

WEBCASTING

WITH



**BREAKAWAY BROADCAST
&
BREAKAWAY LIVE AUDIO**

PROCESSOR

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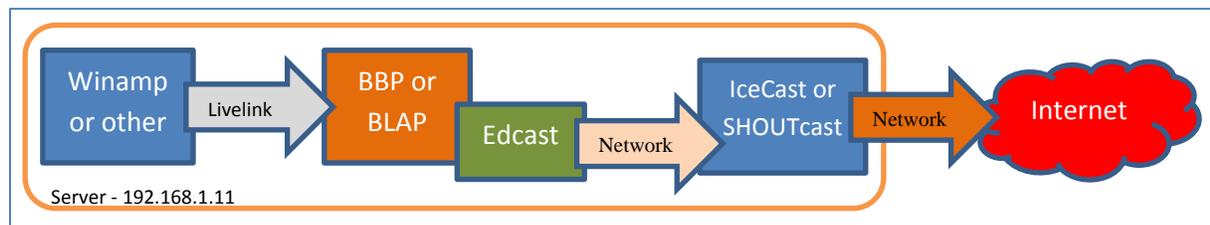
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WebCasting with Breakaway

Introduction

This step by step manual is intended for users who want to setup a web stream with BBP or BLAP. In this manual we use the EdCast client and the IceCast or SHOUTcast server. Also we do not use a soundcard, instead we use Livelink.

I do not recommend the SHOUTcast DSP plugin client because it does not support different audio streams, and the audio stream quality is worse than the EdCast client.



(In this example I used a Windows 2008 server with IP Address 192.168.1.11, and Winamp for testing the stream)

I made this manual with the help of the Breakaway forum. This is a great forum for all audio enthusiasts, Dj's, Webcasters and (pirate) radio stations.

I want to specially thank Leif (and his crew) for his great audio products.

Let's get going...

Pre install

First download and install the following software:

- Winamp player (Free full version v5.601) at: <http://www.winamp.com>
- Winamp plugin NOP, Null Output Plugin (v0.1) at: <http://www.winamp.com>
- EdCast client (Winamp DSP plugin v3.2.25.130) at: <http://users.tpg.com.au/radorio>
- IceCast server (win32 v2.3.2) at: <http://www.iccast.org> **or**
- SHOUTcast DNAS server (win32 v1.9.8) at: <http://www.shoutcast.com>
- Breakaway Broadcast Processor (v0.90.95) at: <http://www.claessedwards.com> **or**
- Breakaway Live Audio Processor (v0.90.96b) at: <http://www.claessedwards.com>
- Any radio automation application.
In this document there is an example with the SAM Broadcaster

Only download these, we use these files later:

- LiveLink DSP for BBP or BLAP at:
http://www.claessonedwards.com/index.php?option=com_content&view=article&id=80
- Special webcast LAME encoder dll (v3.93.1) from the following site:
http://stashbox.org/810352/lame_enc.dll.v3.93.1-best.for.streaming.zip

If one of the above links don't work, then visit the Breakaway forum and leave a message.

Copy the following files from the Winamp directory (C:\Program Files\Winamp) to the Breakaway directory (C:\Program Files\BreakawayBroadcast) Or (C:\Program Files\BreakawayLive):

- bass.dll
- liboggflac.dll
- ogg.dll
- pthreadVSE.dll
- vorbis.dll
- enc_aacplus.dll
- libFLAC.dll

Copy the following files from the winamp\Plugins directory to the Breakaway C:\Program Files\BreakawayBroadcast Or C:\Program Files\BreakawayLive directory.

- dsp_edcast.dll
- edcast.chm

After copying the files, you can un-install Edcast.

If you have no plans to use Winamp you can un-install it too. For the testing later on, I recommend you leave it on your system for now.

Breakaway Broadcast setup

Right click on Breakaway and click I/O Configuration.



Check the <Start with computer> and <Encoders> 'button'.

Because we do not use a soundcard you can disable the L/R Out.



