Streaming Media Format Comparison

When creating streaming media for the Web, it is valuable to decide in which format you would like it to be saved before you begin compression. There are three major formats for streaming media: Real Player, QuickTime, and Windows Media Player. This document explains the pros and cons of each and details which platform and programs accommodate the formats.

Keep in mind that as you decide on what format you would like to use to present your video, you will need to make some choices about what is most important. Whether it is the type of audience you want to reach (connection speed), quality of audio or video, ease of use, or the platform you'd like to use (probably the least important), your decision will definitely influence the choice of format. Also, due to the nature of video compression, it is important to remember that streaming media will virtually never look as good online as it does in the editing program you use (such as Final Cut Pro or Adobe Premiere). Though some programs and formats will look better than others, some loss of quality is unavoidable.

Real Player

Ease of use:
Real Player is probably the least complicated to prepare a movie for streaming. However, though theoretically possible to compress on both Macs and PCs, Real Player has had problems in the Center for Teaching, Learning, and Technology (CTLT) with compressing on Macs; therefore, to be on the safe side, it is better to use a PC when choosing this format.

Quality of Video and Audio:
Though the video for all three of these formats have similar attributes, Real Player can be less sharp than QuickTime and Windows Media Player, having a greater tendency at lower speeds to sacrifice motion for the sake of clear audio, (looking more like a slide show than a movie).

User Friendly:
As previously mentioned, compression will more likely be done on a PC, but Real Player can be viewed in both Netscape and Internet Explorer on

both Macs and PCs. The universality of its usage is undeniable. The compression program needed to compress media for Real Player (Helix Producer) can be downloaded for free.

QuickTime

Ease of use:
QuickTime is perhaps not as trouble-free as Real Player in terms of compression, and the method used to put it on the Web is unfortunately different from the other two, making it another method to learn. However, this is the only format that encodes just as well on both a PC and a Mac.

Quality of Video and Audio:
At high data speeds, QuickTime's video quality is quite good; at low speeds, it tends to sacrifice motion, becoming blurry. However, when used correctly and at high speeds, it can generate stunning results (Example: those QuickTime movie trailers--amazing quality, considering their size).

User Friendly:
QuickTime is a good choice for compression on either a Mac or PC, and it can be viewed by either Netscape or Internet Explorer on both platforms. QuickTime is used all over the Web and is probably the most common of all three formats. Unfortunately, unlike other media compression programs, the one needed for the QuickTime format (QuickTime Pro) is not free. If you are not working within the CTLT lab, you will need to spend around $30 to buy it.

Windows Media

Ease of use:
Windows Media Player is not as easy to compress as the other two formats because you must use a specific program, called Windows Media Encoder, to create Windows Media Player files. Moreover, you must be compress using a PC; Windows Media Player does not translate well cross-platform.

Quality of Video and Audio:
In direct comparison with the other two formats, Windows Media Player has very high video and audio quality at faster speeds. Even more important, this is probably the best looking player for lower speeds as well.

User Friendly:

This is probably the least universal of all the players--not only do you have to be on a PC to encode it, but it also has problems being viewed on Macs. Windows Media Encoder can be downloaded for free.

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related documents

Catalyst How-To: Create QuickTime Streaming Internet Media
Catalyst How-To: Create Windows Media Streaming Internet Media
Catalyst How-To: Create RealMedia Streaming Internet Media

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