

NAME

psnup – multiple pages per sheet

SYNOPSIS

psnup [**-w***width*] [**-h***height*] [**-p***paper*] [**-W***width*] [**-H***height*] [**-P***paper*] [**-l**] [**-r**] [**-f**] [**-c**] [**-m***margin*] [**-b***border*] [**-d***linewidth*] [**-s***scale*] [**-nup**] [**-q**] [*infile* [*outfile*]]

DESCRIPTION

Psnup puts multiple logical pages onto each physical sheet of paper. The input PostScript file should follow the Adobe Document Structuring Conventions.

The **-w** option gives the paper width, and the **-h** option gives the paper height, normally specified in **cm** or **in** to convert PostScript's points (1/72 of an inch) to centimeters or inches. The **-p** option can be used as an alternative, to set the paper size to **a3**, **a4**, **a5**, **b5**, **letter**, **legal**, **tabloid**, **statement**, **executive**, **folio**, **quarto** or **10x14**. The default paper size is **a4**. The **-W**, **-H**, and **-P** options set the input paper size, if it is different from the output size. This makes it easy to impose pages of one size on a different size of paper.

The **-l** option should be used for pages which are in landscape orientation (rotated 90 degrees anticlockwise). The **-r** option should be used for pages which are in seascape orientation (rotated 90 degrees clockwise), and the **-f** option should be used for pages which have the width and height interchanged, but are not rotated.

Psnup normally uses 'row-major' layout, where adjacent pages are placed in rows across the paper. The **-c** option changes the order to 'column-major', where successive pages are placed in columns down the paper.

A margin to leave around the whole page can be specified with the **-m** option. This is useful for sheets of 'thumbnail' pages, because the normal page margins are reduced by putting multiple pages on a single sheet.

The **-b** option is used to specify an additional margin around each page on a sheet.

The **-d** option draws a line around the border of each page, of the specified width. If the *linewidth* parameter is omitted, a default linewidth of 1 point is assumed. The linewidth is relative to the original page dimensions, *i.e.* it is scaled down with the rest of the page.

The scale chosen by *psnup* can be overridden with the **-s** option. This is useful to merge pages which are already reduced.

The **-nup** option selects the number of logical pages to put on each sheet of paper. This can be any whole number; *psnup* tries to optimise the layout so that the minimum amount of space is wasted. If *psnup* cannot find a layout within its tolerance limit, it will abort with an error message. The alternative form *i nup* can also be used, for compatibility with other n-up programs.

Psnup normally prints the page numbers of the pages re-arranged; the **-q** option suppresses this.

EXAMPLES

The potential use of this utility is varied but one particular use is in conjunction with *psbook(1)*. For example, using *groff* to create a PostScript document and *lpr* as the UNIX print spooler a typical command line might look like this:

```
groff -Tps -ms file | psbook | psnup -2 | lpr
```

Where *file* is a 4 page document this command will result in a two page document printing two

pages of *file* per page and rearranges the page order to match the input pages 4 and 1 on the first output page and pages 2 then 3 of the input document on the second output page.

AUTHOR

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SEE ALSO

psbook(1), psselect(1), pstops(1), epsffit(1), psnup(1), psresize(1), psmerge(1), fixscribeps(1), getafm(1), fixdlsrps(1), fixfmps(1), fixmacps(1), fixpsditps(1), fixpspps(1), fixtpps(1), fixwfwps(1), fixwpps(1), fixwwps(1), extractres(1), includeres(1)

TRADEMARKS

PostScript is a trademark of Adobe Systems Incorporated.

BUGS

Psnup does not accept all DSC comments.