Click <Finish> and click the <Settings> button in the Main BBP window.



Choose <Pre-Emphasis: 15us> and click the <Edit> button



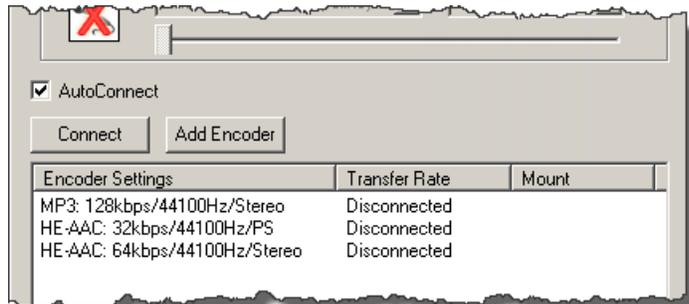
Select the EdCast dll, check <Enable>, click <Ok> and click the <Reload> button.



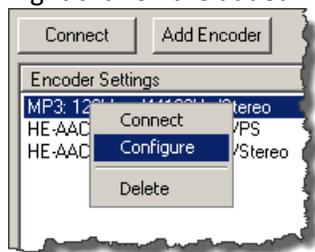
Now the EdCast program will popup.

EdCast client setup

Check AutoConnect and click on <Add Encoder>

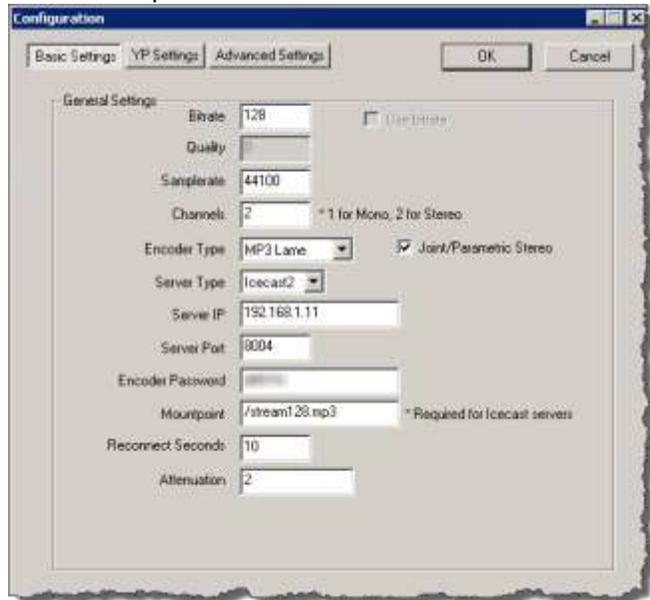


Right click on the added Encoder to configure the settings



Set all your preferred settings and click on <YP Settings> settings

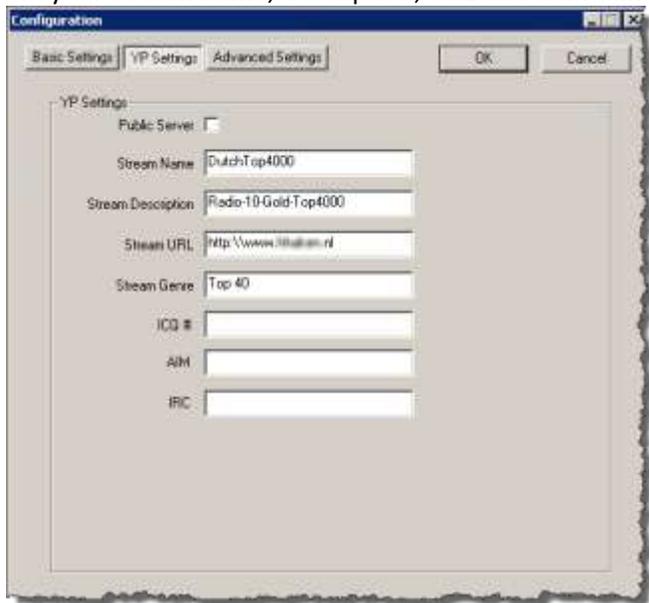
In this example we use server IP Address 192.168.1.11, port 8004 and mountpoint /stream128.mp3



Enter a Encoder password, ***and don't forget the Attenuation value!***

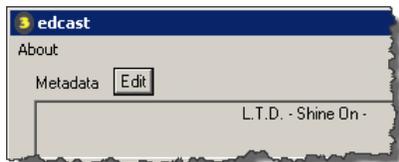
PS: SHOUTcast does not support mount points!

