

HOWTO: Setup an Oddcast & Icecast on Windows

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Goal

The goal of this document is to instruct the reader on how to setup a private dedicated streaming solution.

Requirements

You will need the following:

- 1 computer running Windows 2000 or XP w/ at least one sound card
- 1 high speed Internet connection (at least 256 kbps upload speed)
- live audio source

This tutorial assumes that you have your PC setup running Windows 2000 or XP, that you have properly configured all hardware, and have setup your connection to the Internet.

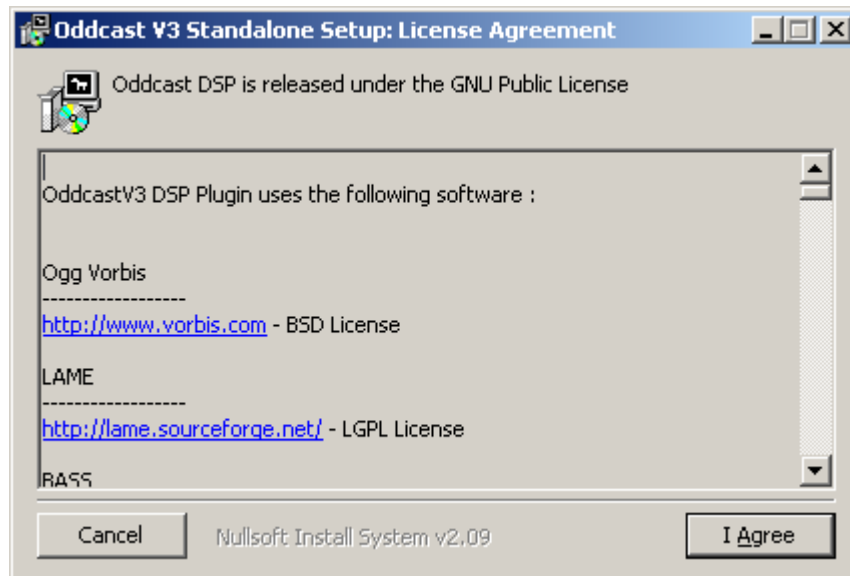
Download

Your first step is to download the following programs.

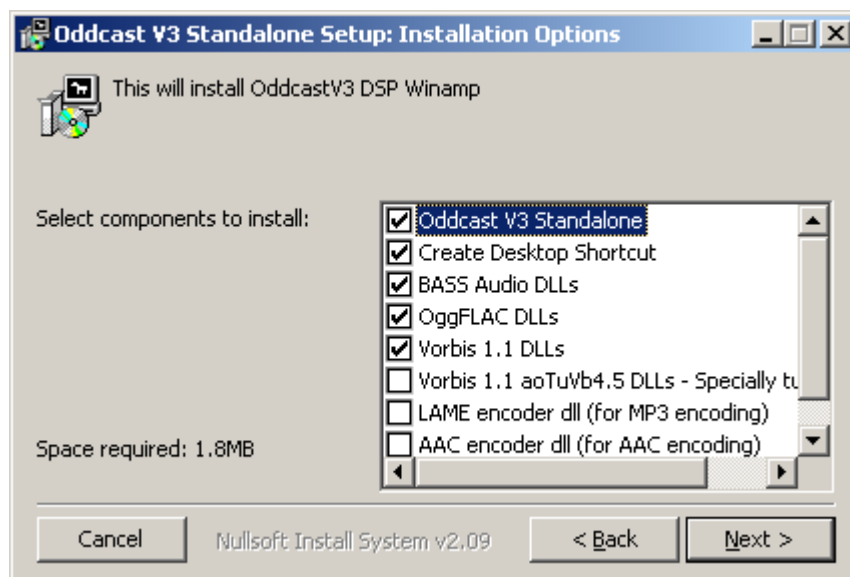
- OddCast can be downloaded from here
<http://www.oddsock.org/tools/oddcastv3/>
(I recommend the stand-alone version)
- Icecast can be downloaded from here
<http://www.icecast.org/download.php>
(Get the Windows Version)

Installation: OddCast

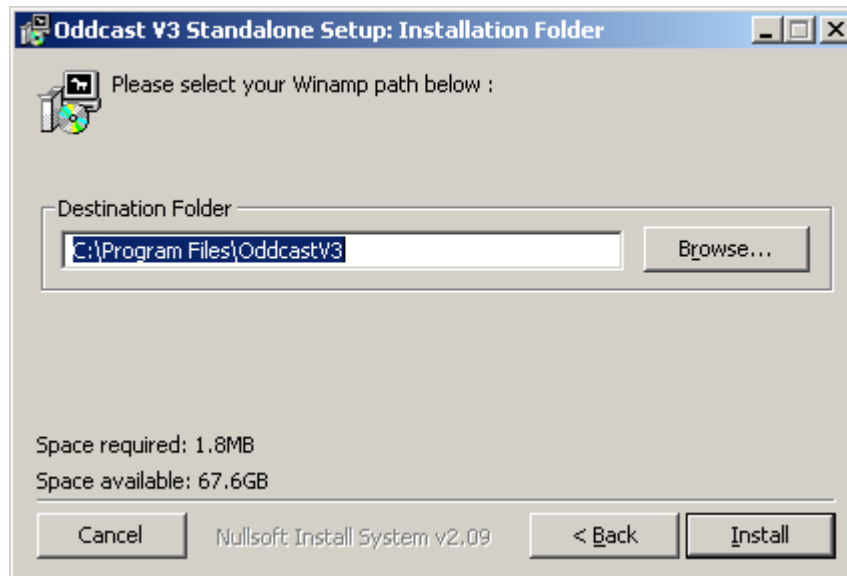
We begin the installation process with OddCast. To launch the OddCast installer double click on the OddCast exe file that you downloaded in the previous step. You will be presented with the following screen.



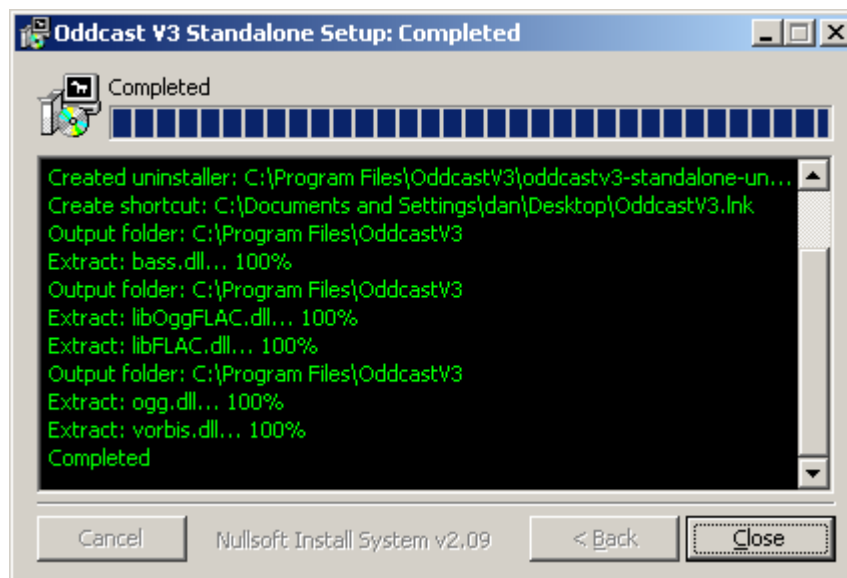
Click 'I Agree'



Do not change anything on this screen unless you know what you are doing. Just click 'Next'.



