

**NAME**

ImageMagick - ImageMagick is an X11 package for display and interactive manipulation of images.

**DESCRIPTION**

ImageMagick is an X11 package for display and interactive manipulation of images. The package includes tools for image conversion, annotation, compositing, animation, and creating montages. ImageMagick can read and write many of the more popular image formats (e.g. JPEG, TIFF, PNM, XPM, Photo CD, etc.).

ImageMagick is available via anonymous FTP as

**<ftp://ftp.wizards.dupont.com/pub/ImageMagick/ImageMagick-4.0.9.tar.gz>**.

**display** **Display** is a machine architecture independent image and display program. It can display an image on any workstation display running an X server. **Display** can read and write many of the more popular image formats (e.g. JPEG, TIFF, PNM, Photo CD, etc.). You can perform these functions on the image:

- o load an image from a file
- o display the next image
- o display the former image
- o display a sequence of images as a slide show
- o write the image to a file
- o print the image to a Postscript printer
- o delete the image file
- o create a Visual Image Directory
- o select the image to display by its thumbnail rather than name
- o undo last image transformation
- o copy a region of the image
- o paste a region to the image
- o restore the image to its original size
- o refresh the image
- o half the image size
- o double the image size
- o resize the image
- o crop the image
- o cut the image
- o flop image in the horizontal direction
- o flip image in the vertical direction
- o rotate the image 90 degrees clockwise
- o rotate the image 90 degrees counter-clockwise
- o rotate the image
- o shear the image
- o trim the image edges
- o invert the colors of the image
- o vary the color brightness
- o vary the color saturation
- o vary the image hue
- o gamma correct the image
- o sharpen the image contrast
- o dull the image contrast
- o perform histogram equalization on the image
- o perform histogram normalization on the image
- o negate the image colors
- o toggle the colormap type: : Shared or Private
- o reduce the speckles within an image
- o eliminate peak noise from an image

- o detect edges within the image
- o emboss an image
- o oil paint an image
- o convert the image to grayscale
- o set the maximum number of unique colors in the image
- o segment the image by color
- o apply image processing techniques to a region of interest
- o annotate the image with text
- o draw on the image
- o edit an image pixel color
- o edit the image matte information
- o composite an image with another
- o add a border to the image
- o surround image with an ornamental border
- o add an image comment
- o display image centered on a backdrop
- o display image to background of a window
- o display information about the image
- o display information about this program
- o discard all images and exit program
- o change the level of magnification
- o display images specified by a World Wide Web (WWW) uniform resource locator (URL)

**import** Import reads an image from any visible window on an X server and outputs it as an image file. You can capture a single window, the entire screen, or any rectangular portion of the screen. You can use the display (see display(1)) utility for redisplay, printing, editing, formatting, archiving, image processing, etc. of the captured image.

The target window can be specified by id, name, or may be selected by clicking the mouse in the desired window. If you press a button and then drag, a rectangle will form which expands and contracts as the mouse moves. To save the portion of the screen defined by the rectangle, just release the button. The keyboard bell is rung once at the beginning of the screen capture and twice when it completes.

#### **animate**

Animate displays a sequence of images on any workstation display running an X server. Animate first determines the hardware capabilities of the workstation. If the number of unique colors in an image is less than or equal to the number the workstation can support, the image is displayed in an X window. Otherwise the number of colors in the image is first reduced to match the color resolution of the workstation before it is displayed.

This means that a continuous-tone 24 bits/pixel image can display on a 8 bit pseudo-color device or monochrome device. In most instances the reduced color image closely resembles the original. Alternatively, a monochrome or pseudo-color image sequence can display on a continuous-tone 24 bits/pixels device.

#### **montage**

Montage creates a composite image by combining several separate images. The images are tiled on the composite image with the name of the image optionally appearing just below the individual tile.

**convert** Convert converts an input file using one image format to an output file with a differing image format. By default, the image format is determined by it's 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. If file has the extension .Z, the file is decoded with uncompress.

**mogrify**

Mogrify transforms an image or a sequence of images. These transforms include image scaling, image rotation, color reduction, and others. The transmogrified image overwrites the original image.

**identify** describes the format and characteristics of one or more image files. It will also report if an image is incomplete or corrupt. The information displayed includes the scene number, the file name, the width and height of the image, whether the image is colormapped or not, the number of colors in the image, the number of bytes in the image, the format of the image (JPEG, PNM, etc.), and finally the number of seconds it took to read and process the image.

**combine**

Combine combines images to create new images.

**xtp** Xtp is a utility for retrieving, listing, or printing files from a remote network site, or sending files to a remote network site. Xtp performs most of the same functions as the ftp program, but does not require any interactive commands. You simply specify the file transfer task on the command line and xtp performs the task automatically.

**SEE ALSO**

**display(1), animate(1), import(1), montage(1), mogrify(1), convert(1), combine(1), xtp(1)**

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