Set your stream name, description, URL and Genre and click on <OK>

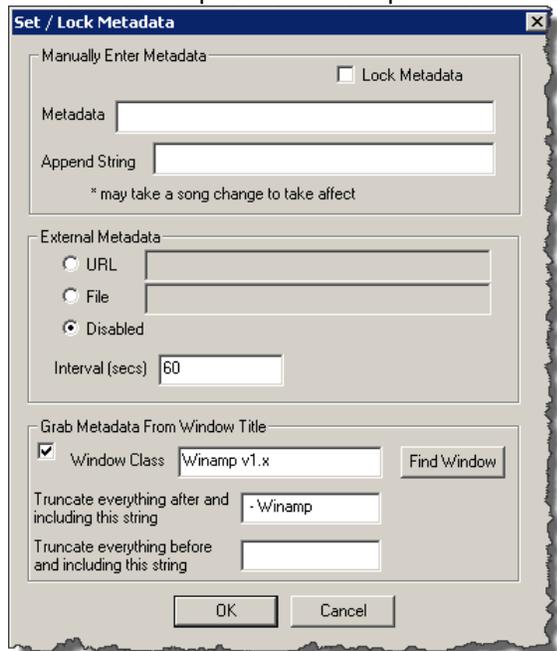


EdCast metadata update

Back in the main screen click on <Edit>



To grab Metadata (artist, title) from Winamp, click on <Find Window> and select Winamp v1.x, and enter “ - Winamp” without the quotes in the ‘Truncate everything after and including this string’.



Now shut down Breakaway. Edit the following edCast configuration file:

C:\Program Files\BreakawayBroadcast\dsp_edcast_v3_1.cfg Or
C:\Program Files\BreakawayLive\dsp_edcast_v3_1.cfg

Edit the following settings for the Lame MP3 encoder:

```
LameCBRFlag=1  
LameStrictISO=0  
LameDisableReservoir=0  
LameQuality=0  
LAMEPreset=12
```

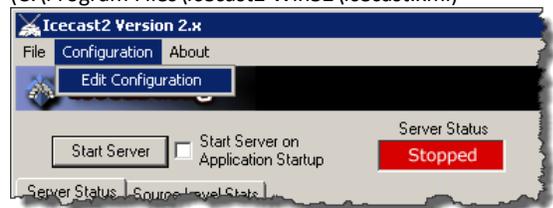
After this change you can re-start Breakaway.

These are special Lame webcast settings, and they give you the best possible quality with a MP3, 128Kbps (or less) stream. Only use the Lame encoder version 3.93.1 for this. For more information visit the Breakaway forum.

Icecast server setup

Start the Icecast server, and edit the following Icecast XML configuration file:

(C:\Program Files\Icecast2 Win32\icecast.xml)



Check the “Start Server on Application Startup” if this is what you want.

(It is also possible to run the IceCast server as a service in Windows, read the IceCast manual for this!)