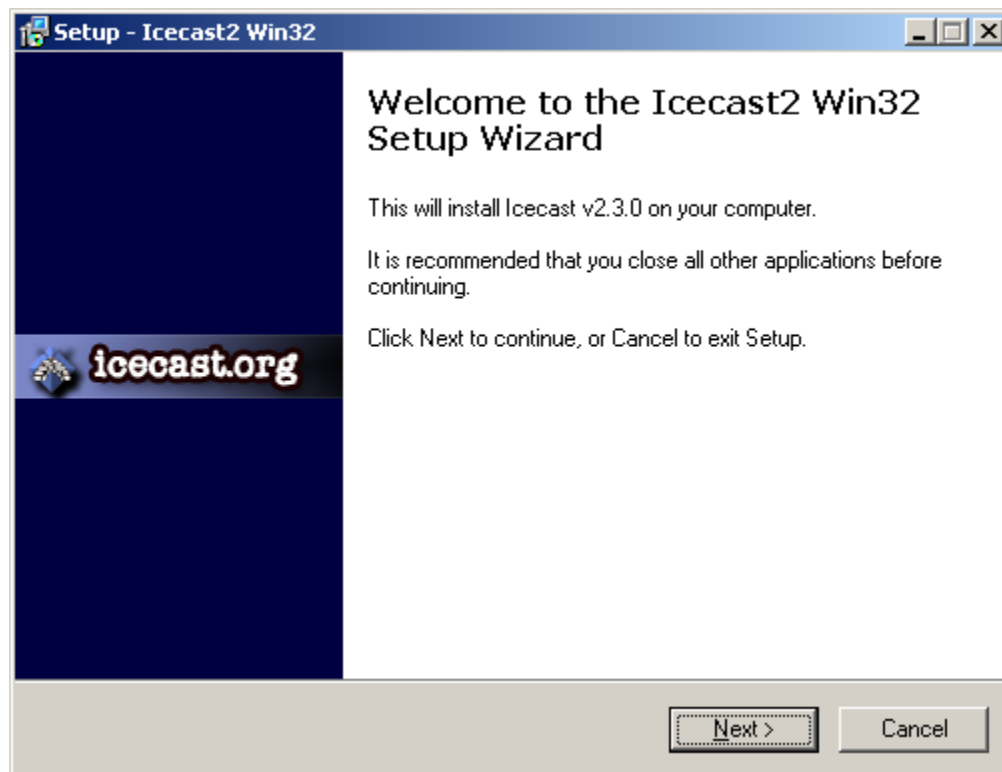
Select the location of where OddCast should be installed, and click the 'Install' button.



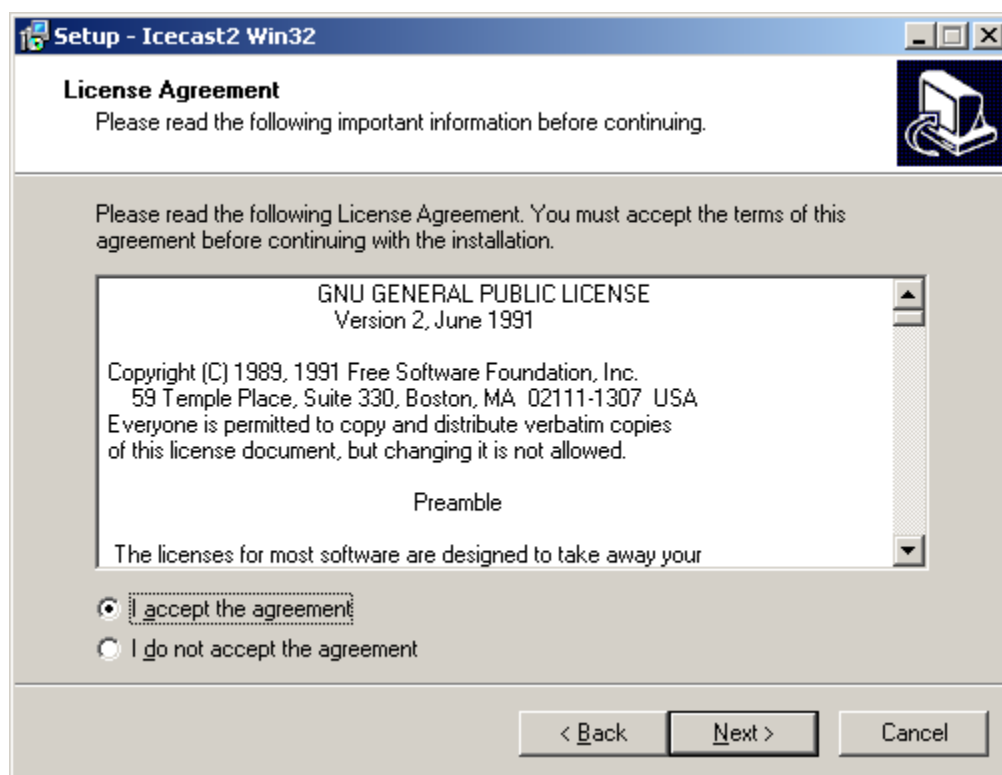
You will see this screen when the installation is complete. Click 'Close'. The installation of OddCast is now complete.

Installation: Icecast

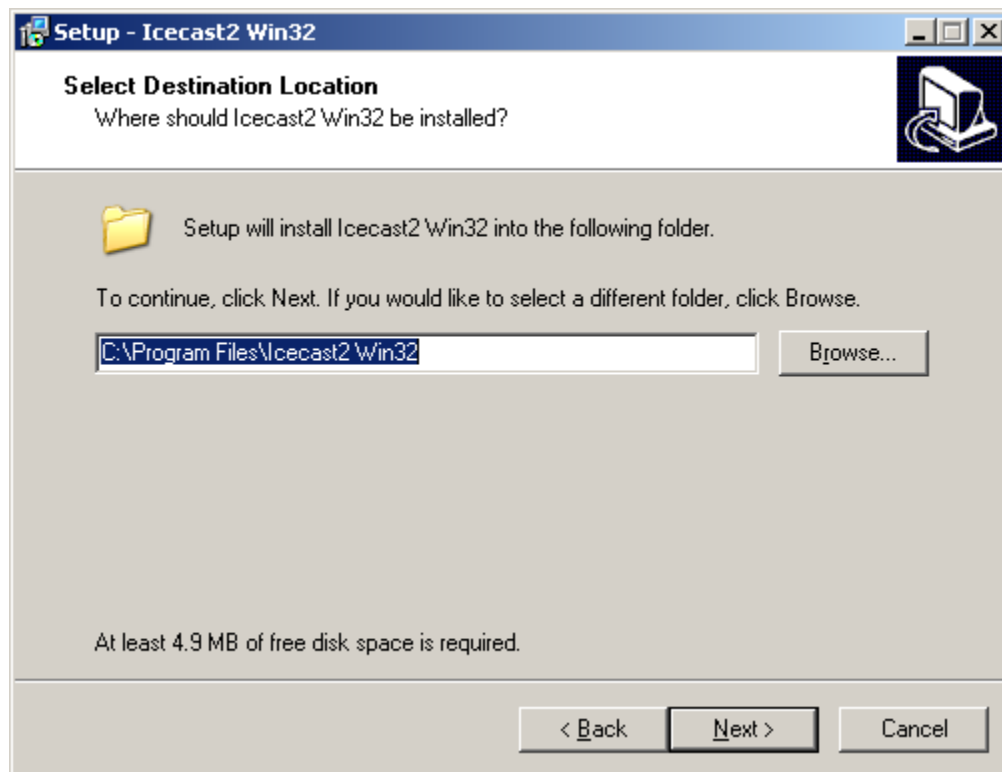
The only other piece of software that we will need is Icecast. To install it, double click on the Icecast exe file that you downloaded. You will be presented with this screen.



