

CLOUD live

A Guide to Streaming Live Events to the Web

Table Of Contents

1	Live Streaming	1
	Overview	1
	System Requirements	1-2
	Video and Audio Capture.	3

2	Setting Up Your Live Stream	4
	Flash Media Live Encoder	4
	Configuring Audio	5
	Configuring Video	5
	Configuring the FMS URL.	6
	Watching Your Live Feed	6

1 Live Streaming | Overview

Live streaming is the ability to broadcast live video and audio to the internet. The ability to livestream to the internet is an amazing tool for churches, ministries, business, non-profits and other organizations wanting to broadcast their content.

In this guide, you will learn the basics of streaming and how to broadcast your video to the internet.



System Requirements

Our live streaming services are powered by Flash Media Server. This is a powerful software tool for broadcasting video to nearly any platform.

There are many programs that have the ability to broadcast to Flash Media Server, but the program that we recommend is Flash Media Live Encoder. This is a free program provided by Adobe and can be downloaded from the link below:

<http://www.adobe.com/products/flash-media-encoder.html>

This program is compatible with both Windows and Mac computers. Here are system requirements for Flash Media Live Encoder (FMLE).



Windows

- 933MHz Intel® Pentium® 3 (or compatible) or faster processor
- For H.264 and AAC support: 1.67GHz Intel Core™2 Duo processor required (3GHz Intel Core 2 Duo recommended)
- For multiple output streams: 3GHz Intel Core 2 Duo processor and 2GB of RAM required (quad- or 8-core machine with 3GB of RAM recommended)
- Microsoft® Windows® XP with Service Pack 2 or 3; Windows Vista® Business, Ultimate, or Enterprise; Windows Server® 2003 (32-bit) Web Edition; or Windows 7
- 256MB of RAM (1GB recommended)
- 40MB of available hard-disk space (excludes archived FLV and F4V files)
- 1024x768 screen resolution with 32-bit video card
- Microsoft DirectShow compatible video capture device
- Microsoft DirectX End-User Runtime version 9.0c
- For H.264 and AAC support: Adobe® Flash® Media Live Encoder software 2.5 required

Mac OS

- 2GHz Intel Core 2 Duo or faster processor
- Mac OS X v10.5.6
- 1GB of RAM
- 50MB of available hard-disk space (excludes archived FLV and F4V files)
- 1024x768 screen resolution
- QuickTime compatible audio/video capture devices
- QuickTime 7 software or later

***High speed internet connection is required for live streaming video**

Video and Audio Capture

The previous list of requirements is for the ability to broadcast video to the FMS Server.

This second section is listing compatible devices to capture your video and audio to your computer for broadcast. There are several ways to capture video and audio, but the main ways are listed below.

- Video Capture Card
- USB Capture
- DV Camera
- Webcam
- Audio Capture Card

Though there are many solutions to capturing your audio and video, we recommend the following hardware. Please note that webcams typically only capture video and not audio. If you choose to use a webcam, you will need an audio capture device to be able to broadcast audio.

When purchasing your hardware, check to make sure that it is compatible with your computer.

Capture Cards:

- FireWire, PCI IEEE 1394
- Osprey 100
- Osprey 440
- Osprey 450e
- Osprey 230
- Osprey 240e
- Osprey 530
- Osprey 560
- Osprey 700 HDe *
- Digital Rapids DRC 500
- Digital Rapids DRC-1600
- Epiphan VGA2USB LR
- Epiphan VGA2USB Pro
- BlackMagic Intensity Pro
- BlackMagic Decklink HD Extreme

Webcams:

- Creative Webcam Vista Plus
- Logitech QuickCam Fusion
- Logitech QuickCam Pro 5000
- Logitech QuickCam Express
- Logitech QuickCam Easy
- Microsoft LifeCam VX-1000

Recommended Video/Audio Hardware Providers



2

Setting Up Your Live Stream

Once you have signed up for the Live Streaming service with us, you will receive an email with all of the required information to get your feed up and going.

Flash Media Live Encoder

The first step is installing Adobe Flash Live Media Encoder. You can download it from the following link. You will need to sign up for an Adobe account to obtain the installer file.

<http://www.adobe.com/products/flash-media-encoder.html>



Once you have downloaded the program, install it on your computer. Go through the installation and open the program. The window that opens up will be the window that you will broadcast from. All of the settings for video, audio, stream URLs and video archiving will be here. You can preview incoming and outgoing video in the top pane of the window.

From here we need to configure FLME to publish to the URL provided to you in the stream confirmation email.

Configuring Video

Your incoming video feed needs to be configured for the stream. There is a video column on the left side of the window. Here is where you will set your video options:

- Select your video device under “Device”
- Select H.264 under the “Format”
- Select the frame rate you would like
- Select the the input size of the video
- Select the desired video bitrate of the stream. The higher bitrate of the video and audio will use bandwidth more quickly. A good place to start is around 500kbps.
- Next to the bitrate is the “Output Size”. This is how large the video will appear in a web browser or mobile phone. These numbers will vary depending on your aspect ratio. If you do not wish to change size, do not change this field.
- If you need to crop the video you can do so under the “Crop” section.
- If your video is interlaced, you can deinterlace the video by selecting the “Deinterlace” check box.

Configuring Audio

Your incoming audio feed needs to be configured for the stream. Next to the video column is an audio column. Here is where you will set your audio options:

- Select your audio device under “Device”
- Select MP3 under the “Format”
- Select either stereo or mono audio
- Select the the input size of the video
- Select 44100 or 48000 under “Sample Rate”. Any other setting will cause your audio to sound very poor.
- Select an audio bitrate under the “Bitrate” section. We recommend setting this no lower than 128. This determines the quality of the audio.
- Under the volume section, move the audio volume all the way to the right. This ensures maximum output volume.

Configuring the FMS URL

Now that the video and the audio are setup, you need to tell FMLE where to send the feed. This is done by entering the FMS URL and the stream name. On the right side of the window there is a section "Stream to Flash Media Server". Follow the instructions below to configure the FMS URL.

- Choose the **Cloudlive.me** publishing point closest to your location (East, West, Europe or Sydney). Copy and paste the FMS URL from the email you received after purchasing the livestream.
- Leave the "Backup URL" empty
- Copy and paste the stream name
- Click "Connect" if all the information is correct, the correct button should change to a "Disconnect" button, indicating that you have made a connection with the FMS Server.
- At the bottom of the form are a few options to archive the video to a file. If you wish to archive the Flash file, check the box and name the desired filename.
- Click the green "Start" button and you are now Live Streaming!

Watching Your Live Feed

Once you are broadcasting live, you are then able to view your stream through a webpage.

Locate the HTML code that was provided to you in the confirmation email. Then add this HTML code anywhere in your website.