Set the Highlighted settings, these must correspond with the settings in Edcast.

```
<!-- This config file contains a minimal set of configurable parameters,
and mostly just contains the things you need to change. We created
this for those who got scared away from the rather large and heavily
commented icecast.xml.dist file. -->
<icecast>
  <limits>
    <sources>3</sources>
  </limits>

  <authentication>
    <source-password>password</source-password>
    <relay-password>password</relay-password>
    <admin-user>admin</admin-user>
    <admin-password>password</admin-password>
  </authentication>

  <hostname>192.168.1.11</hostname>

  <listen-socket>
    <bind-address>192.168.1.11</bind-address>
    <port>8004</port>
    <shoutcast-mount>/stream128.mp3</shoutcast-mount>
  </listen-socket>

  <fileserve>1</fileserve>

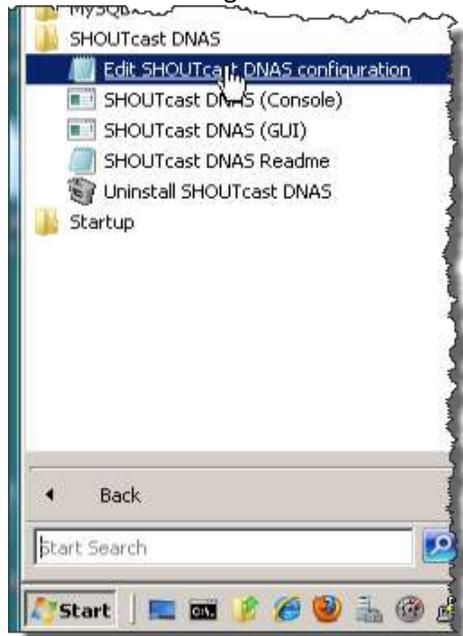
  <paths>
    <logdir>./logs</logdir>
    <webroot>./web</webroot>
    <adminroot>./admin</adminroot>
    <alias source="/" dest="/status.xml"/>
  </paths>

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

Close the editor and start the Icecast server. There should no error messages appear in the ‘Server Status’ screen.

SHOUTcast server setup

First edit the configuration file thru the Start menu:



Or direct with your favorite editor:

C:\Program Files\SHOUTcast\sc_serv.ini

Change the following highlighted settings:

