Video Files

Mpeg Files:

MPEG, which stands for Moving Picture Experts Group, is the name of family of standards used for coding audio-visual information (e.g., movies, video, music) in a digital compressed format. The major advantage of MPEG compared to other video and audio coding formats is that MPEG files are much smaller for the same quality. This is because MPEG uses very sophisticated compression techniques. MPEG file extensions can be .mpg, .mpeg, or .mpe.

MP4 is a multimedia container format standard specified as a part of MPEG-4. It is most commonly used to store digital video and digital audio streams, especially those defined by MPEG, but can also be used to store other data such assubtitles and still images. Like most modern container formats, MPEG-4 allows streaming over the Internet. A separate hint track is used to include streaming information in the file. The only official filename extension for MPEG-4 files is**.mp4**.

Avi Files:

AVI stands for Audio Video Interface. AVI is used in Windows operating systems to provide sound and video. It may drop frames to keep the sound playing, thereby allowing the format to work on almost any Windows machine. The file extension for AVI files is .AVI.

Quicktime Files:

QuickTime is Apple's award-winning, industry-standard, software architecture for creating, playing and streaming digital media for Mac OS and Windows. The file extension for quicktime files is either .qt or .mov.

WMV Files:

Windows Media Video (WMV) is a generic name for the set of video codec technologies developed by Microsoft. It is part of the Windows Media framework. The codecs were originally developed as proprietary codecs for low-bitrate streaming applications. However, in 2003 Microsoft drafted a video codec specification based on its Windows Media Video version 9 codec and submitted it to SMPTE for standardization. The standard was officially approved in March 2006 as SMPTE 421M, thus making the Windows Media Video 9 codec no longer a proprietary technology. Earlier versions of the codec (7 and 8) are still considered proprietary as they fall outside the SMPTE 421M standard. The video stream is often combined with an audio stream of Windows Media Audio and encapsulated in Advanced Systems Format files, carrying the .wmv or .asf file extensions. WMV files are played by players such as MPlayer or Windows Media Player, the latter being only available for Microsoft Windows and Macintosh systems.

NOTES:

1. There are several more video formats on the web that are not listed here. Video clips are fairly large, which is one reason they are not that common on most web sites.
2. You can find some video clips at <http://dir.yahoo.com/Entertainment/Movies_and_Film/Multimedia/Video_Clips/>.
3. You can use google to search for video and audio clips by entering +audio+video+clips.
4. To save a video clip to disk in IE, right click on the link to the video, and then click 'save target as'.

Embedding Video Clips:

Embedding a video file on a web page means that the viewer's associated video controller will be loaded onto the page, at the time that the browser loads the page.  
  
Here is an [example](http://fog.ccsf.org/~srubin/embvid.htm) of a web page that contains embedded videos.

Here is the coding of one of the embedded video files, julia.qt:

<embed src="julia.qt" height="140" width="160" autostart="false" loop="false" controller="true" />

autostart="false" means that the quicktime file will NOT start playing automatically right after the page is loaded. This is generally a good idea. The viewer must click the start button on the video controller for the file to play.

height="140" - means the controller will be 140 pixels high.

width="160" - means that the controller will be 160 pixels wide.

loop="false" - means that the quicktime file will not keep playing continuously after the viewer clicks start.

controller="true" - This adds user controls to the movie.

Notes:

1. A very common error in the failure to display the controller for a video file is not declaring the width and height to be large enough. See this [example](http://fog.ccsf.edu/~srubin/vidCtl.html). Note that a video without a controller will still play if the user clicks on the video.

2. If you are going to embed a video file I suggest that you also link to it. This will bring up a video controller outside of the web page, and the video file will play after it is downloaded. Whether your video file is linked or embedded, you should consider indicating the size of the file in parentheses.

3. You can also use the Quick Time Object (QTObject) for embedding video files. It works cross browser and cross platform. Here is an [example](http://fog.ccsf.edu/~srubin/embvidO.html).

4. You can embed a video file using just the object tag. The object tag will validate for XHTML. See the second example on this [page](http://fog.ccsf.edu/~srubin/h4Object.html).

5. For HTML5, you can use the video tag, for example:

<video width="200" height="150" controls="controls">  
<source src="chimp.mpeg" type="video/mpeg">  
<source src="chimp.ogg" type="video/ogg">  
Your browser does not support the video tag.  
</video>

I needed to convert chimp.mpeg into an ogg file for use with this tag. The OGG Converter (allows a Free Trial, but costs 19.95 to buy it).  
  
Converts MP3, WAV, WMA, OGG from one to another  
Supports Resampling of MP3, WAV, WMA, OGG Vorbis

See this example:

<http://fog.ccsf.edu/~srubin/multi5.html>  
  
I found a free video converter:  
<http://www.mirovideoconverter.com/>  
  
Here's another free video converter:  
<http://www.freemake.com/free_video_converter/>  
  
A super simple way to convert almost any video to MP4, WebM (vp8), Ogg Theora, or for Android, iPhone, and more. 100% Free and open-source.  
  
6. The HTML5 <video> element also has methods, properties, and events.

There are methods for playing, pausing, and loading, for example. There are properties (e.g. duration, volume, seeking) that you can read or set. There are also DOM events that can notify you, for example, when the <video> element begins to play, is paused, is ended, etc.

See this example:

<http://fog.ccsf.edu/~srubin/video5.html>  
  
7. For HTML5, the embed tag will not validate. You should use the video tag or the object tag. If you use the object tag, you must use the type attribute.  
  
For example:  
  
<object height="136" width="155" type="video/qt">  
<param name="src" value="julia.qt" />  
<param name="controller" value="true" />  
<param name="autostart" value="false" />  
  
<object type="video/quicktime" data="julia.qt" height="136" width="155" class="qt">  
<param name="controller" value="true" />  
<param name="autostart" value="false" />  
Error text.  
</object>