

**What is MovieStreamer HLS?**

MovieStreamer HLS is a new Mac based application from Softron Media Services used to ingest video for streaming to the web or a local network.

What hardware is required for using MovieStreamer HLS?

In addition to a Mac, an appropriately configured system will include an AV Foundation supported video I/O device. These include the various video cards and Thunderbolt devices from Blackmagic Design as well as FireWire attached video devices (cameras or tape decks).

How does it work?

The user first selects the video input port (there could be more than one available on the system), then selects the video format of the incoming video (SD or HD, NTSC or PAL, for example), then determines the destination where encoded stream will be sent and finally selects one or more output resolutions for encoding. Depending on the system and the number of processors, the number of simultaneous encoded streams will vary.

What if I am unsure of the resolution that is best for streaming, can MovieStreamer HLS help?

There are a number of default resolutions in a list of available outputs (recommended settings that are available in AV Foundation, the underlying technology that Softron uses.) MovieStreamer HLS also allows the user to add customized settings. Customization capabilities include bitrate, output resolution, whether Main or Baseline, etc.

What are the advantages of using MovieStreamer HLS to encode?

1. **Infrastructure.** HTTP Live Streaming does not require any specific servers; a simple Apache HTTP server will suffice. Although bandwidth requirements are the same as for other formats, there is no need to buy a Flash or RTSP server.
2. **Openness.** HTTP Live Streaming makes it possible to include multiple audio tracks in different languages and also multiple resolutions that the user can switch to transparently and automatically. Viewing can start at a lower resolution and then switch to a better resolution bandwidth permitting. The format is also documented and based on the MPEG-2 Transport Stream encapsulation which is still in use today in most set top boxes and cable receivers.
3. **Ease-of-Use.** Every web developer can build a website integrating HTTP Live Streaming, building on existing web technologies without having to use external resources or SDKs.
4. **Cost Effective.** No licenses or royalties are required other than what would be paid for the actual content.
5. **Platform support.** Most platforms already support HTTP Live Streaming. Examples are Android, iOS (iPhone, iPad), MacOS X (Safari)

Can I stream using MovieStreamer HLS from the same system that is using OnTheAir Video or OnTheAirNode for on air playout?

Yes. But care must be taken because not all video cards are the same and not all Macs are the same.

If you want to playout and stream on the same system, you will need two independent I/Os cards, one for outputting two SDI outputs (mirrored outputs) from OnTheAir Node or OnTheAir Video and another one for encoding, using MovieStreamer HLS. (Blackmagic Design has two Decklink cards that have two SDI outputs, the Decklink Studio and the Decklink HD Extreme.) Alternatively you could use a switch that takes non-mirrored output from OnTheAir Video or OnTheAir Node and redirects through the switch to air and back to the second video video card (or input) for encoding.

What about if I want to stream my playout to the Web from OnTheAir Video or OnTheAir Node but do not need to have my playout got to air at the same time?

If you are not playing out to air and intending to stream at the same time, you will not need to mirror your output from OnTheAir Video or OnTheAir Node. So you could use a video card like the BlackmagicDesign Decklink Duo or as in the case above, direct your output to a switch and then into the second video card.

Can I use a Mac mini with MovieStreamer HLS to stream?

Yes. As long as you have an AV Foundation video input, you can use the Mac mini for streaming.

**Is there any competition for MovieStreamer HLS?**

That depends on what you define as competition. There are other applications on both Mac and Windows that encode. Indeed there are other hardware based systems that work on either Mac or Windows to encode for streaming. There aren't many other applications that are using Apple's AV Foundation as the underlying architecture. There aren't many others that offer multiple outputs of encoding material. So - as pertains to competition, are there applications that encode on the Mac? Yes. Are there applications that are as high quality or as versatile as MovieStreamer HLS? No.

Do I have to use another Softron application in conjunction with MovieStreamer HLS?

No. MovieStreamer HLS is a stand alone application. It will encode any video stream coming into it from any video device or the video output from another system, whether Mac based or Windows based. You could even connect directly to a tape deck and stream from there. It will of course depend on the video source and the video input device you are using. But MovieStreamer HLS has been designed to be a stand alone product providing the highest quality streaming output on the Mac. It does not require other Softron applications to work.

How much does MovieStreamer HLS cost?

MovieStreamer HLS lists for USD 995, EUR 695.