

Graphic File Formats

Tiff

Tagged Image File Format (TIFF), the last F is dropped because of the PC platform, is used to exchange files between applications and computer platforms for use in the print world. The TIFF format supports LZW compression, a lossless compression method that does not discard detail from the image.

When saving an Adobe Photoshop image in TIFF format, users can choose to save as Macintosh or by IBM PC-compatible. TIFF is always smaller than EPS.

EPS

Encapsulated PostScript (EPS) file format is supported by most illustration and page layout programs. An EPS can be Raster (made of Pixels) or Vector (made of Points) EPS is usually larger because it can store special things in the header of the file that TIFF can not.

Those things are:

- A Clipping Path (Silhouette), this can be done on TIFF's now
- Spot Colors, such as Pantone®
- JPEG Compression (inside the EPS file, not raw JPEG)
- DCS (Desktop Color Separation), 5 file format
- Transfer Function (Curve)
- Fixed Line Screen (to override the Page Layout program)
- Photoshop EPS also supports transparent whites in Bitmap mode.

An image must be in EPS format if it is a Monotone, Duotone, Tritone, Quadtone, fixed line screen, transfer curve/function, or if it has a "Clipping Path" (silhouette).

GIF

Graphics Interchange Format. Is a highly compressed format that lets users download and view graphics very quickly. GIF has three main features.

The first GIF feature is interlacing. Interlaced images do not need to be completely downloaded before a user begins to see the image in an HTML document. Instead, they start by showing a very low-resolution version of the image. Then, the image becomes gradually sharper as more information is downloaded.

The second feature is a GIF's ability to have a transparent background. This means that the background color or image on a web page can be seen through, or around the GIF, instead of having it inside a rectangular box.

Finally, GIF images can be animated in programs such as Adobe® LiveMotion™.

GIF should never be used for print documents. They can not color separate. GIF images are stored in Indexed color space.

JPEG

The JPEG (**Joint Photographic Experts Group**) format was created so that true-color, 24-bit graphics could be used and create much smaller files. JPEG is in RGB color space and will not dither on the web.

JPEG uses a compression scheme that is lossy, which means that the more compression applied, the smaller the file will become, but, more of the original image's data will be thrown away. JPEG is designed for continuous-tone images, so it won't work well with line art or images that contain only a few colors.

JPEG files cannot be transparent, so they will always appear rectangular on a web page.

JPEG may be for printed pieces and is commonly used for Stock Photography or Digital Camera images. On some older printers, the JPEG format may not print or produce an error.

PSD

Adobe® **Photoshop™ Document** is the default file format for newly created images with layers. This encoded format is the only one that supports all available image modes (Bitmap, Grayscale, Duotone, Indexed Color, RGB, CMYK, Lab, and Multichannel). As well as other features such as guides, grids, alpha channels, and layers (including adjustment layers).

PICT

The PICT (**P**icture) format is widely used among Macintosh® graphics and page-layout applications as an intermediary file format for transferring files between applications. The PICT format is especially effective at compressing images that contain large areas of solid color. This compression can be dramatic for alpha channels, which often consist of large areas of white and black.

When saving an RGB image in PICT format, you can choose either a 16-bit or 32-bit pixel resolution. For a grayscale image, you can choose from 2, 4, or 8 bits per pixel. If you're using a Macintosh with QuickTime installed, you can also choose from four JPEG compression options for the file.

BMP

The BMP (**B**it **M**apped **P**aint) format is widely used among office based PC users. BMP is typically in RGB (Red, Green, Blue) color space and low resolution (72 ppi). This should be avoided by people who want to print. It is acceptable for on-screen use only. BMP contains black&white, 16-color, 256-color and Truecolor image data. The palletized 16-color and 256-color images may be compressed with run length encoding.

WMF

The WMF (**Windows MetaFile**) format is also widely used among office based PC users, it was developed by Microsoft. WMF is typically in RGB (Red, Green, Blue) color space and low resolution (72 ppi). This should be avoided by people who want to print. It is acceptable for on-screen use only.

It file consists of a set of Windows specific instructions to draw a Vector (point-based) graphic. This is an nice format for image interchange between Windows applications, but is not very useful on other platforms.

DCS

Desktop Color Separation (DCS), was developed by Quark Inc. and it enables certain applications, such as QuarkXPress, to print Low Resolution placement files with separations off and High Resolution data with separations on. When you save a CMYK image in Photoshop EPS format, you have the option of saving the image as an extension of the standard EPS format. Saving in DCS format creates five files: one file for each of the color channels in the CMYK image and a fifth master file corresponding to the composite color channel. To save the file in standard EPS format without the DCS option, choose Off. This method allows the RIP to process the file faster, because it is pre-separated.

DCS 2

Same as the DCS listed above, except that it now supports more than four colors from Photoshop. DCS 2 also creates one file, instead of five separate files on your hard drive