QuickTime Streaming: An overview of how to set up and manage your digital files while keeping your sanity

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Overview

- Why Streaming?
- Why Quicktime?
- Platforms and other issues.

Tools

- Quicktime Pro
- Dreamweaver
- Cleaner (http://www.discreet.com/)
- Renamer (freeware available from http://www.versiontracker.com)
- Sound Studio (http://www.felttip.com)

Process

- Acquiring the Audio or Video
  o Off CD
  o From an analog source, through a card or device which will allow you to input the sound or video to the computer.
  o From a Digital device over USB, or Firewire connections
- Software for recording the video or audio. I use Imovie for video, or Sound Studio for audio.
- Software for compressing and encoding the video or audio. I use Cleaner for both, but Sorenson Squeeze (http://www.sorenson.com/) is optimized for the latest G5 processors and Sorenson codecs.
- Copy the compressed and hinted files to the server.
- Rename the files to something simple if necessary. I use a freeware utility for OS X ... Renamer.
- Create reference movies. I use Quicktime Pro.
- Create web pages and embed reference movies.

FYI

- Make sure the reference movie you embed in your web page is “self-contained”
- If your pages contain more than one Quicktime file, make sure the Quicktime preferences are set so that the computer does not autoplay files.
QuickTime Streaming Server FAQ

QuickTime Streaming Server

What is QuickTime Streaming Server?
A: QuickTime Streaming Server delivers hinted QuickTime (.mov), hinted MPEG-4 (.mp4), and hinted 3GPP (.3gp) files in real time over the Internet via the Real-time Transport Protocol/Real-Time Streaming Protocol (RTP/RTSP). It can also deliver MP3 files via Icecast-compatible protocols. It delivers both video on demand (VoD) and, when combined with broadcasting software, live streams. It is perfect for serving live events over the web, when partnered with broadcaster software, or for creating a 24x7 video or radio station with the included Playlist Broadcaster, or delivering long-form media. It is also perfect for those concerned with customers downloading files locally: real time streaming means the data is “consumed” as it is delivered, leaving no file to play back locally.

QuickTime Streaming Server, while designed for Mac OS X Server, is also available via the Darwin open source project, which offers a high level of customizability to just about any network. Sharing the same code base as QuickTime Streaming Server, ready-made versions of Darwin Streaming Server are available for Linux, Windows, and Solaris. In addition, since source code is available, it can be ported to most any platform by modifying a few files.

What’s new in QuickTime Streaming Server 5?
QuickTime Streaming Server 5 introduces:

- **New admin**: QuickTime Streaming Server can now be administered from the Mac OS X Server Admin utility for easy set up and monitoring from any Mac running Mac OS X v10.3 (The web-based admin still exists for administering QuickTime Streaming Server from any web browser)
- **Home directory support**: Mac OS X Server users can stream movies from their home directory (rtsp://serveraddress/~user/movie.mov) allowing server admins to set up account

Does Darwin Streaming Server have the same features as QuickTime Streaming Server 5?
While Darwin Streaming Server and QuickTime Streaming Server share the same code base they do not share the user interface features. QuickTime Streaming Server 5 delivers a number of enhancements as a result of the services available on Mac OS X Server.

On which platforms can I use QuickTime Streaming Server 5?
QuickTime Streaming Server 5 is included as part of Mac OS X Server v10.3.

Can I run QuickTime Streaming Server on Mac OS X desktop?
In order to stream movies from Mac OS X desktop you will have to install Darwin Streaming Server for Mac OS X. Note: Darwin Streaming Server is not supported by AppleCare.

How much does QuickTime Streaming Server 5 cost?
QuickTime Streaming Server is included as part of Mac OS X Server v10.3. Please see Mac OS X Server v10.3 for pricing.

Where can I find support for QuickTime Streaming Server?
QuickTime Streaming Server 5 is supported as part of Mac OS X Server v.10.3. Visit www.apple.com/support/macosxserver/. Darwin Streaming Server is an open source project and is support by the community. Join the streaming server developer’s lists to post questions.

Can I still use the web-based admin to administer QuickTime Streaming Server?
Yes, in addition to administering QuickTime Streaming Server from the Mac OS X Server Admin utility you can also use the web-based admin which is great for remote administration. Note: web-based administration is turned off by default and must be enabled by the server administrator.
Real-time playlist updating: Add, remove, and rearrange media in your playlist without restarting your stream.

QTSS Publisher: New application for easily managing all of your server-side media including uploading files, creating playlists, and generating web pages.