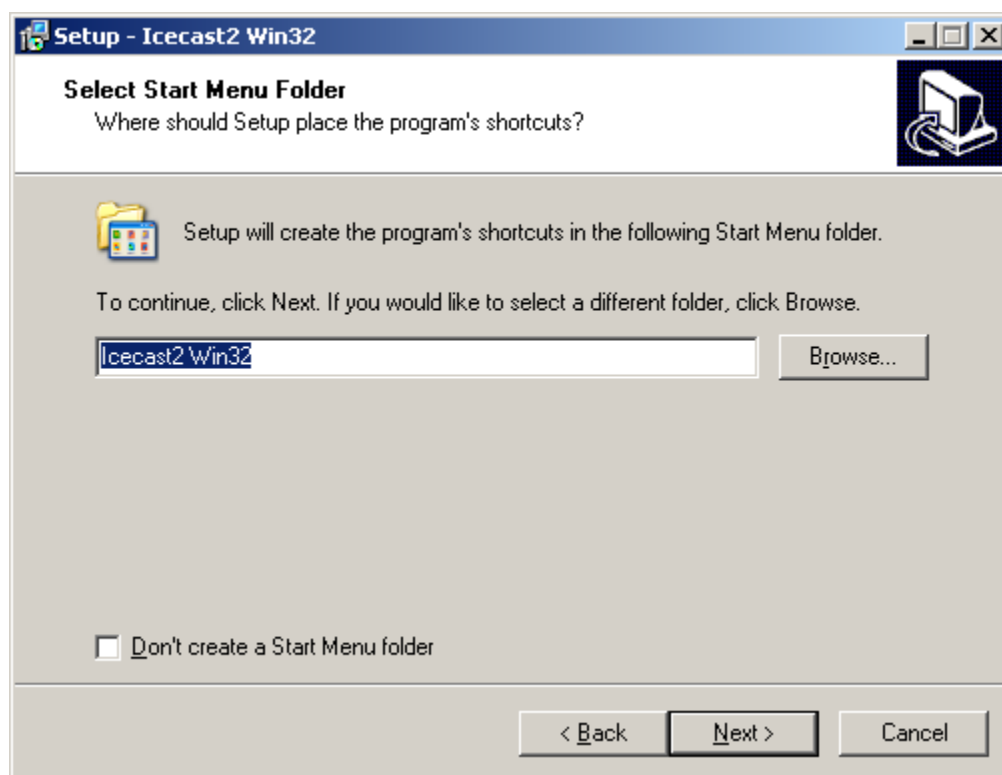
Click 'Next'.



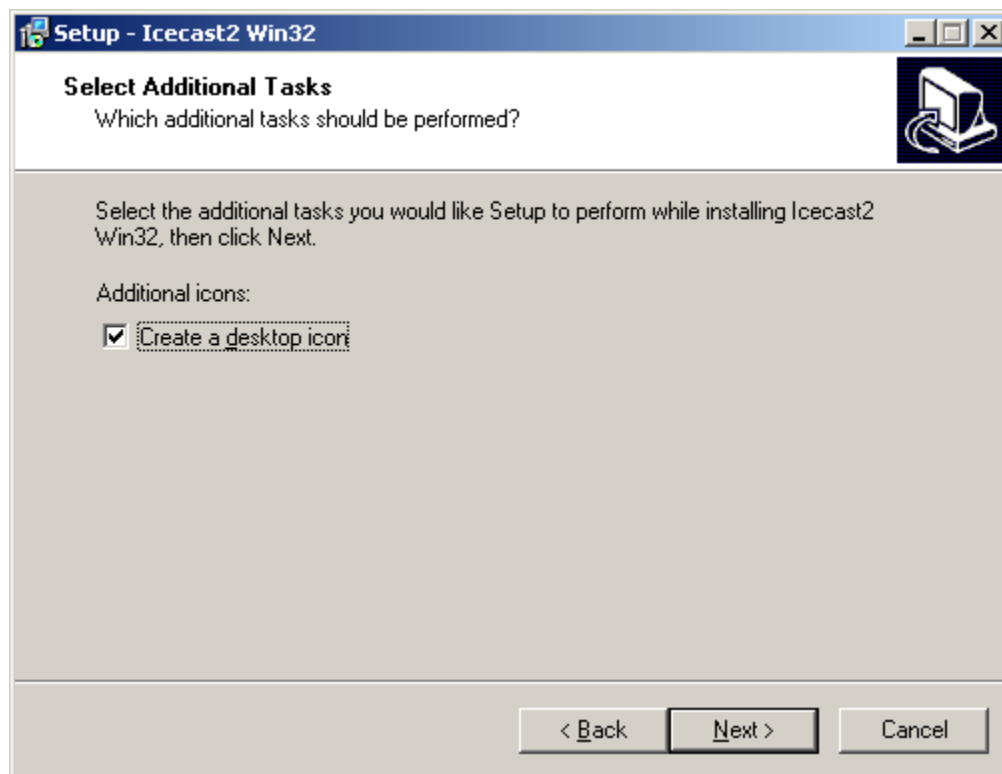
Select the 'I accept the agreement', radio button. Then click 'Next'.



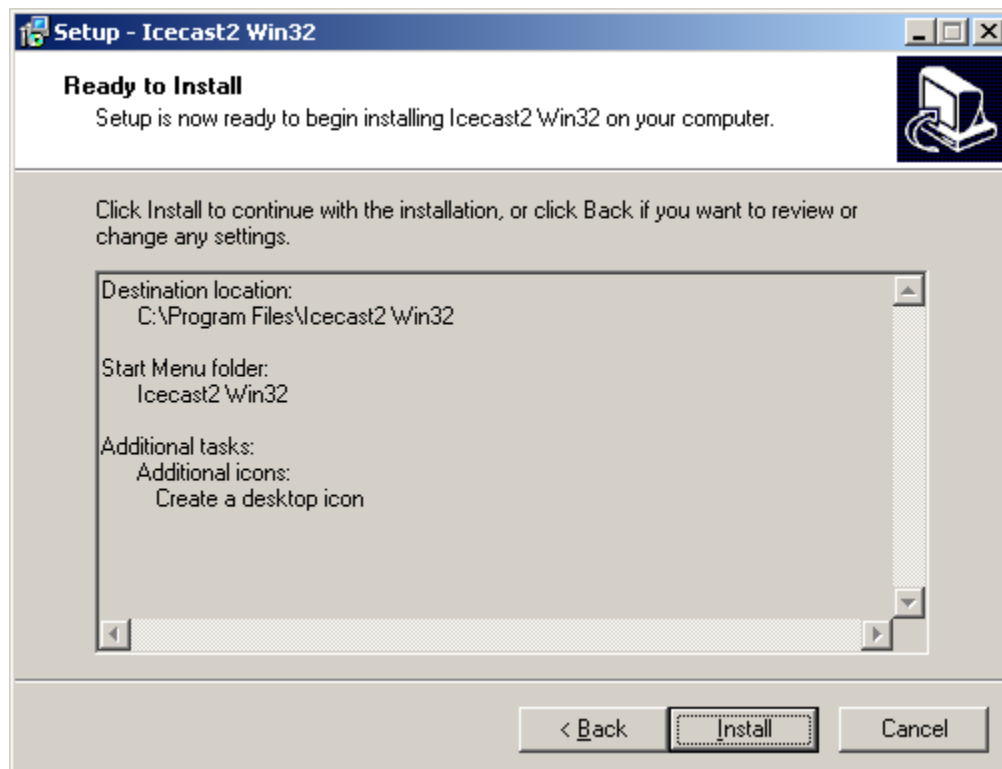
Select the location of where Icecast should be installed. Then click 'Next'.