```
.....  
Password=password  
AdminPassword=password  
  
SrcIP=192.168.1.11  
DestIP=ANY  
PortBase=8004  
  
.....
```

These settings must correspond with the settings in Edcast.

You can leave the other settings on default.

Winamp player setup

In this example we use Winamp as the audio source for our stream.

Also we don't use a Soundcard, as we stream our music direct into BBP with help of LiveLink.

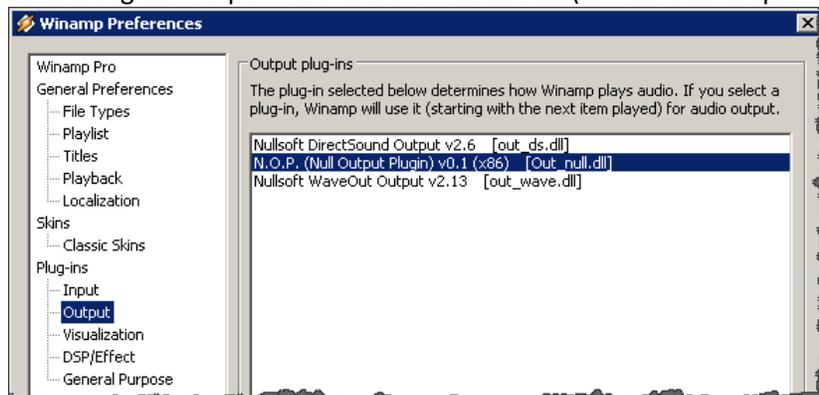
First we copy our downloaded LiveLink DSP dll's (1-4) in the Plugin folder of Winamp.

(C:\Program Files\Winamp\Plugins)

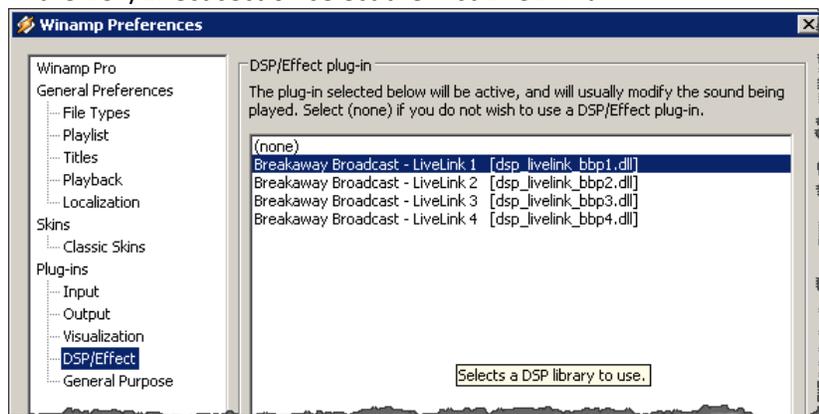
Right click on Winamp and select Options, Preferences...



In the Plug-ins Output section select the N.O.P. (Installed in the pre install section)



In the DSP/Effect section select the first LiveLink dll.



Click the <Close> button.

Testing your rig

Load up some tracks in your Winamp player and hit the Play button.
If everything is working you should see some activity in the Breakaway meters.

Now open EdCast by double clicking the icon in the Notification Area. If you click on the EdCast meters you should see activity too. Also in the Transfer rate column you should see your audio transmission speed.



Now go to another Workstation or Laptop and try to ping your Webcast server (192.168.1.11).
