

NAME

mogrify - resize an image, blur, crop, despeckle, dither, draw on, flip, join, re-sample, and much more. Mogrify overwrites the original image file, whereas, convert(1) writes to a different image file.

SYNOPSIS

mogrify [*options*] *input-file*

OVERVIEW

The **mogrify** program is a member of the ImageMagick(1) suite of tools. Use it to resize an image, blur, crop, despeckle, dither, draw on, flip, join, re-sample, and much more. This tool is similar to convert(1) except the original image file is overwritten with any changes you request.

For more information about the mogrify command, point your browser to <file:///usr/local/share/doc/ImageMagick-7/www/mogrify.html> or <http://imagemagick.org/script/mogrify.php>.

DESCRIPTION

Image Settings:

- adjoin join images into a single multi-image file
- affine matrix affine transform matrix
- antialias remove pixel-aliasing
- authenticate value decrypt image with this password
- attenuate value lessen (or intensify) when adding noise to an image
- background color background color
- bias value add bias when convolving an image
- black-point-compensation
 use black point compensation
- blue-primary point chromaticity blue primary point
- bordercolor color border color
- caption string assign a caption to an image
- cdl filename color correct with a color decision list
- colorspace type alternate image colorspace
- comment string annotate image with comment
- compose operator set image composite operator
- compress type type of pixel compression when writing the image
- decipher filename convert cipher pixels to plain pixels
- define format:option
 define one or more image format options
- delay centiseconds display the next image after pausing
- density geometry horizontal and vertical density of the image

-depth value image depth

-direction type render text right-to-left or left-to-right

-display server get image or font from this X server

-dispose method layer disposal method

-dither method apply error diffusion to image

-encipher filename convert plain pixels to cipher pixels

-encoding type text encoding type

-endian type endianness (MSB or LSB) of the image

-family name render text with this font family

-features distance analyze image features (e.g. contrast, correlation)

-fill color color to use when filling a graphic primitive

-filter type use this filter when resizing an image

-flatten flatten a sequence of images

-font name render text with this font

-format type image format type

-function name apply a function to the image

-fuzz distance colors within this distance are considered equal

-gravity type horizontal and vertical text placement

-green-primary point chromaticity green primary point

-intensity method method to generate intensity value from pixel

-intent type type of rendering intent when managing the image color

-interlace type type of image interlacing scheme

-interline-spacing value set the space between two text lines

-interpolate method pixel color interpolation method

-interword-spacing value set the space between two words

-kerning value set the space between two letters

-label string assign a label to an image

-limit type value pixel cache resource limit

-loop iterations add Netscape loop extension to your GIF animation

-matte store matte channel if the image has one

-mattecolor color frame color

-metric type measure differences between images with this metric

-monitor monitor progress

-morphology method kernel
apply a morphology method to the image

-orient type image orientation

-page geometry size and location of an image canvas (setting)

-path path write images to this path on disk

-perceptible epsilon
pixel value less than |epsilon| become epsilon or -epsilon

-ping efficiently determine image attributes

-pointsize value font point size

-precision value maximum number of significant digits to print

-preview type image preview type

-quality value JPEG/MIFF/PNG compression level

-quiet suppress all warning messages

-read-mask filename associate a read mask with the image

-red-primary point chromaticity red primary point

-regard-warnings pay attention to warning messages

-remap filename transform image colors to match this set of colors

-repage geometry size and location of an image canvas

-respect-parentheses settings remain in effect until parenthesis boundary

-sampling-factor geometry
horizontal and vertical sampling factor

-scene value image scene number

-seed value seed a new sequence of pseudo-random numbers

-size geometry width and height of image

-stretch type render text with this font stretch

-stroke color graphic primitive stroke color

-strokewidth value graphic primitive stroke width

-style type render text with this font style

-synchronize synchronize image to storage device

-taint declare the image as modified

-texture filename name of texture to tile onto the image background

-tile-offset geometry
tile offset

-treedepth value color tree depth

-transparent-color color
transparent color

-undercolor color annotation bounding box color

-units type the units of image resolution

-verbose print detailed information about the image

-virtual-pixel method
virtual pixel access method

-weight type render text with this font weight

-white-point point chromaticity white point

-write-mask filename associate a write mask with the image

Image Operators:

