Appendix D
Compatibility Issues

This appendix discusses QuickTime compatibility issues in the following areas:

- differences between Windows, Mac OS X, and older versions of the Mac OS
- browser issues
- issues involving CPU speed
- compatibility with older versions of QuickTime
- compatibility with other plug-ins

Windows and the Mac OS

QuickTime is virtually the same on Windows and all Mac OS computers, and content created on one platform almost always plays without modification on both, so there are very few compatibility issues. There are a few exceptions that you should be aware of, however.

Fonts

Windows and the Mac OS come with different sets of fonts. If you use text tracks in a movie, a substitute font is used when the movie is played on a system that lacks the specified font. Depending on what fonts you use, the available substitute may be almost identical or strikingly different.

There are three Mac OS fonts that have almost-identical counterparts on Windows: Times (Times New Roman), Courier, and Helvetica (Arial).

Tip The Verdana font is installed on most Windows and Mac OS systems and is rendered in almost exactly the same size on both platforms.

Text of a given point size is generally rendered at a larger screen size on Windows computers. Preview your text on a Windows computer to make sure there is enough space to display it properly. Preview text on a Macintosh to make sure the smaller text has acceptable line breaks. You may have to compromise to get good results on both platforms. For a complete discussion of cross-platform fonts, including numerous screen shots of fonts at specific sizes on Windows and Mac OS, see

```
developer.apple.com/internet/fonts.html
```

Alternately, you can include two text tracks in your movies—one optimized for Windows and one for Macintosh. Text tracks are generally quite small, so this is a practical approach. Unfortunately, QuickTime Player doesn't currently provide a way to mark tracks as alternates based on the viewer's operating system, so you need to use a wired sprite action to enable one track and disable the other based on the operating system. It's not terribly difficult, but you need LiveStage Pro to do it.

Another approach is to use alternate movies instead of alternate tracks. You don't need LiveStage for this—you can use the free XMLtoRefMovie tool to play one movie for viewers with Mac OS and another for viewers with Intel-compatible processors. For details, see "Using XMLtoRefMovie" (page 163).

You can get identical text appearance on all platforms by pre-rendering the text as video, as described in "Burning Text into a Video Track" (page 413). It generally takes more bandwidth to deliver text this way, but for rare or decorative fonts it may be the best alternative.

Starting with QuickTime 5, you can also use Flash text. If you tell Flash to "break apart" the text, it turns text into vectors that look the same on Mac OS and Windows. This makes the movie larger, however.

Is QuickTime Installed?

QuickTime is installed on all Macintosh computers at the factory and updated automatically when users update the Mac OS. QuickTime is common on Windows computers, but not as universal. You can test for QuickTime's presence—the steps vary slightly depending on the viewer's operating system and browser.

If the viewer has a Netscape or Mozilla browser for Windows or the Mac OS, or Internet Explorer for the Mac, you can use JavaScript to test for the QuickTime plug-in.

For Internet Explorer on Windows, you can use VBScript to test for the QuickTime ActiveX control. You can also use the `<OBJECT>` tag and the `CLASSID` parameter to have Internet Explorer automatically test for the QuickTime ActiveX control and offer to install it if it's not already there.

There's an example Web page that contains both JavaScript and VBScript to detect QuickTime in Chapter 9, "It's in the Script: Basic JavaScript."

In many ways the best and simplest solution is to use QuickTime itself to detect whether QuickTime is installed and configured, as described in "Detecting the QuickTime Plug-in" (page 126).

Browsers

The QuickTime plug-in works equally well inside Internet Explorer and Netscape browsers, but there are some ancillary functions that are different.

JavaScript

Internet Explorer for the Mac does not allow JavaScript to communicate with plug-ins; consequently you cannot use JavaScript to control QuickTime or any other plug-in.

Explorer does allow JavaScript to detect and communicate with ActiveX controls on Windows computers, and you can detect the QuickTime ActiveX control this way. The QuickTime ActiveX control is scriptable in QuickTime 6 and later.

You can call JavaScript functions from within a QuickTime movie by passing a JavaScript function name and parameters in place of a URL—in an `HREF` parameter, for example. Some people have reported that even this functionality is unreliable in Internet Explorer, however, and recommend that you instead pass the URL of a Web page, perhaps targeted to a hidden frame, containing JavaScript code that executes on loading.

A bug in Internet Explorer 4.5 caused it to ignore `JavaScript:` URLs. This bug is fixed in later versions.