If this doesn't work check your server firewall or gateway settings.

Open, in Internet Explorer or Firefox, the following address:
<http://192.168.1.11:8004>

You should see your IceCast2 Status screen

Now click on the little M3U icon on the right. This should open your favorite media player.

= And here comes the music =

The last thing you should do is enable your stream to go out into the internet thru your ISP router.
This is beyond this manual.

If you have any questions, please visit the Breakaway forum.
You can find me under the alias: DJ Buik (Netherlands)

Happy streaming.

SAM Broadcaster setup

Put the four LiveLink dll's in the SAM plugins folder:

C:\Program Files\SpacialAudio\SAMBC\plugins

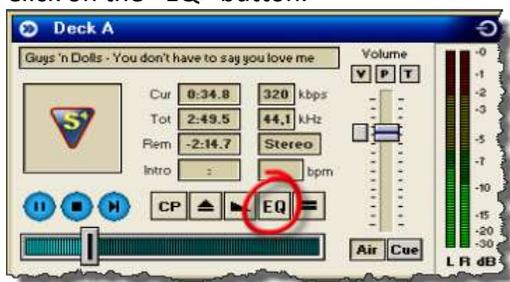
For some strange reason SAM also looks in the Winamp\Plugins folder for installed plugins.

So if you have already installed Winamp (for testing) and the four LiveLink dll's, there is no reason to copy them again in the SAMBC\plugins folder. Otherwise you will see them twice in SAM.

Because we let BBP do all the sound processing we need to disable all sound processing in SAM. We disable the sound processing for all play decks (A, B, Sound FX, Aux 1-3 and Voice FX).

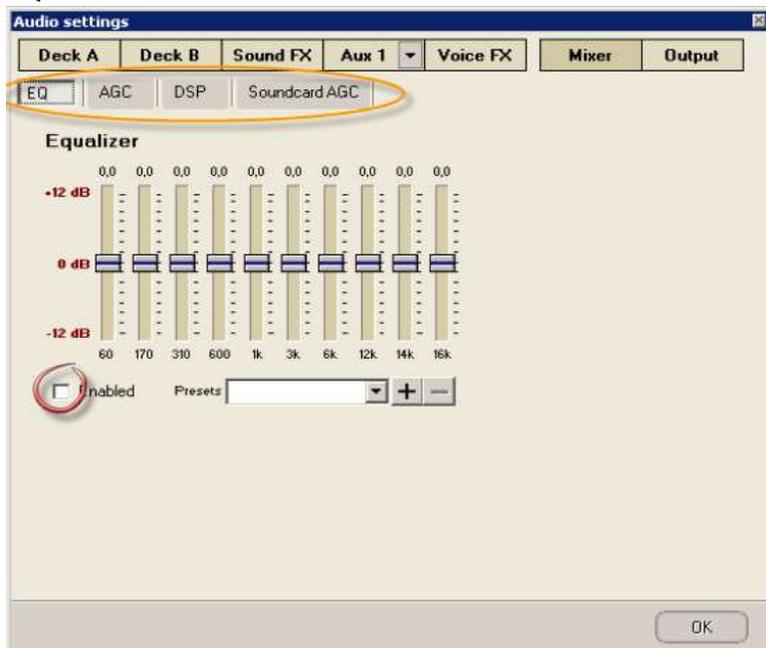
