

NAME

pstopngtops – convert (Encapsulated) PostScript files to PostScript bitmap files

SYNOPSIS

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pstopngtops [ -? ] [ -crop ] [ -debug ] [ -extension name ] [ -gamma float-value ] [ -help ] [ -icon ]
[ -margin pixels ] [ -norun ] [ -resolution dpi ] [ -version ] [ -Wcomponent,option ]
POSTSCRIPT-files
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DESCRIPTION

pstopngtops converts one or more input (*Encapsulated*) *POSTSCRIPT* files to output *POSTSCRIPT* files via an intermediate transformation to *Portable Network Graphics (PNG)* lossless compressed bitmap files.

This curious procedure serves to purify *POSTSCRIPT* files that are not includable in other documents because they fail to conform to Adobe's Encapsulated *POSTSCRIPT* specification (see Appendix G of any of the three editions of the *POSTSCRIPT* Language Reference Manual). **pstopngtops** converts *POSTSCRIPT* files to *POSTSCRIPT* bitmap page images, with user control of resolution, cropping, and margin padding.

For maximal color fidelity, bitmaps are produced in 24-bit color mode, with 16,777,216 possible colors.

The PNG format is an Internet Standard defined in RFC 2083 (1997), and major Web browsers, *POSTSCRIPT* level 3 (1999), and picture editors such as **gimp**(1) **photoshop**(1), and **xv**(1) now support it.

Unlike the Compuserv GIF format, which uses the Lempel-Ziv-Welch (LZW) compression algorithm protected under U.S. Patent 4,558,302 (10-Dec-1985) held by Unisys Corporation, PNG is free of patent and copyright claims, and the PNG format is recommended for replacement of GIF images.

For each file given on the command line, an output file is written with the same basename as the input file, but with extension *xps*, or the name specified by the **-extension** option.

With the **-icon** option, small companion files with the same name are also written in a subdirectory *icons*, which is created if necessary.

If no files are given on the command line, then *stdin* is read, and *stdout* is written, and no icon file can be produced.

pstopngtops is a convenient interface to **gs**(1), **pngtopnm**(1), **pnmcrop**(1), **pnmmargin**(1), and **pnm-tops**(1), which do the real work.

OPTIONS

Command-line options may be abbreviated to a unique leading prefix.

To avoid confusion with options, if a filename begins with a hyphen, it must be disguised by a leading absolute or relative directory path, e.g. */tmp/-foo.eps* or *./-foo.eps*.

Options may begin with either UNIX-style single hyphens, or GNU/POSIX-style double hyphens, and may be abbreviated to any unique prefix.

-crop	Crop the image to remove edges that are the background color.
-debug	Turn on debug tracing.
-extension <i>name</i>	Replace the default output file extension, <i>xps</i> , with <i>name</i> .
-gamma <i>float-value</i>	Specify an image gamma correction as a floating-point number. Small values darken the image, and large values lighten it. Typical values are in the range 0.5 .. 3.0. [Default: 1.0]
-?	
-help	Display a brief help message on <i>stdout</i> , and exit with a success status code (0 on UNIX).
-icon	Produce icon files as well as PNG files. An icon file is just a low-resolution (12dpi) bitmap that may be useful as a compact representation of what is in the PNG file.

- In filter mode (no files on the command line), this option is ignored.
- margin** *pixels* Add a background margin of width *pixels* to the output image. This option is usually specified together with **-crop**.
 - norun** Show on *stdout* the commands that would be executed, but do not run them.
 - resolution** *dpi* Use this option to trap the complex command pipelines for further private customization.
Set the output bitmap resolution to *dpi* dots per inch.
[Default: 100 dpi, suitable only for screen resolution].
 - version** Display program version numbers and dates on *stdout*, and exit with a success status code (0 on UNIX).
 - W***component,option* Pass *option* to the program *component*, which must be one of *gs*, *pngtopnm*, *pnm-crop*, *pnmmargin*, or *pnmtops*.

This option, a POSIX convention, provides a general way for a user to pass options to programs invoked by another program. The value *option* is passed *after* any generated in response to options supplied to **pstopngtops**. For example, **-Wpnm-margin,-black** would cause any added margin to be colored black.

SEE ALSO

epsutil(1), **gimp(1)**, **gs(1)**, **photoshop(1)**, **pngtopnm(1)**, **pnmcrop(1)**, **pnmmargin(1)**, **pnmtops(1)**, **pstojpeg(1)**, **pstopng(1)**, **pstotiff(1)**, **xv(1)**.

T. Boutell, *RFC 2083: PNG (Portable Network Graphics) Specification Version 1.0*, available at <ftp://ftp.internic.net/rfc/rfc2083.txt>.

John Miano, *The programmer's guide to compressed image files: JPEG, PNG, GIF, XBM, BMP*, Addison-Wesley Longman, Harlow, Essex, England 1999, ISBN 0-201-60443-4.

Greg Roelofs, *PNG: The Definitive Guide*, O'Reilly and Associates, Inc., Sebastopol, CA, Cambridge, MA, and Beijing, China, 1999, ISBN 1-56592-542-4.

The POSTSCRIPT language has evolved through three upward-compatible major levels, each defined by an edition of these books:

Adobe Systems Incorporated, *POSTSCRIPT Language Reference Manual*, First edition, Addison-Wesley, Reading, MA, 1985, ISBN 0-201-10174-2.

Adobe Systems Incorporated, *POSTSCRIPT Language Reference Manual*, Second edition, Addison-Wesley, Reading, MA, 1990, ISBN 0-201-18127-4.

Adobe Systems Incorporated, *POSTSCRIPT Language Reference*, Third edition, Addison-Wesley, Reading, MA, 1999, ISBN 0-201-37922-8.

POSTSCRIPT printing devices contain language implementations that are also compatible with one or more of these levels, though usually with a lag time of two to three years after an edition of the books.

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