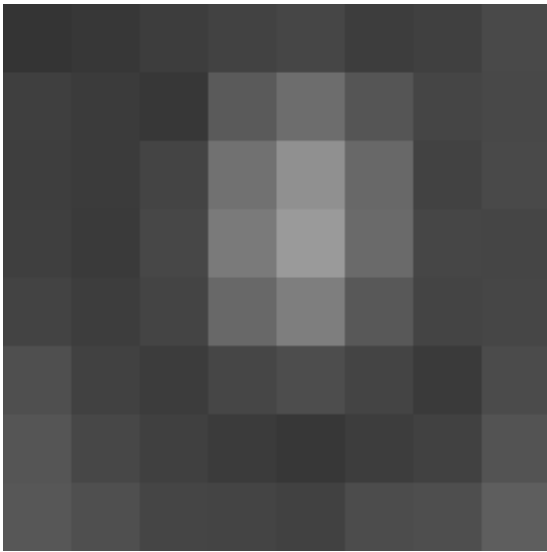


BPG image format judged awesome versus JPEG

December 17 2014, by Nancy Owano



If these three letters could talk, BPG, they would say something like "Farewell, JPEG." Better Portable Graphics (BPG) is a new image format based on HEVC and supported by browsers with a small Javascript decoder. The format is intended to replace the JPEG [image](#) format when the file size or quality is an issue. BPG's advantages include a high compression ratio, whereby files are much smaller than JPEG for similar quality.

High Efficiency Video Coding is a video compression [standard](#). Gannon

Burgett said in *Imaging Resource* that the technology behind this new format is based on the same HEVC codec used in x265/H.265 [video](#). This allows the BPG file format to handle 14 bits per color channel, lossless compression and even alpha support. "Its strength lies in its ability to produce JPEG quality images at roughly half the size." The BPG site said that "BPG natively supports 8 to 14 bits per channel when most other formats use 8 bits (including most of the JPEG implementations and WEBP). It gives a higher dynamic range (which is important for cameras and new displays) and a slightly better compression ratio (because there are less rounding errors in the decoder)."

BPG was created by French programmer Fabrice Bellard. Matt Smith, an editor with *Digital Trends*, said Bellard is known for [QEMU](#), a hardware virtualization program, and FFmpeg, a cross-platform multimedia codec library. Other accomplishments, from Bellard's page list, include a new ASNI compiler, "generating small and efficient C code," and a PC emulator in Javascript.

So is this the end for JPEG? While "new" is a catchy invitation for breakfast cereals, the same cannot be said for file formats. "If it's not broke, don't fix it" seems to play the loudest. "As with any new file format, the problem is ensuring it catches on with developers, programmers, camera companies and more," said Burgett. Smith similarly wrote that "The new file format, while clearly superior to JPEG, is new...Getting companies to add the feature is a chicken-and-egg problem; no one will be publishing BPG images until there's support, but there's no reason to add support until BPG begins to appear on websites."

Nonetheless, Smith said he hoped the [file format](#) does receive support in the near future. Its increase in quality is apparent, and its adoption could let photographers share high-quality shots without

resorting to formats like PNG and BMP. Paul Monckton, who writes about photography, thinks that BPG is quite impressive: "Bellard's technique delivers a huge [leap](#) in compression performance," he wrote in *Forbes*, and "generates much higher quality images than JPEG for any given size of file." Like other observers, though, Monckton said BPG as a new standard image format would be difficult for reasons of compatibility. With almost no existing software currently supporting the BPG format, he said, it would take a lot for it to gain widespread popularity. Sebastian Anthony wrote in *ExtremeTech*, "it's very hard to unseat an incumbent file [format](#) (or, more accurately, a compression technology). The fact is, despite any misgivings we might have about JPEGs or GIFs, almost every computer system in the world can display them—and generally, in the grand scheme of communication, it's much more important to make sure that your message was seen at all, rather than making sure the message is as small and as optimized as possible."

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