



MultiMediaPros Quick Start Guide – Live Streaming

All of us at MultiMediaPros.com wish you success with your online streaming venture. We created this guide to help get you up and running with the basic procedures for live streaming of your event. If you have further questions, please visit our online knowledge base on our website or you can contact us at: support@MultiMediaPros.com

Step One – Equipment and Location Setup

If you have already set up your equipment and Internet connection, then you can move to step two.

Your audio and/or video equipment can be as simple as one microphone or webcam or as elaborate as a multi-camera setup with many microphones and an audio and video switcher.

Two vendors of such equipment are Markertek and B&H Photo:

<http://markertek.com/>

<http://www.bhphotovideo.com/>

A typical setup would be a single video camera and microphone connected to a capture device that connects to your computer. The computer would be running Windows Media Encoder or Flash Media Encoder and sending one stream to our network over a dedicated broadband connection at your location.

If you are using a fairly new camcorder as a source, it might have a USB or FireWire connection that can go right into your encoding computer without the need for a capture device. We have experienced very good results using a Sony HandyCam with USB or FireWire outputs connected directly to the PC. The camcorder can be your video and audio source if that is sufficient for the program content.

The computer you use for encoding should be dedicated to that one task and should be as powerful as possible. Some guidelines are:

- 3.2Ghz Pentium 4 processor, Core Duo processor or better
- Windows XP Pro or Vista
- 1GB RAM or better
- Available FireWire & USB ports

If you will be using multiple cameras and an audio mixer, you will need a capture device to get the audio and video into the encoding computer. Two professional capture devices we use and recommend are:

Canopus 110 or 300 (external FireWire):
<http://www.videoguys.com/ADVC.html>

Osprey-210 (internal card):
<http://www.viewcast.com/pages.asp?page=osprey-210>

IMPORTANT: Make sure no other programs are running when you are encoding, including those that run in the system tray of your machine. The encoding computer must be dedicated to the task of encoding for the entire time of your event.

An option to using a PC for live streaming is the NewTek TriCaster series, which are basically like a TV production truck in a box:

<http://www.newtek.com/tricaster/>

You will need to send one stream to our streaming network entry point for each bit rate you wish to offer your program in. You need to ensure that the upload speed of your available Internet connection can handle the sum of these streams plus 20-25% overhead.

For example, if you are sending us a 56k and 300k stream, you would need at least 425k upload speed.

You can test your connection's upload speed at this page:
<http://www.speakeasy.net/speedtest/>

We recommend selecting a server that's closest to your location and then redo the speed test at one that's as far away as possible to get a good average.

Please remember to account for other users that may be sharing your connection at the time of the webcast. The more bandwidth you make available, the better chance you will have for a stable, uninterrupted program for your viewers.

If you need high speed service on-site, we recommend Speakeasy. We use them for our Internet connection in our studios and have been very happy for the past 6 years with their DSL and T-1 services. Check for availability at your venue here: <http://www.speakeasy.net/refer/7403>

If possible, you should test the setup a day or more in advance.

Step Two – Encoder Setup & Testing

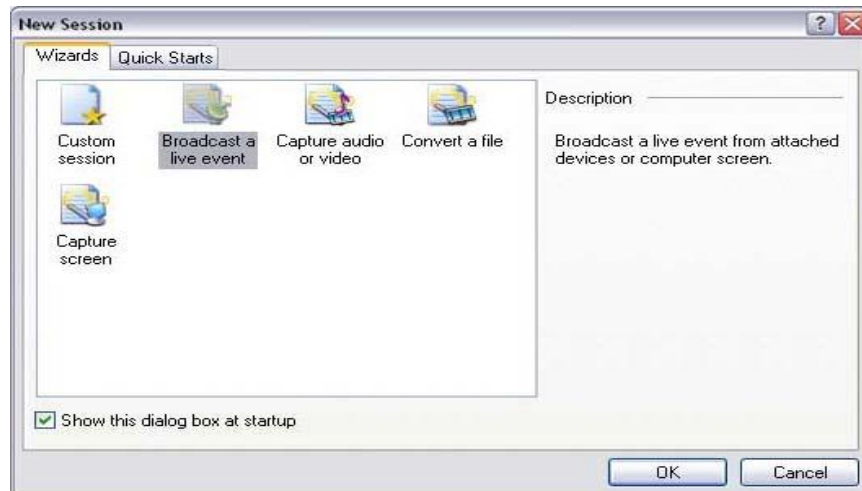
Windows Media

(for Live Flash streaming please see page 7)