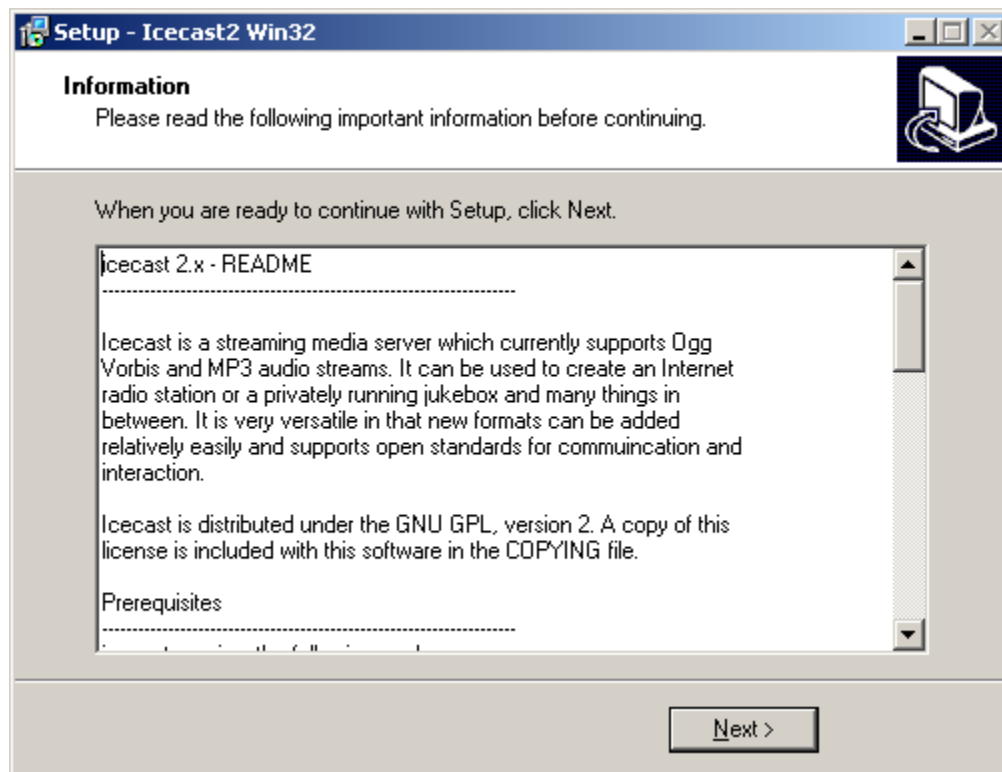
Select the location of where the Start Menu shortcuts should be created. Alternatively you can check the 'Don't create a Start Menu folder' box if you do not want these to be created. Then click 'Next'.



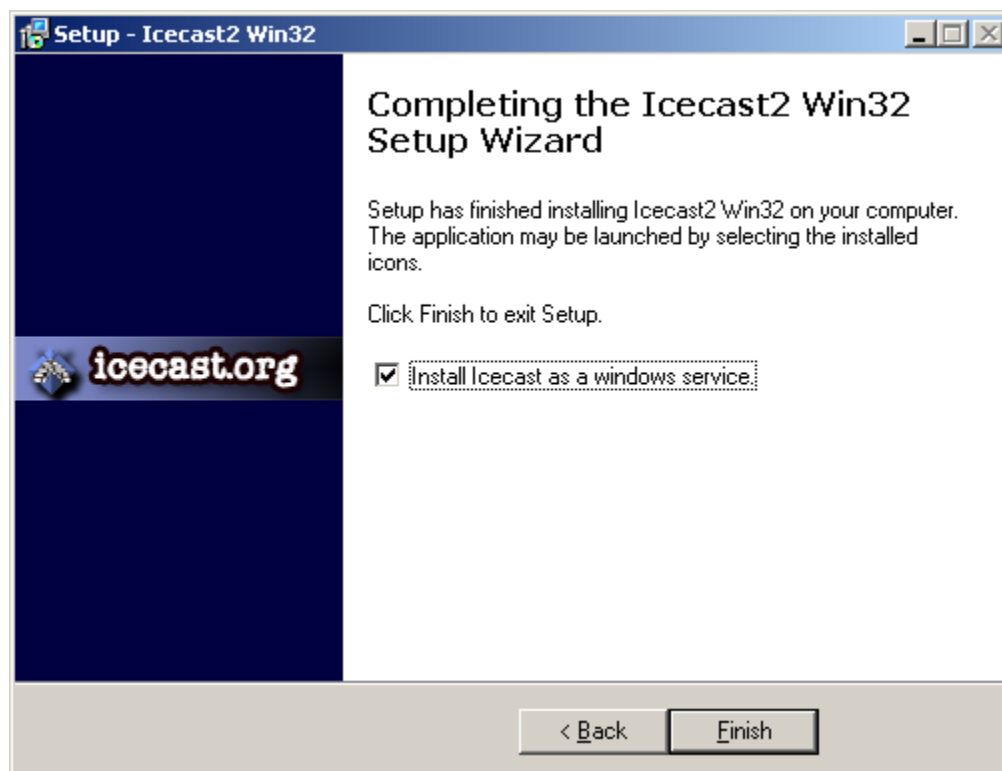
Click 'Next'.



Click 'Install'.



Here you can read the release notes if you are interested. Click 'Next' when you are done.

