NAME

pnmtopng - convert a portable anymap into a Portable Network Graphics file

SYNOPSIS

pnmtopng [-verbose] [-downscale] [-interlace] [-alpha file]
[-transparent [=]color] [-background color] [-gamma value]
[-hist] [-chroma wx wy rx ry gx gy bx by] [-phys x y unit]
[-text file] [-ztxt file] [-time [yy]yy-mm-dd hh:mm:ss]
[-filter type] [-compression level] [-force] [*pnmfile*]

DESCRIPTION

Reads a portable pixmap as input. Produces a Portable Network Graphics file as output.

Color values in PNG files are either eight or sixteen bits wide, so *pnmtopng* will automatically scale colors to have a maxval of 255 or 65535. Grayscale files will be produced with bit depths 1, 2, 4, 8 or 16. An extra *pnmdepth* step is not necessary.

OPTIONS

-verbose

Display the format of the output file.

-downscale

Enables scaling of maxvalues of more then 65535 to 16 bit. Since this means loss of image data, the step is not performed by default.

-interlace

Creates an interlaced PNG file (Adam7).

-alpha file

The alpha channel of pixel (or image) specifies the transparency of a pixel. To create this fourth pixel value a separate *.pbm-* or *.pgm-file* is needed. In this file black (0) stands for fully transparant and white (1) will become opaque. The sizes of both pbm/pgm/ppm-files must be the same. If the information contained in the alpha mask can also be represented as a transparency index, it will be used, since this should result in a smaller image file.

-transparent color

ppmtogif marks the specified color as transparent in the PNG image.

You specify the color as in **ppmmake**(1).**E.g. red** or **rgb:ff/00/0d**. If the color you specify is not present in the image, **pnmtopnm** selects instead the color in the image that is closest to the one you specify. Closeness is measured as a cartesian distance between colors in RGB space. If multiple colors are equidistant, **pnmtopnm** chooses one of them arbitrarily.

However, if you prefix your color specification with "=", e.g.

-transparent =red

Only the exact color you specify will be transparent. If that color does not appear in the image, there will be no transparency. **pnmtopng** issues an information message when this is the case.

-background color

To create a background color chunck in the *png-file*, which can be used for subsequent alpha-channel or transparent-color conversions. See -transparent for format of color.

-gamma value

Creates an gAMA chunk. By providing the gamma-value of the *pnm-file* the software that lateron will display the *png-file* will be able to do the necessary gamma-corrections. A good rule-of-thumb is that when the file is created by a software program (like a CAD-program or a ray-tracer)

the value is probably 1.0. When the *pnm-file* looks good on a non-gamma corrected PC display (which has itself a gamma-value of 2.2 - 2.8), a value of 0.45 should be given.

-hist Use this parameter to create a chunk that specifies the frequency (or histogram) of the colors in the image.

-chroma white point X and Y, red X and Y, green X and Y, and blue X and Y
To specify the white point and rgb values following the CIE-1931 spec.

-phys x y unit
When your image should not be displayed with square but with rectangular pixels this option should be used to create a pHYS chunk. When the unit-value is 0 the x and y only gives the ratio of pixel width and height. When it is 1 the x and y specify the number of pixels per meter.

-text file
Allows to include comments in the text-chunk of the *png-file*. The format of the text-file is as follows: when the first column does not contain a blank or a tab, the first word is considered to be the keyword. For keywords to contain spaces, enclose them in double-quotes.
When the first character on a line is a blank or tab, the rest of the line is a new line of the current comment. Note that the initial spaces are not considered to be part of the comment line.

Here is an example:

```
-----------------------------------------
Title          PNG-file
Author         your name
Description    how to include a text-chunk
               into a PNG file
"Creation date" 3-feb-1987
Software       pnmtopng
-----------------------------------------
```

-ztxt file
The same as -text, but now the text will be compressed.

-time yy-mm-dd hh:mm:ss or -time yyyy-mm-dd hh:mm:ss
This option allows you to specify the (modification)time. The year parameter can be given as a two- or a four-digit value.

-filter type
When the types of filters must be restricted you can specify here which filter you want to use. Allowed values are: 0 (none), 1 (sub), 2 (up), 3 (avg) and 4 (paeth).

-compression level
To explicitly set the compression level of zlib use this parameter. Select a level between 0 for no compression (max speed) and 9 for maximum compression.

-force When set, -force limits the optimizations of pnmtopng. A png-file similar to the pnm-input is as much as possible enforced. For example no paletted files will be created and alpha-channel images will not be converted to images with a transparency chunck.

All flags can be abbreviated to their shortest unique prefix.

SEE ALSO

pngtopnm(1), gif2png(1), pnmgamma(1), pnm(5)

NOTE

Instead of xxxtopnm|pnmtopng, a specific converter should be used, if available. E.g. *gif2png* (GIF conversion), etc.

BUGS

There could be an option to read the comment text from pnm comments instead of a separate file.

The program could be much faster, with a bit of code optimizing.

AUTHORS