VR in Tables

An unpleasant flashing on the screen can occur when a QuickTime VR panorama or object movie is placed inside an HTML `<TABLE>` element in

Internet Explorer. The flashing occurs when the mouse cursor is outside the display area of the QuickTime VR movie, but still inside the table cell that holds the movie.

If possible, you should avoid putting QTVR movies inside tables for this reason. If you must put a QTVR movie in a table, try to arrange things so that the movie exactly fills its cell—make sure there is no text in the same cell, not even a blank space between the <DATA> tags and the <EMBED> tag, and set the CELLPADDING and CELLMARGIN parameters to zero.

HTML

There are numerous small differences in the ways that different browsers interpret HTML. None of them are specific to QuickTime, but they can affect the appearance and behavior of Web pages used to display QuickTime content. For example, using the Align parameter inside an <EMBED> tag can cause movies not to display.

Various versions of Netscape browsers and Internet Explorer support and interpret the <OBJECT> tag in a baffling variety of ways. We recommend using the <OBJECT> tag *only* with the CLASSID and CODEBASE parameters set to specify the QuickTime ActiveX component, and with an <EMBED> tag inside the <OBJECT> </OBJECT> tagset. Currently, all browsers except Internet Explorer for Windows ignore such an <OBJECT> tag and execute the nested <EMBED> tag instead, while IE for Windows reliably uses (or offers to install) the QuickTime ActiveX control specified in the CLASSID.

Tip Always view your Web pages on both Macintosh and Windows computers, using every version of every browser that you plan to support. It's worth the trouble.

ActiveX

You need the ActiveX control included with QuickTime 5.0.3 or later to play QuickTime movies in Internet Explorer for Windows, version 5.5, SP2 or later. Internet Explorer for Windows no longer works with Netscape-style plug-ins. Only ActiveX controls are supported.

The original ActiveX control supplied with QuickTime 4.1 cannot be used with the new versions of Internet Explorer; it was intended solely to allow scripts to detect QuickTime. The ActiveX control included in QuickTime 5.0.3 and later is fully functional.

The ActiveX control can be downloaded separately and added to an existing version of QuickTime.

Internet Explorer for Windows will automatically offer to install the QuickTime ActiveX control (if it is not already installed) if a Web page includes an <OBJECT> tag with the following parameters:

```
CLASSID="clsid:02BF25D5-8C17-4B23-BC80-D3488ABDDC6B"
CODEBASE="http://www.apple.com/qtactivex/qtplugin.cab">
```

Users with QuickTime 3 or later can add the ActiveX control without downloading a new version of QuickTime. If a compatible version of QuickTime is not already installed on the user's computer, the ActiveX control will offer to download the current version of QuickTime whenever the browser encounters a page that includes QuickTime content.

It is not necessary to use the <OBJECT> tag to invoke the QuickTime ActiveX control. Once installed, the ActiveX control is called whenever Internet Explorer for Windows is asked to display QuickTime content, so the <EMBED> tag works fine.

CPU Speed

QuickTime has a number of features that let you deliver high-quality content over low-bandwidth connections. This is generally accomplished by putting a compact description of the content inside the movie and using the viewer's computer to recreate it when the movie is played.

Text tracks, MIDI music, QuickTime effects, and advanced compressors such as Sorenson and QDesign all place a relatively high demand on the viewer's CPU in order to minimize bandwidth.

If you want your movies to play smoothly on older and slower computers, follow these guidelines (bear in mind that you may lose quality or increase bandwidth requirements by doing so):

- Don't overlay a video track with alpha layer compositing on another video track, especially if they are both with high-bandwidth video compressed with a demanding decompressor such as DV.
- Use MPEG-4 audio and video, rather than Sorenson video and QDesign audio compression; substitute Cinepak video and IMA 4:1 audio for very slow systems.
- Use a lower sampling rate for sound (22 kHz or 11 kHz), in mono.
- Don't use more than a single MIDI music track. Use as few voices as possible—preferably no more than four or five.

- If you use a text track (instead of mixing the text into the video), avoid scrolling, keyed text, and anti-aliased text. Certainly don't combine them.
- Mix all video, sound, text, and effects tracks into a single sound track and a single video track by opening the movie in QuickTime Player, choosing Export, then choosing Movie to QuickTime Movie from the pop-up menu.

