

## 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[l*width*]] [-s*scale*] [-n*up*] [-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, specified in **pt**, **mm**, **cm**, or **in**. The **-p** option can be used instead, to set the paper size; otherwise a default value is used. See **paper(1)**. 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 *lwidth* 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 **-nnup** 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

### TRADEMARKS

**PostScript** is a trademark of Adobe Systems Incorporated.

**BUGS**

**Psnup** does not accept all DSC comments.