**PNG** ( *Portable Network Graphics* ) is a [graphic file format](https://bg.wikipedia.org/wiki/%D0%93%D1%80%D0%B0%D1%84%D0%B8%D1%87%D0%B5%D0%BD_%D1%84%D0%B0%D0%B9%D0%BB%D0%BE%D0%B2_%D1%84%D0%BE%D1%80%D0%BC%D0%B0%D1%82" \o "Graphic file format) for digital [image](https://bg.wikipedia.org/wiki/%D0%98%D0%B7%D0%BE%D0%B1%D1%80%D0%B0%D0%B6%D0%B5%D0%BD%D0%B8%D0%B5" \o "Image) recording . The motivation for creating the PNG format was in early 1995, when it came to light that the Lempel-Ziv-Welch (LZW) data compression algorithm, used in the [GIF](https://fileformats.fandom.com/wiki/Graphics_Interchange_Format) format, had been patented by Unisys.The possible colors in each [pixel](https://bg.wikipedia.org/wiki/%D0%9F%D0%B8%D0%BA%D1%81%D0%B5%D0%BB" \o "Pixel) are 16.7 million, using a way to reduce the [file](https://bg.wikipedia.org/wiki/%D0%A4%D0%B0%D0%B9%D0%BB" \o "File) size without losing image storage quality.

PNG is the latest Web image format designed specifically by a group of independent graphic image experts to enhance and eventually replace [GIF](https://bg.wikipedia.org/wiki/GIF) . Supports 24 and 48 bit images. Allows you to include mask channels to control gradual transparency. PNG files are usually larger than [JPEG](https://bg.wikipedia.org/wiki/JPEG) and GIF because a PNG file does not include lossless JPEG compression and may contain more colors than a GIF image (with the exception of grayscale when its files are smaller than JPEG and GIF). PNG is best for small images, such as buttons, icons, or thumbnails with details.