

Multimedia File Formats

The content of a Web page includes the copy that is contained in the HTML file. The content may also include related graphics, audio, video, or other media. HTML tags tell browsers where to find the media files and how to display them on the page.

Many media files can be played by a web browser without any special software. Some media files require a special program called a *plug-in*. A plug-in tells a web browser how to play a particular type of media file. Animated or enhanced graphics are one type of media that usually requires a plug-in.

Not all computer files are the same. Every file is stored in a particular format. Different kinds of data usually use different formats. *File extensions* tell you what kind of format files use. When you download a file from the Web, you should pay attention to its format. All formats are good for some purposes but not for others.

Image Formats

Images can be saved in many formats. Most of the images you find on the Web are GIF or JPG (or JPEG) files. PNG is another format that is becoming more popular. TIF (or TIFF) is the most common format for print publications.

- **GIF** (Graphics Interchange Format) is a good format for very simple graphics and graphics with *transparent*, or cut out, areas. GIF images are used for graphics that do not have many colors or much detail, such as logos and page banners. All modern web browsers display GIF files.
- **JPG or JPEG** (Joint Photographic Experts Group) provides adjustable quality images. JPG images can support many colors and are often used to show pictures in Web pages. This format enables you to compress images by removing data. All modern web browsers display JPG files. JPG is a good image format to use when both image quality and small file size are important.
- **PNG** (Portable Network Graphics) provides high-quality images and supports transparent, or cut out, areas. It does not remove data during compression. Most modern web browsers can display PNG images. PNG is a good choice when image quality is important.
- **TIF or TIFF** (Tagged Image File Format) provides very high-quality images. This format is a good choice for storing images and for print publications. Web browsers do not usually display TIF files.

Audio Formats

Sounds, like images, can be saved in many formats. One audio format that almost everyone is familiar with is MP3. Most audio formats were developed for either the Mac or Windows operating systems. However, players are available to support most formats on both platforms.

- **AIFF** (Audio Interchange File Format) is a very high-quality audio format that was developed by Apple*. It is not a common audio format on the Internet because files sizes are relatively large, but it is often used in recording sound because it can be easily converted to other formats.

- **MP3** (MPEG-1 Layer 3.) is probably the most popular audio format on the Internet. It is popular primarily because it can store CD-quality music in relatively small-sized files. MP3 is also multiplatform, which means it works easily on Mac and Windows operating systems.
- **WAV** (Waveform) was an early and very common audio format for Windows, but it can also be used on the Mac platform. It is not a common audio format on the Internet because uncompressed WAV files can be very large.
- **WMA** (Windows Media Audio) is a relatively new audio format developed by Microsoft* for the Windows operating system. It can provide high-quality sound in compressed file sizes, but is not as common as MP3.

Video Formats

Video, like images and audio, can be saved in many formats. Unlike image and audio formats, no video format appears to be the most popular format on the Internet.

- **AVI** (Audio Video Interleave) is a common video format for the Windows operating system. Like the WAV audio format, it has become less popular as the Internet has become the most common way to distribute audio files.
- **MOV or QT** (QuickTime Movie) was created by Apple and included with every Mac. Apple has developed a player for QuickTime that runs on Windows. You can play a QuickTime movie on a Windows operating system if the player has been downloaded and installed.
- **MPG or MPEG** (Motion Picture Experts Group) is a video format from the same organization that developed the MP3 audio format. The MPEG standard has different versions. MPEG-1 is a relatively common video format on the Internet because its compression produces small files. MP3 is the audio layer in MPEG-1.
- **WMV** (Windows Media Video) is a relatively new video format developed by Microsoft for the Windows operating system. Microsoft has developed a player for Windows Media for the Mac operating system. You can play a WMV file on a Mac if the player has been downloaded and installed.