in the server list. If you don't do this and leave it at Built In Server you won't connect to the server we just setup and your broadcast won't be heard.

You can now close this window and go back to the main Nicecast window.

SPECIAL NOTE

Users often make a small mistake when copying in the details. They copy a blank space along the password IP or port and that gives them errors such as wrong password or it won't connect them. If you get such errors try clearing all of these fields and **typing** the details in.

Nicecast Setup - Source

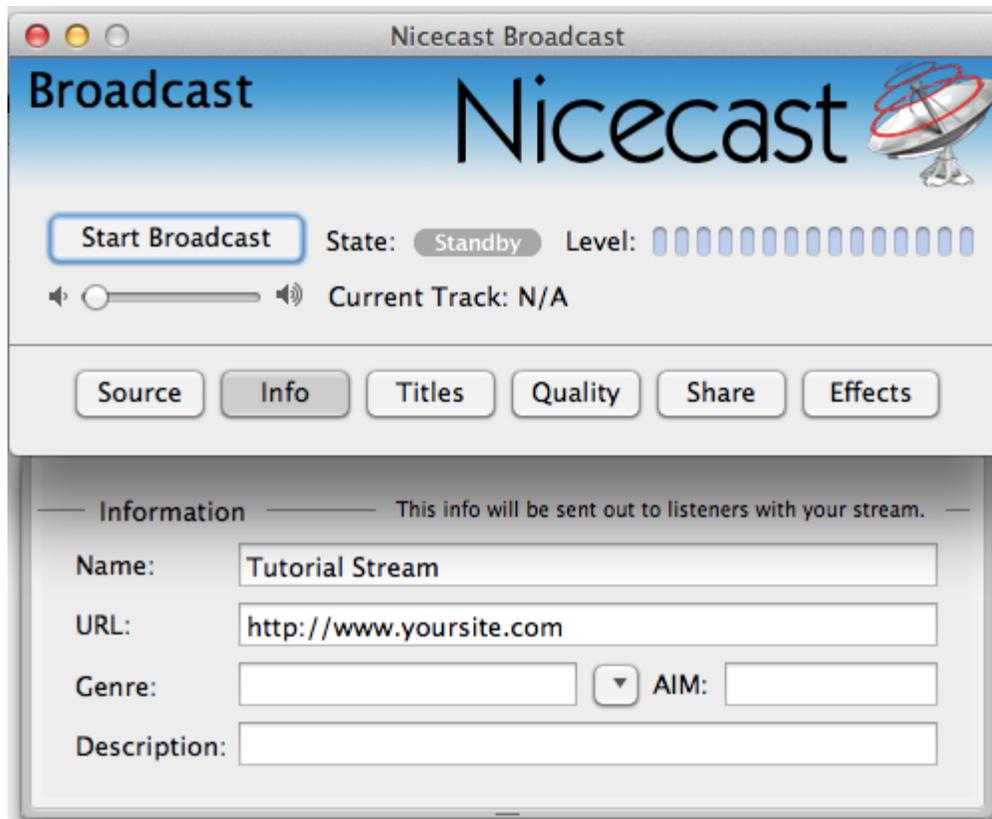


The next thing we need to do is set the source of our audio. Click on the **Source** button to bring up the selection menu. By default iTunes will be selected as the source of the audio so anything that you play in iTunes will be broadcast to your server, if you prefer to use another application you can

click on **Select** and choose the application you want to use.

Once you have chosen your audio source click on the **Info** tab to proceed to the next step.

Nicecast Setup - Info



At this step you need to define the info of your station. The name field will define the title and name of the station, these show up when someone is listening in a player that supports names or in public directories like shoutcast.com if you choose to be listed on those.