-adaptive-blur geometry

- adaptively blur pixels; decrease effect near edges
- adaptive-resize geometry
 - adaptively resize image with data dependent triangulation
- adaptive-sharpen geometry
 - adaptively sharpen pixels; increase effect near edges
- alpha option on, activate, off, deactivate, set, opaque, copy
 - transparent, extract, background, or shape
- annotate geometry text
 - annotate the image with text
- auto-gamma automagically adjust gamma level of image
- auto-level automagically adjust color levels of image
- auto-orient automatically orient image
- auto-threshold method
 - automatically perform image thresholding
- bench iterations measure performance
- bilateral-blur geometry
 - non-linear, edge-preserving, and noise-reducing smoothing filter
- black-threshold value
 - force all pixels below the threshold into black
- blue-shift simulate a scene at nighttime in the moonlight
- blur geometry reduce image noise and reduce detail levels
- border geometry surround image with a border of color
- brightness-contrast geometry
 - improve brightness / contrast of the image
- canny geometry detect edges in the image
- channel mask set the image channel mask
- charcoal radius simulate a charcoal drawing
- chop geometry remove pixels from the image interior
- clahe geometry contrast limited adaptive histogram equalization
- clamp keep pixel values in range (0-QuantumRange)
- clip clip along the first path from the 8BIM profile
- clip-mask filename associate a clip mask with the image
- clip-path id clip along a named path from the 8BIM profile
- colorize value colorize the image with the fill color
- color-matrix matrix apply color correction to the image
- colors value preferred number of colors in the image
- color-threshold start_color-stop_color
 - force all pixels in the color range to white otherwise black
- connected-component connectivity
 - connected-components uniquely labeled

- contrast enhance or reduce the image contrast
- contrast-stretch geometry
 improve contrast by 'stretching' the intensity range
- convolve coefficients
 apply a convolution kernel to the image
- cycle amount cycle the image colormap
- deskew threshold straighten an image
- despeckle reduce the speckles within an image
- distort method args
 distort images according to given method and args
- draw string annotate the image with a graphic primitive
- edge radius apply a filter to detect edges in the image
- emboss radius emboss an image
- enhance apply a digital filter to enhance a noisy image
- equalize perform histogram equalization to an image
- evaluate operator value
 evaluate an arithmetic, relational, or logical expression
- extent geometry set the image size
- extract geometry extract area from image
- fft implements the discrete Fourier transform (DFT)
- flip flip image vertically
- floodfill geometry color
 floodfill the image with color
- flop flop image horizontally
- frame geometry surround image with an ornamental border
- gamma value level of gamma correction
- gaussian-blur geometry
 reduce image noise and reduce detail levels
- geometry geometry preferred size or location of the image
- grayscale method convert image to grayscale
- help print program options
- hough-lines geometry
 identify lines in the image
- identify identify the format and characteristics of the image
- ift implements the inverse discrete Fourier transform (DFT)
- implode amount implode image pixels about the center
- integral calculate the sum of values (pixel values) in the image
- interpolative-resize geometry
 resize image using interpolation
- kmeans geometry K means color reduction

- lat geometry local adaptive thresholding
- layers method optimize or compare image layers
- level value adjust the level of image contrast
- level-colors color,color
level image with the given colors
- linear-stretch geometry
improve contrast by 'stretching with saturation' the intensity range
- liquid-rescale geometry
rescale image with seam-carving
- magnify double the size of the image with pixel art scaling
- mean-shift geometry delineate arbitrarily shaped clusters in the image
- median geometry apply a median filter to the image
- mode geometry make each pixel the 'predominant color' of the neighborhood
- modulate value vary the brightness, saturation, and hue
- monochrome transform image to black and white
- motion-blur geometry
simulate motion blur
- negate replace each pixel with its complementary color
- noise geometry add or reduce noise in an image
- normalize transform image to span the full range of colors
- opaque color change this color to the fill color
- ordered-dither NxN
add a noise pattern to the image with specific amplitudes
- paint radius simulate an oil painting
- polaroid angle simulate a Polaroid picture
- posterize levels reduce the image to a limited number of color levels
- print string interpret string and print to console
- profile filename add, delete, or apply an image profile
- quantize colorspace reduce colors in this colorspace
- radial-blur angle radial blur the image
- raise value lighten/darken image edges to create a 3-D effect
- random-threshold low,high
random threshold the image
- range-threshold values
perform either hard or soft thresholding within some range of values in an image
- region geometry apply options to a portion of the image
- render render vector graphics
- resample geometry change the resolution of an image
- resize geometry resize the image
- roll geometry roll an image vertically or horizontally

