



Richard W. Kaszeta

2 February, 2000

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What is the Gimp?:

GIMP is an acronym for *GNU Image Manipulation Program*. It is a freely distributable (GPL) piece of software suitable for such tasks as photo retouching, image composition and image authoring. It provides capabilities similar to (and in many cases superior to) Adobe Photoshop.

It is an extremely capable piece of software with many capabilities. It can be used as a simple paint program, a expert quality photo retouching program, an online batch processing system, a mass production image renderer, a image format converter, etc.

GIMP is extremely expandable and extensible. It is designed to be augmented with plugins, scripting, and extensions to do just about anything. The advanced scripting interface allows everything from the simplest task to the most complex image manipulation procedures to be easily scripted.

Gimp Features

From the GIMP web site:

Basic Features:

- ❖ Full suite of painting tools including Brush, Pencil, Airbrush, Clone, etc.
- ❖ Tile based memory management so image size is limited only by available disk space.
- ❖ Sub-pixel sampling for all paint tools for high quality anti-aliasing
- ❖ Full alpha channel support
- ❖ Multiple Layers and channels
- ❖ Multiple Undo/Redo (limited only by disk space)
- ❖ File formats supported include gif, jpg, png, xpm, tiff, tga, mpeg, ps, pdf, pcx, bmp, and many others.

Advanced Features:

From the GIMP web site:

- ❖ A Procedural Database for calling internal GIMP functions from external programs as in Script-fu
- ❖ Advanced scripting capabilities
- ❖ Virtually unlimited number of images open at one time
- ❖ Extremely powerful gradient editor and blend tool.
- ❖ Load and save animations in a convenient frame-as-layer format.
- ❖ Transformation tools including rotate, scale, shear and flip.
- ❖ Selection tools including rectangle, ellipse, free, fuzzy, Bezier and intelligent.
- ❖ Plug-ins which allow for the easy addition of new file formats and new effect filters.
- ❖ Over 100s of plugins already available.
- ❖ Supports custom brushes and patterns

GIMP Basics

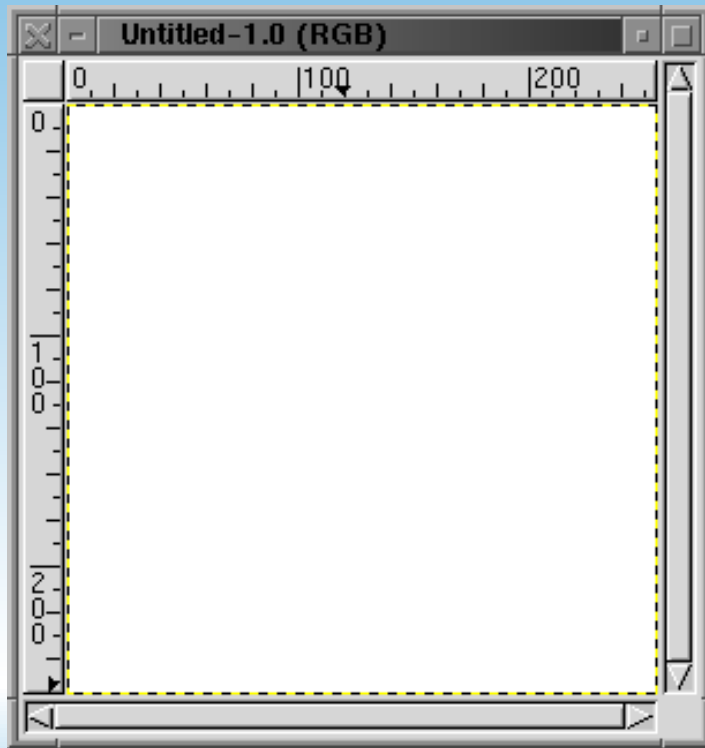
The Toolbox:



Gimp’s main window is known as the toolbox, and is the first window that opens when you start Gimp. Similar to most paint programs, the toolbox contains often-used tools, such as selection tools, painting tools, color selectors, and similar utilities. It also includes the file handling menu, and the Extensions menu which gives you access to many of the Gimp plugins and scripting extensions.

GIMP Basics

The Canvas Window:



In Gimp, each image is represented in its own image canvas, with crosshairs and image rulers along the top and left sides of the image.

Most tools from the toolbox are used by selecting them and clicking on the image menu.

However, the most useful feature of the image window is the list of pop-down menus available by right-clicking on the image. From these menus, you will have access to all of the Gimp's tools, plugins, and scripting capabilities.

Plugins

Like Adobe Photoshop, Gimp allows people to develop their own third-party extensions that add functionality to the Gimp. Usually, plugins add new artistic effects, file formats, printing, or editing tools. Many of the “built-in” file formats of the Gimp, for example, are actually just plugins included with the default distribution.

For example, a wide variety of artistic plugins are previewed at <http://www.xach.com/gimp/previews/cubism.html>

To install a plugin, all the user has to do is obtain the plugin, compile it, and leave it in their personal gimp plugins directory.

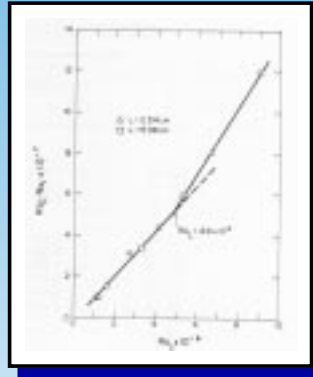
Scripting

Gimp also includes a script-able Lisp-based language allowing automation.

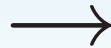
Many of the activities a user may wish to do, such as web page label image generation, artistic effects, and color correction can often be broken down into a series of script-able steps.

Other Examples:

❖ Fixing bad scans



❖ Image Masking



Further Gimp Resources:

Web Resources

1. The Gimp Web Page, <http://www.gimp.org/>
2. The Gimp Plugin Registry, <http://registry.gimp.org>
3. Gimp News, <http://www.xach.com/gimp/news/index.html>
4. The Gimp Links Page, <http://www.gimp.org/links.html>
5. Gimp, the Past, Present, and Future,
<http://www.graphics-muse.com/linuxworld/index.html>, to be presented at
this year's upcoming LinuxWorld conference.

Printed Resources

1. GUM, the *Gimp Users Manual*, by Olof S. Kylander and Karin Kylander, is available online as a (almost unuseably huge) PDF, or in printed form from CoriolisOpen Press.
2. Michael J. Hammel's *The Artists' Guide to the Gimp* is available from SSC. Michael is also the author the the Linux Journal's regular "Graphics Muse" column.

Other GIMP books are also available, and many more are waiting to be published.

Questions?