You don't necessarily need to follow *all* these guidelines—play your movie on the slowest computer you plan to support and apply the guidelines one by one until it plays smoothly. It's often enough to reduce the audio sampling rate and turn off anti-aliasing, for example, or to simply combine multiple video and sound tracks.

Versions of QuickTime

New features are added to QuickTime in every release. In general, you'll get the best results by using whatever features you need in your movies and including a Get QuickTime button on your site for people who need to upgrade. Still, in some cases you might consider leaving out an unnecessary feature, or deferring it until a little more time has passed, to reach the broadest possible audience.

QuickTime 2.1

This is the oldest version of QuickTime that you'll ever encounter. It's the last version of QuickTime available for Windows 3.1. All later versions of QuickTime for Windows require Windows 95 or later.

If you need to support this version of QuickTime, bear in mind that it's probably running on a slow '386 or '486 processor with an 8-bit or 16-bit graphics card and an obsolete operating system. Follow these guidelines for movies that need to play in QuickTime 2.1:

- Use QuickTime Player's Export command (Movie to QuickTime Movie) to reduce your movie to one sound track and one video track. Compress the video using Cinepak, set to thousands of colors. Compress the audio using IMA 4:1. Don't include any other track types.

- Consider using the <A HREF> tag instead of the <EMBED> tag, in case the browser is an older version of Internet Explorer. Don't use any of the QuickTime <EMBED> tag parameters—stick to the browser parameters.
- If you're delivering the movie on disk, use exclusively eight-dot-three filenames, such as maxlengt.htm—a maximum of eight characters, followed by a period and a three-letter file extension.
- If you're delivering the movie on CD-ROM, use ISO-9660 format (no Joliet extensions) and keep the data rate below 200 Kbytes/sec.

Obviously, restricting yourself to this kind of movie severely limits what you can do.

QuickTime 3

This is the oldest version of QuickTime you're remotely likely to encounter. It supports most QuickTime track types. It also supports QTVR, most simple wired sprite actions, and reference movies made using MakeRefMovie, Cleaner, or XMLtoRefMovie. It is compatible with the new QuickTime ActiveX control (but not scriptable using it).

If you need to be compatible with QuickTime 3, don't use the QTSRC parameter—use reference movies instead. Embed the image or movie that you would normally pass in the SRC parameter as the default movie.

You can't use Flash, real-time streams, SMIL, or MPEG-4 with QuickTime 3.

QuickTime 3 can play media compressed using the original QDesign Music Codec and Sorenson video codec, but not audio compressed using QDesign 2 or Sorenson 3.

QuickTime 3 can't play back MP3 audio.

You can't control QuickTime 3 using JavaScript, and you can't detect it using VBScript. QuickTime 3 does not have an ActiveX control. Adding the QuickTime 5 or later ActiveX control allows you to use QuickTime 3 and later with Internet Explorer 5.5 or later for Windows.

QuickTime 4

QuickTime 4 (including 4.1.2) is very rarely found. In addition to QuickTime 3 media, it can play Flash 3, real-time streams, and MP3 audio.

QuickTime 4 supports most of the <EMBED> tag parameters, including the QTSRC parameter.

QuickTime 4.1

QuickTime 4.1 adds support for SMIL, variable-bit-rate (VBR) MP3 audio, M3U playlists.

This is the oldest version of QuickTime that can be controlled using JavaScript, and introduces the `JavaScriptEnabled` `<EMBED>` parameter. It cannot be controlled using JavaScript in Internet Explorer, however, only Netscape and similar browsers using the Live Script interface.

QuickTime 4.1 also adds the Browser Plug-in item to the QuickTime Settings control panel, allowing you to specify which MIME types QuickTime should handle.

There is a bug in QuickTime 4.1 that affects QTVR hot spots when played in the plug-in. The work-around is to double-reference any hot spots. For details, see "Hot Spots and Multinode Panoramas" (page 587). This bug is corrected in 4.1.2.

QuickTime 4.1.2

This version fixed a number of bugs in 4.1, including the VR hot spot bug.

QuickTime 4.1.2 also added the ability to detect QuickTime using VBScript in Internet Explorer for Windows. This version of the ActiveX control is not scriptable, however.

Adding the QuickTime 6 or later ActiveX control to QuickTime 4.1.2 or later makes QuickTime scriptable in Internet Explorer for Windows using JavaScript. Use the `<OBJECT>` tag with the QuickTime `ClassID` and `Codebase` to trigger the ActiveX download.

