*Image Creation
and Manipulation*

GIMP

*Pocket
Reference*

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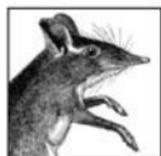
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Gimp Pocket Reference

The GNU Image Manipulation Program, more affectionately known as "the Gimp," is a freely available graphic design program that runs on virtually all Unix and Linux platforms, and is included with most Linux distributions, including Red Hat, SuSE, and Debian GNU/Linux. This powerful design tool can be quite complex and it is easy to overlook the Gimp's whole functionality. The *Gimp Pocket Reference* helps novices and experts alike to quickly master this complex program.

This compact reference, based on Gimp 1.2, describes every tool, menu item, and filter, and offers tips for everyday use. The *Gimp Pocket Reference* also includes an overview of important image manipulation and design terms, along with a table of file formats supported by the Gimp.

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Introduction

The GNU Image Manipulation Program, or *Gimp*, is a powerful and complex Open Source image editing program. Because the Gimp's ability can be expanded with plug-ins and scripts, its functionally is virtually limitless. This reference will introduce you to version 1.2 of the Gimp and all the plug-ins and scripts that are part of the standard distribution. This book will help the novice, who wants to learn about the Gimp's features, as well as the experienced user who wants to look up certain functions. Some effort has been put to the task to document the many, sometimes hidden, features that make working with the Gimp more efficient.

Structure and Conventions

This reference starts with a description of the Toolbox, the Gimp's main window, and the functions that can be accessed from here. The second section of this Pocket Reference deals with the Image window and the functions reached through the Context menu that can be opened by right-clicking in any image window. We will closely follow the Context menu's hierarchy, making it fast and easy for you to look up specific functions. References to other menu items in the text will follow this structure as well. For example, *<Image>Filters* points to the *Filters* menu inside the *Image* menu. The Toolbox also contains a menu hierarchy that provides access to functions that do not apply to any specific image. Since some functions are accessible only via the Extensions menu, we will also use the *<Toolbox>Xtns* notation where appropriate.

The standard shortcut key of a function is in parenthesis next to its description—for example, *Quit* (*CTRL-Q*). See *"Creating and Editing Keyboard Shortcuts"* to learn how to define your own keyboard shortcuts.

This book also covers the Gimp's use of some not-so-common Perl modules. If these Perl modules are not installed on your system, you won't be able to use some of the functions that Perl adds to the Gimp. Functions that require the use of Perl have been marked with a Camel icon.

Understanding the Gimp, and image manipulation in general, requires an understanding of some technical terms. These terms are explained in the Appendix, along with a list of the image file formats, and their respective properties, that the Gimp can handle.

The Toolbox

The Toolbox, as illustrated in Figure 1, is the Gimp's main window. This first section of this book describes the functions accessible through the Toolbox's menus, its tools, and finally, the color-selector and preview areas located at the bottom of the Toolbox. The Toolbox may be resized to whatever shape you like by simply dragging its borders with the mouse.

File

The Gimp has two different File menus, one located in the Toolbox, and the other in the Image window. The Toolbox's File menu (*<Toolbox>File*) contains only those functions specific to an image, in addition to an image history, which offers easy access to images on which you have recently worked. The Image window has its own File menu (*<Image>File*), with options that allow you to save and print images. These options include:

Menus
Tools
Swap Foreground and Background Colors
Foreground Color
Default Color Setting
Background Color

