

KNOW YOUR FILE TYPES: WHEN TO USE JPEG, GIF & PNG

Digital images fill up our inboxes, take up computer memory space and take time to load on a web page. When working with digital image files there are certain file types to use for each circumstance.

JPEG

File extension: .JPG or .JPEG

Developed by: Joint Photographic Experts Group

Created in: 1986

Lossy compression: Yes

Transparency: No

Color palette: 24-bit

Compression: 60%-75% decrease in file size

Use when: you need a small file size, more intricate detail, and more colors

Can be used for: Photographs and Photo Editing

Called "lossy" compression: for the loss of some color detail in order to save file space

Compatible with: many platforms (PC and Mac), web browser programs (web browsers and image editors)

Created by: In March 2014 Mozilla created the next-generation format

Standard: ISO 10918-1

Resolution: up to 16,384 x 16,384 pixels

Quality: 1-100 (100 is the highest quality)

Transparency: No

Color palette: 24-bit

Compression: 60%-75% decrease in file size

BEST USES:

- STILL IMAGES ONLY
- REAL-WORLD IMAGES (LANDSCAPE)
- COMPLEX SCENARIOS
- SHADES OF LIGHT AND DARK

GIF

File extension: .GIF

Developed by: CompuServe

Created in: 1987

Lossy compression: No

Transparency: Yes (single color)

Color palette: 256 colors

Compression: LZW

Use when: you need a small file size, simple graphics, and transparency

Can be used for: Simple graphics, logos, and icons

Called "lossless" compression: because it does not lose any data

Compatible with: many platforms (PC and Mac), web browser programs (web browsers and image editors)

Created by: In March 2014 Mozilla created the next-generation format

Standard: ISO 8830

Resolution: up to 256 x 256 pixels

Quality: 1-100 (100 is the highest quality)

Transparency: Yes (single color)

Color palette: 256 colors

Compression: LZW

BEST USES:

- WEB GRAPHICS (BUTTONS, ICONS)
- SMALL LOGOS
- ANIMATIONS
- SIMPLE IMAGES

PNG

File extension: .PNG

Developed by: Network Appliance

Created in: 1996

Lossy compression: No

Transparency: Yes

Color palette: 24-bit

Compression: Deflate

Use when: you need a small file size, high quality, and transparency

Can be used for: High-quality images, logos, and icons

Called "lossless" compression: because it does not lose any data

Compatible with: many platforms (PC and Mac), web browser programs (web browsers and image editors)

Created by: In March 2014 Mozilla created the next-generation format

Standard: ISO 15948

Resolution: up to 16,384 x 16,384 pixels

Quality: 1-100 (100 is the highest quality)

Transparency: Yes

Color palette: 24-bit

Compression: Deflate

PNG-8

Very similar to GIF

256 colors and 1-bit transparency

PNG-8 files are even smaller than GIF files

PNG-24

24-bit color, similar to JPEG

Can include user-defined color palette

Supports alpha channel (transparency)

Alpha-channels

PNG files allow transparency to be set on a scale between opaque and completely transparent, allowing for a faded, translucent look.

PNG-8 images can focus on any color background and maintain image transparency.

Some older browsers may have trouble supporting PNG files because of alpha channels.

BEST USES:

- WEB IMAGES SUCH AS LOGOS AND FADING
- IMAGES IN THE MIDDLE OF THE EDITING PROCESS
- COMPLEX IMAGES LIKE PHOTOGRAPHS IF FILE SIZE IS NOT AN ISSUE

What Should You Use?

FILE TYPE	BEST USES
JPEG	<ul style="list-style-type: none"> Still images Photographs Many colors Shading of light and dark
GIF	<ul style="list-style-type: none"> Animations
PNG	<ul style="list-style-type: none"> Web images (PNG-8) Logos which involve transparency and fading Images in the editing process (PNG-24) Complex images like photographs if file size is not an issue (PNG-24)

With the variety of image file formats available you can use the right format for your images to save quality and space on your website, in your emails, and your personal digital scrapbooks.