

Streaming Add-on On-line Help (Version 1.0)

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1 Overview

The Total Recorder Streaming Add-on allows real-time transfer of audio being played back or captured by Total Recorder over a local network or the Internet. Some of the uses for this add-on include the following:

- organize a radio station in a local network
- provide the audio source for an existing SHOUTcast- or Icecast2-compatible broadcast
- remote monitoring of the audio being played back or captured by Total Recorder
- send the audio from Total Recorder to a home-hardware device that can accept sources for a SHOUTcast or Icecast2 server.

This add-on can provide sources in MP3 format for SHOUTcast- or Icecast2-compatible servers and broadcast audio in WMA format. It also allows sending metadata (clip info) that can be displayed and used by network client applications (for example, by another instance of Total Recorder).

The Streaming Add-on Version 1.0 requires the Professional, VideoPro, or Developer edition of Total Recorder Version 8.2 or higher. This add-on is available at no additional charge and does not require registration.

To learn more about Total Recorder add-ons, refer to the add-on home page.

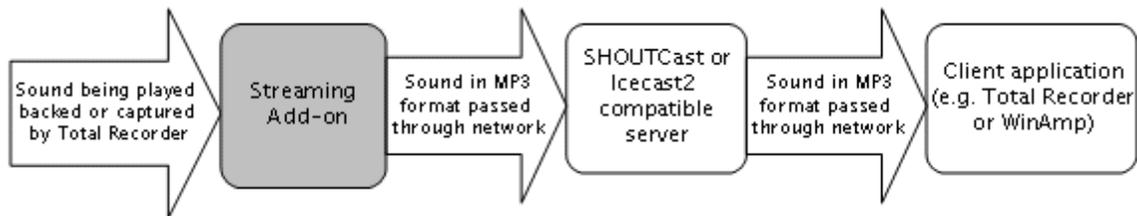
See also. Using the Streaming Add-on.

2 Using the Streaming Add-on

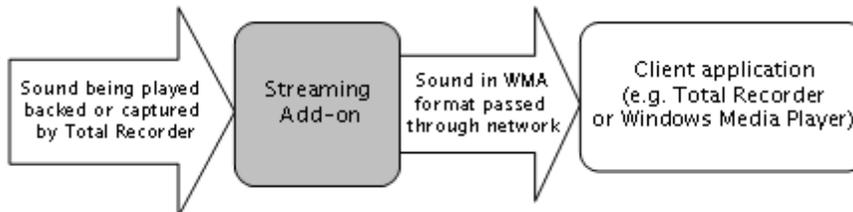
Streaming using this add-on can be accomplished in the following ways:

- *Provide the audio source in MP3 format for either a local or remote SHOUTcast-compatible server.* The add-on can transfer audio to an existing server, or you can install a free server, such as SHOUTCast DNAS, on a local or remote machine, and then pass audio to that server. You can listen to such broadcasts using a SHOUTcast-compatible client, such as Total Recorder or WinAmp. For additional information, refer to Organizing a Radio Broadcast Through a SHOUTcast Server.
- *Provide the audio source in MP3 format for either a local or remote Icecast2-compatible server.* The add-on can transfer audio to an existing server, or you can install a free server, such as Icecast 2.3.2, and then pass audio to that server. You can listen to such broadcasts using an Icecast2-compatible client, such as Total Recorder or WinAmp. For additional information, refer to Organizing a Radio Broadcast Through an Icecast2 Server.
- *Broadcast in WMA format.* In this case, Total Recorder acts as a broadcasting server. You can listen to such broadcasts using a WMA-network client, such as Total Recorder or Windows Media Player. For additional information, refer to Organizing a WMA Radio Broadcast.

The following diagram shows a schema for streaming a source for a SHOUTcast- or Icecast2-compatible server:



The following diagram shows a schema for streaming in the case of a WMA broadcast:



The Streaming Add-on can send metadata along with the audio data over a network. The ability to use this metadata depends on your client application. Total Recorder, when used as the client application, can accept and use such metadata from the Streaming add-on if the add-on acts as the source for a SHOUTcast or Icecast2 server.

2.1 Organizing a Radio Broadcast Through a SHOUTcast Server

This section describes a process for organizing a radio broadcast using Total Recorder, the Streaming Add-on, and a locally installed SHOUTcast server. You can use these instructions to create a local network or Internet radio station. Information from this section can also be used to stream to an existing SHOUTcast server.

