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Software datasheet #SAMBC (Windows 2000 / XP / Vista)



Internet-Radio with SAM Broadcaster
Destination server: Shoutcast / Icecast / Windows Media

Rev. 1.1 - 16.08.2008

Rev.	Author	Release	Comments/Changes
1.0	A. Bardonski 15.10.2006	S. Kelso 20.10.2006	Translation of German revision 1.1
1.1	A. Bardonski 16.08.2008	K. Werner 16.08.2008	Text changes, destination servers in one document

1. Introduction

The SAM Broadcaster is without controversy one of the most popular tools for audio broadcasts. It contains numerous features which make an automated broadcast flow and a professional Internetradio operation possible. SAM stands for Streaming Audio Manager.

SAM supports broadcasting over Shoutcast, Icecast and Windows Media Servers. On board there are encoders for all current audio formats like MP3, mp3PRO, WMA, Ogg Vorbis and since revision 4 also an encoder for aacPlus.

With this tutorial we don't go into details, means we cannot introduce you each feature or explain all configuration possibilities. SAM Broadcaster is not a freeware, you must pay for a regular licence, so all support services remain primarily at the software producer. But we are pleased to show you here step by step how to go on the air with SAM Broadcaster after its proper installation.

2. Software download and installation

On the homepage of the software producer (Special Audio Solutions) you can download a free test version.

- Download SAM Broadcaster: #S2*

*The download link for this application you will find on our main page under "Help | Software".

Notes for installation:

SAM Broadcaster works with a local database. The database is included in the full software package and is installed together with the SAM BC application. Please read also carefully the recommendations for database type on the download page.

SAM Broadcaster application starts only with a proper running database. So please take care that the database will be setup correctly in order to continue the further installation process of SAM Broadcaster.

Then you can go over to the next page and step 3.

3. Configuration and handling

Run the SAM Broadcaster and you will get (depends on Windows display design) the following screen:

