

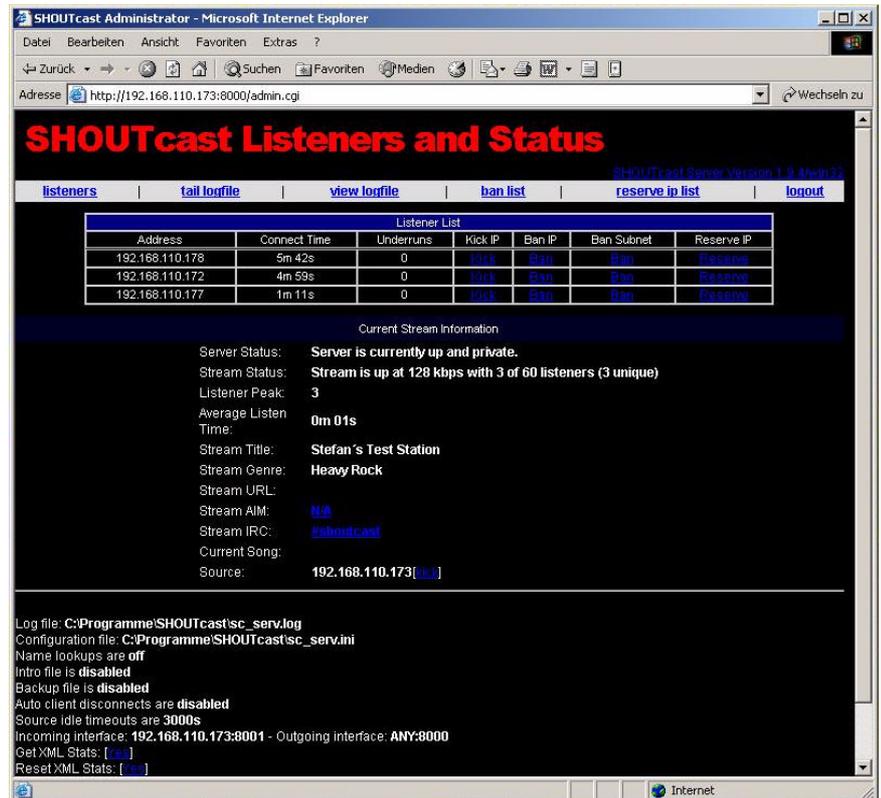
How to install the SHOUTcast server with Barix Instreamer and Barix Exstreamers

The SHOUTcast server is very nice tool to multiply your audio stream to many listeners (PCs) or Exstreamers. This software is for free and can be downloaded from www.shoutcast.com. The Instreamer firmware 1.14 (2005/06/20) or higher supports the SHOUTcast authentication, so it is possible to stream directly to the SHOUTcast server and to be a source for the SHOUTcast (relay) server.

The Instreamer itself supports up to 6 http MP3 audio streams at the same time, if this is not sufficient then SHOUTcast might be a good solution for you.

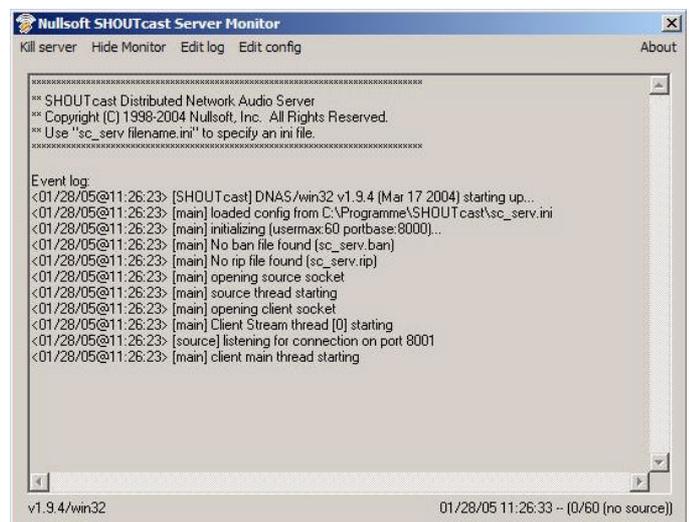
The SHOUTcast software is available for almost all Windows operating systems, Linux, Solaris and Mac.

On the SHOUTcast server configuration you can define how many users can listen the stream (default is 60) or the used stream quality. The limits are depending from the performance of your system and your network. It has a nice administration GUI to set restrictions or for control purposes.



Software Installation

If you will only use the Instreamer as a source for the SHOUTcast server then you need to download (from www.shoutcast.com) and to install only the SHOUTcast server software.



Software Configuration

Now start the SHOUTcast server and click on "edit config".

All settings are very well documented in the sv_serv.ini. I have used the configuration you can see on the right side (all comments are removed).