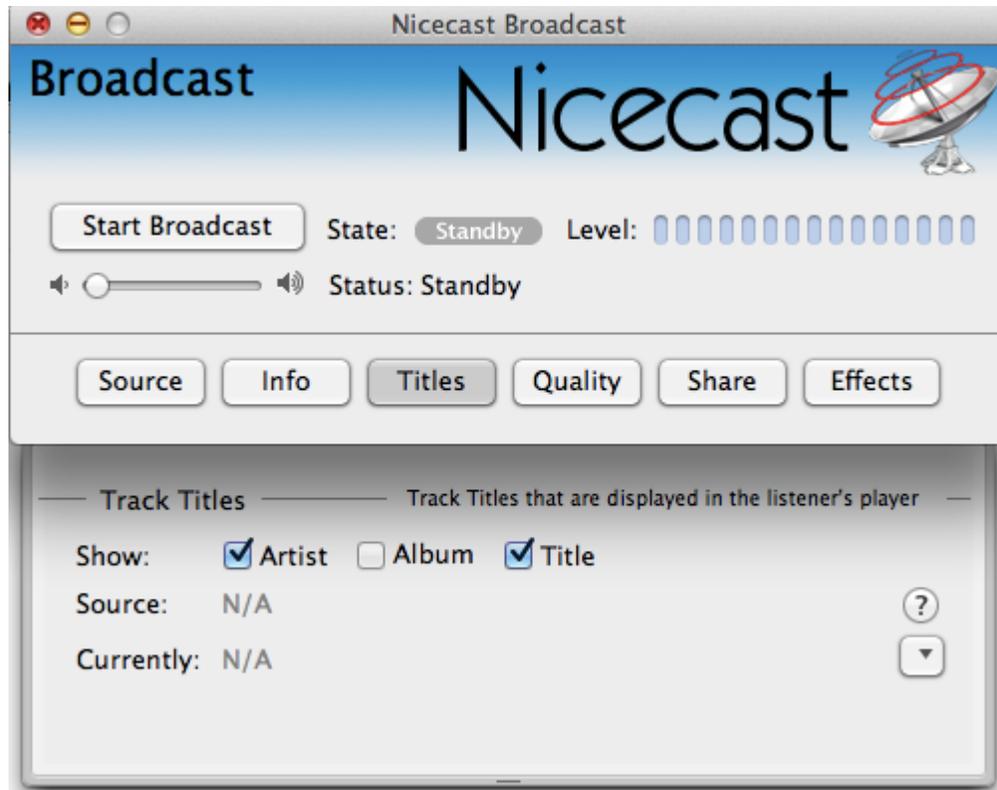
In URL you can enter the URL of your web site.

Genre - You can enter the most common genre you play on your station or you can just leave it blank.

You can't but don't have to fill in the AIM and Description, we are just going to leave it empty.

Once you are done with these click on **Titles**.

