(images/wizard.png) ImageMagick® (http://tarr.uspto.gov/servlet/tarr?regser=serial&entry=78333969) is a software suite to create, edit, compose, or convert bitmap images. It can read and write images in a variety of formats (www/formats.html) (over 200) including PNG, JPEG, JPEG-2000, GIF, TIFF, DPX (www/motion-picture.html), EXR (www/high-dynamic-range.html), WebP, Postscript, PDF, and SVG. Use ImageMagick to resize, flip, mirror, rotate, distort, shear and transform images, adjust image colors, apply various special effects, or draw text, lines, polygons, ellipses and Bézier curves.

The functionality of ImageMagick is typically utilized from the command-line (www/command-line-processing.html) or you can use the features from programs written in your favorite language. Choose from these interfaces: G2F (www/api.html#ada) (Ada), MagickCore (www/api.html#c) (C), MagickWand (www/api.html#c) (C), ChMagick (www/api.html#ch) (Ch), ImageMagickObject (www/api.html#com_) (COM+), Magick++ (www/api.html#c__) (C++), JMagick (www/api.html#java) (Java), L-Magick (www/api.html#lisp) (Lisp), Lua (www/api.html#lua) (LuaJIT), NMagick (www/api.html#neko) (Neko/haXe), Magick.NET (www/api.html#dot-net) (.NET), PascalMagick (www/api.html#pascal) (Pascal), PerlMagick (www/api.html#perl) (Perl), MagickWand for PHP (www/api.html#php) (PHP), IMagick (www/api.html#php) (PHP), PythonMagick (www/api.html#python) (Python), RMagick (www/api.html#ruby) (Ruby), or TclMagick (www/api.html#tcl) (Tcl/TK). With a language interface, use ImageMagick to modify or create images dynamically and *automagically*.

ImageMagick utilizes multiple computational threads to increase performance and can read, process, or write mega-, giga-, or tera-pixel image sizes.

ImageMagick is free software delivered as a ready-to-run binary distribution or as source code that you may use, copy, modify, and distribute in both open and proprietary applications. It is distributed under the Apache 2.0 license (www/license.html).

The ImageMagick development process ensures a stable (http://abi-laboratory.pro/tracker/timeline/imagemagick/) API and ABI. Before each ImageMagick release, we perform a comprehensive security assessment that includes memory error (https://code.google.com/p/address-sanitizer/) and thread data race (https://code.google.com/p/data-race-test/wiki/ThreadSanitizer) detection to prevent security vulnerabilities.

The current release is ImageMagick 7.0.2-0 (www/binary-releases.html). It runs on Linux (www/binary-releases.html#unix), Windows (www/binary-releases.html#windows), Mac Os X (www/binary-releases.html#macosx), iOS (www/binary-releases.html#iOS), Android OS, and others.

The authoritative ImageMagick web site is http://www.imagemagick.org (index.html). The authoritative source code repository is http://git.imagemagick.org/repos/ImageMagick (http://git.imagemagick.org/repos/ImageMagick). We maintain a source code mirror at GitLab (https://gitlab.com/ImageMagick/ImageMagick) and GitHub (https://github.com/ImageMagick/ImageMagick).

We continue to maintain the legacy release of ImageMagick, version 6, at http://legacy.imagemagick.org (http://legacy.imagemagick.org/).

Features and Capabilities

Here are just a few examples (www/examples.html) of what ImageMagick can do for you:

Animation (http://www.imagemagick.org/Usage/anim_basics/)	create a GIF animati
Color management (www/color-management.html)	accurate color mana gamma compressior
Command-line processing (www/command-line-processing.html)	utilize ImageMagick
Complex text layout (https://en.wikipedia.org/wiki/Complex_text_layout)	bidirectional text su
Composite (www/composite.html)	overlap one image o
Connected component labeling (www/connected-components.html)	uniquely label conne
Decorate (http://www.imagemagick.org/Usage/crop/)	add a border or fran
Delineate image features (http://www.imagemagick.org/Usage/transform/#vision)	Canny edge detectio (http://www.imager server//viewtopic.h (http://www.imager server//viewtopic.h
Discrete Fourier transform (http://www.imagemagick.org/Usage/fourier/)	implements the forv (http://en.wikipedia
Distributed pixel cache (www/distribute-pixel-cache.html)	offload intermediate
Draw (http://www.imagemagick.org/Usage/draw/)	add shapes or text to
Encipher or decipher an image (www/cipher.html)	convert ordinary im
Format conversion (www/convert.html)	convert an image fro PNG to JPEG).

Generalized pixel distortion (http://www.imagemagick.org/Usage/distorts/)	correct for, or induc
Heterogeneous distributed processing (www/architecture.html#distributed)	certain algorithms a advantage of speed- heterogeneous platf processors.
High dynamic-range images (www/high-dynamic-range.html)	accurately represent scenes ranging from shadows.
Image calculator (www/fx.html)	apply a mathematica
Image gradients (www/gradient.html)	create a gradual blen circular, or elliptical
Image identification (www/identify.html)	describe the format
ImageMagick on the iPhone (www/binary-releases.html#iOS)	convert, edit, or com (http://www.apple.c
Large image support (www/architecture.html#tera-pixel)	read, process, or wri
Montage (www/montage.html)	juxtapose image thu
Morphology of shapes (http://www.imagemagick.org/Usage/morphology/)	extract features, des
Motion picture support (www/motion-picture.html)	read and write the co
Noise and color reduction (http://www.imagemagick.org/Usage/transform/#vision)	Kuwahara Filter (http://www.imagen server//viewtopic.h (http://www.imagen server//viewtopic.h
Perceptual hash (http://www.fmwconcepts.com/misc_tests/perceptual_hash_test_results_510/index.html)	map visually identica image retrieval, auth digital watermarking
Special effects (http://www.imagemagick.org/Usage/blur/)	blur, sharpen, thresl
Text & comments (http://www.imagemagick.org/Usage/text/)	insert descriptive or
Threads of execution support (www/architecture.html#threads)	ImageMagick is thre parallel (www/open multicore processor
Transform (http://www.imagemagick.org/Usage/resize/)	resize, rotate, deske
Transparency (http://www.imagemagick.org/Usage/masking/)	render portions of a
Virtual pixel support (www/architecture.html#virtual-pixels)	convenient access to

Examples of ImageMagick Usage (http://www.imagemagick.org/Usage/) shows how to use ImageMagick from the command-line (www/command-line-processing.html) to accomplish any of these tasks and much more. Also, see Fred's ImageMagick Scripts (http://www.fmwconcepts.com/imagemagick/): a plethora of command-line scripts that perform geometric transforms, blurs, sharpens, edging, noise removal, and color manipulations. With Magick.NET (https://magick.codeplex.com/), use ImageMagick without having to install ImageMagick on your server or desktop.

News

Now that ImageMagick version 7 is released, we continue to maintain the legacy release of ImageMagick, version 6, at https://legacy.imagemagick.org (https://legacy.imagemagick.org/).

ImageMagick best practices **strongly** encourages you to configure a security policy (www/security-policy.html) that suits your local environment.

Community

To join the ImageMagick community, try the discourse server (http://www.imagemagick.org/discourse-server/). You can review questions or comments (with informed responses) posed by ImageMagick users or ask your own questions. If you want to contribute image processing algorithms, other enhancements, or bug fixes, open an issue (http://git.imagemagick.org/repos/ImageMagick/issues).