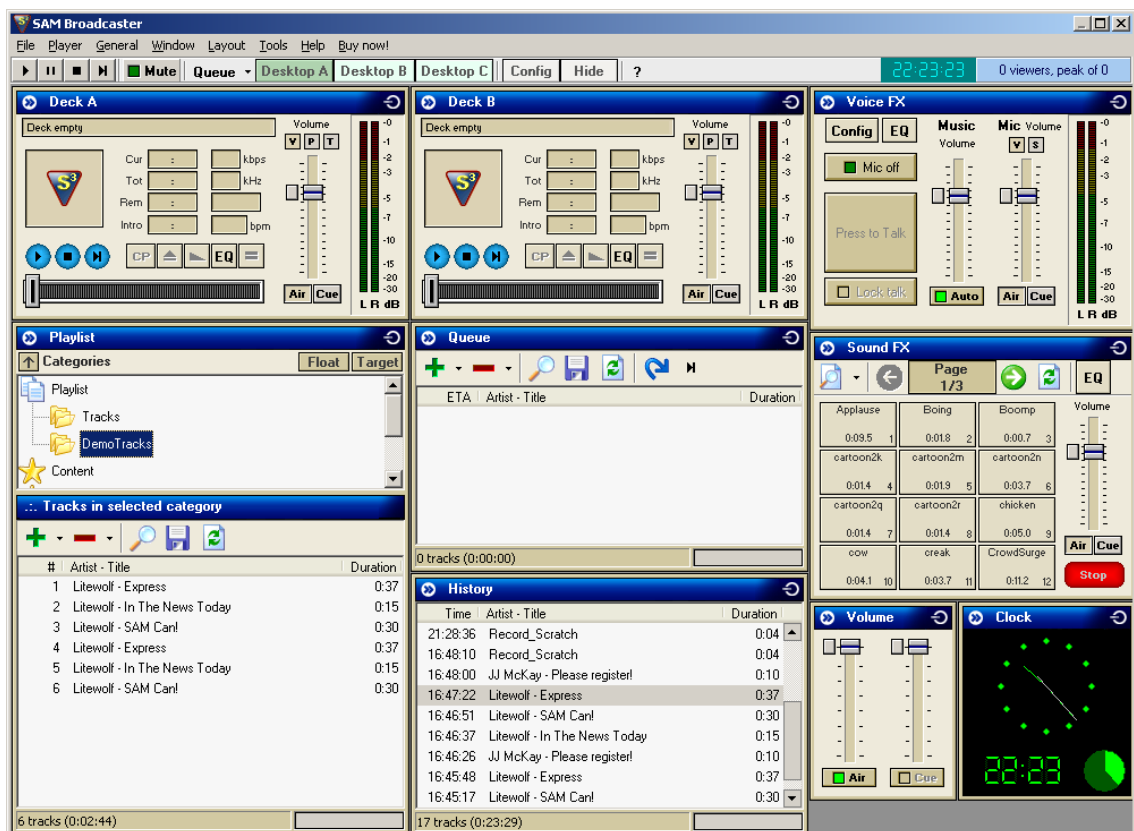


Fig. 1 SAM BC start screen

SAM Broadcaster bases on single modules which can be arranged individually. The required Encoders-Module is not shown by default, so you have to add it at your first step.

Proceed as follows:

- Window
- Encoders

A further small Module-Window called "Encoders" opens:

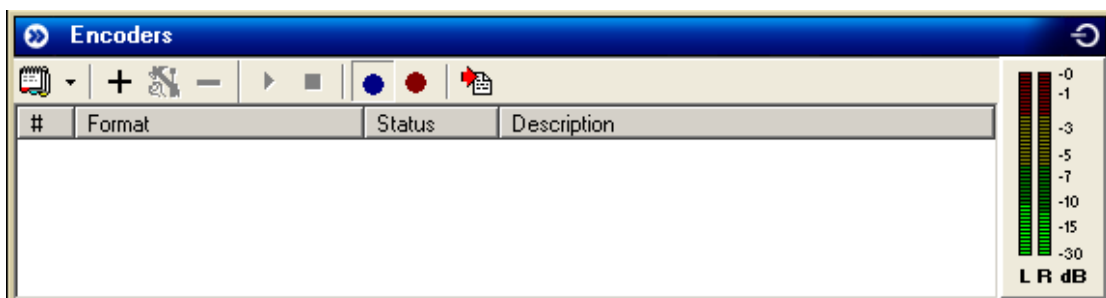


Fig. 2 SAM BC Encoders

Increase the height of the SAM main application window and add the new module for example to the bottom of the layout configuration.

