

# Graphics Formats

## Everything to Know, and More

There are, understandably, many different kinds of formats for graphics on a computer. Why? Well, each time a new program came along, a new format was invented, made for that specific program. Then, when computer graphics became popular, different formats battled each other out: "Which is better?" Some formats offered features others did not. For instance, a PSD, or Photoshop Document, offers you the ability to keep your layers. A TIFF file can include an alpha channel. And GIF images can contain a script so that things "move," the animated GIF file.

Below are some commonly found graphics formats, and a little about each one.

Format	Full-Name	Good for?	Web-friendly?	Filename Extension
GIF	Graphics Interchange Format	Only uses 256 colors, but can present "crisp" edges through its compression. GIFs with 32 colors, for instance, are small. Great for text-effects in a webpage.	Yes. Offers transparency and animation.	.gif
JPEG	Joint-Photographic Experts Group	Photograph-style images. JPEGs, named after a group that defined the format, is really a JFIF file... these can be compressed at different levels, called a quality setting (1-12). The higher the quality, the larger the file size. JPEGs can include 16.7 million colors, or 24-bit color.	Yes. Today, probably the most popular format on the web.	.jpg
TIFF	Tagged, In-line File Format	TIFFs are a high-quality image that can use a special type of compression called LZW—which is lossless—meaning using the compression does not affect the quality of the	No. These are used for professional print-design applications.	.tif, .tiff

		image. Originally only a grayscale format, it was popular with scanning software. When used with PageMaker, you can change properties of the file within PageMaker, such as contrast and brightness.		
PNG	Portable Network Graphics format	PNGs come in several different flavors, and is a file format developed to combine the best of the JPEG and GIF formats in one new format. Unfortunately, it still has not gained wide acceptance. PNGs can include transparency, indexed color, plus the full 24-bit color gamut.	Yes, not supported in older browsers.	.png
PICT	Macintosh Picture	A OS-derived file format for the Macintosh. More or less equivalent to the Windows BMP format. Fairly good quality, 24-bit color, built-in compression.	No.	(none), .pict
EPS	Encapsulated Post Script	A 'default' format for PostScript, vector artwork. EPS file contain mathematical formulas for vector artwork, plus a small bitmapped "preview" image for programs that cannot render the vector artwork. EPS files can also include placed bitmapped artwork. Quality is the same for bitmaps as TIFF.	No.	.eps

Illustrator v. <i>n</i>	Adobe Illustrator file	Each version of Illustrator generates a new file format. For best compatibility, save as a version 5.5 Illustrator file.	No.	.ai
Adobe Acrobat	Portable Document Format	PDF is an open-source format developed by Adobe for the electronic publication of files, including font information, bitmap, and vector graphics. These files are generated for use with "reader" programs, such as Adobe Acrobat Reader. Illustrator 9 files (.ai) are actually PDF files in disguise. Apple's MacOS X uses PDF as its core technology in drawing graphics to the screen.	Yes, with plugin.	.pdf
PSD/Photoshop	Photo Shop Document	This is Photoshop's native file format, which does compress graphics, and maintains all of the functionality of a Photoshop file (layers, transparency, vector text, shapes, gradients, etc.) Great for archiving graphics projects.	No.	.psd
Flash	Macromedia Flash Movie	A file format developed by Macromedia for movies and vector graphics.	Yes, with plugin	.swf
SVG	Scalable Vector Graphics	Adobe's version of 'Flash;' Illustrator can produce both SWF and SVG file formats.	Yes, with plugin	.svg
Quicktime	Quicktime Movie	A movie file, which	Yes, with plugin	.mov, .moov,

		could include moving pictures, sound, MIDI tracks, etc.		.qtvr, etc.
MPEG	Motion Picture Experts Group	A suite of compression formats and standards design to compress moving video and audio. DVD discs are encoded using MPEG-compression. The most famous of MPEG standards is MPEG-1, audio layer III, or MP3.	Yes, with plugins.	.mpg, .mp3
AVI	Audio/Video Interleaved Format	A Windows-based format for movies and music; most often played with the Windows Media Player.	Yes, with plugin.	.avi
Digital Video	Digital Video	Native, high-quality format, for professional and now "prosumer" video applications. Only rivaled by HDTV format for quality. Native format of video used by iMovie and Final Cut Pro.	No.	.dv

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