NAME

pbmmask - create a mask bitmap from a regular bitmap

SYNOPSIS

pbmmask [**-expand**] [*pbmfile*]

DESCRIPTION

Reads a portable bitmap as input. Creates a corresponding mask bitmap and writes it out.

The color to be interpreted as "background" is determined automatically. Regardless of which color is background, the mask will be white where the background is and black where the figure is.

This lets you do a masked paste like this, for objects with a black background:

```
pbmmask obj > objmask
pnmpaste < dest -and objmask <x> <y> | pnmpaste -or obj <x> <y>
```

For objects with a white background, you can either invert them or add a step:

```
pbmmask obj > objmask
pnminvert objmask | pnmpaste -and obj 0 0 > blackback
pnmpaste < dest -and objmask <x> <y> | pnmpaste -or blackback <x> <y>
```

Note that this three-step version works for objects with black backgrounds too, if you don't care about the wasted time.

You can also use masks with graymaps and pixmaps, using the *pnmarith* tool. For instance:

```
ppmtopgm obj.ppm | pgmtopbm -threshold | pbmmask > objmask.pbm
pnmarith -multiply dest.ppm objmask.pbm > t1.ppm
pnminvert objmask.pbm | pnmarith -multiply obj.ppm - > t2.ppm
pnmarith -add t1.ppm t2.ppm
```

An interesting variation on this is to pipe the mask through the *pnmsmooth* script before using it. This makes the boundary between the two images less sharp.

OPTIONS

-expand

Expands the mask by one pixel out from the image. This is useful if you want a little white border around your image. (A better solution might be to turn the *pbmlife* tool into a general cellular automaton tool...)

SEE ALSO

ppmcolormask(1), **pnmpaste**(1), **pnminvert**(1), **pbm**(5), **pnmarith**(1), **pnmsmooth**(1)

AUTHOR

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