

## File Type Info

Vector vs. Raster	
Definitions	
<p><b>Vector</b> Made of hundreds of thousands of tiny lines and curves called paths that can be scaled to any size without losing resolution or causing pixelation. Think Math.</p>	<p><b>Raster</b> Made of millions of tiny squares called pixels. As you zoom in on a raster image you will see square outlines. Blending colors reduces appearance of pixelation. Think Art.</p>
Print Uses	
<p><b>Native Files</b> Also known as Source Files; these need to be sent to the printer. Include Fonts, Images, and all Links.</p>	<p><b>Hi-RES Files</b> High Resolution Files can be used for printing, but Pixels per Inch (ppi/dpi) should be at least 300.</p>
File Extension Types	
.ai	.eps
.pdf	.svg
.jpg	.gif
.png	.tif

### File Extension Type Definitions

**.ai Adobe Illustrator**

Default file type in Illustrator, a vector based program

**.eps Encapsulated PostScript**

A vector or raster image that can be opened using a wide range of applications (Illustrator, Photoshop, etc)

**.pdf Portable Document Format**

Self-contained document which preserves vector images as well as fonts or graphics (not ideal for editing)

**.svg Scaleable Vector Graphics**

XML-based vector image format supported by modern web browsers

**.jpg Joint Photographic Experts Group**

Raster image format that is best for displaying photographic images on web browsers (.jpg or .jpeg)

**.gif Graphics Interchange Format**

Raster image format best for simple images made up of solid colors (i.e. no gradients)

**.png Portable Network Graphics**

Raster image format best for displaying simple images, supports transparency (logos or icons)

**.tif Tagged Image File Format**

Raster image format best for high-resolution photos

## Image Info

### When Sending Images to a Printer/Designer

**Don't place images into text documents**

It is difficult to extract images in a Word or Excel or Powerpoint document and results in significantly lower image quality.

**Send images larger than you want them printed**

Raster images can be sized down without a reduction in quality, but when an image is stretched larger than its original size, a significant loss of quality occurs.

**Make sure logos are vector files**

Logos often need to be separated from the rest of the file, resized, and re-designated. Vector images are the most versatile for these purposes.

**Don't rely on just any image editing program**

Although image editing programs are versatile, it is always best to use the appropriate programs for each function. Illustrator is great for logos. Photoshop is great for photos. Trying to reverse them will lead to problems down the road. When in doubt, ask Peczuh.

Print vs. Web	
<p><b>300 dpi/ppi</b> Print Images need a resolution of 300 dpi/ppi (dots/pixels per inch). The printing expands the detail of an image.</p>	<p><b>72 dpi/ppi</b> Web only images need a resolution of 72 dpi/ppi (dots/pixels per inch). This is the maximum resolution of most monitors.</p>