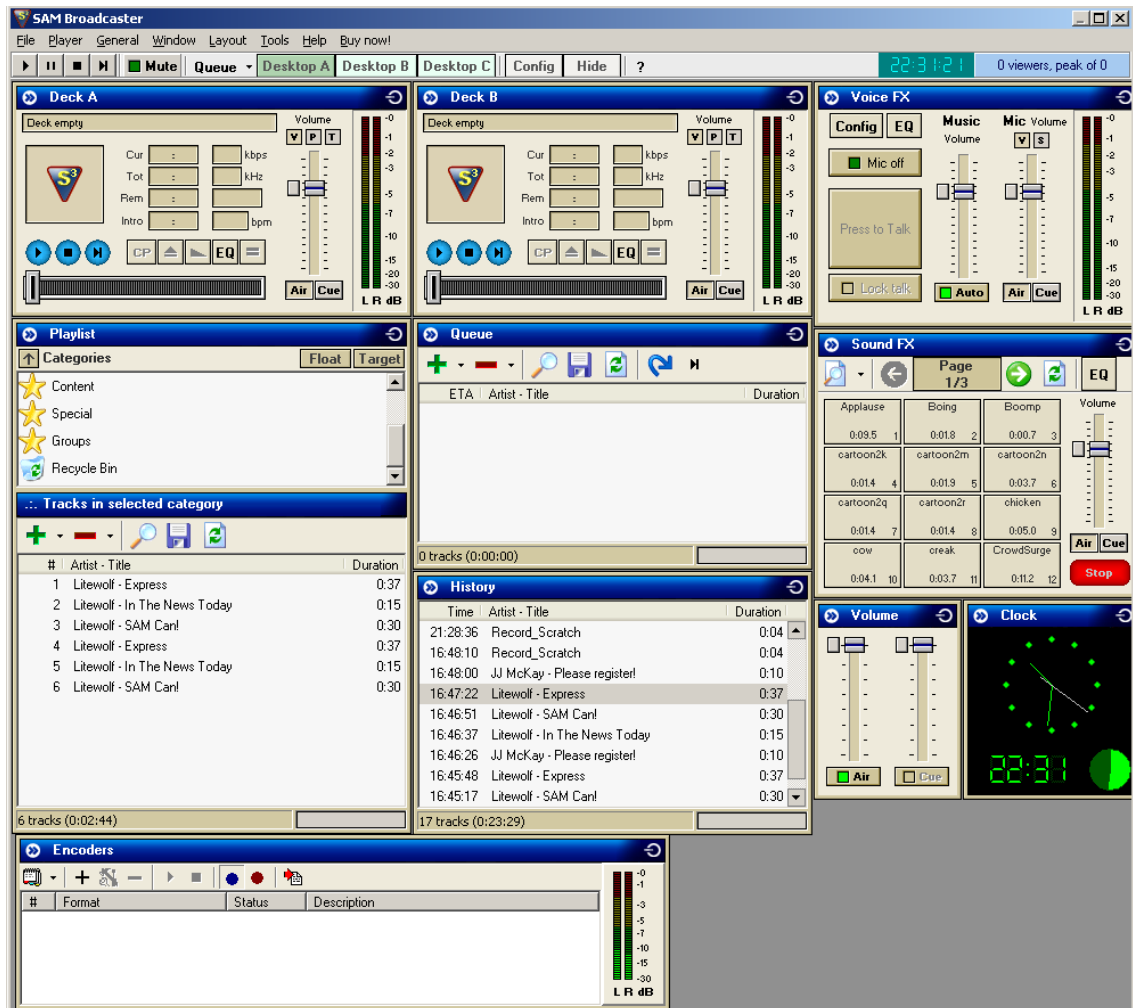


Fig. 3 SAM BC Layout with Encoders Module

To save the new configuration, proceed further:

- Layout
- Save
- Save as default

4. Encoder and Stream server settings

Into the module “Encoders” the real stream encoder is added. The encoder has the job to convert your broadcast in real time to the select format in set up bitrate and to send it further in packets to the stream server.

Please read further the chapter that corresponds to your stream server type and continue then at chapter 5 on page 14:

- 4.1 Shoutcast Server (pages 5 to 7)
- 4.2 Icecast Server (pages 8 to 10)
- 4.3 Windows Media Server (pages 11 to 13)

4.1 Shoutcast Server

4.1.1 Adding of MP3-encoder

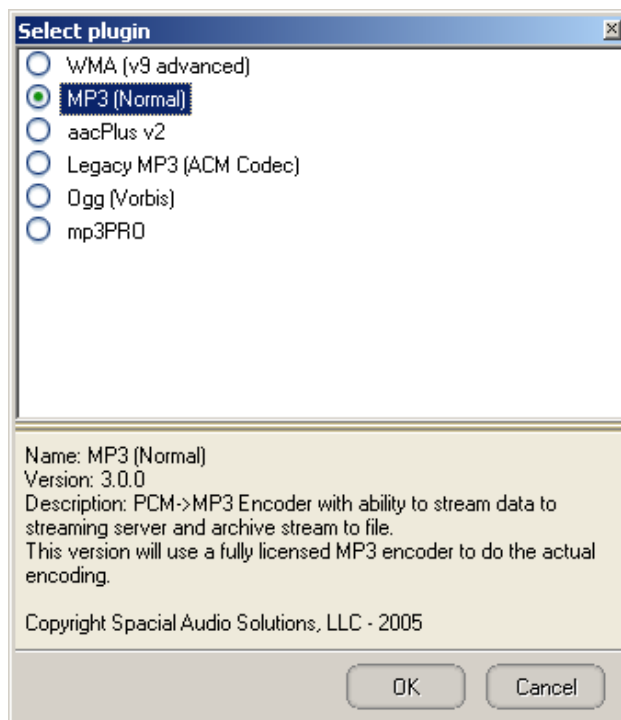


Fig. 4 SAM BC Encoder Select



Click on the + (Add new encoder) and the window shown on the left appears.

Using SAM v4 please select **MP3 (Normal)** click further on [OK].

(Using SAM v3: **MP3/mp3PRO**)

Note:

At this step the format of the stream is set. Shoutcast basically supports MP3, mp3PRO and the aacPlus format.

