NAME

convert – convert between image formats as well as resize an image, blur, crop, despeckle, dither, draw on, flip, join, re-sample, and much more.

SYNOPSIS

convert-im6.q16 [*input-option*] *input-file* [*output-option*] *output-file*

OVERVIEW

The **convert-im6.q16** program is a member of the ImageMagick-ims6.q16(1) suite of tools. Use it to convert between image formats as well as resize an image, blur, crop, despeckle, dither, draw on, flip, join, re-sample, and much more.

For more information about the convert command, point your browser to file:///usr/share/doc/image-magick-6-common/html/www/convert.html (on debian system you may install the imagemagick-6 package) or https://www.imagemagick.org/script/convert.php.

DESCRIPTION

Image Settings:
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 –adjoin            join images into a single multi-image file
 –affine matrix     affine transform matrix
 –alpha option      activate, deactivate, reset, or set the alpha channel
 –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
 –channel type      apply option to select image channels
 –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
 –colors value      preferred number of colors in the image
 –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 "string"   output formatted image characteristics
−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
−mask filename   associate a mask with the image
−matte   store matte channel if the image has one
−mattecolor color   frame color
−metric type   measure differences between images with this metric
−moments   report image moments
−monitor   monitor progress
−orient type   image orientation
−page geometry   size and location of an image canvas (setting)
−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
−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
−statistic type geometry
               replace each pixel with corresponding statistic from the neighborhood
−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
−support factor   resize support: > 1.0 is blurry, < 1.0 is sharp
−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
          –view   FlashPix viewing transforms
          –virtual-pixel method
                    virtual pixel access method
          –weight type   render text with this font weight
          –white-point point   chromaticity white point

     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
       –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
       –bench iterations   measure performance
       –black-threshold value
                    force all pixels below the threshold into black
       –blue-shift factor   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
       –charcoal radius   simulate a charcoal drawing
       –chop geometry   remove pixels from the image interior
       –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
       –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

−function name apply a function to the image

−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

−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

−interpolative-resize geometry

      resize image using 'point sampled' interpolation

−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

−morphology method kernel

      apply a morphology method to the image

−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
–perceptible epsilon
              pixel value less than |epsilon| become epsilon or -epsilon
–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
–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
–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
–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-threshold value

force all pixels above the threshold into white

Image Sequence Operators:
  –append   append an image sequence top to bottom (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 recon-
struction
  –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:
  –clone indexes   clone an image
  –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

Use any setting or operator as an *output-option*. Only a limited number of setting are *input-option*. They
include: –antialias, –caption, –density, –define, –encoding, –font, –pointsize, –size, and –texture as well as
any of the miscellaneous options.

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-im6.q16(1)

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