Take the following steps to create and use you own network radio station:

1. Download and install the free SHOUTCast DNAS application.
2. Configure the SHOUTcast DNAS server by editing the `sc_serv.ini` file in the installation folder. At minimum, you should specify values for the "Password" and "SrcIP" parameters. Also verify that the "MaxUser", "PortBase", and "DestIP" parameters are acceptable. For more information on configuring SHOUTcast DNAS, refer to its documentation and the comments in the `sc_serv.ini` file.
3. In Total Recorder, from the "Process" menu, select "Streaming" to open the Streaming Add-on window.
4. Click the "New..." button to create a new stream. Configure the stream through the "Stream configuration" window as described below.

Stream configuration

Name: My SHOUTcast

Description: My description

Type: Shoutcast source

Format: MP3; 128kbit/s, 44100Hz, Stereo

Send: Audio being played Audio being captured

Server

Address: 127.0.0.1 Port: 8000
Specify an address in the form like
www.myhost.com or 127.0.0.1

Mount point: /stream.mp3

Password: MyPassword

Send metadata

Capture metadata from this player:

OK Cancel Help

Specify a stream **Name** and **Description**.

Type - select "Shoutcast source".

Address – corresponds to the "SrcIP" parameter in the SHOUTcast DNAS configuration.

Port – corresponds to the "PortBase" parameter in the SHOUTcast DNAS configuration. – corresponds to the "PortBase" parameter in the SHOUTcast DNAS configuration.

Password – corresponds to the "Password" parameter in the SHOUTcast DNAS configuration.

Set other parameters based on your requirements. For more information, refer to the Configuring a stream section.

5. Launch the SHOUTcast DNAS application. Verify that there are no error messages.
6. In the Streaming Add-on window, right-click the stream and select "Connect". If you have properly configured SHOUTcast DNAS and the stream, the "Connected" string will appear in the "Log" box. Streaming is now running.
7. Launch a streaming client, such as Total Recorder, on a computer in the network, and open the URL for the transmission. This URL will be in the form "http://192.168.1.2:8000", where "192.168.1.2" corresponds to the IP of the network interface of the computer running the SHOUTcast DNAS, and "8000" corresponds to the "PortBase" value.

Note: You can test your transmission by launching another copy of Total Recorder on the same computer where SHOUTcast DNAS is running. In this case, you can use the address "http://127.0.0.1:8000".

See also. Using the Streaming Add-on.

2.2 Organizing a Radio Broadcast Through an Icecast2 Server

This section describes a process for organizing a radio broadcast using Total Recorder, the Streaming Add-on, and a locally installed Icecast2 server. You can use these instructions to create a local network or Internet radio station. Information from this section can also be used to stream to an existing Icecast2 server.

Take the following steps to create and use you own network radio station:

1. Download and install the free Icecast2 server.
2. Configure the Icecast2 server. To configure the server, launch the Icecast2 Win32 program, and select "Configuration"->"Edit configuration". At minimum you should change the "source-password" parameter. Also verify that the other configuration parameters are acceptable. For more information on configuring Icecast2, refer to its help.
3. In Total Recorder, from the "Process" menu, select "Streaming" to open the Streaming Add-on window.
4. Click the "New..." button to create a new stream. Configure the stream through the "Stream configuration" window as described below.

Stream configuration

Name: My Icecast

Description: My description

Type: Icecast2 source

Format: MP3; 128kbit/s, 44100Hz, Stereo

Send: Audio being played Audio being captured

Server

Address: 127.0.0.1 Port: 8004
Specify an address in the form like
www.myhost.com or 127.0.0.1

Mount point: /stream.mp3

Password: MyIcePassword

Send metadata

Capture metadata from this player: [dropdown]

OK Cancel Help

Specify a stream **Name** and **Description**.

Type - select "Icecast2 source".

Address - specify "127.0.0.1" as the server address.

Password – corresponds to the “source-password” parameter in the Icecast2 configuration.

Port – corresponds to the “port” parameter in the Icecast2 configuration.

The **Mount point** setting is mandatory. You can specify something like */stream.mp3*.

Set other parameters based on your requirements. For more information, refer to the Configuring a stream section.