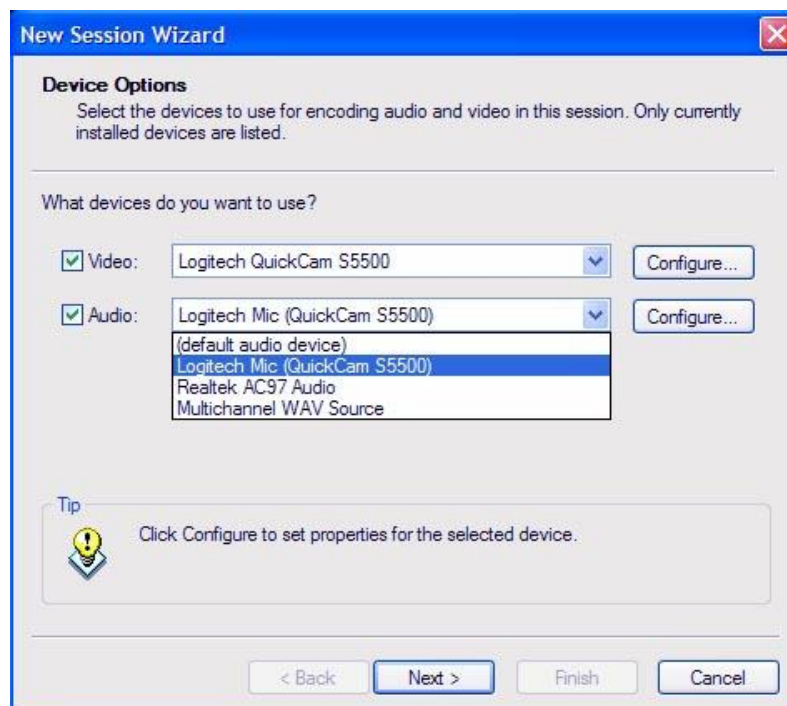
Our QuickStart guide will detail the procedures for live streaming with the Windows Media Encoder, which can be downloaded - free of charge - from Microsoft:

<http://www.microsoft.com/windows/windowsmedia/forpros/encoder/default.aspx>

From the new session wizard select "Broadcast a live event".
Then click the OK button.



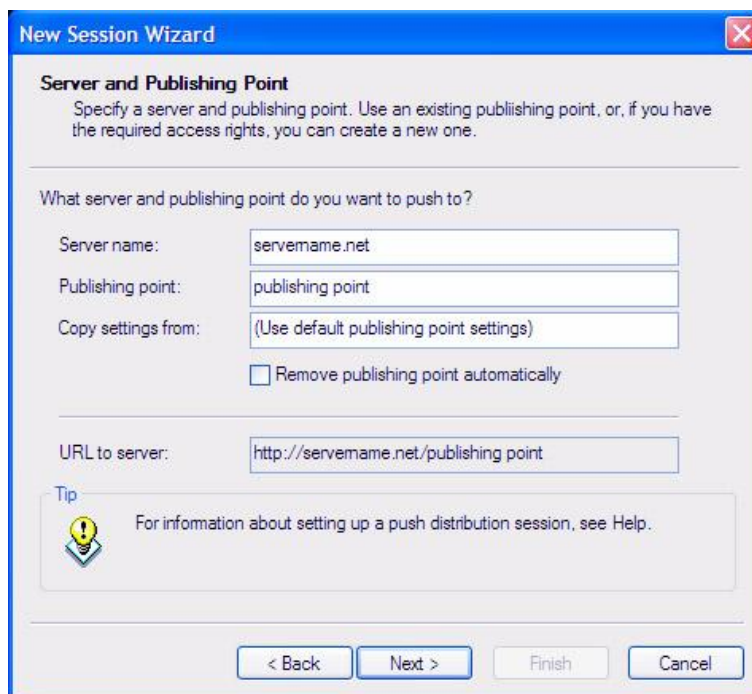
Select the device or devices you want to stream from. Click Next.