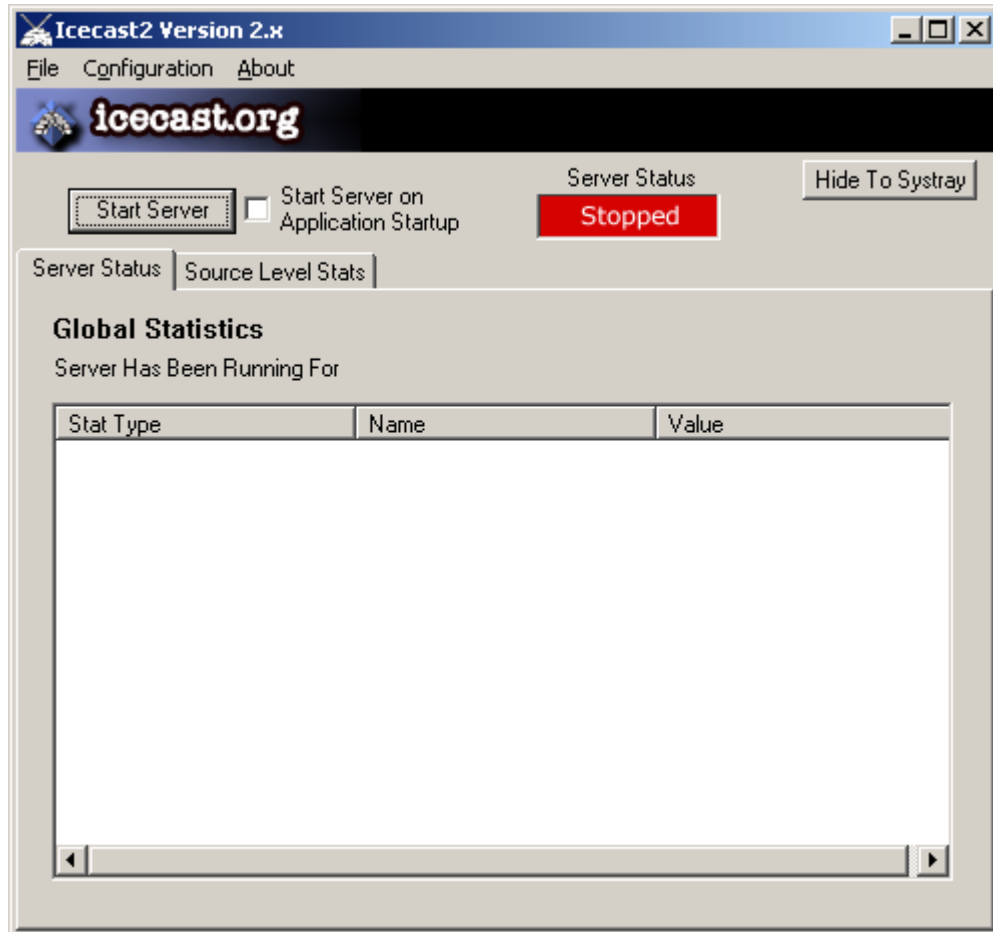


Make sure that 'Install Icecast as a windows service' is checked, and click 'Finish'.

The installation of Icecast is now complete.

Configuration: Icecast

The first thing we must do is configure Icecast. To do this we must start Icecast. On your desktop you should see an icon for Icecast. Double click it, to start Icecast. You should now see this screen.



To configure Icecast go to the 'Configuration' menu, and select 'Edit Configuration'.

```
<icecast>
  <limits>
    <clients>100</clients>
    <sources>2</sources>
    <threadpool>5</threadpool>
    <queue-size>524288</queue-size>
    <client-timeout>30</client-timeout>
    <header-timeout>15</header-timeout>
    <source-timeout>10</source-timeout>
    <!-- If enabled, this will provide a burst of data when a client
         first connects, thereby significantly reducing the startup
         time for listeners that do substantial buffering. However,
         it also significantly increases latency between the source
         client and listening client. For low-latency setups, you
         might want to disable this. -->
    <burst-on-connect>1</burst-on-connect>
    <!-- same as burst-on-connect, but this allows for being more
         specific on how much to burst. Most people won't need to
         change from the default 64k. Applies to all mountpoints -->
    <burst-size>65535</burst-size>
  </limits>

  <authentication>
    <!-- Sources log in with username 'source' -->
    <source-password>hackme</source-password>
    <!-- Relays log in username 'relay' -->
    <relay-password>hackme</relay-password>

    <!-- Admin logs in with the username given below -->
    <admin-user>admin</admin-user>
```

Now a window will pop up containing the configuration file for Icecast. Please clear all of the text out of the window.

Now copy and paste in the following text.

```
<!-- Start Copy Here -->
<icecast>
  <limits>
    <clients>20</clients>
    <sources>5</sources>
    <threadpool>5</threadpool>
    <queue-size>524288</queue-size>
    <client-timeout>30</client-timeout>
    <header-timeout>15</header-timeout>
    <source-timeout>10</source-timeout>
    <burst-on-connect>1</burst-on-connect>
    <burst-size>65535</burst-size>
  </limits>

  <authentication>
    <source-password>secret1</source-password>
    <relay-password>secret2</relay-password>
    <admin-user>admin</admin-user>
    <admin-password>secret3</admin-password>
  </authentication>
```

```

<hostname>localhost</hostname>

<listen-socket>
  <port>8000</port>
</listen-socket>

<mount>
  <mount-name>/mount.ogg</mount-name>
  <max-listeners>3</max-listeners>
  <hidden>1</hidden>
  <no-yp>1</no-yp>
  <authentication type="htpasswd">
    <option name="filename" value="passwords"/>
    <option name="allow_duplicate_users" value="0"/>
  </authentication>
</mount>

<fileserve>1</fileserve>

<paths>
  <basedir>./</basedir>
  <logdir>./logs</logdir>
  <webroot>./web</webroot>
  <adminroot>./admin</adminroot>
  <alias source="/" dest="/status.xml"/>
</paths>

<logging>
  <accesslog>access.log</accesslog>
  <errorlog>error.log</errorlog>
  <loglevel>4</loglevel> <!-- 4 Debug, 3 Info, 2 Warn, 1 Error -->
</logging>

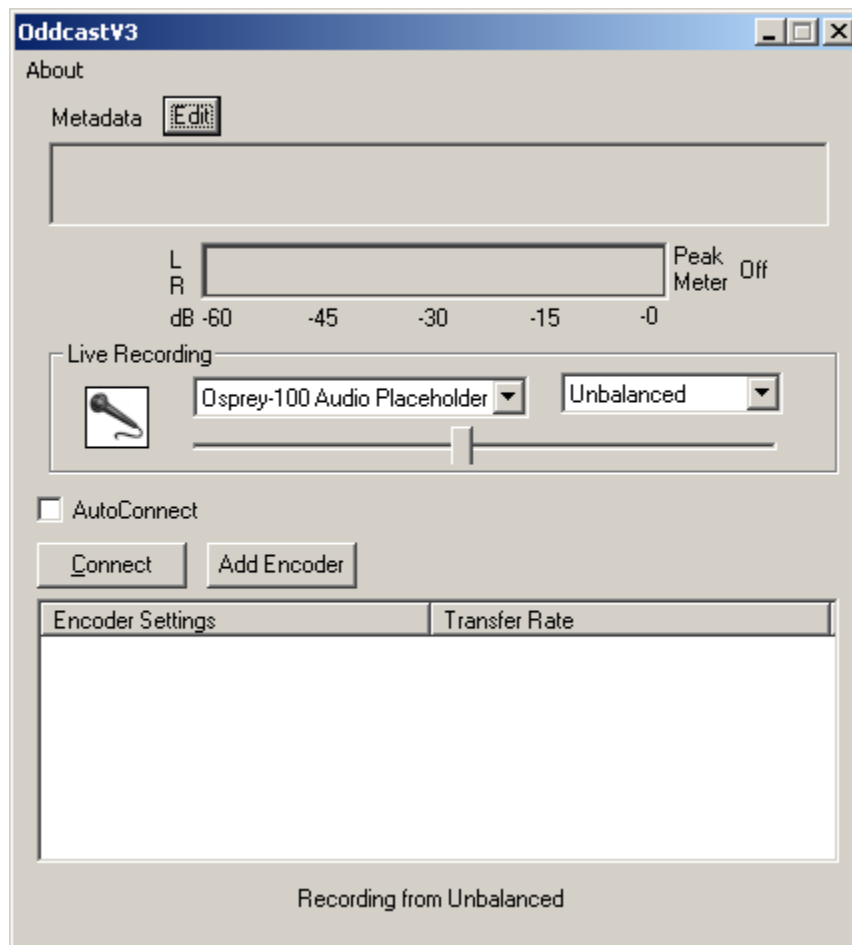
<security>
  <chroot>0</chroot>
</security>
</icecast>
<!-- End Copy Here -->