QuickTime Streaming Server (QTSS) Publisher

What is QTSS Publisher?
QuickTime Streaming Server (QTSS) Publisher is a new application for managing all of your QuickTime media for delivery via QuickTime Streaming Server on Mac OS X Server. Features include:

- File upload
- Automatic hinting of QuickTime and MPEG-4 files
- Simple playlist creation
- Automatic generation of embed tags
- One-click web page publishing with templates

Can I use QTSS Publisher with earlier versions of QuickTime Streaming Server?
QTSS Publisher will only work when connected to Mac OS X Server v10.3 running QuickTime Streaming Server 5.

How can I distribute QTSS Publisher to my users?
QTSS Publisher comes installed on Mac OS X Server in the /Applications/Server directory. The application can be installed on other Mac OS X computers by simply copying it to those machines; no installer is required. QTSS Publisher is also available on the Mac OS X Server v10.3 Admin Tools CD.

On which platforms can I run QTSS Publisher?
QTSS Publisher can be run locally on Mac OS X Server v10.3 or later or remotely from any Macintosh running Mac OS X v10.3 and later. Note: you will have to log into a computer running Mac OS X Server v10.3 or later in order for QTSS Publisher to function.

OS & System Requirements

What is the minimum recommended hardware configuration for my QuickTime Streaming Server?
As a minimum hardware configuration, Apple recommends a Power Macintosh G3 or Macintosh Server G3 with at least 128 MB of random-access memory (RAM) and 1 GB of free disk space.

For heavier traffic, the recommended configuration is a Power Macintosh G4 or an Xserve with 512 MB of RAM, 9 GB of free disk space, 3 Ultra-ATA drives, and a gigabit Ethernet card.

You must use the latest release of Mac OS X Server.

Licensing & Availability

I've heard about Darwin implementations for other platforms. How do I obtain more information about this?
For information on the Darwin Streaming Server, visit the Darwin Streaming Server area of the Apple Public Source web site.

Where can I get more information about
Where do I find the latest copies of the client
licensing?
For information on licensing the Darwin Streaming Server, visit the Darwin Streaming Server area of the Apple Public Source web site.

For information on licensing the QuickTime Player, visit the QuickTime Software Distribution Agreement page.

Authoring & Streaming

- **How do I calculate how large my Internet connection must be to stream content?**
  Multiply the maximum number of users you expect to connect by the bit rate of the files they will view. If files play at different bit rates, multiply by the highest and then the lowest bit rates to estimate a range.

  For more information and details refer to the Knowledge Base article, “Determining Adequate Server Bandwidth”.

- **How do I do live video and audio streaming?**
  In order to stream live media you will need recording equipment (i.e., a video camera), a computer that has broadcast software, and a Mac OS X Server with QuickTime Streaming Server installed.

  For more information on setting up this environment and streaming live media, refer to http://docs.info.apple.com/article.html?artnum=75002.

- **Where can I find more information on broadcasting software?**
  See QuickTime Broadcaster to learn more about Apple’s free broadcasting application. For information about 3rd party broadcasting products please visit the QuickTime Broadcasting Tools page.

- **How do I stream prerecorded movies or audio?**
  All prerecorded, or stored, media must be "hinted" with either QuickTime Pro or most authoring applications.

  For more information on hinting, see the tutorials area or visit the Hint Track tutorial. You can stream single and multiple stored files. After the movie is hinted, copy the file to the Movies folder.

- **How do I stream content directly off a web page?**
  By streaming media directly within a web page, viewers can use any standard web browser to view the media by entering the URL address of the web site. To embed media within a web page, see http://www.apple.com/quicktime/authoring/embed.html.

- **How do I get around firewall problems?**
  If you are experiencing firewall problems, update your software to the latest version of QuickTime Streaming Server and have users upgrade to QuickTime 4.1 or later. You may optionally want to select the "Enable Streaming On Port 80" checkbox in the Settings window of the QuickTime Streaming Server Admin application.

- **Can users view movies with a web browser?**
  Users can view movies with either the QuickTime Player or a standard web browser. You must first set up a web page that embeds streamed media, then you must give the user the URL address to that web page. The user just types in the URL in the Address field of their browser.

- **Are there any security features and how can I implement them?**
  QuickTime Streaming Server comes with 2 authentication modules that you can use to control access to streamed media files. Users must have QuickTime Player 4.1 or later to access secure media files.

  For more information, see http://docs.info.apple.com/article.html?artnum=75005.
Support

Where is the Help located? The QuickTime Streaming Help can be found in several different places. Select QuickTime Streaming Help from the Help menu or you can choose "Streaming media" from the Server Administration Help table of contents.

Are there resources on the web that I can reference to obtain more information? Yes. For more information about QuickTime Streaming, see QuickTime Streaming Server, Mac OS X Server support, and QuickTime. You may also subscribe to related mailing lists by visiting Apple Mailing Lists.

What are my support options? Apple offers a variety of support plans to meet the needs of our customers.

For information on the different plans available, see AppleCare Product Support.

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