

QuickTime 6, Mpeg-4, ...Huh?

That's the great promise of MPEG-4 — you can encode once and then share your video and audio with any number of MPEG-4-compliant players and devices. That is, someone using a Web-capable cell phone or PDA, a Windows user with RealOne Player Plus, and a Mac user with QuickTime 6 should all be able to view the same MPEG-4 file.

QuickTime still does some things that MPEG-4 can't (and vice versa), such as QTVR. Also, an .mov video is not the same thing as an .mp4 video, even though you can export both from QT Player Pro.

There's nowhere near enough room here to mention all of the cool new features of QuickTime 6. If you want the full monty, get the "QuickTime 6 Specification Sheet" PDF at <http://www.apple.com/mpeg4/> as well as background on MPEG-4 itself.

Sounds Good!

QuickTime 6 uses the MPEG-4 AAC audio codec (AAC=Advanced Audio Compression). For music fans, MP4 Audio is intended to replace MP3 as the standard for compressed audio.

MP4 Audio promises much higher fidelity at lower sample rates. I put this to the test by encoding two different sound files as both MP4 and MP3, at various sample rates. I chose two very different songs—a really noisy rock and roll song ("Bone Machine", The Pixies), and a classical track with great dynamic range ("Ode VII" from "Kanon Pokajänen," Arvo Part).

Using both a high quality stereo system and a studio quality set of headphones, I listened to my new sound files. The Pixies MP3 sounded "warbly" at 96 kbps and the "Ode" VII MP3 was almost unbearable. (My preferred MP3 bit rate is 160 or greater.)

The MP4s sounded fine at 96. If you're an audiophile you might want to encode at 112 or 128kbps. Most people won't hear the difference between 96 and 128.

iTunes v3 can play MP4 Audio, but you'll need an AppleScript and QT6 Player Pro to rip CDs

This summer, QuickTime 6 was introduced to the sound of the scratching of a lot of average users' heads IMHO. In this article I'll help you "suss" out what this means to you, the average QuickTime user.

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Why is QuickTime 6 so Great?

The huge leap forward for QT6 is its incorporation of the MPEG-4 standard. MPEG-4 is much more than a video/audio format; it is as rich and robust as QT because it was, in fact, based on QuickTime.

QT6 Player can play MPEG-4 files and if you upgrade to Player Pro, you can encode your audio and video files to MPEG-4.

Ok, So Why is Mpeg-4 so Great?

Imagine that the televisions made by Sony, Phillips and RCA could only receive a Sony, Phillips, or RCA TV signal, and that each of these standards had some unique features (e.g., interactive shopping or Web browsing) in addition to transmitting video and audio. You'd have to buy 3 different televisions to see all the different programming available!

Now imagine MPEG-4 as a new fourth, non-proprietary television standard—a signal that all future Sony, Phillips and RCA televisions could display, as well as their own, unique, proprietary signal. You might still need a Sony television to use the Sony Interactive Shopping channel, but you wouldn't need all those televisions just to see plain old television shows.

to iTunes. Get the script at <http://www.malcolmadams.com/itunes/itinfo/makeminmpeg4.shtml>. Of course you can always rip tracks one-by-one with QT6 Player Pro and bring them into iTunes manually.

The iPod does not currently support MP4 Audio; I was unable to find any information on whether it will support it in the future. Also, your MP3-capable car stereo won't play MP4 Audio.

Looks Great!

As well as MP4 Audio performs, it's even better with video! I tested it with some DV footage I shot this past summer in Switzerland. I edited the clips down to a 1:16 'long' sequence and a 0:30 'short' sequence, and then encoded the videos with both Sorenson 3 Pro and MPEG-4 at a window size of about 320 pixels wide. You can see the sample movies at <http://www.30fps.com/AMUG/>

Sorenson 3 Pro came in at an impressive 524kb for the short video and 1.2mb for the long version, while the MPEG-4 encoded video weighed in at 1.3mb and 3.2mb.

Clearly, Sorenson 3 Pro is still the professional standard for creating great-looking, compact web video; however, it definitely has a learning curve, and it's also a lot more expensive than the \$29.95 you'll shell out for QT6 Player Pro and the ability to export MPEG-4.

For the hobbyist or average person who wants to share their video over the web, exporting your QuickTime video as an MPEG-4 is very easy and the price/performance ratio is impressive.

Embedding an MPEG-4 on a web page is the same as embedding a QuickTime movie. The only difference is your file extension will be .mp4 instead of .mov.