QuickTime 5

QuickTime 5 is the oldest version of QuickTime still found in any significant numbers. Version 5.0.3 is the most common, as it is sometimes used by people who want QuickTime Pro and have a QuickTime 5 key, but not a QuickTime 6 key.

QuickTime 5.0

This version was released for OS X version 1.0 and for Mac OS 9 as a bundle with certain hardware graphics accelerators. There should be very few copies still in circulation, as they will automatically upgrade themselves as soon as they are attached to the Internet.

It shares the feature set of QuickTime 5.0.1, with the exception of media skins.

QuickTime 5.0.1

This was the first general release of QuickTime 5 for Mac OS 8, Mac OS 9, and Windows. It was not available for Mac OS X. It added a number of features:

- cubic VR
- media skins
- new MIME type (`.qtl/application-quicktimeplayer`) that launches QuickTime Player from an HTML text link
- XML importer that allows lightweight text files to stand in as QuickTime movies and to specify playback settings such as full-screen mode
- wired text, wired actions for VR, lists, XML data exchange
- support for SoundForge and DLS-2 sound fonts
- MPEG-1 playback on Windows
- improved DV codec efficiency, allowing DV cameras to be used by broadcasting applications
- support for Flash 4, including editable text fields
- SMIL support for clip-begin, clip-end, full-screen, and pre-roll attributes
- export from QuickTime Pro supports creation of Fast Start VR panoramas and object movies, splitting of multinode panoramas into multiple single-node panoramas with URL links
- automatic download of missing QuickTime components, including third-party components
- extended AppleScript support, including setting full-screen mode and quit when done from AppleScript
- full support for relative URLs in QuickTime Player
- URL extensions (`E < >`) that allow you to attach `<EMBED>` tag parameters to a URL
- `AllowEmbedTagOverrides` parameter for `<EMBED>` tag
- support for a start time as part of the `AUTOPLAY` parameter
- ability to jump between discontinuous chapter list entries in QuickTime Player

QuickTime 5.0.2

QuickTime 5.0.2 fixes some minor bugs and introduces a few new features.

Most notable are the Sorenson 3 codec and the ability to add other media types to MPEG-1 video and MPEG-1 layer 2 audio in QuickTime Player.

QuickTime 5.0.3

QuickTime 5.0.3 adds an ActiveX version of the QuickTime browser plug-in that works with Internet Explorer for Windows, version 5.5/sp2 and later.

The ActiveX control is downloaded automatically when needed, if Internet Explorer encounters an `<EMBED>` tag that specifies the QuickTime `ClassID` and `CodeBase`.

The ActiveX control is compatible with QuickTime 3 and later.

QuickTime 6

QuickTime 6 introduced a number of new features, most notably MPEG-4 authoring and playback and a scriptable ActiveX control for Windows. There are several different versions, with (mostly) minor differences.

QuickTime 6.0, 6.01, and 6.03

QuickTime 6.0 introduces the ability to play Flash 5 media, including the greatly enhanced set of Flash actions and scripts.

QuickTime 6.0 and later can play and encode MPEG-2 software with an additional download from Apple, or in conjuction with other software that encodes (such as DV Studio Pro or iDV) or decodes (DVD Player software).

QuickTime 6.0.1 adds the ability to create, play, and stream MPEG-4 files containing audio, video, or both. The MPEG-4 video and audio (AAC) codecs can also be used in QuickTime movies, together or individually, and mixed with other QuickTime media, such as Flash, VR, and skins.

QuickTime 6.01 was intended as the last release of QuickTime for Mac OS 8, Mac OS 9, or Windows 95. QuickTime 6.03 was later released as a security bug-fix for these operating systems however. You should upgrade any 6.0x system to 6.02 or later to eliminate this security problem.

QuickTime 6.1 and 6.1.1

QuickTime 6.1 and 6.1.1 share essentially the same feature set. QuickTime 6.1 was not released for Windows due to an installer problem (by the time it was fixed, version 6.1.1 was almost ready and the two were combined).

QuickTime 6.1 (and 6.1.1) are bug-fix releases with a few notable exceptions:

An improved fullscreen mode was added that takes advantage of hardware acceleration and does not change screen resolution.

The ActiveX control for QuickTime 6.1 and later is scriptable in Internet Explorer for Windows. This ActiveX control is compatible with QuickTime 3 and later, and adds scriptability in Explorer for Windows to QuickTime 4.1 and later.

The Mac OS X version includes support for PDF and JPEG2000 media, as well as DVC-50 (DVCPro) compression.