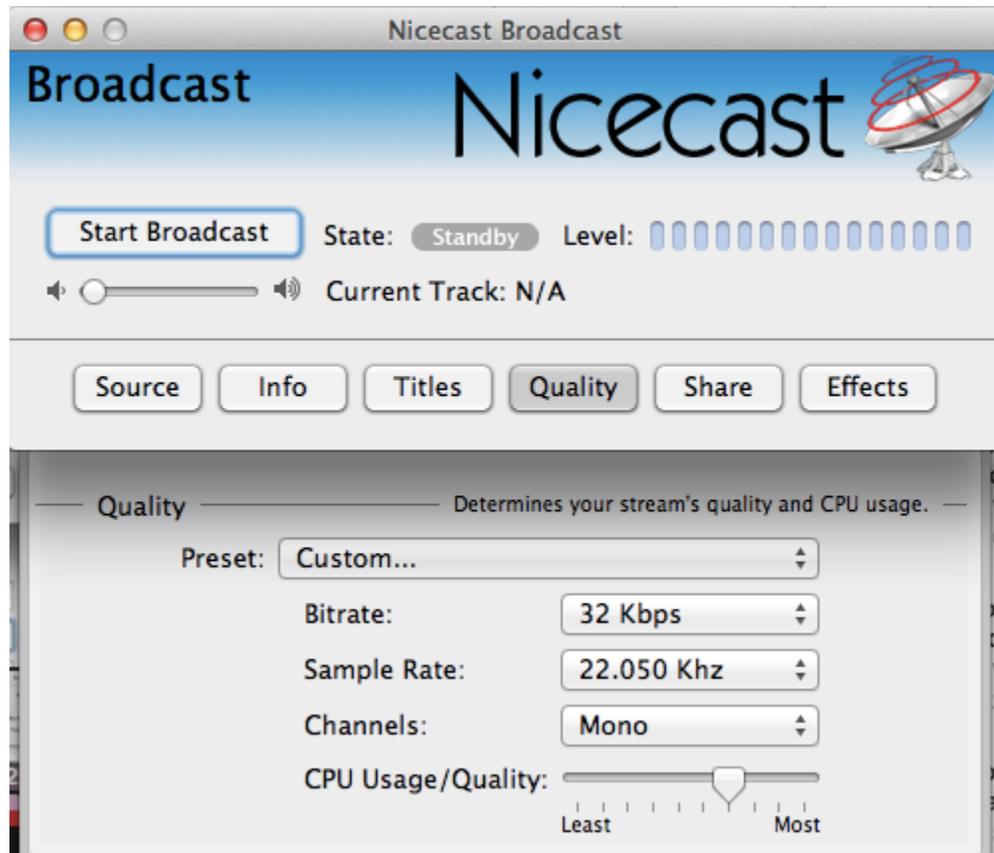
Nicecast Setup - Titles



Under titles you can enable or disable the showing of the song titles and albums. We are just going to leave it at the defaults.

Click on **Quality** to proceed to the next step.