We recommend using the MP3 format because all popular players can receive MP3 livestreams by default without any further add-ons.

4.1.2 Converter

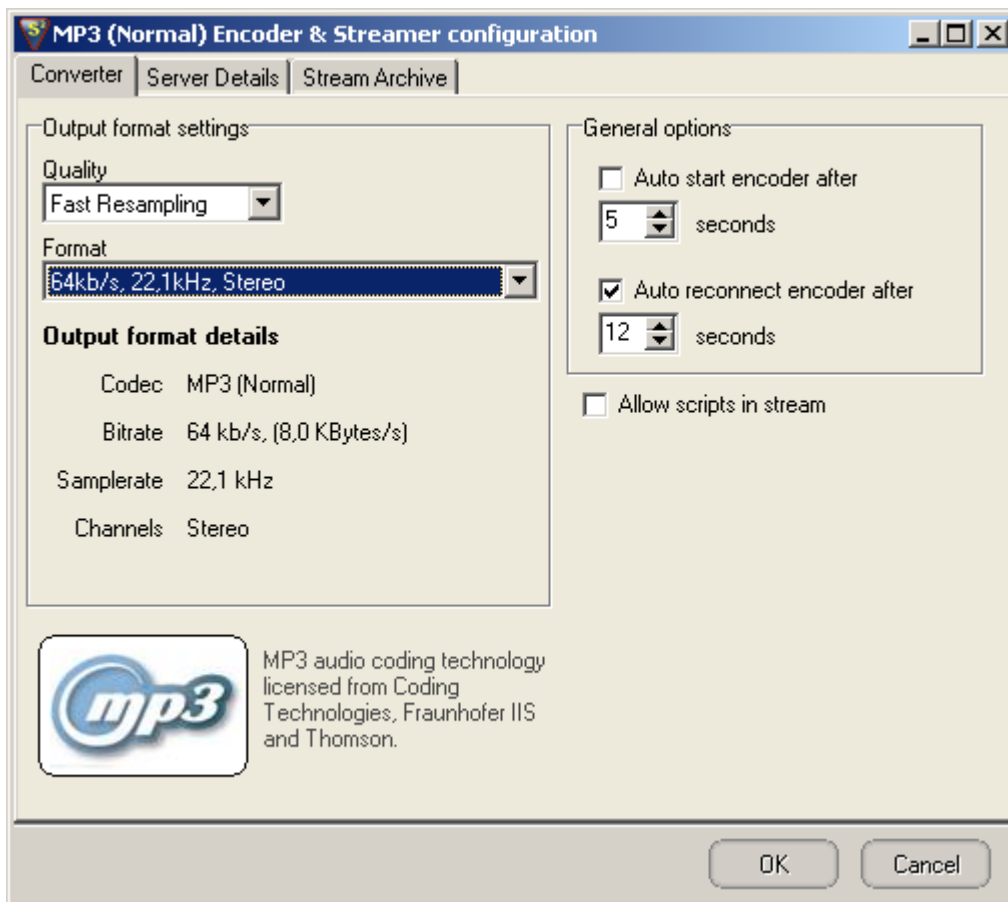


Fig. 5 SAM BC Encoder Converter

Quality

Fast Resampling

Format

Enter here the MP3 bitrate (stream quality) you like to stream.

Please consider at this step to select at most this bitrate which you have booked. Exceeding the bitrate, your server is killed automatically by our control system.

General Options (Auto Start / Auto Reconnect / Allow Scripts)

These setting can be taken over as mentioned.

4.1.3 Server Details

Fig. 6 SAM BC Encoder Server Details

Please select „ShoutCast “ as **Server Type** and enter in the input fields for **Server IP**, **Server Port** and **Password** your individual stream data.

You find these data in the customer area under link “Server configuration”. There you can also set or change the Stream-Password anytime by yourself.

Station Name

Name of the DJ, title of the broadcast. (Example: „DJ Andy’s Rock night“)

Note: The name of your radio station you can fix in the customer area under “Server configuration”, see setting “Title format”.

Genre

Type of your music style, e. g. Rock/Pop, 80s or Oldies.

Website URL

The address of your station homepage, URL must begin with **http://**

AIM / ICQ / IRC

Details about AIM and IRC nick name or the ICQ number of the DJ (if applicable).