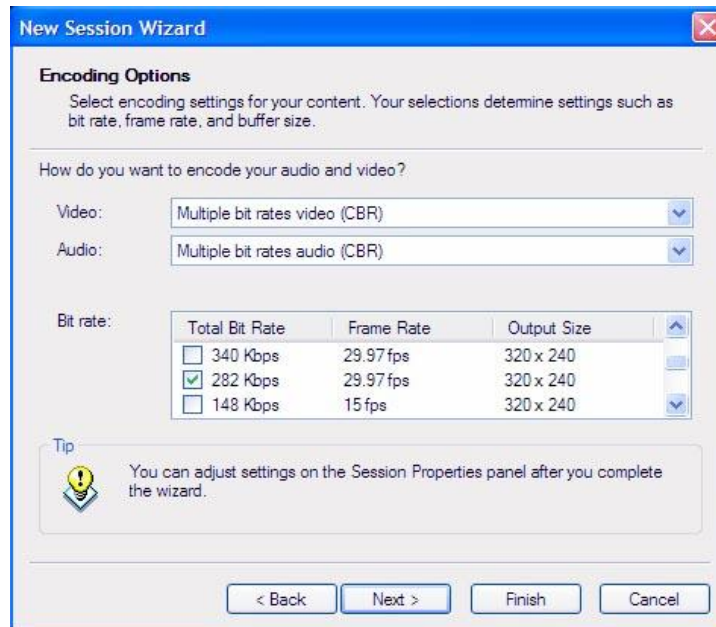
Select "Push from the encoder" and click Next.



Enter the server name and the publishing point we provided for you and click Next. (do not enter anything in the "Copy settings from:" box)

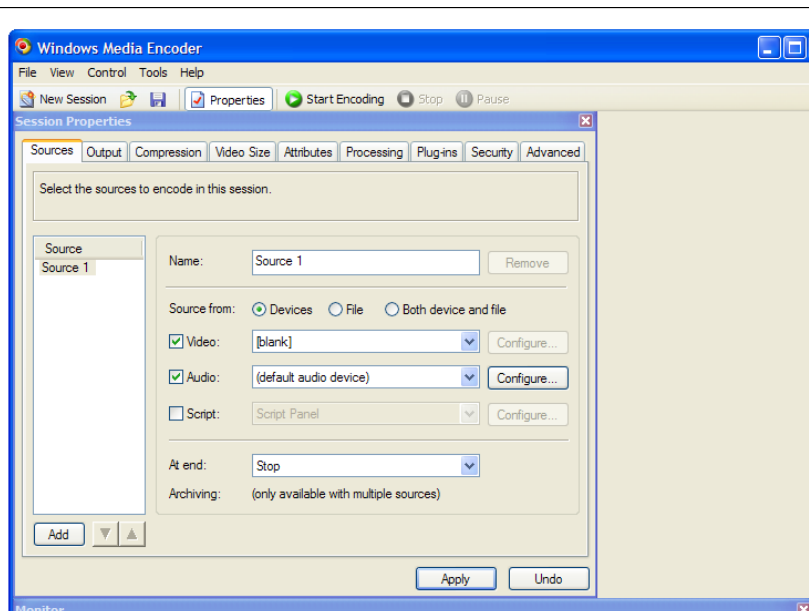


Select one or multiple bit rates from the drop menu and then check the rate or rates that you want to stream at. Make sure your TOTAL bit rate does not exceed 80% of your internet connections upload speed. If you are selecting multiple bitrates you need to add all of the rates together to find out the total rate that you are trying to send out.



On the next few screens, you can elect to archive a copy of your stream to your computer, or add metadata such as title, artist, copyright, or description. If you don't care to use any of these features, you can simply click Finish at this point.

To add pre-recorded intro, intermission, or ending messages to your live stream, click the Properties button and then select the Sources tab. From the "Source from:" selections, choose **Devices** to capture your audio or video from devices connected to your computer; **File** to select a pre-recorded file, or **Both device and file**. Click the Apply button when you are finished making your selections.