5. Launch the Icecast2 server and click the “Start Server” button. Verify that there are no error messages.
6. In the Streaming Add-on window, right-click the stream and select “Connect”. If you have properly configured the Icecast2 server and the stream, the “Connected” string will appear in the “Log” box. Streaming is now running.
7. Launch a streaming client, such as Total Recorder, on a computer in the network, and open the URL for the transmission. This URL will be in the form “http://192.168.1.2:8000/stream.mp3”, where “192.168.1.2” corresponds to the IP of the network interface of the computer running the Icecast2 server, 8000 corresponds to the “Port” value entered in the stream configuration, and “/stream.mp3” corresponds to the “Mount point” value in the stream configuration.

Note: You can test your transmission by launching another copy of Total Recorder on the same computer where the Icecast2 server is running. In this case, you can use the address “http://127.0.0.1:8000/stream.mp3”.

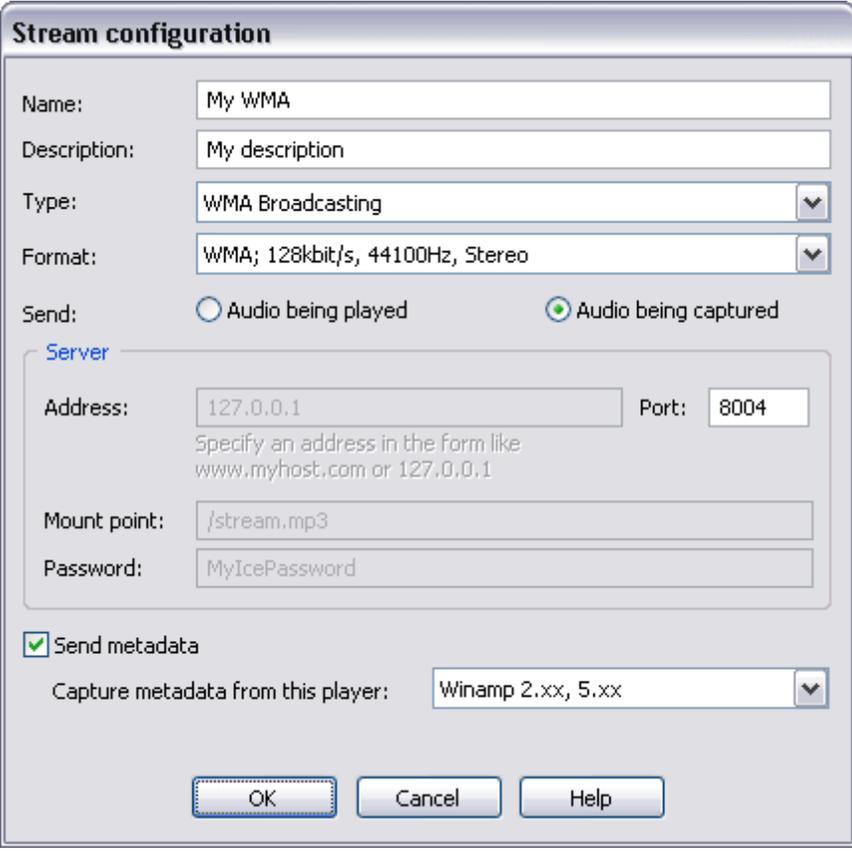
See also. Using the Streaming Add-on.

2.3 Organizing a WMA Radio Broadcast

This section describes a process for organizing a radio broadcast using Total Recorder and the Streaming Add-on. You can use these instructions to create a local network or Internet radio station.

Take the following steps to create and use you own network radio station:

1. In Total Recorder, from the “Process” menu, select “Streaming” to open the Streaming Add-on window.
2. Click the “New...” button to create a new stream. Configure the stream through the “Stream configuration” window as described below.



The image shows a 'Stream configuration' dialog box with the following fields and options:

- Name: My WMA
- Description: My description
- Type: WMA Broadcasting (dropdown)
- Format: WMA; 128kbit/s, 44100Hz, Stereo (dropdown)
- Send: Audio being played, Audio being captured
- Server section:
 - Address: 127.0.0.1 (text field), Port: 8004 (text field)
 - Mount point: /stream.mp3 (text field)
 - Password: MyIcePassword (text field)
- Send metadata
- Capture metadata from this player: Winamp 2.xx, 5.xx (dropdown)
- Buttons: OK, Cancel, Help

Specify a stream **Name** and **Description**.