4.2 Icecast Server

4.2.1 Adding of MP3-encoder

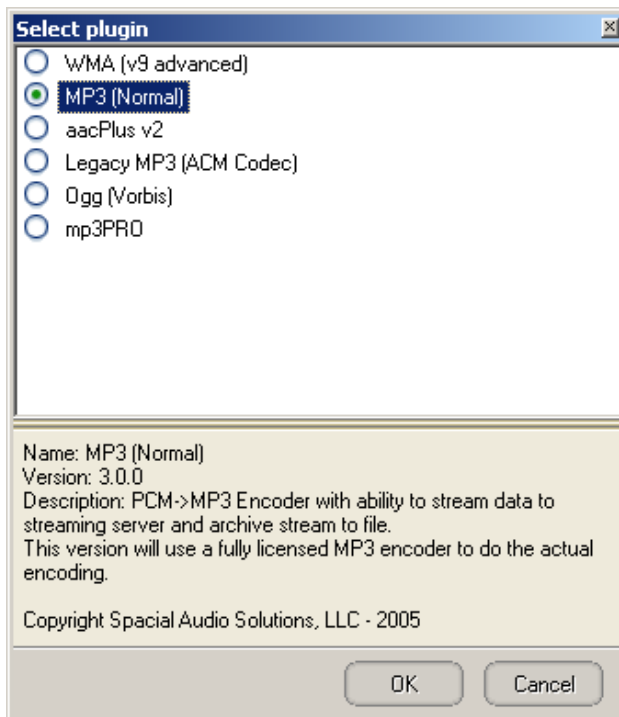


Fig. 7 SAM BC Encoder Select



Click on the + (Add new encoder) and the window shown on the left appears.

Using SAM v4 please select **MP3 (Normal)** click further on [OK].

(Using SAM v3: **MP3/mp3PRO**)

Note:

At this step the format of the stream is set. Icecast basically supports MP3, mp3PRO, aacPlus and the OGG Vorbis format.

We recommend using the MP3 format because all popular players can receive MP3 livestreams by default without any further add-ons.