Sometimes you need to adjust the volume (down) of certain decks, if you get red bars (= clipping) in BBP.

Click on the <EQ> button.



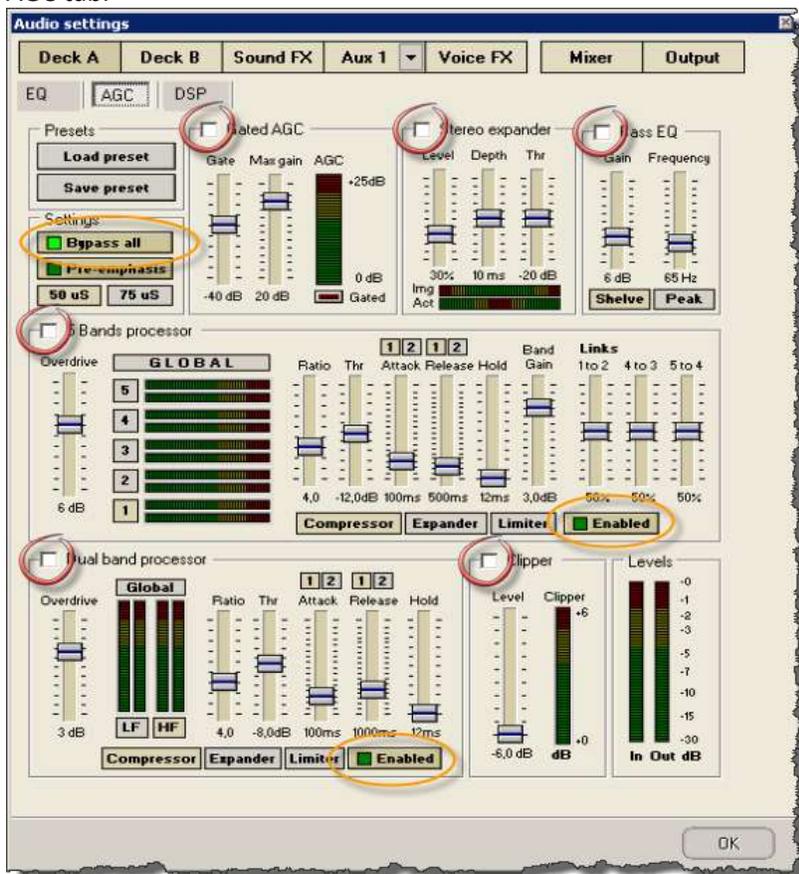
We are entering the Audio settings dialog.

EQ tab.



Uncheck Equalizer 'Enabled' for Deck A, B, Sound FX, Aux 1-3, Voice FX and Mixer

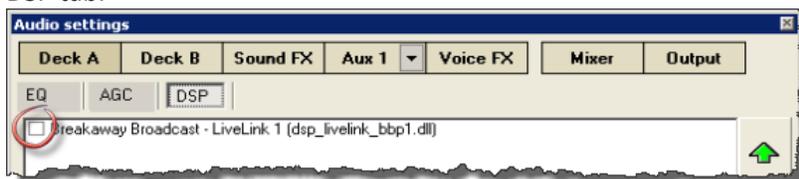
AGC tab.



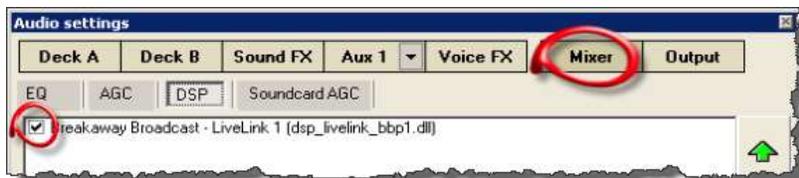
Uncheck all for Deck A, B, Sound FX, Aux 1-3, Voice FX and Mixer
 Check 'Bypass all', we let all the audio processing to Breakaway.

I think when you enable 'Bypass all' this should be sufficient, but to be sure uncheck all.

DSP tab.

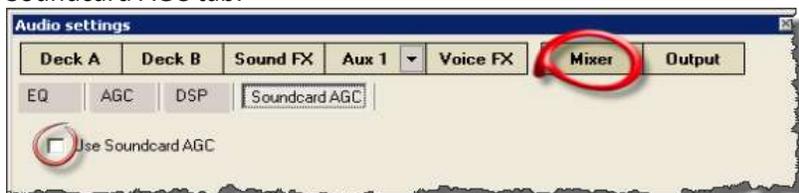


Uncheck the LiveLink.dll for Deck A, B, Sound FX, Aux 1-3 and Voice FX.



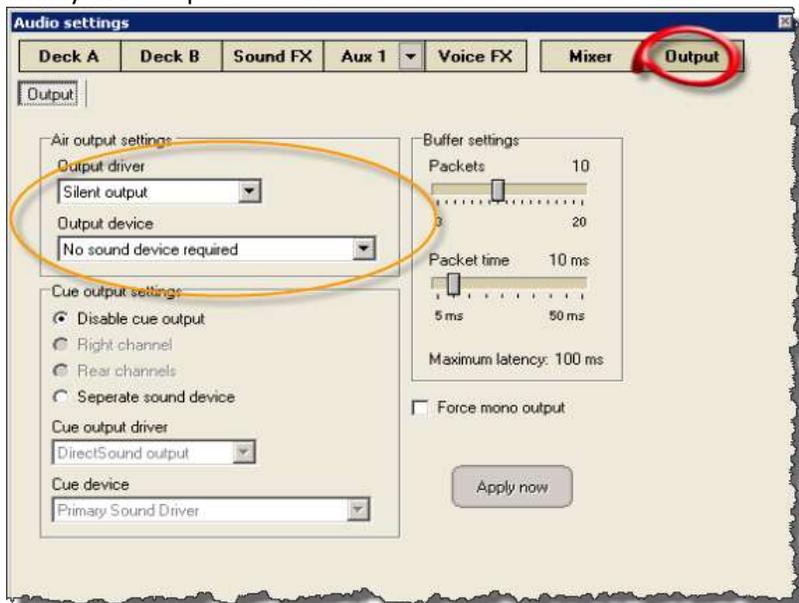
For the <Mixer> button you need to check the LiveLink 1.dll

Soundcard AGC tab.



Uncheck 'Use Soundcard AGC'

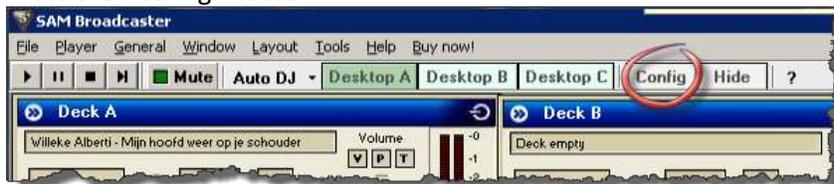
Finally the 'Output' button.



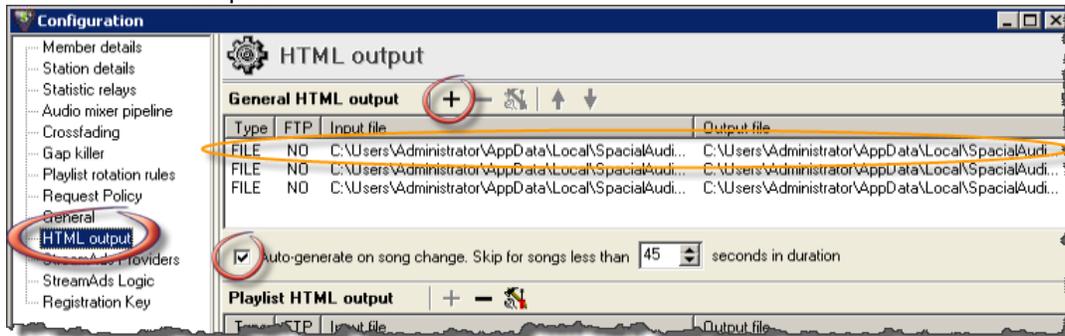
We do not output the sound to a Soundcard.

SAM metadata update

Press the <Config> button



Click on 'HTML output'



Check in what directory the HTML pages are located by double clicking on one of the output files.

In the directory found, create the following file:

<path found>_artist-title.txt
(Don't forget the under_score sign!)