QuickTime 6.2 and 6.3

QuickTime 6.2 was released for Mac OS X only, largely to support new features of iTunes and the Apple music store. It also allows XML import of formatted unicode text, which was formerly quite difficult, and support for 8-bit unicode.

QuickTime 6.3 provides bug fixes for 6.2 and brings QuickTime Windows to parity with Windows for Mac OS X. It also adds support for third-generation digital telephone delivery (3GPP) of audio, video, and text, as well as import, export, and creation of 3GPP text. Support for 3GPP audio and text require a separate download, much like the one for MPEG-2, for licensing reasons.

QuickTime 6.3 also includes improvements to the AAC audio codec and to full-screen video mode.

Other Plug-ins

There are two different compatibility issues concerning the QuickTime plug-in and other plug-ins: plug-ins that can play some QuickTime movies and media that can be played by multiple plug-ins (including QuickTime).

Plug-ins That Can Play QuickTime Movies

There are a few plug-ins available besides the QuickTime plug-in that can play some QuickTime movies. There are only two that you need to be con-

cerned about: Windows Media Player and the open-source UNIX movie player.

QuickTime Player and the QuickTime plug-in are not directly available for UNIX (or Linux, or IRIX, or Solaris). However, Crossover software (`www.codeweavers.com`) allows UNIX and Linux users to play QuickTime movies using the QuickTime for Windows browser plug-in and ActiveX controls, and this seems to be a satisfactory solution for most people.

The OpenQuickTime movie player for UNIX is also under active development by the open source community (`www.openquicktime.org`), and can play most movies that are compatible with QuickTime 4 and earlier.

Windows Media Player is also able to play simple QuickTime movies that are compatible with QuickTime 2.1. There are two circumstances where you might want to make your QuickTime movies compatible with Windows Media Player.

One case is where you want to provide a movie that absolutely everyone can see. If you make your movies QuickTime 2.1 compatible—one Cinepak video track and one uncompressed or IMA 4:1 sound track—they can be played by the widest possible audience—anyone with Windows Media Player, any version of QuickTime, or the open-source movie player for UNIX.

Of course, this limits you to 1980s technology—long downloads, blurry postage-stamp video, and high-bandwidth audio. No text tracks, MIDI tracks, Flash, sprites, or MP3. No high-quality, low-bandwidth Sorenson video or QDesign audio. Least common denominator stuff—it's just sad.

The other circumstance arises because earlier versions of Windows Media Player had an unfortunate tendency to take over the QuickTime movie MIME type (`.mov` files—`video/quicktime`) without consulting the user, so if you embed QuickTime movies in your website using the `SRC` parameter, a few of your viewers might see only whatever an old version of Windows Media Player shows them (typically not much).

You can avoid this problem by passing a QuickTime image file in the `SRC` parameter (`SRC="UNeedQT4.qtif"`) and passing your QuickTime movies in the `QTSRC` parameter, as described in "Using QuickTime to Play Files in Other Formats" (page 32).

Alternatively, you can pass a reference movie with an embedded default movie. People with versions of QuickTime prior to QuickTime 3, and people whose `video/quicktime` MIME type has been snatched by Windows Media Player, see the embedded default movie, so it needs to be QuickTime 2.1 compatible.

Make the default movie a Cinepak-compressed image that says something like this:

"You need QuickTime 3 or later to see this movie. Get it free at www.apple.com/quicktime/download/."

There's a movie that says exactly that, ready and waiting for you in the Basic folder of the CD—UNeedQT.mov. Feel free to use it on your website.

If the user is running Internet Explorer for Windows, you can invoke the QuickTime plug-in to play any media that QuickTime understands, regardless of MIME type, by using the <OBJECT> tag with CLASSID set to clsid:02BF25D5-8C17-4B23-BC80-D3488ABDDC6B and CODEBASE set to http://www.apple.com/qtactivex/qtplugin.cab.

Media Supported by Multiple Plug-ins

Some media types, such as WAV, AIFF, and MP3 audio, AVI movies, Flash (.swf) files, and MPEG-4 streams, can be played by various plug-ins, including QuickTime.

Who Gets It?

When you install QuickTime on a Mac, it selects the QuickTime plug-in to handle all these media types except Flash.

When you install QuickTime on Windows, it registers the QuickTime plug-in only for QuickTime movies (.mov), QuickTime images (.qti, .qtif), and System 7 and AIFF audio (.snd and .aif).

