

# FILE FORMAT

**File Format Name:** Tagged Image File Format

**File Extension:** .tif, .tiff

**Date Introduced:** 1986

**Dates in Use:** 1986-present (2004)

**Variations:** TIFF 1-TIFF 6 (current since 1992).<sup>1</sup> Within TIFF itself, an “image can be compressed or uncompressed, 32 bit colour, 24 bit colour, indexed colour, greyscale or black and white.”<sup>2</sup>

**Developers:** Aldus and Microsoft Corp. Now, due to mergers, Adobe Systems holds copyright for TIFF specification. However, the TIFF format itself is in the public domain.<sup>3</sup>

**Open Source/Proprietary:** Odd mix of proprietary and open source.

**Associated Operating System:** Mac; PC

**Associated Application(s):** Mac: Preview; Windows: Photo Editor

**Compression:** TIFF supports LZW [Lempel-Ziv Welch – similar to GIF] algorithm but TIFF supports lossless compression.<sup>4</sup> Additionally (and officially), TIFF also supports lossy JPEG compression, but the specs did not get worked out properly and JPEG does not get used in TIFF files.<sup>5</sup> And, in their support of TIFF in almost every aspect, TASI mentions that they “always mean an uncompressed Baseline TIFF v6.”<sup>6</sup>

**Primary Usage:** For image files.

**Risks:** A de facto standard now, it, along with .GIF are two of the oldest image file formats in existence. Few risks.

**Conservation Steps:** As stated above, many preservation task forces as well as archives, libraries, etc. utilize and recommend TIFF. Because TIFF was designed to be independent of the hardware platform and the operating system, as well as the ability of adding new information fields to older formats without impacting the ability of older applications to read the files *and* it was created with the idea of becoming the industry

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<sup>1</sup> [www.prepressure.com/formats/tiff/fileformat.htm](http://www.prepressure.com/formats/tiff/fileformat.htm). Accessed 10/4/2004.

<sup>2</sup> [www.uwm.edu/People/price/graphic\\_file\\_format\\_comparisson.html](http://www.uwm.edu/People/price/graphic_file_format_comparisson.html). Accessed 10/3/2004.

<sup>3</sup> “The TIFF File Format,” [www.ee.cooper.edu/courses/course\\_pages/past\\_courses/EE458/TIFF/](http://www.ee.cooper.edu/courses/course_pages/past_courses/EE458/TIFF/). Accessed 9/28/2004.

<sup>4</sup> [www.uwm.edu/People/price/graphic\\_file\\_format\\_comparisson.html](http://www.uwm.edu/People/price/graphic_file_format_comparisson.html). Accessed 10/3/2004.

<sup>5</sup> [www.prepressure.com/formats/tiff/fileformat.htm](http://www.prepressure.com/formats/tiff/fileformat.htm).

<sup>6</sup> “Choosing a File Format,” [www.tasi.ac.uk/advice/creating/format.html](http://www.tasi.ac.uk/advice/creating/format.html). Accessed 9/28/2004.

standard, it has a lot of advantages.<sup>7</sup> However, because of these numerous advantageous, it is also a more complex file format (more so than some proprietary file formats) and requires more code to manage it. It has, though, become a de facto standard in not only business, but archiving as well.

**Other Sources:**

"The Unofficial TIFF Home Page," <http://home.earthlink.net/%7Eritter/tiff/> Accessed 9/29/2004.

[www.fact-index.com/g/gr/graphicx\\_file\\_format.html](http://www.fact-index.com/g/gr/graphicx_file_format.html). Accessed 10/3/2004.

[www.cs.sfu.ca/CourseCentral/365/li/material/notes/Chap3/Chap3.2/Chap3.2.html](http://www.cs.sfu.ca/CourseCentral/365/li/material/notes/Chap3/Chap3.2/Chap3.2.html). Accessed 9/28/2004.

[www.awaresystems.be/imaging/tiff/faq.html](http://www.awaresystems.be/imaging/tiff/faq.html). Accessed 10/3/2004.

[www.sharpened.net/helpcenter/extensions.php](http://www.sharpened.net/helpcenter/extensions.php). Accessed 10/3/2004.

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<sup>7</sup> "The TIFF Image File Format."

[www.ee.cooper.edu/courses/course\\_pages/past\\_courses/EE458/TIFF/](http://www.ee.cooper.edu/courses/course_pages/past_courses/EE458/TIFF/).