```

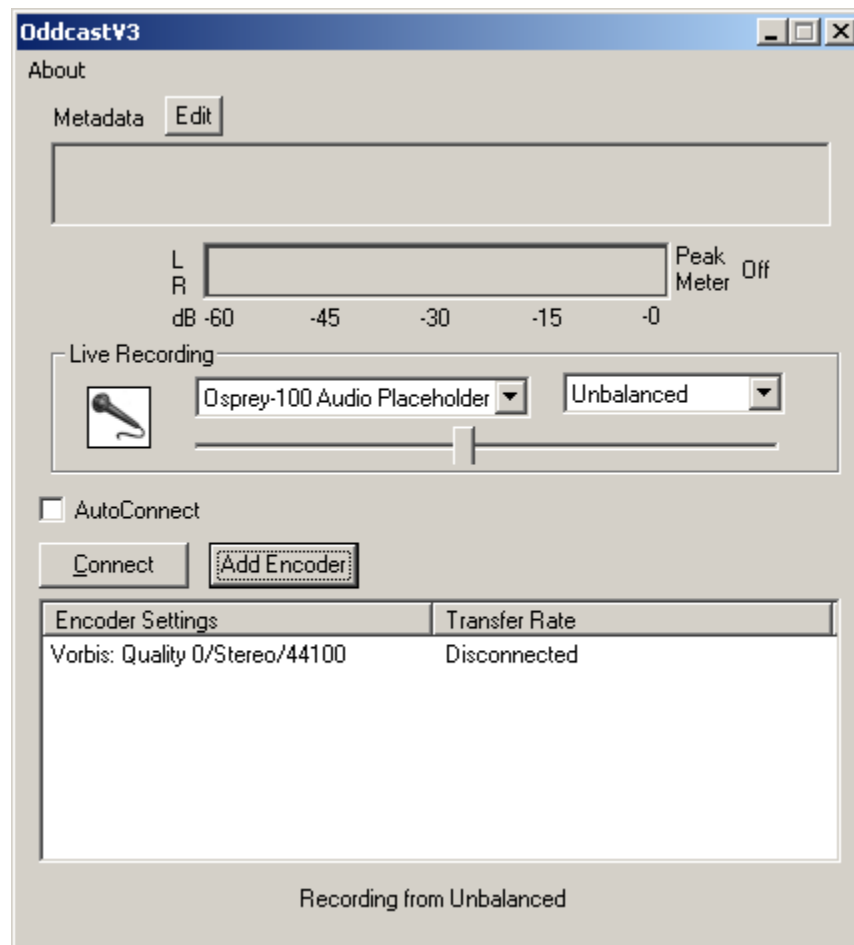
Go to the 'File' menu, and click 'Save'. Then close the file. You are now back on the main screen. Click the 'Start Server' button. Icecast is now configured and running.

Configuration: OddCast

Double click the 'OddCast' shortcut that is on your desktop. This will launch OddCast giving you a screen like this.



Click the 'Add Encoder' button. You will now see this.



To configure the encoder, right click where it says 'Disconnected' and in the pop up menu click 'Configure'.

Configuration

Basic Settings YP Settings Advanced Settings

OK Cancel

General Settings

Bitrate 128 ☐ Use bitrate

Quality 4

Samplerate 22050

Channels 2 * 1 for Mono, 2 for Stereo

Encoder Type OggVorbis

Server Type Icecast2

Server IP localhost

Server Port 8000

Encoder Password secret1

Mountpoint /mount.ogg * Required for Icecast servers

Reconnect Seconds 10

Please set your settings as you see them in this picture. The click 'YP Settings'.

Configuration

Basic Settings YP Settings Advanced Settings

OK Cancel

YP Settings

☐ Public Server

Stream Name

Stream Description

Stream URL

Stream Genre

ICQ #

AIM

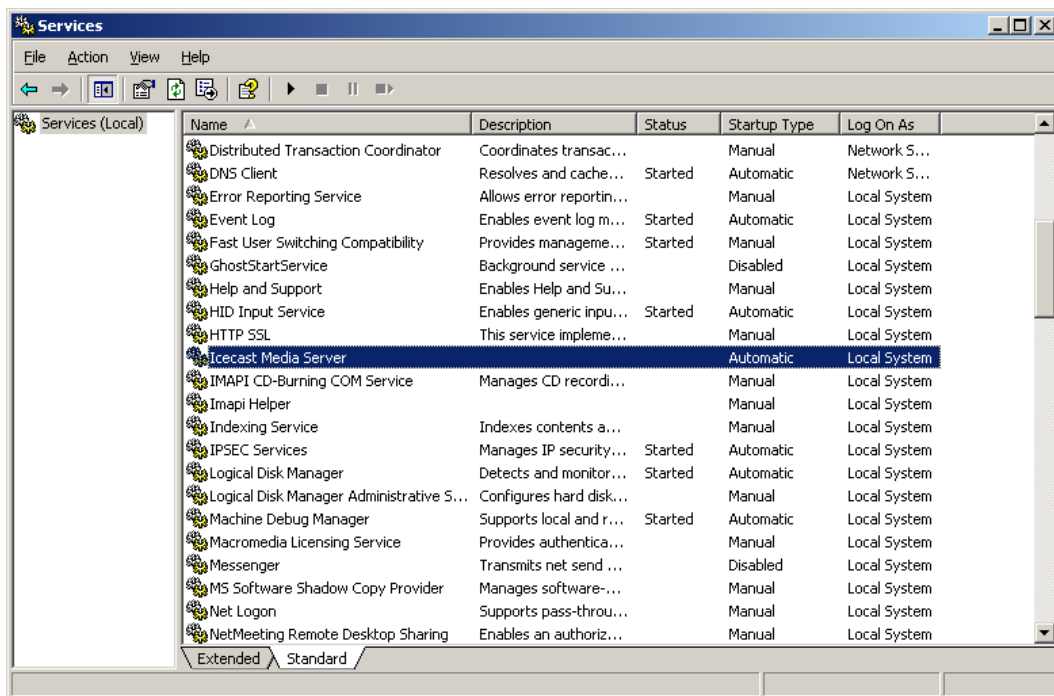
IRC

Please set your settings as you see them in this picture. Then click 'OK'.

You will now be back on the main screen, where you should see in the middle of the window the text 'Live Recording'. In the pop up menu, below that select the sound card that you are using. In the pop up menu next to that select which input on the sound card you are using. Most sound cards have a line-in (blue) and microphone (pink). Select the one you have plugged your audio input cable into. The slider bar below the pop up menus can be used to adjust the level of the incoming audio. Adjust this as needed. Everything is now setup. We will now move on the the operation phase.

Operation: Icecast

There are two ways to run the Icecast server, always or as needed. If you want the Icecast server to always be running, go to the start menu, go to settings, go to control panel. Then go to the 'Administrative Tools' folder and click on 'Services'.



Right Click on 'Icecast Media Server', and select 'Start' from the pop up menu.