Type - select "WMA Broadcasting".

Port - specify a free port number.

Set other parameters based on your requirements. For more information, refer to the Configuring a stream section.

3. In the Streaming Add-on window, right-click the stream and select "Connect". If you have properly configured the stream, the "Connected" string will appear in the "Log" box. Streaming is now running.
4. Launch a streaming client, such as Total Recorder, on a computer in the network, and open the URL for the transmission. This URL will be in the form "http://192.168.1.2:8000/", where "192.168.1.2" corresponds to the IP of the network interface of the computer running the Streaming Add-on, and 8000 corresponds to the "Port" value entered in the stream configuration.

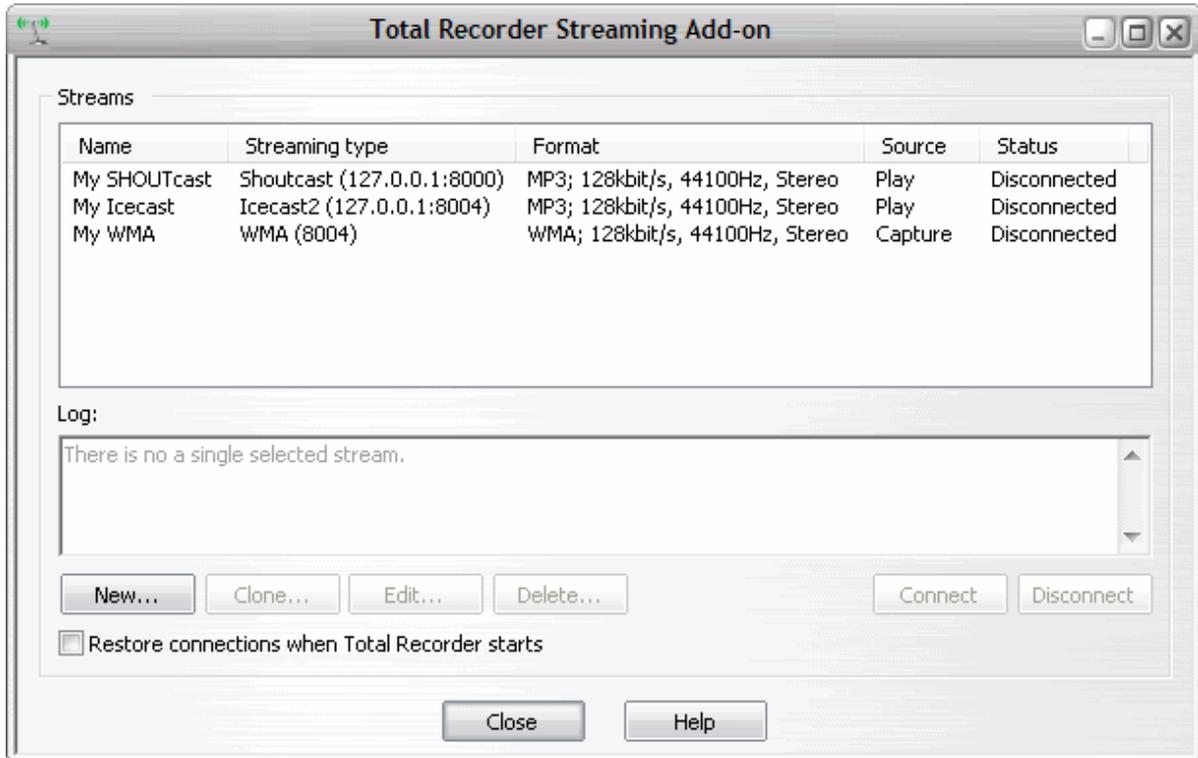
Note: You can test your transmission by launching another copy of Total Recorder on the same computer where the broadcasting instance of Total Recorder is running. In this case, you can use the address "http://127.0.0.1:8000/".

See also. Using the Streaming Add-on.

3 Reference

3.1 Streaming Add-on Window

The Streaming Add-on window can be shown or hidden from Total Recorder's main menu. From the "Process" menu, select "Streaming". The window looks like this:



Streams

This is a list of all your streams. The columns in the list display the name of the stream, streaming type (address:port), streaming format, source, and the status. If a stream is sending data to a server or it is currently broadcasting then the amount of data sent appears as part of the status.

