

NAME

pic2graph - convert a PIC diagram into a cropped image

SYNOPSIS

pic2graph [**-unsafe**] [**-format** *fnt*] [**-eqn** *delim*]

DESCRIPTION

Reads a PIC program as input; produces an image file (by default in Portable Network Graphics format) suitable for the Web as output. Also translates [eqn\(1\)](#) constructs, so it can be used for generating images of mathematical formulae.

PIC is a rather expressive graphics minilanguage suitable for producing box-and-arrow diagrams of the kind frequently used in technical papers and textbooks. The language is sufficiently flexible to be quite useful for state charts, Petri-net diagrams, flow charts, simple circuit schematics, jumper layouts, and other kinds of illustration involving repetitive uses of simple geometric forms and splines. Because PIC descriptions are procedural and object-based, they are both compact and easy to modify.

The PIC language is fully documented in *Making Pictures With GNU PIC*, a document which is part of the [groff\(1\)](#) distribution.

Your input PIC code should *not* be wrapped with the .PS and .PE macros that normally guard it within [groff\(1\)](#) macros.

The output image will be clipped to the smallest possible bounding box that contains all the black pixels. Older versions of **convert(1)** will produce a black-on-white graphic; newer ones may produce a black-on-transparent graphic. By specifying command-line options to be passed to **convert(1)** you can give it a border, force the background transparent, set the image's pixel density, or perform other useful transformations.

This program uses [pic\(1\)](#), [eqn\(1\)](#), [groff\(1\)](#), [gs\(1\)](#), and the ImageMagick **convert(1)** program. These programs must be installed on your system and accessible on your \$PATH for **pic2graph** to work.

OPTIONS**-unsafe**

Run [pic\(1\)](#) and [groff\(1\)](#) in the 'unsafe' mode enabling the PIC macro **sh** to execute arbitrary commands. The default is to forbid this.

-format *fnt*

Specify an output format; the default is PNG (Portable Network Graphics). Any format that **convert(1)** can emit is supported.

-eqn *delim*

Change the fencepost characters that delimit [eqn\(1\)](#) directives (**\$** and **!**, by default). This option requires an argument, but an empty string is accepted as a directive to disable [eqn\(1\)](#) processing.

Command-line switches and arguments not listed above are passed to **convert(1)**.

FILES

/usr/share/groff/1.22.3/tmac/eqnrc The [eqn\(1\)](#) initialization file.

ENVIRONMENT**GROFF_TMPDIR**

The directory in which temporary files will be created. If this is not set **pic2graph** searches the environment variables **TMPDIR**, **TMP**, and **TEMP** (in that order). Otherwise, temporary files will be created in **/tmp**.

BUGS

Due to changes in the behavior of ImageMagick **convert(1)** that are both forward and backward-incompatible, mismatches between your **pic2graph** and **convert(1)** versions may produce zero-sized or untrimmed output images. For this version of **pic2graph** you will need a version of **convert(1)** that supports the **-trim** option; older versions of **pic2graph** used **-crop 0x0**, which no longer has trimming behavior.

SEE ALSO

[eqn2graph\(1\)](#), [grap2graph\(1\)](#), [pic\(1\)](#), [eqn\(1\)](#), [groff\(1\)](#), [gs\(1\)](#), [convert\(1\)](#).

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