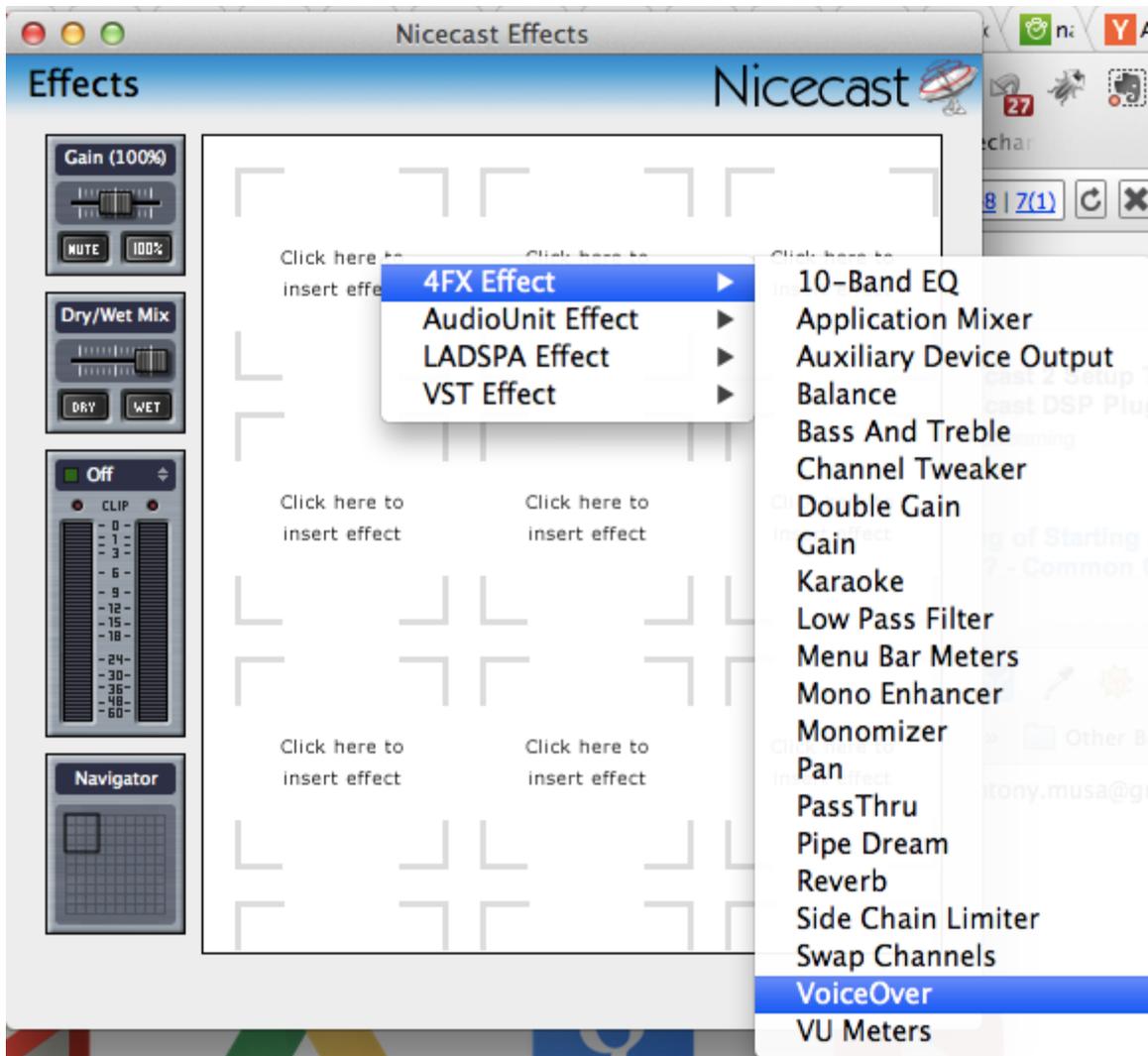
Nicecast Setup - Quality



This step is very important because it determines the quality of your stream. Under bit rate set the bit rate in Nicecast to the maximum bit rate of your package, the one you saw under Quick Links.

After you set the bit rate click on **Effects**.

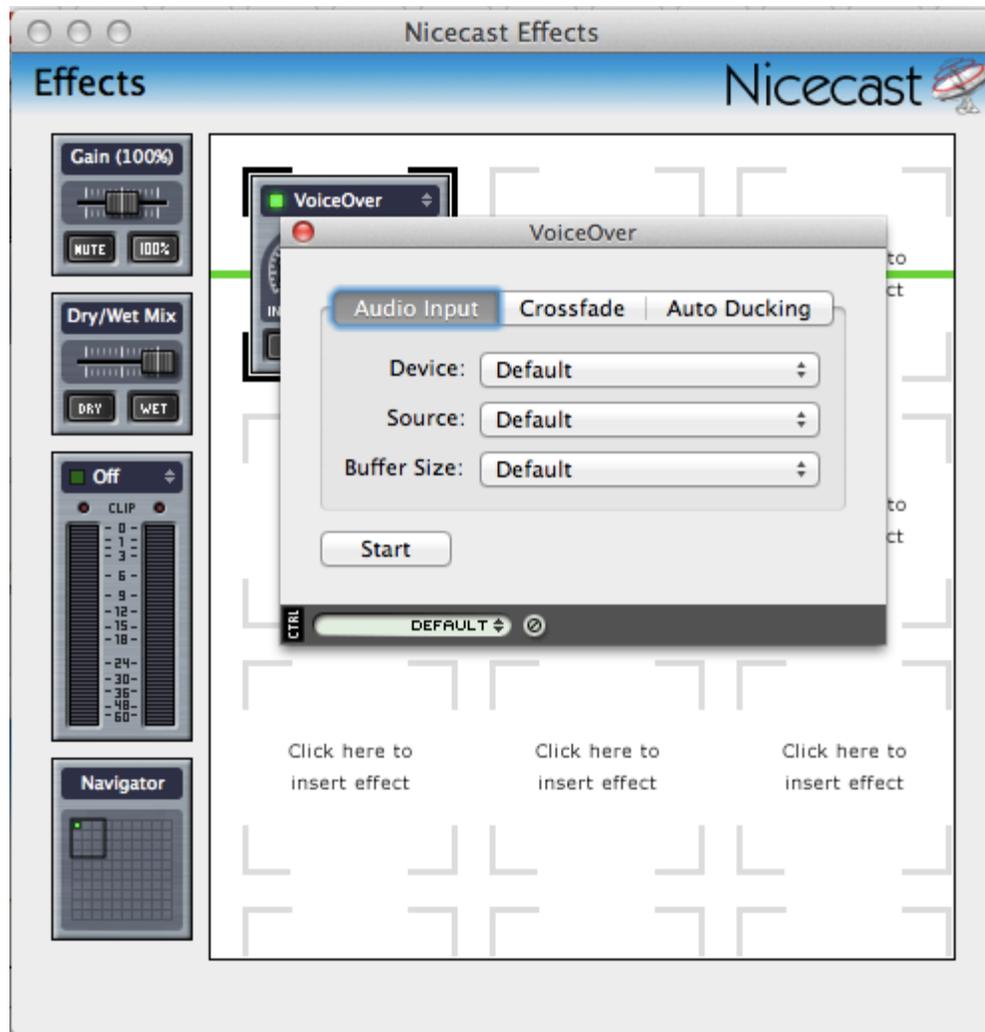
Nicecast Setup - Effects



There are a lot of effects in Nicecast but we are only gonna show one - Voice Over. What voice over does is, it allows you to speak while your music is in the background.