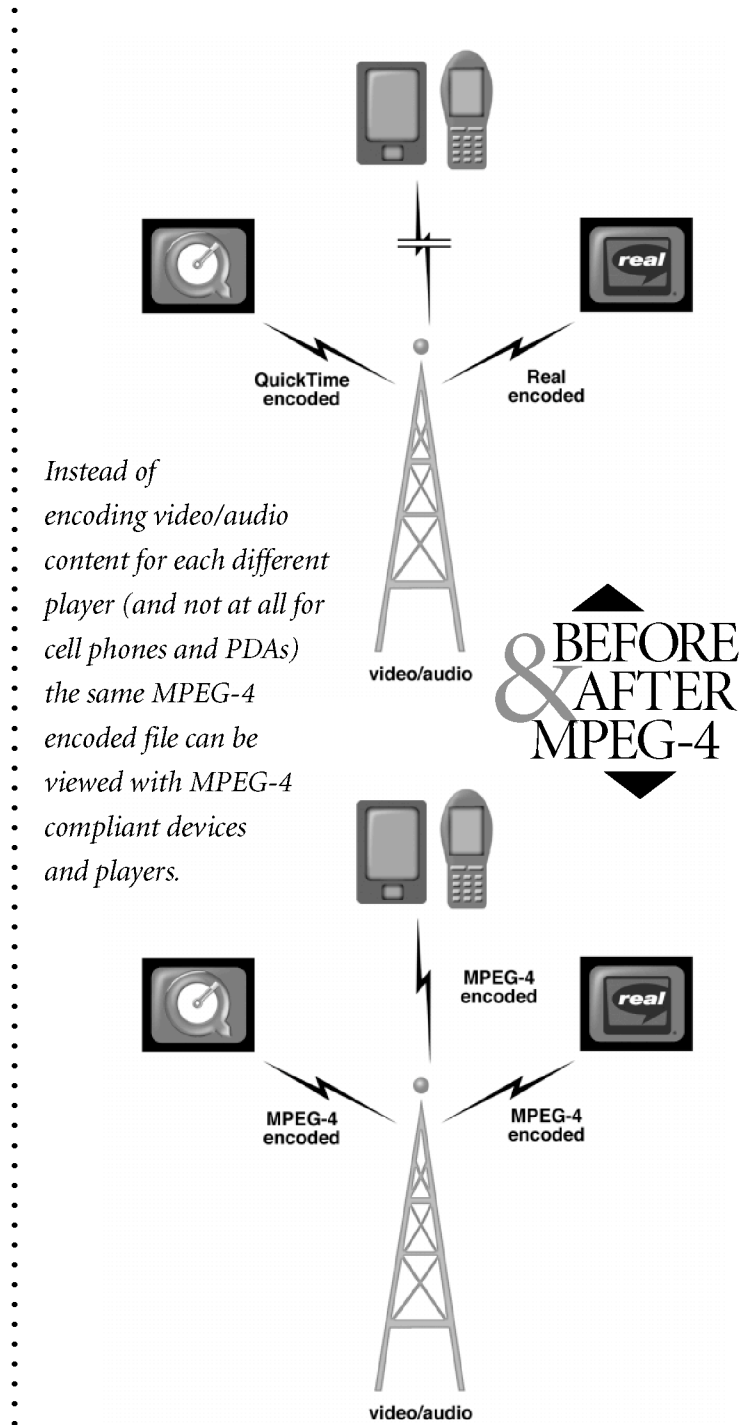
The Last Word

As a QuickTime monkey, I'm very pleased with MPEG-4, especially its ability to make a truly compact, great-looking video. QT6 also has some cool features that aren't MPEG-4-related such as gamma correction (which I didn't have space to get into here). Check out the QT6 Spec Sheet mentioned above to read more about it.

So, should you upgrade? If you like to share your audio and video files over the Web, QT6 Player Pro is well worth the \$29.95. Between the smaller file sizes and the ability to play MPEG-4 with a variety of players and devices, you'll be able to share your content with a much wider audience.

It's disappointing that the iPod doesn't (yet) handle MP4 Audio; if or when it does, it will be the ideal audio format for Mac-heads.

If you only use QuickTime to view media files from others, you probably won't be missing much if you don't upgrade right now; however, as MPEG-4 and QT6 content become more widespread, you may be missing out by not upgrading!



Instead of encoding video/audio content for each different player (and not at all for cell phones and PDAs) the same MPEG-4 encoded file can be viewed with MPEG-4 compliant devices and players.

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