4.2.2 Converter

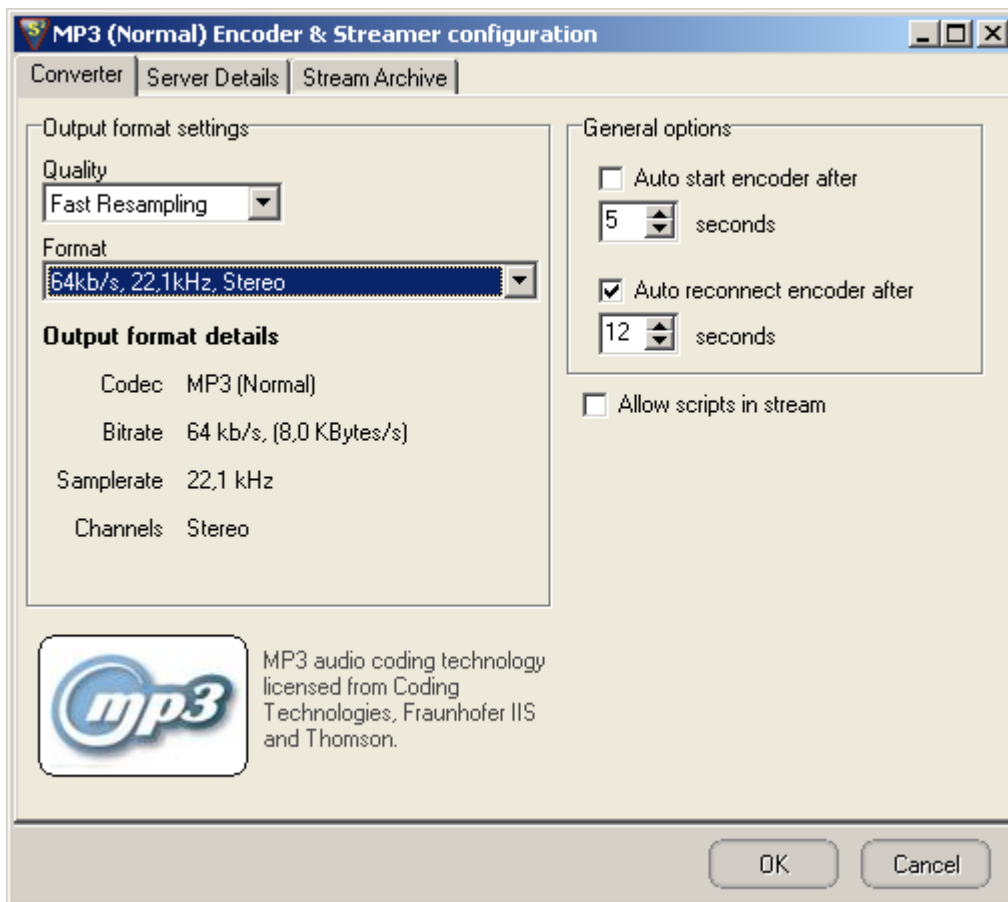


Fig. 8 SAM BC Encoder Converter

Quality

Fast Resampling

Format

Enter here the MP3 bitrate (stream quality) you like to stream.

Please consider at this step to select at most this bitrate which you have booked. Exceeding the bitrate, your server is killed automatically by our control system.

General Options (Auto Start / Auto Reconnect / Allow Scripts)

These setting can be taken over as mentioned.

4.2.3 Server Details

The screenshot shows the 'MP3 (PRO) Encoder & Streamer configuration' dialog box with the 'Server Details' tab selected. The 'Server Type' section has 'IceCast' selected. Underneath, 'IceCast 2' is selected. The 'Server Details' section contains: Server IP: rs3.stream24.org; Server Port: 7770; Password: masked with asterisks; Mount: /stream. The 'Station Details' section contains: Station name: <Name des Radios - Moderator/Sendung>; Station description: N/A; Genre: Various; Website URL: http://www.stream24.org. Two checkboxes are checked: 'List on public station listing (recommended)' and 'Enable title streaming'. 'OK' and 'Cancel' buttons are at the bottom right.

Abb. 9 SAM BC Encoder Server Details

On the top as “Server Type” please select **IceCast** and in the next line IceCast 2.

Enter in the input fields for **Server IP**, **Server Port**, **Password** and **Mount** your individual stream data. You find these data in the customer area under link “Server Administration | Server configuration”.

Station Name

Name of the Radio station / DJ / title of the broadcast. (e.g.: DJ Andy’s Rock night)

Station description

You can leave this field empty.

Genre

Type of your music style, e. g. Rock/Pop, 80s or Oldies

Website URL

The address of your station homepage, URL must begin with **http://**

4.3 Windows Media Server

4.3.1 Adding WMA-encoder

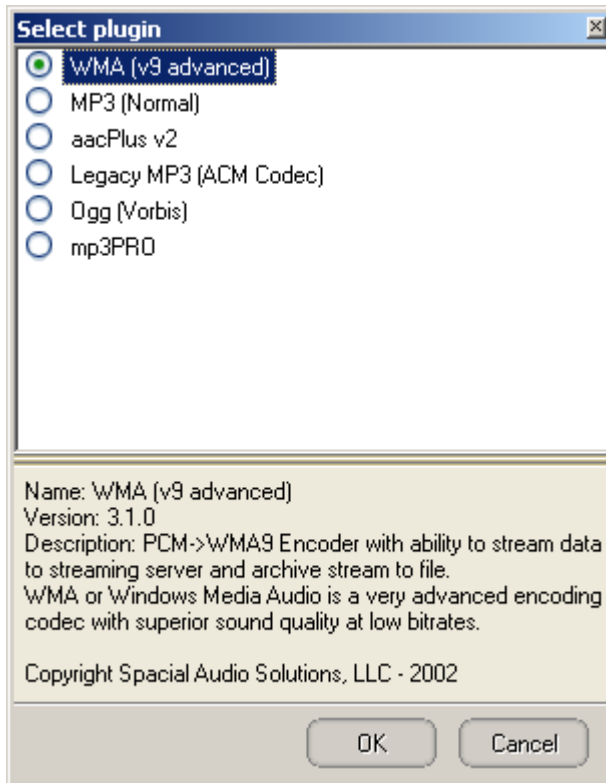
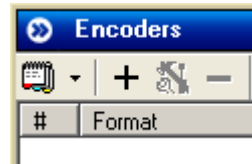


Abb. 10 SAM BC Encoder Select



Click on the + (Add new encoder) and the window shown on the left appears.