- rotate degrees apply Paeth rotation to the image
- sample geometry scale image with pixel sampling
- scale geometry scale the image
- segment values segment an image
- selective-blur geometry
 selectively blur pixels within a contrast threshold
- sepia-tone threshold
 simulate a sepia-toned photo
- set property value set an image property
- shade degrees shade the image using a distant light source
- shadow geometry simulate an image shadow
- sharpen geometry sharpen the image
- shave geometry shave pixels from the image edges
- shear geometry slide one edge of the image along the X or Y axis
- sigmoidal-contrast geometry
 lightness rescaling using sigmoidal contrast enhancement
- sketch geometry simulate a pencil sketch
- solarize threshold negate all pixels above the threshold level
- sort-pixels sort each scanline in ascending order of intensity
- sparse-color method args
 fill in a image based on a few color points
- splice geometry splice the background color into the image
- spread amount displace image pixels by a random amount
- statistic type geometry
 replace each pixel with corresponding statistic from the neighborhood
- strip strip image of all profiles and comments
- swirl degrees swirl image pixels about the center
- threshold value threshold the image
- thumbnail geometry create a thumbnail of the image
- tile filename tile image when filling a graphic primitive
- tint value tint the image with the fill color
- transform affine transform image
- transparent color make this color transparent within the image
- transpose flip image vertically and rotate 90 degrees
- transverse flop image horizontally and rotate 270 degrees
- trim trim image edges
- type type image type
- unique-colors discard all but one of any pixel color
- unsharp geometry sharpen the image
- vignette geometry soften the edges of the image in vignette style

- wave geometry alter an image along a sine wave
- wavelet-denoise threshold
removes noise from the image using a wavelet transform
- white-balance automagically adjust white balance of image
- white-threshold value
force all pixels above the threshold into white

Image Channel Operators:

- channel-fx expression
exchange, extract, or transfer one or more image channels
- separate separate an image channel into a grayscale image

Image Sequence Operators:

- affinity filename transform image colors to match this set of colors
- append append an image sequence top to botto (use +append for left to right)
- clut apply a color lookup table to the image
- coalesce merge a sequence of images
- combine combine a sequence of images
- compare mathematically and visually annotate the difference between an image and its reconstruction
- complex operator perform complex mathematics on an image sequence
- composite composite image
- copy geometry offset,
copy pixels from one area of an image to another
- crop geometry cut out a rectangular region of the image
- deconstruct break down an image sequence into constituent parts
- evaluate-sequence operator
evaluate an arithmetic, relational, or logical expression
- flatten flatten a sequence of images
- fx expression apply mathematical expression to an image channel(s)
- hald-clut apply a Hald color lookup table to the image
- morph value morph an image sequence
- mosaic create a mosaic from an image sequence
- poly terms build a polynomial from the image sequence and the corresponding terms
(coefficients and degree pairs)
- process arguments process the image with a custom image filter
- separate separate an image channel into a grayscale image
- smush geometry smush an image sequence together
- write filename write images to this file

Image Stack Operators:

- delete indexes delete the image from the image sequence
- duplicate count,indexes
 duplicate an image one or more times
- insert index insert last image into the image sequence
- reverse reverse image sequence
- swap indexes swap two images in the image sequence

Miscellaneous Options:

- debug events display copious debugging information
- distribute-cache port
 distributed pixel cache spanning one or more servers
- help print program options
- log format format of debugging information
- list type print a list of supported option arguments
- version print version information

By default, the image format of 'file' is determined by its magic number. To specify a particular image format, precede the filename with an image format name and a colon (i.e. ps:image) or specify the image type as the filename suffix (i.e. image.ps). Specify 'file' as '-' for standard input or output.

SEE ALSO

ImageMagick(1)

COPYRIGHT

Copyright (C) 1999-2021 ImageMagick Studio LLC. Additional copyrights and licenses apply to this software, see <file:///usr/local/share/doc/ImageMagick-7/www/license.html> or <http://imagemagick.org/script/license.php>