NAME

impaste - Paste an image atop a background and store in a new file

SYNOPSIS

impaste [*options*] *infilename backfilename* [*outfilename*]

DESCRIPTION

impaste pastes an input image atop a background image and stores the result in a new file or back in the background image file.

If the input file contains multiple images, each input image is pasted onto a fresh copy of the background image and added to the output file. The output file contains one new image for each input image.

If the input and background files each contain multiple images, a one-for-one mapping occurs where input image #1 is pasted atop background image #1, and so on. The output file contains one new image for each input image.

The input, background, and output image file formats may be different.

OPTIONS

impaste has a variety of options in the following five categories:

File Selection	What input and output files to use
Format Selection	What image file format to use
Format Control	What variant of a file format to generate
Standard	Standard generic options on all SDSC tools
Manipulation	How the image can be manipulated

File Selection, *Format Selection*, *Format Control*, and *Standard* options are common to all SDSC image tools and are discussed in depth in the man page for imconv(1IM).

If you don't specify an output file, the background image file is treated as the output file. This allows paste-in-place operations.

The input image or the background image, but not both, may be taken from stdin.

All options can be abbreviated to the first few unique characters.

Manipulation Options

The pasting location within the background image is specified by:

-xposition *x*	Left edge of paste location
-yposition *y*	Top edge of paste location

The paste location may be outside the bounds of the input image. The portion of the input image that lies within the bounds of the background image will be pasted. (0,0) is the upper left corner of the image. Both positions default to values that center the incoming image left-to-right and top-to-bottom within the background image.

By giving a repeat count in the X and Y directions, the input image may be pasted repeatedly to create a tiling effect using the following:

-xrepeat *nx*	Number of times to paste horizontally
-yrepeat *ny*	Number of times to paste vertically
-xdirection *xdir*	Horizontal tiling direction

-ydirection *ydir* Vertical tiling direction

-xrepeat and -yrepeat indicate how many times to paste the input image onto the same background image. A value of 1 (default) pastes the image once. Values greater than 1 repeat the paste in X and Y. A value of 0 for either repeat count requests an "infinite" repeat that tiles the image as many times as necessary to reach the horizontal or vertical edge of the background image.

-xdirection and -ydirection select how tiling should advance from image to image. -xdirection takes one of the following as its argument:

left Tiling advances to the left
right Tiling advances to the right

By default, tiling advances to the right.

-ydirection takes one of the following as its argument:

up Tiling advances upward
down Tiling advances downward

By default, tiling advances downward.

NOTES

Pasting takes place without regard to alpha planes, write protect planes, and so on. The input image is always placed pixel-for-pixel atop the background image.

Internally, an input image is converted to the same depth as the background image prior to being pasted.

Pasting of non-RGB images can cause unexpected results but is allowed. Consider this scenario: An input color index image uses color indexes 1, 2, and 3 for red, green, and blue. The background color index image uses color indexes 1, 2, and 3 as well, but its color lookup table (CLT) defines them as orange, white, and black. When the input image is pasted atop the background image, its color indexes are copied across and use the background image's CLT. Input pixels that used to be red become orange, input green pixels become white, and input blue pixels become black because they now reference the background image's CLT. If this is not what you want, convert the images to RGB prior to invoking impaste.

For notes regarding file format conversion and standard image tool options, see the man page on imconv(1IM).

Error messages are reported to stderr.

EXAMPLES

To paste a logo at (10,20) on a background image and save the result in a new file, use the following:

```
impaste logo.rgb background.hdf -xpos 10 -ypos 20 result.rla
```

To paste an image in the center of a background and save it back in the same background file, use the following:

```
impaste image.pix background.pix
```

To tile a pattern across the whole background, use the following:

```
impaste pattern.x -xpos 0 -ypos 0 -xrepeat 0 -yrepeat 0 background.tiff
```

To tile a pattern three times in X and none in Y, starting at (-10, -20), use the following:

```
impaste pattern.ras -xrepeat 3 -xpos -10 -ypos -20 background.ras
```

SEE ALSO

imcopy (1IM), ImVfbCopy (3IM)

For information on SDSC's image library, see imintro(3IM).

AUTHOR

Dave Nadeau
San Diego Supercomputer Center

See the individual file format man pages for the authors of the underlying format read and write code. The names of these man pages begin with the letters "im" followed by the format name. For example, the name of the TIFF man page is imtiff. To display it, enter man imtiff.

CONTACT

SDSC consultants, (619)534-5100, consult@y1.sdsc.edu