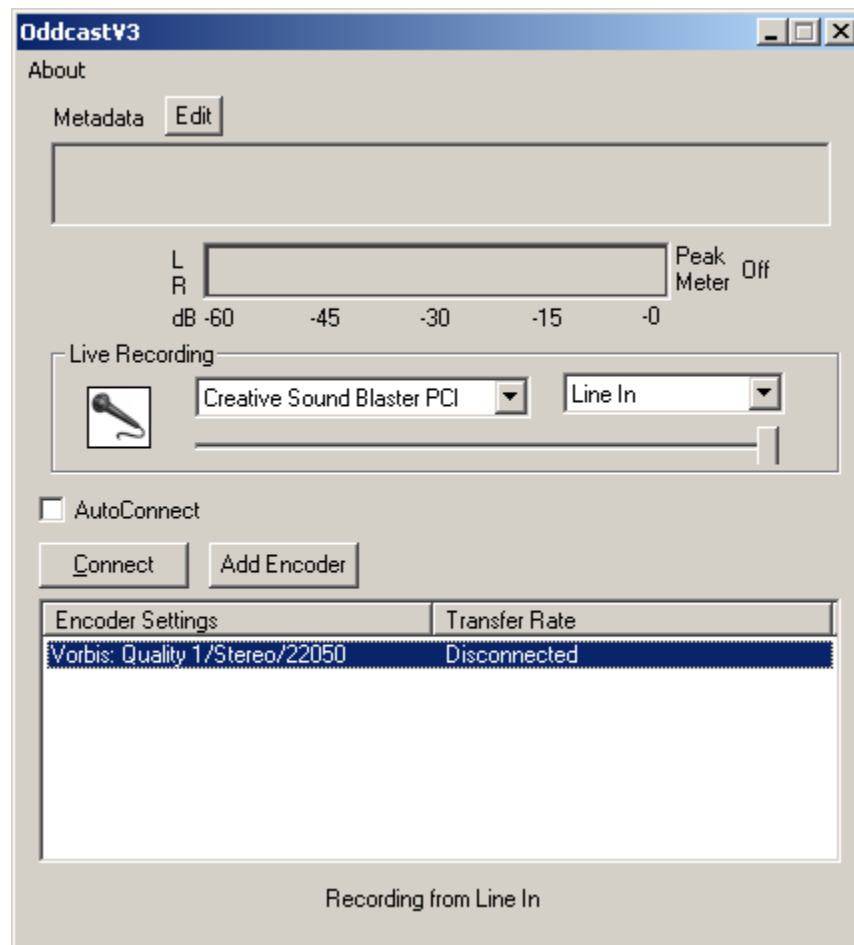
Alternatively if you just want to run the server as you need it, double click the 'Icecast' shortcut on your desktop.



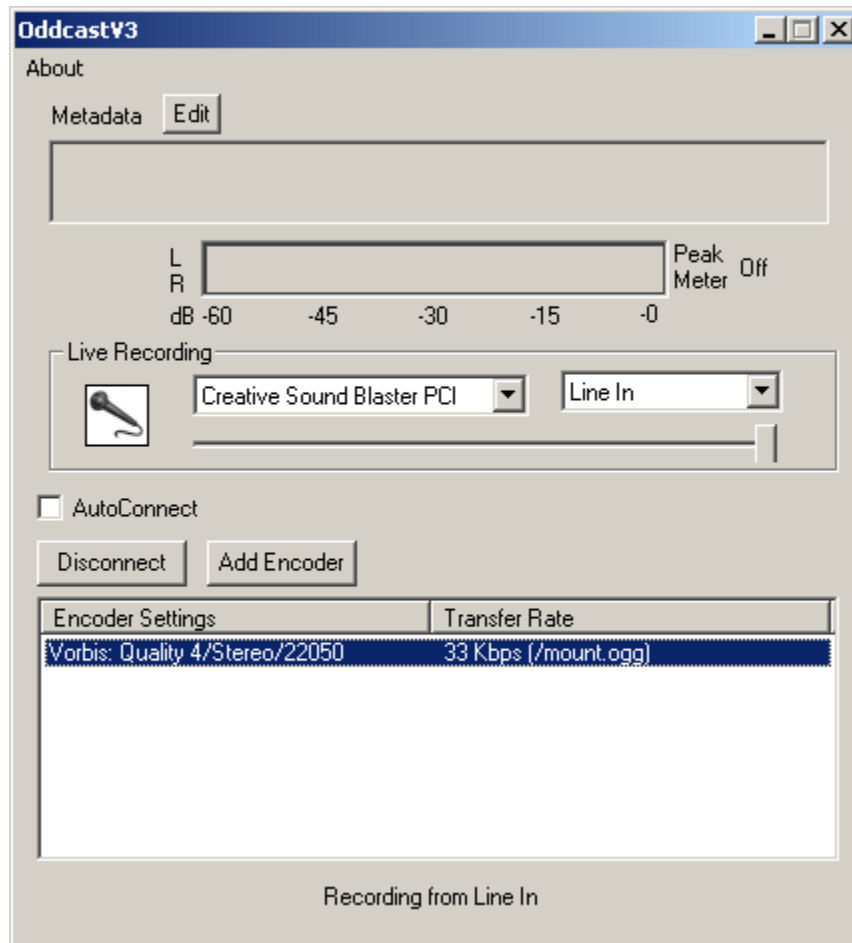
Click the 'Start Server' button.

Operation: OddCast

Operation of OddCast is very simple. Double click the 'OddCast' shortcut on your desktop.



Click the 'Connect' button.



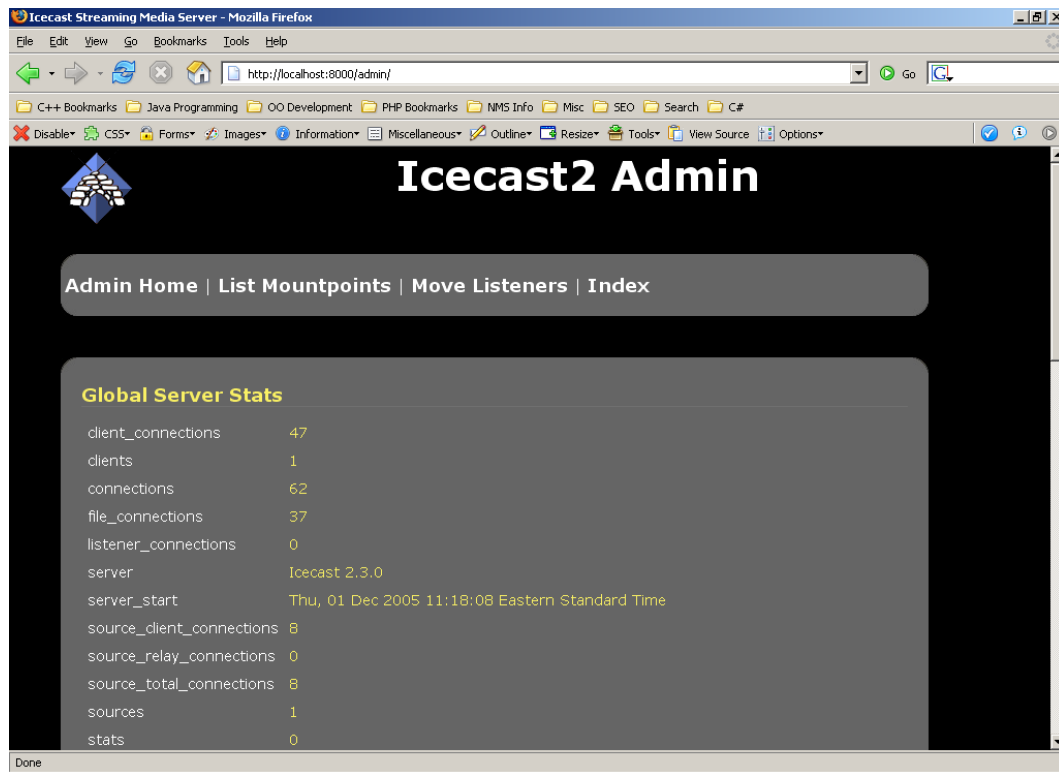
You should now see that the stream is connected and using roughly 33 Kbps of bandwidth.

Administration: Icecast

You can now monitor your Icecast server by opening your favorite web browser and going to the following address.

