NAME

   imroll - Rolls images vertically and/or horizontally

SYNOPSIS

   imroll [options] infilename outfilename

DESCRIPTION

   imroll reads each image in the input file, rolls it vertically, horizontally, or both, then writes it to the output file. The input and output image file formats may be different.

OPTIONS

   imroll 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
Rolling	How the image can be rolled

   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).

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

 Rolling Options

   Rolling an image copies pixel (0,0) to pixel (x,y), pixel (1,0) to (x+1,y), pixel (2,0) to (x+2,y), and so on. Pixels that fall off the image edges wrap around to the opposite edge. The effect is to slide an image horizontally and/or vertically, wrapping around in a cyclical fashion.

   -xroll value

      Rolls the image horizontally by value pixels. Positive values of value roll left-to-right, negative values roll right-to-left.

   -yroll value

      Rolls the image vertically by value pixels. Positive values of value roll top-to-bottom, negative values roll bottom-to-top.

   -xroll and -yroll may be given in combination in order to roll in both the X and Y directions simultaneously.

NOTES

   Image rolling may be used for a variety of simple pan effects, such as cyclical backgrounds for cartoon chase-sequence animations.

   Image rolling may also be used in the processing of scanned or generated texture images prior to repeated side-by-side texture mapping, such as for grassy planes, carpeted areas, or brick or stone walls. In each of these cases, the original texture image will be repeated over a large area with the left edge of one copy butting up against the right edge of the next copy, and the top edge of one copy butting up against the bottom edge of the next. To avoid obvious grid lines in texturing, it is important that the left and right edges, and top and bottom edges, of the texture match each other. This may be done by bringing the image into a paint system and adjusting the pixels to make them match.

   However, it is hard to visually match the left edge of an image with its right edge when those edges aren't next to each other. imroll may be used to bring them next to each other. Roll the image half the image's width and height. This places the left-right and top-bottom edges next to each other in the middle of the image. Now, bring the image into a paint system and smear the joining line. The image will then be ready for seamless, side-by-side texture mapping.

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

Error messages are reported to stderr.

With no roll arguments, the actions of imroll default to the same as the SDSC image format conversion tool imconv(1IM), but they take a little longer.

EXAMPLES

Roll a Wavefront RLB file 30 pixels to the right and store the result into an SGI RGB file:

        imroll original.rlb -xroll 30 rolled.rgb

Roll a Sun raster file 100 pixels to the left and 50 pixels down:

        imroll incoming.ras -xroll -100 -yroll 50 outgoing.ras

SEE ALSO

imcltroll (1IM), imcopy (1IM), imrotate (1IM), imshear (1IM), imscale (1IM), ImVfbRoll (3IM)

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

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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

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