A username and password window will pop up. Enter the username and password that we provided and click OK.



NOTE:

If you receive a message that it is not possible to detect the publishing point type, you can bypass this message and click the checkbox to not have it show again.

Also, if you change your mind about any of the settings you previously entered in the wizard, you can change them by going to Properties and selecting the tab for the option you want to change. For instance, if you select the Compression tab, you can select a different bit rate.

Click Start Encoding at the top of the encoder window to start your live broadcast.



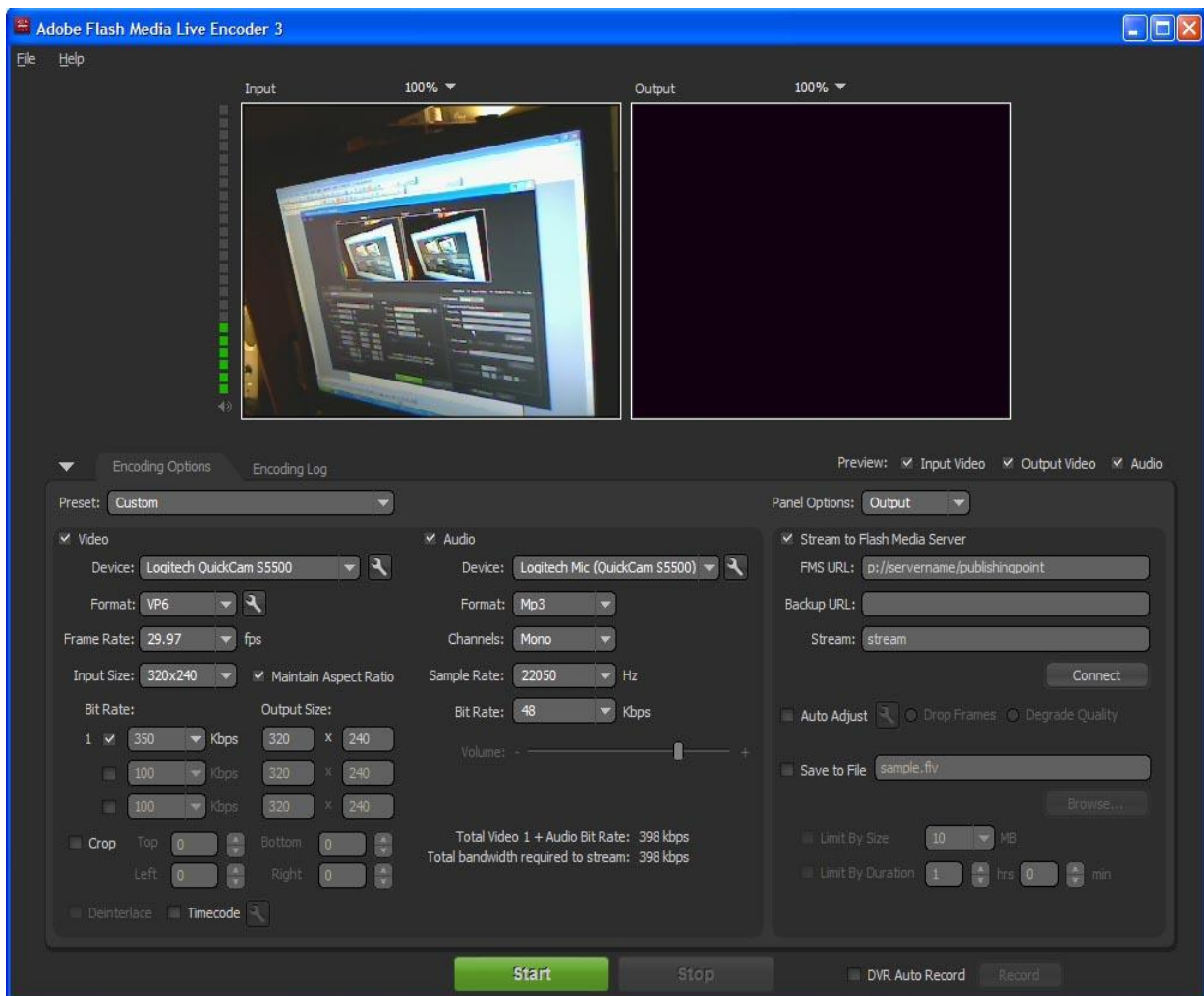
There are two ways you can view your live stream. When you login to your control panel at www.MultiMediaPros.com/mediastats you will find links to open the stream in the Windows Media Player and code to embed the stream into a web page. Always use another computer to monitor the stream and perhaps have someone off-site connect as well. Or you can contact our support department and we will be more than happy to tune in to view your test stream.