- <http://localhost:8000/admin/>

From there you will be prompted for a login and password. The login is 'admin' and the password is 'secret3'.

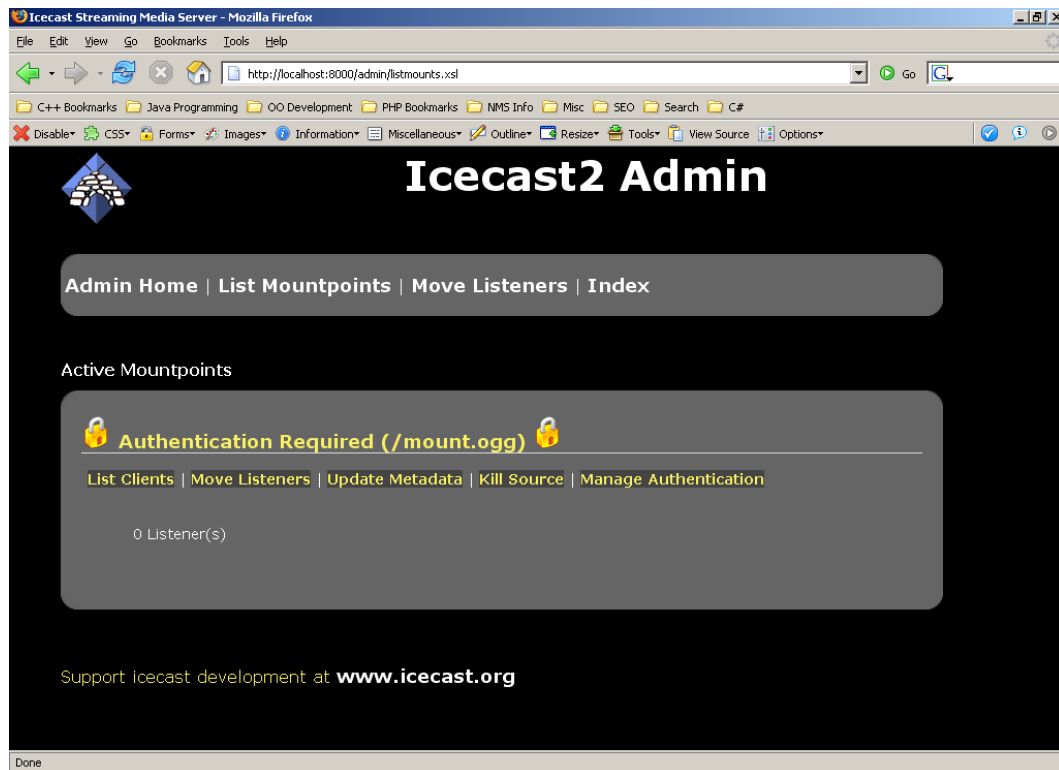


Here you can see the general stats for you server and you can make sure that you streams are connected ok.

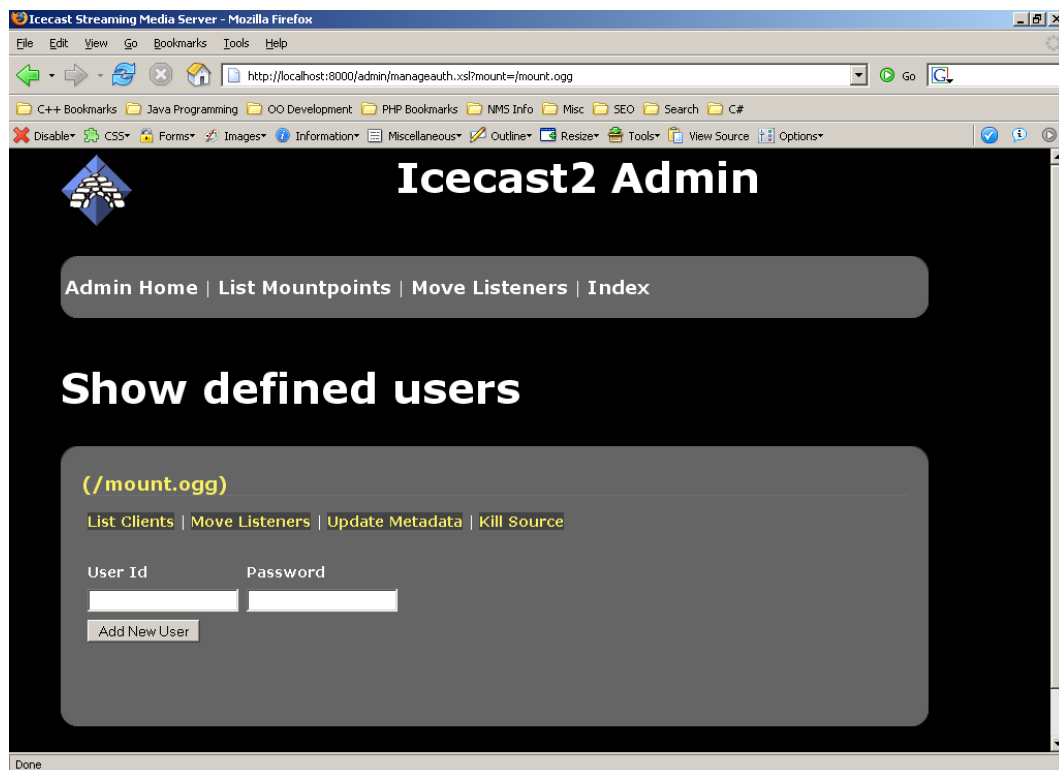
Finishing

We are now almost done. The last thing that you need to do, before you can listen to a stream is create a user that can access your stream.

To create a user to listen to the stream, login to the Admin Menu as mentioned in the previous step. Click the 'List Mount points' link.



Click on 'Manage Authentication'.



Now just type in the user name and password. Then click the 'Add New User' button. This will result in the user you've just created being able to access the stream.

Listen

Everything should now be setup properly, and the audio should be streaming. All you need to do now is to connect to the game and listen.

Launch 'Winamp'. It is a free program that can be used to listen to Icecast streams. Go to the file menu, select 'Play URL'. Type in the following URL.

- <http://localhost:8000/mount.ogg>

Winamp will then ask you for a user and password type in the username and password that you created in the previous step. Make sure you do it in this format.

- username:password (no space in between, separated by a colon)

Press 'OK' and you should start hearing your stream.

Tips

- Make sure that you change the passwords that are given in the configuration files. There is no trick to this, just select good passwords and make sure that you replace them consistently with the defaults throughout this document.
- There are other things in the configurations that you might like to change, the mount name, the quality of the broadcast, etc. Feel free to change these, just keep things consistent throughout this document and you'll have no problems.
- There are some restrictions placed on the Icecast server in our configuration which limit the number of connections, feel free to adjust these to fit your needs.
- You may notice that some of the URL's contain the word 'localhost', this is an alias that your computer understands which directs it to connect to itself. For this document to be useful, you will want to change all references to 'localhost' to your IP address or DNS name.
- Please be aware that to connect to Icecast from a remote computer, you will need to make sure that there is no firewall running or that it is properly configured to forward Icecast traffic to the correct machine. All Icecast traffic runs on port 8000 by default. You can change the port in the Icecast configuration if you desire.
- If you do not want your listeners to have to authenticate, then remove this piece from the configuration file and disregard the instructions which talk about authentication.

```
<authentication type="htpasswd">
  <option name="filename" value="passwords"/>
  <option name="allow_duplicate_users" value="0"/>
</authentication>
```