

Graphic FILE FORMATS:

In a nutshell:

PNG , GIF, JPG for Web, Emails, Screens (RGB color format) (low resolution)

AI, EPS, PDF for Printing (CMYK color format) (high resolution)

For More Details:

There are many graphic file formats, if we include the proprietary types. The PNG, JPEG, and GIF formats are most often used to display images on the Internet. These graphic formats are listed and described below.

TIFF (.tiff & .tif) - Tagged Image File Format

The Tagged Image File Format is widely used in business, offices, and commercial printing environments. Initially TIFF was designed to alleviate the problems associated with fixed file formats and to eliminate the need for proprietary image file formats.

Web-based images

In web-based publishing, three file formats have become the widely accepted standard. Presently Internet browsers can only read JPG or GIF and PNG images, without the user installing a separate viewer or plug-in. On Web pages it is most common to find JPEG files used for photographic quality images.

JPEG (.jpg) - Joint Photographic Experts Group

JPEG (or JPG) uses a lossy compression structure that allows users to compress the data up to 1/10th of the original size. Such high compression results in a loss of image quality, but on Web pages the images are generally small and they need the compression to produce the smaller image file sizes for downloading.

Most graphics programs will also allow the user to select a compression factor as you save a JPEG file, so you can work with the image to achieve a good balance between file size and image quality. As the compression factor gets higher, more artifacts are introduced into the image, which are blurred to make them less noticeable. Using the jpeg format in print design is possible as long as you save the file at 100%. This because artifacts that occur when JPEG compression kicks in get even more noticeable when printed.

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GIF (.gif) - Graphic Interchange Format

The Graphic Interchange Format was developed by CompuServe to show images online when 8-bit video was commonplace. GIF uses a palette of up to 256 colors, which is why it is not suited to photo quality images where 24-bit color is required. GIF is best suited to common Web graphics like buttons, logos, text boxes, borders, and small animated images where the image is designed by the graphic artists and does not need more than 256 colors. A small background image for a Web page may only contain a few colors, in which case saving the image as a GIF file will produce the optimal file size for this type of graphic, especially when the graphic uses separate solid colors rather than shading.

Another important feature of a GIF file is that you can choose to save the background of an image as transparent. If you create a simple set of icons or text boxes for a Web page, saving these as transparent GIF files would allow you to implement the graphics on a variety of Web pages, regardless of the background colors you've used on the page. Most graphics programs will allow you to select a color within the GIF file to make transparent, or start with a transparent background and build your graphic up from there.

PNG (.png) - Portable Network Graphics

Portable Network Graphics is the third graphics standard supported by web browsers (though not supported by all browsers). PNG was developed as a patent-free answer to the GIF format but is also an improvement on the GIF technique. An image in a lossless PNG file can be 5% to 25% more compressed than a GIF file of the same image. PNG builds on the idea of transparency in GIF images and allows the control of the degree of transparency, known as opacity (which ranges from 0 to 100 percent).