After your changes save and close the config file and close the application by clicking the "kill server" button. Then start it again.

```
MaxUser=60
Password=changeme
PortBase=8000
LogFile=sc_serv.log
RealTime=3
ScreenLog=1
ShowLastSongs=10
W3CEnable=Yes
W3CLog=sc_w3c.log
SrcIP=any
DestIP=ANY
Yport=80
NameLookups=0
AutoDumpUsers=0
AutoDumpSourceTime=3000
ContentDir=./Content
TitleFormat=Stefan's Test Station
PublicServer=never
AllowRelay=Yes
AllowPublicRelay=Yes
MetaInterval=8192
```

Instreamer Configuration :

Have look on the firmware version, this or a newer firmware is required ! Important is also to define the destination where the Instreamer should the stream to . The default port number for the SHOUTcast server is port 8000.

The screenshot shows the 'DEVICE CONFIGURATION' web interface for the 'INSTREAMER' device. The 'SETTINGS' tab is active, and the 'STREAMING' sub-tab is selected. The interface includes a navigation bar with 'SETTINGS', 'DEFAULTS', 'REBOOT', 'UPDATE', and 'HOME' buttons. The 'STREAMING' section contains the following configuration options:

- Own Name:
- Streaming mode:
- Trigger Level: only for mode "send on Level"
- Pre Trigger Start: msec
- Post Trigger Play: msec
- Buffer Underrun Mode (TCP):
- Stream Packet Strategy:
- UDP Tx Source Port:
- Sync Port:
- Radio Path:

Below these settings is a 'Stream to' table:

#	Conn. type	IP #	#	#	#	Port #
1	Shoutcast source	192	. 168	. 110	. 173	: 8000
2	Internet Radio	0	. 0	. 0	. 0	: 0

The SHOUTcast server requires a password authentication for all streaming sources. This password you have to define in the SECURITY section of the Instreamer's web configuration. default password: changeme

The screenshot shows the 'SECURITY' section of the 'DEVICE CONFIGURATION' web interface. The 'SETTINGS' tab is active, and the 'SECURITY' sub-tab is selected. The interface includes a navigation bar with 'SETTINGS', 'DEFAULTS', 'REBOOT', 'UPDATE', and 'HOME' buttons. The 'SECURITY' section contains the following configuration options:

- Level:
- Password:
- Status:
- Telnet/Serial Configuration:
- Save Configuration:
- View Configuration:
- Control/Command:
- Listening:
- Ice/Shoutcast:
- 6 (User):

At the bottom of the page, there are 'Apply' and 'Cancel' buttons.

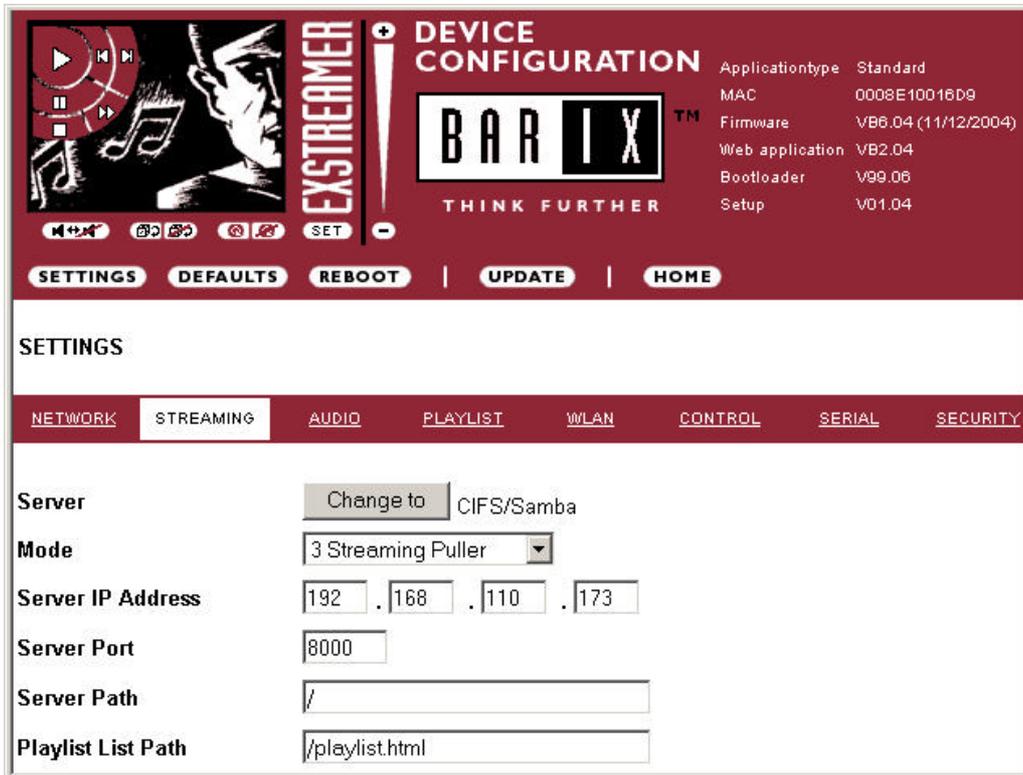
Extreamer Configuration

How to listen the SHOUTcast server with a Barix Extreamer ?

The configuration is very simple, only a few STREAMING settings are necessary .

You have to use: **Mode: 3 Streaming Puller** . The parameters “Server IP Address” and “Server Port” are also needed and must point to the SHOUTcast-server-PC.