Please select "WMA (v9 advanced)" and go click further on [OK].

Note:

At this step the format of the stream is set. Windows Media supports only the WMA format.

4.3.2 Profile

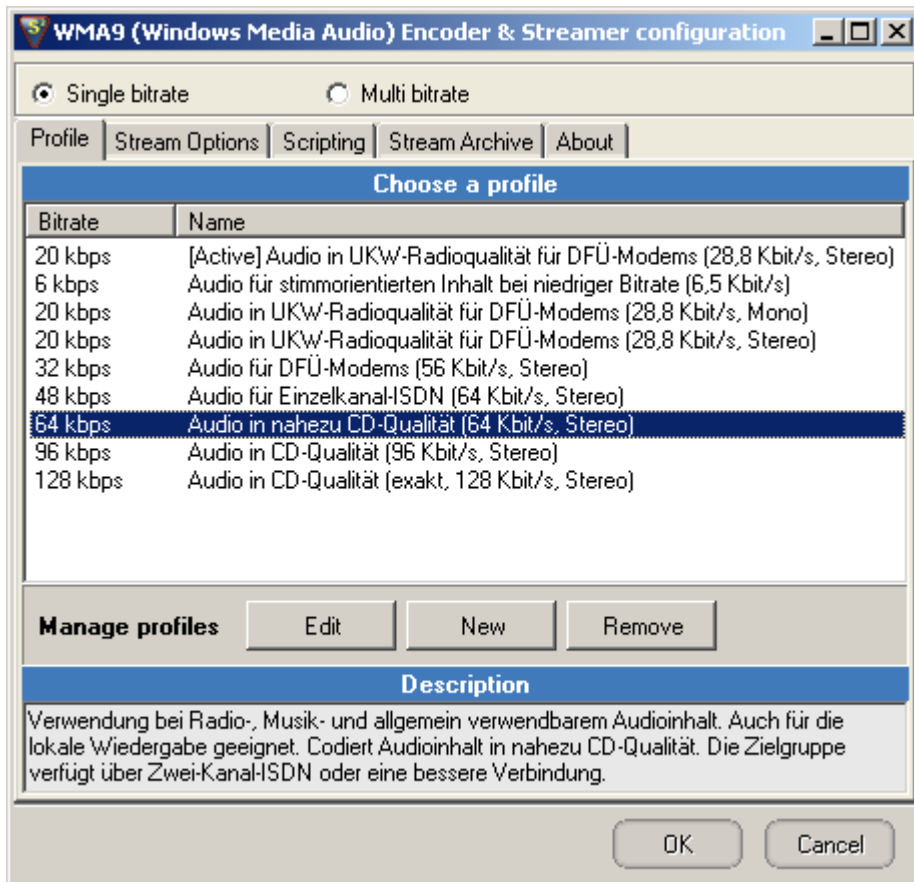


Abb. 11 SAM BC Encoder Profile

Select **Single Bitrate** on the top and in the register **Profile** choose a bitrate profile.

Note: Basically the bitrate may not exceed the bitrate ordered with us. There's a bitrate limitation set on the stream server. If the streaming bitrate is too high the server stops to deliver the stream to the clients without showing any respective error messages on the encoder or in client's player.