Log

This box displays log messages for the selected stream. Note that each stream has its own log.

New

Click this button to add a new stream. Default parameters will be set as initial parameters for the new stream. After you click this button, the Stream configuration dialog appears.

Clone

Click this button to clone an existing stream. Parameters from the currently selected stream will be set as initial parameters for the new stream. After you click this button, the Stream configuration dialog appears.

Edit

Click this button to edit the properties of the stream using the Stream configuration dialog.

Delete

Click this button to delete one or more selected streams. A confirmation prompt appears.

Connect

Click this button to connect the currently selected stream.

Disconnect

Click this button to disconnect the currently selected stream.

Restore connections when Total Recorder starts

If this option is selected then when Total Recorder starts the add-on will automatically connect all of the streams that were in an active state (either connected or were connecting) when you last exited from Total Recorder.

Notes

- You can use a context menu to perform some operations on a stream.
- After you edit the properties of a connected stream, the stream may disconnect temporarily and then reconnect when you click the OK button in the Stream configuration dialog.
- Each stream that is sending data results in additional system load. It is not recommended that streams are connected unnecessarily.
- Security software, such as a firewall, may block your network activity. Refer to the appropriate software documentation to resolve any streaming problems that occur due to security.

See also. Using the Streaming Add-on.

3.2 Configuring a Stream

The "Stream configuration" dialog, as shown below, can be used to add a new stream or edit an existing stream from the Streaming Add-on window.

Stream configuration

Name: My Icecast

Description: My description

Type: Icecast2 source

Format: MP3; 128kbit/s, 44100Hz, Stereo

Send: Audio being played Audio being captured

Server

Address: 127.0.0.1 Port: 8004
Specify an address in the form like
www.myhost.com or 127.0.0.1

Mount point: /stream.mp3

Password: MyIcePassword

Send metadata

Capture metadata from this player:

OK Cancel Help

Each configuration item is described below.

Name

Specify a name for the stream. This name will appear in the Streaming Add-on window and may appear in a client player.

Description

Specify a description for the stream. This description may appear in a client player.

Type

Select the type of streaming from the drop-down list.

Format

Select the streaming format from the drop-down list. To send data to a Shoutcast or Icecast2 server, only an MP3- format can be used. For WMA broadcasting, only a WMA format can be used.

Send

Specify the type of audio data to be transferred as part of the stream. You can select from the following:

Audio being played - Audio data being played backed by Total Recorder will be transferred as part of the stream.

Audio being captured - Audio data being captured by Total Recorder will be transferred as part of the stream. This includes not only the audio data being captured during an ordinary recording but also the audio data being captured when running in preview (monitoring) mode.

Server

This group contains settings for the broadcasting server.

Address - specify the address of the server. You can use either the character form of the address (e.g. www.someserver.com) or the digital form (e.g. 127.0.0.1). For WMA broadcasting, this setting is not used and it is disabled.

Port - specify the server port.

Mount point - this is only used for sending data to an Icecast2 server.

Encoder password - specify a password to send data to the server. For WMA broadcasting, this setting is not used and it is disabled.

Send metadata

Select this checkbox if you want the add-on to send metadata (like clip info) along with the audio data through the stream. Whether sending such metadata makes sense and it can actually be used on the client side depends on the particular server and client software.

If the add-on sends audio being played by Total Recorder then the information displayed in the information panel of Total Recorder's main window will always be used as metadata.

If the add-on sends audio being captured by Total Recorder then the information to be sent as metadata is captured from the selected player. In this case, the add-on periodically captures information from the title of the selected player's window and uses this information as metadata. This option works similarly to the "use clip info from external player for created file tag and name" option on Total Recorder's "Split recording conditions" dialog. This option is meant to be used when Total Recorder captures sound reproduced by a player and you want to transfer the captured sound over a network.

Note that a network player may not be able to alter clip information at the same time that audio is being played back by the player. Also, it is not guaranteed that the player will display the clip information. The ability to use the metadata depends on the player itself, the type of streaming, and the behaviour of the streaming server.

See also. Using the Streaming Add-on, Organizing a Radio Broadcast Through a SHOUTcast Server, Organizing a Radio Broadcast Through an Icecast2 Server, Organizing a WMA Radio Broadcast.