Live Flash Video Streaming

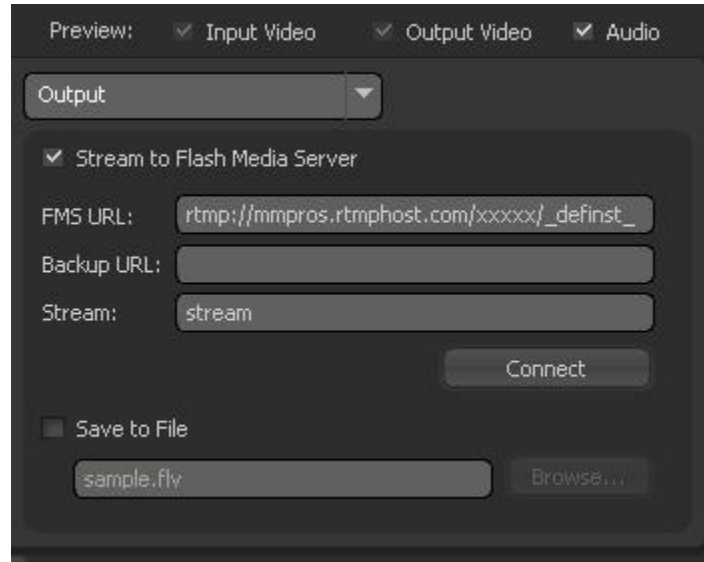
Our QuickStart guide will detail the procedures for live streaming with the Adobe Flash Media Live Encoder, which can be downloaded - free of charge - from Adobe:

<http://www.adobe.com/products/flashmediaserver/flashmediaencoder/>

When you launch Adobe FMLE, it will automatically detect audio and video devices available on your system. If you have multiple devices present, you can decide which to use by selecting them from the device pull downs on the left side on the Encoding Options tab. This is also where you'll select the format (VP6 or h.264), video size, bit rate, and frame rate for encoding your video. The Adobe FMLE comes with encoding presets for low, medium, and high bandwidth bitrates. We suggest choosing the preset closest to your available bandwidth and then making any adjustments as needed during testing.



On the right side of the Encoding Options tab you will need to enter the server setting we have provided you with in your streaming media control panel.



Please note that you should replace the “xxxxx” above with your custom settings for your account. Next, click the “connect” button to establish a connection to the server.

When you are ready to begin your webcast, click the green “Start” button at the bottom of the encoder application.

In your control panel you will find the code embed the stream into a web page. Always use another computer to monitor the stream and perhaps have someone off-site connect as well. You can contact our support department and we will be more than happy to tune in to view your test stream.

Step Three – Going Live!

On the day of your event, it is a good idea to do one last test. You will also want to start your stream encoding at least 15 minutes prior to the event start time in case you have early attendees tuning in.

It is a good idea to send a “coming up next” message with some music or other announcement down the line if you can to let viewers know they are connected to the right stream.

If you have an on-demand account with us, we can also setup your account to play a pre-recorded audio/video message before viewers connect to your live stream. This could be an introduction or even a sponsorship commercial!

Please contact our production department if you need assistance with creating these announcements. They would be more than happy to provide you with a quote.

We hope that this has been an informative guide to the basics of live streaming media events. Once you have completed your first event, the process will be more familiar to you.

We also provide you with real time statistics. Please note that each live connection will be counted toward the total only after the viewer disconnects from the stream. Links to these statistics are provided in your control panel.

Customer Technical Support
MultiMediaPros.com
support@MultiMediaPros.com