Ready, now you can enjoy to the Instreamer MP3 audio stream over a SHOUTcast server.



The screenshot displays the 'DEVICE CONFIGURATION' web interface for a Barix Extreamer. The top navigation bar includes 'SETTINGS', 'DEFAULTS', 'REBOOT', 'UPDATE', and 'HOME'. The 'SETTINGS' section is active, with sub-tabs for 'NETWORK', 'STREAMING', 'AUDIO', 'PLAYLIST', 'WLAN', 'CONTROL', 'SERIAL', and 'SECURITY'. The 'STREAMING' tab is selected, showing the following configuration:

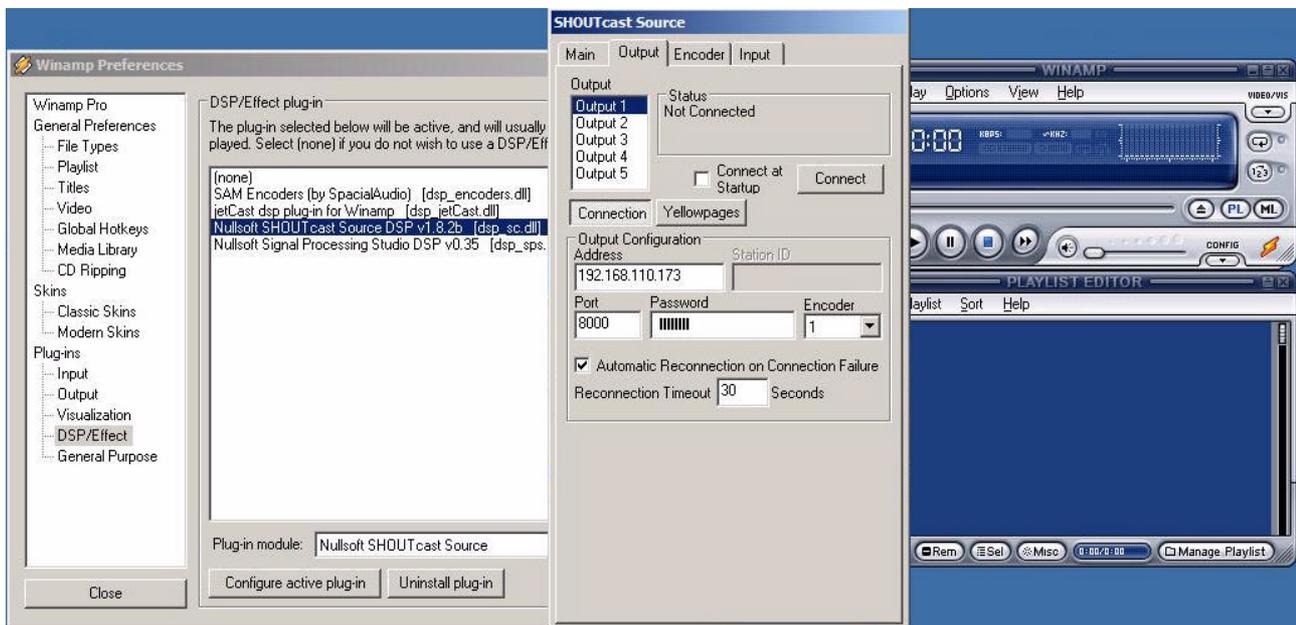
Server	Change to CIFS/Samba
Mode	3 Streaming Puller
Server IP Address	192 . 168 . 110 . 173
Server Port	8000
Server Path	/
Playlist List Path	/playlist.html

SHOUTcast with the DSP plug-in (DJ-software for Winamp)

The SHOUTcast server can manage different sources. If your SHOUTcast server should play also some MP3 or WAV audio files which you have stored on your PC then you will additionally require also Winamp (www.winamp.com) and the SHOUTcast DSP plug-in (www.shoutcast.com). The SHOUTcast DSP is a Winamp plug-in and must be installed in the Winamp program folder .

The DSP plug-in can run on the same PC than the SHOUTcast server is running, but it must not. The SHOUTcast DSP plug-in is not needed if you will use only a Instreamer as a source. You need this only if you will create MP3 / WAV playlists for your SHOUTcast server.

After the installation start Winamp and go to “OPTIONS” – “Preferences” – “DSP/Effect” and click on “Nullsoft SHOUTcast DSP”. This will pop up the configuration and monitor of SHOUTcast source . Then close the “Preferences”, the configuration window will remain open.



There go to “Output” – “Connection” – “Address” and define the IP address of the PC where the SHOUTcast server is installed. The “Port” and the “Password” must also fit to the settings in the sr_serv.ini . Port 8000 is default for outgoing streams the next port is automatically used for incoming streams from the server (8001 in this case). The strange thing is you have to define port 8000 also for the source but in the network I can see it is using port 8001 for the source.

The “Encoder” setting can be changed optionally if needed.

Start the stream to the server by clicking the “Connect” button.

Then you can choose your favourite playlists, MP3 files also radio streams in the Winamp Playlist Editor and click on the play icon.

Ready !! Now you can connect your clients / Exstreamers.