Put the following code in that file:

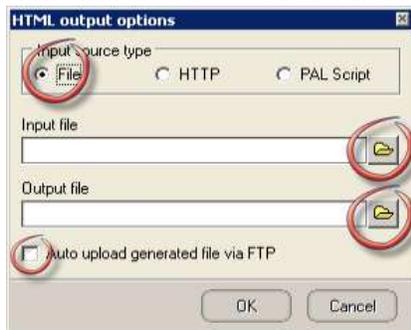
```
$song.artist$ - $song.title$ ($song.album$)
```

Save and close the file.

Create in the same directory an **empty** file with the name:

<path found>\artist-title.txt
(With no under_score sign!)

Now click on the <+> button and create a new HTML output file:



First select for 'Input source type': File.

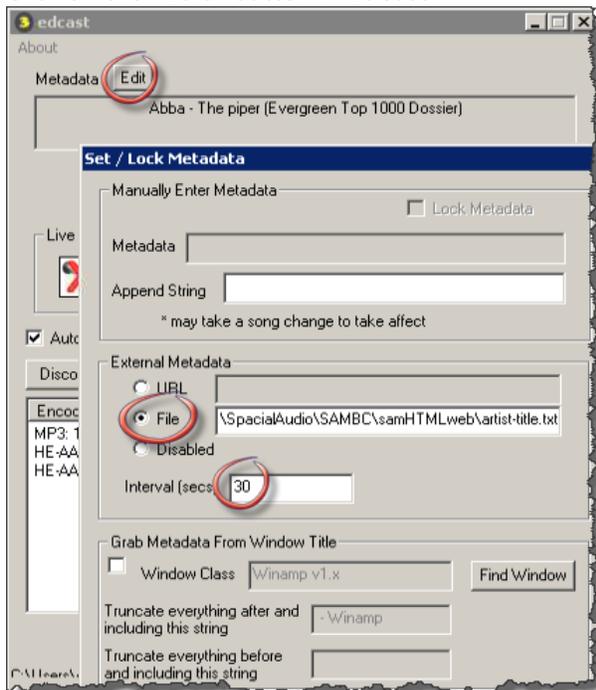
Now select in the Input file our created `_artist-title.txt` file.
For the Output file select our `artist-title.txt` file

Uncheck 'Auto upload generated file via FTP' and click <OK>

Don't forget to check the option 'Auto-generate on song change' in the main configuration screen.
Click <OK> in the main configuration screen, and we're done in SAM.

EdCast metadata update

Click on the <Edit> button in EdCast



Select in 'External Metadata' the file *artist-title.txt* we created before.
Set the interval on 30 seconds and click <OK>

That's it, time to test your stream with SAM.

Good luck.

Breakaway Live Audio setup

Check 'Encoders' and click the <Finish> button.



Click <Settings> in the main Breakaway window.



Set 'HPF' and 'Bandwidth' values and click on the <Edit> button.



Now you can follow the manual for Breakaway Broadcast for the EdCast Client.