

streaming video

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How to setup a video-stream using QuickTime Broadcaster and Waag Society's Streaming server.

What you need:

- a Macintosh computer running OS X 10.3 or higher.
- QuickTime Broadcaster, freely downloadable from <http://www.apple.com/quicktime/broadcaster/>
- an internet connection
- a camera attached to your computer



How to stream:

- Open QuickTime Broadcaster, press if necessary the 'show details' button, so you see the window as shown in the image.
- Press the 'Video'-tab (1), and choose the camera that is attached to your computer (2). Then choose the right settings. In this example we assume you have an upstream of over 720 kbit. Change the resolution and bit- and framerate settings, so that the stream will fit in your bandwidth. This requires some tweaking and trial and error. We chose to use MPEG-4 in this example. This is usually a good choice.

In this example we chose to use the MPEG-4 codec, which usually is a good choice and have set the bitrate for video to 512 kbit/sec (4). Keep in mind that audio will take-up extra bandwidth. Also you shouldn't completely fill-up all your bandwidth, as that will result in stuttering image and sound.



- Next, press the 'Audio'-tab (1) and select the right settings for the audio. Select your audio input (5). This can be the microphone of the camera, or any other device listed in the menu. Again we choose MPEG-4 for the audio codec (6). For good quality we set the 'Rate' to 44.100 Herz, with a sample size of 16 bit. Click the 'options'-button (7) for additional settings.



We have set the bitrate to 128 kbits/second (8), and the output sample-rate to 44.100 kHz. These are high-quality settings. Again, adjust these to fit your bandwidth.

- Then select the network tab (1). We are going to use the Waag's Streaming Server. This means we're going to use 'Unicast' transmission. Select Automatic-Unicast in the transmission pop up-menu. Then fill-out the address in the server field: qt2.waag.org, and think up a file name for your stream. This can be anything. You don't need a login name or password for this server, so now you can press the Broadcast button. You are now streaming!!!

Now to see if it is working, open QuickTime Player, and select 'Open URL in new player' under the 'File' menu (⌘+U). In the address-field, fill out the following address: rtsp://qt2.waag.org/FILE.sdp, where FILE is the filename you gave your stream. If everything went right, you now receive your stream! Give the above address to anyone you want to watch the stream. This can be relatives on the other side of the world.

Any problems that occur can be caused by network settings and firewalls. If Broadcaster seems to stream fine, but QuickTime doesn't receive anything, make sure that the 'Transport Settings' in the QuickTime Preferences are set to use port 80 (or http).

Happy streaming.