4.3.3 Stream Options

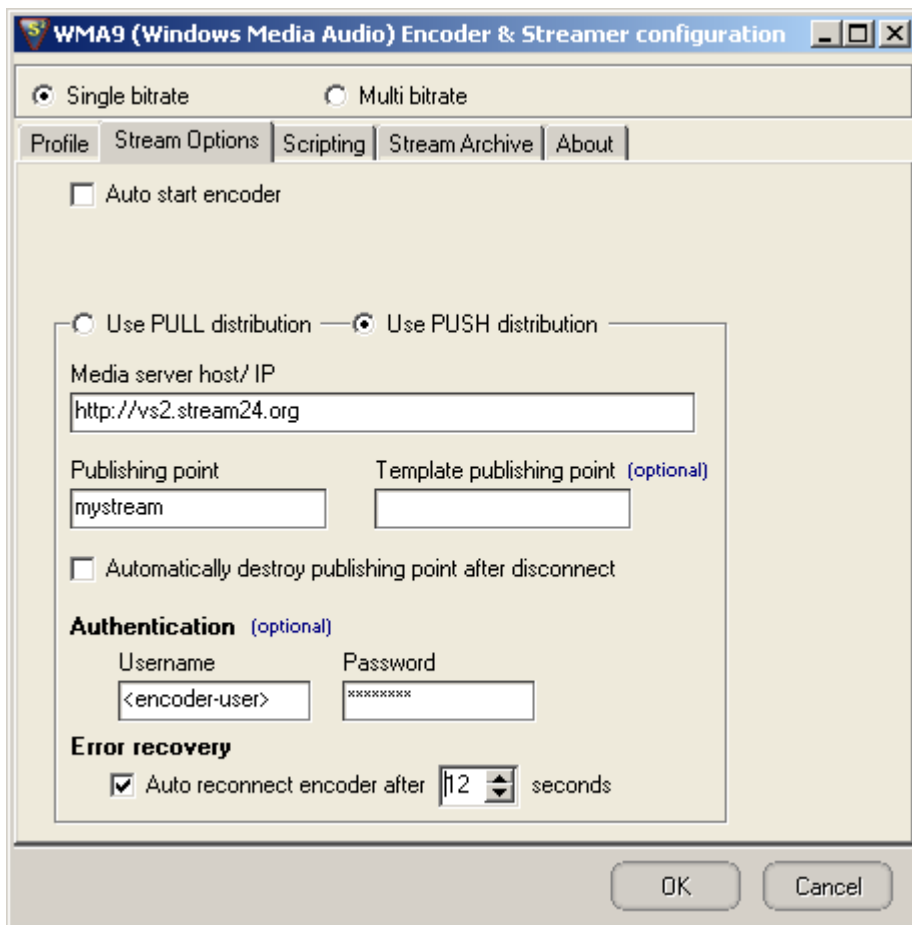


Abb. 12 SAM BC Encoder Streams Options

Please select the distribution method **Use PUSH distribution**. PUSH means that the data are sent from local encoder to server. Using the PULL method the server connects to the local encoder over your IP and given port number.

For **Media server host/IP** enter your Server Address (Host), for **Publishing Point** the name we setup for you.

Enter in the fields **Authentication Username** and **Password** your encoder data and close the configuration with click on [OK].

You will find your individual data in the customer area under link "Server Administration | Server configuration".

3.5 Start encoder and broadcast

Load now few song titles into the Queue and start the playback. Return then back to the Encoders-Module.

Just click on the Play-Button to begin with the transfer for your stream.

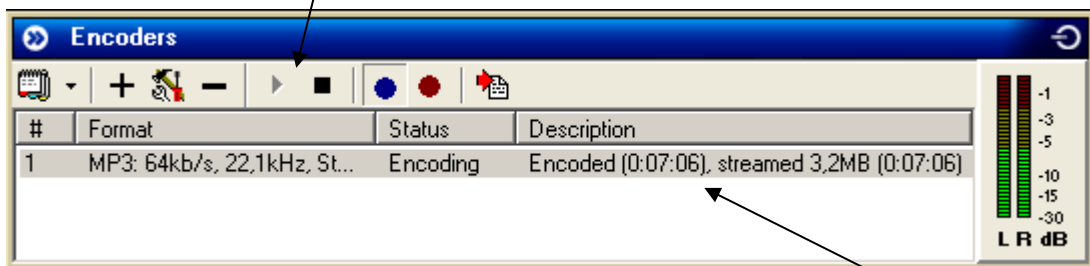


Fig. 13 SAM BC Encoder Start

On successful connection to the stream server you will see how the time and bytes counter starts to run.

You get the error message:

- „Invalid server password“ (Shoutcast)
- „Invalid password“ (Icecast)
- “Push error. Access denied“ (Windows Media)

if you have typed a wrong password before.

Note: At the same time only one DJ can broadcast and be on the Air. If the stream server is busy, no other can connect to.

Further you can read on our main page or inside the customer area how to create player links to integrate them as tune-in links on your website.

That's all! We wish you success and a lot of fun and don't hang the head if everything doesn't work perfectly on first go...