Other plug-ins may be selected to handle some or all of these media types, or the user may select QuickTime for all of them. There is no way for you to know which plug-in is selected for a given media type on a viewer's computer.

What to Do?

In some cases, such as AVI movies, you should probably just leave it to the viewer's discretion. Include the QuickTime <EMBED> parameters that you want, but realize that they may be ignored because the viewer is using a different plug-in.

In most cases, you get the best results by either converting the media into a QuickTime movie, as described in "Importing Media into QuickTime" (page 30), or telling the browser to use the QuickTime plug-in by specifying a .qti file in the <EMBED> tag's SRC parameter and using the <OBJECT> tag, as described in "Using QuickTime to Play Files in Other Formats" (page 32).

Sounding Off

Audio files are a more ambiguous case. Netscape browsers and Internet Explorer each include a default plug-in that can handle uncompressed WAV and AIFF audio. If you're using uncompressed audio in WAV or AIFF format, you might not want to restrict your audience to those who have QuickTime.

If you use the right parameters, you can embed an audio file so it plays using QuickTime or either of the default browser plug-ins. There are a few tricks to making this work because you need to pass different parameters to accomplish the same thing in different plug-ins. Each plug-in ignores the parameters it doesn't understand, so you load your `<EMBED>` tag with parameters for all the possible plug-ins. No kidding, this actually works.

For background audio, the main thing is to use both the `AUTOPLAY` and `AUTOSTART` parameters. Here's the HTML to automatically play a sound in the background in a continuous loop:

```
<EMBED SRC="Sound.wav" HEIGHT="2" WIDTH="2" HIDDEN="True"
AUTOPLAY="True" AUTOSTART="True" LOOP="True">
```

Internet Explorer's default audio plug-in uses the `PLAYCOUNT` parameter instead of the `LOOP` parameter, but it defaults to continuous looping when the `HIDDEN` parameter is true, so in this case it doesn't need to be specified.

- To loop continuously, set `LOOP="True"`.
- To play once, set `LOOP="False" PLAYCOUNT="1"`.
- To play *n* times, set `LOOP="`*n*`" PLAYCOUNT="`*n*`"`.

To play a sound with a controller, you need to allot enough space for the plug-in with the largest controller and include both the `CONTROLLER` and `CONTROLS` parameters. You're allocating too large an area for the QuickTime controller, so set an appropriate background color to fill the gap.

Here's what the HTML looks like to play a sound with a controller:

```
<EMBED SRC="Sound.wav" HEIGHT="60" WIDTH="200"
CONTROLLER="True" CONTROLS="console" BGCOLOR="#000000" >
```

To have the sound play automatically, you can set both `AUTOPLAY="True"` and `AUTOSTART="True"`.

The Flash Factor

One of the most frequently asked questions regarding multiple plug-ins concerns Flash. A number of people would like to have `.swf` files play in the Flash player if it's available and in the QuickTime plug-in as a fall-back for people who have QuickTime but not Flash.

Sadly, this is not possible. Once QuickTime is selected to handle the Flash media type, it becomes the default player for Flash media even if the Flash player is installed. But QuickTime doesn't automatically select the QuickTime plug-in to handle `.swf` files—that kind of media hijacking is rude, to say the least. The user has to manually select the Flash MIME type in the QuickTime Settings panel.

You can force QuickTime to handle `.swf` files by using the `QTSRC` parameter, or by importing the `.swf` file into a Flash track in a QuickTime movie.

MPEG-4

One of the truly wonderful things about MPEG-4 is that it is a genuine standard. QuickTime can play it, RealPlayer can play it, Envivio can play it, Windows Media Player can play it (using a plug-in), and there are more players becoming available all the time.

Your obvious choice is whether to allow the user's browser to pick a player or to force the browser to use QuickTime. Unfortunately, neither the `<EMBED>` tag nor the `<OBJECT>` tag allows you to specify a preferred player or a list of fallbacks. You either specify a single player or take pot luck. One gives you the broadest possible audience, the other allows you to take advantage of all the features QuickTime has to offer, and to exercise some control over how your media is presented.

Use the `<OBJECT>` tag with a `ClassID` and `CodeBase`, or the `<EMBED>` tag with the `QTSRC` parameter set to a `.mov` or `.qti` file, to force the browser to use QuickTime. Use just the `<EMBED>` tag with `SRC=your.mp4` to take pot luck.