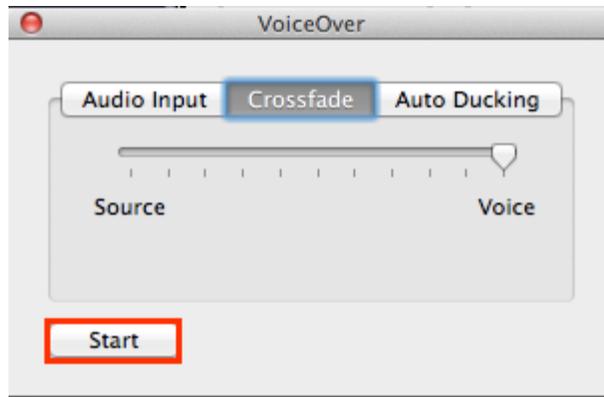
To enable VoiceOver first click on **Effects**. Click on any of the boxes where it says "Click here to insert effect" and under the **4FX Effect** click on **VoiceOver**.

Nicecast Setup - VoiceOver



Now a new window will open up. You can usually leave the Device, Source and Buffer Size at default.

Nicecast Setup - VoiceOver - Crossfade

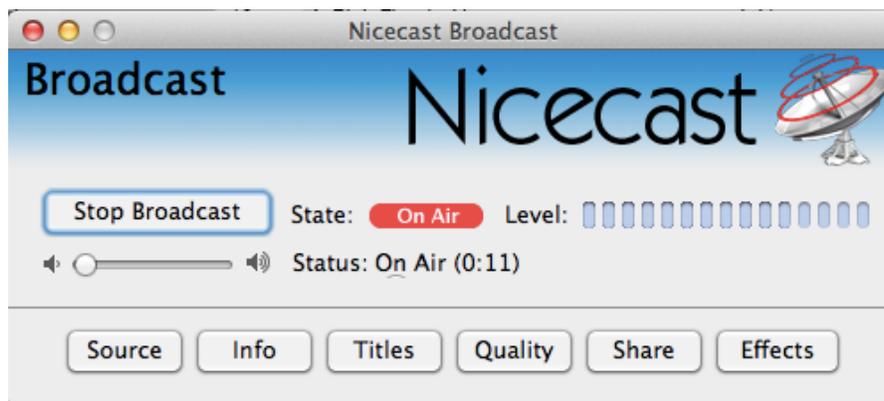


Go to the **Crossfade** tab. Here you set the crossfade between the audio and your voice. By default this is set all the way to voice which means that the music will abruptly cut to your voice and there will be no music in the background just your voice. We recommend that you set it somewhere between 50-70% for a smooth transition and some music in the background while your voice is still loud enough to be heard.

When you want VoiceOver to be active simply click on **Start** and when you want to stop with the voiceover just click on **Stop**.

If the window with the start button disappears click on the **Editor** button on the VoiceOver plugin.

Nicecast Setup - Starting The Broadcast



Now everything is setup, it is time to start the broadcast. Click on the **Start Broadcast** button and after a few seconds it should say **On Air** at **State**. If it doesn't say that something is wrong and you're not broadcasting.

Now start playing music in your audio source (which by default is iTunes)

Listening To The Stream



There are 4 main ways to listen to your broadcast:

- For checking if it's working and for your own listening you can use the player on the top of CentovaCast. This is the fastest and easiest way for your to check your stream
- Listening in Desktop Players - You can go to Quick Links and under Tune in you can click on the playlist file and download it, then you can open it in a desktop player like iTunes or VLC or Winamp itself and listen to the stream.
NOTE - You can't listen in iTunes if you're using it as your audio source for obvious reasons, pick a different player if you are trying to listen this way on the same computer that you're broadcasting from
- Embedding a player on your web site - You can put a player on your web site, this is the fastest and easiest ways for your viewers to listen to your show. For more information on how to embed please see the RadioToolBox tutorial in our knowledgebase.
- Smartphones - You can also listen to your stream on smart phones. For more information about the various ways to listen on a smartphone please see our Smartphone Listening Tutorial in our KnowledgeBase.

If you can hear your stream then everything is working correctly.

Congratulations you're broadcasting live on your very own radio station.