Brush
Pattern
Gradient Blend
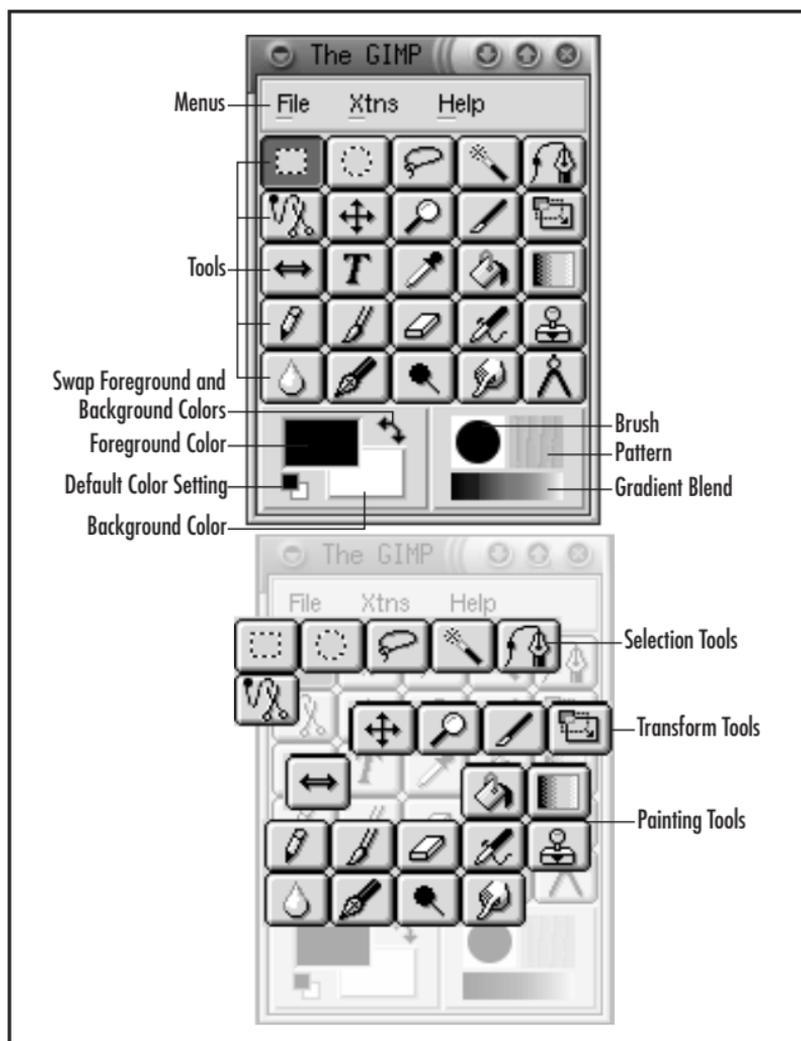
Selection Tools
Transform Tools
Painting Tools

Figure 1. At the heart of the Gimp is the Toolbox, offering a variety of tools for image manipulation and design.

New (CTRL-N)

Creates a new image. If invoked from the Toolbox, the values for the last image created in this session (e.g., image type and size), are used as the default values. (Default image values can be set with *<Toolbox>*

File→Preferences.) *<Image>File→New* copies the properties from the current image and applies them to a new image editing window.

Open (CTRL-O)

Loads an image from disk. The Open dialog can do command-line completion (i.e., pressing the TAB key will complete the filename if there are no ambiguities). Hidden files and directories are not displayed in the dialog, but can be directly accessed by entering their names. Pressing SHIFT or CTRL while selecting the filenames allows you to open multiple images at the same time. Shift-clicking allows you to select a range of images in a directory, while Control-clicking allows you to select specific files.

Saving an image will also create and save a small preview of the image. The Gimp uses the same file format for the preview that the program *xv* uses for its own previews. This preview is displayed in the file list. Clicking the preview will cause an up-to-date preview of the image to be generated. If all of the files in the list have been selected and the preview area is clicked, previews will be generated for each image.

The Gimp recognizes the image by reading the first few bytes of data (the file format's "magic number"). If The Gimp fails to identify the image type, it will try to do so based on its file extension. If you want to load a valid image file whose extension is not correct, the file type can be set manually by selecting it from the *Determine File Type* menu. Compressed files with the *.gz* or *.bz2* extensions are decompressed automatically when opened if the *gunzip* or *bunzip2* programs are installed on your system.

Acquire

Plug-ins that load images from some place other than the hard disk (e.g., scanners) are placed here. *Xsane*, a Unix front-end for the *SANE* scanner library, cooperates

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Table 5. Standard file formats supported by the Gimp (continued)

Format	Extension	Saving	Loading	RGB	Grayscale	Indexed	Alpha	Layers
Irix RBG	rgb, bw, sgi, icon	✓	✓	✓	✓		✓	
Microeyes SNP	snp		✓			✓		
Truevision Targa	tga	✓	✓	✓	✓	✓	✓	
Tagged Image File Format	tiff, tif	✓	✓	✓	✓		✓	
X10/X11 Bitmap	xbm	✓	✓			✓		
Gimp XCF	xcf	✓	✓	✓	✓	✓	✓	✓
Gimp XJT	xjt	✓	✓	✓	✓	✓	✓	✓
X Pixmap	xpm	✓	✓	✓	✓	✓	✓	
X Window Dump	xwd	✓	✓	✓	✓	✓		

The *AVI*, *FLI* and *MPG* formats contain animation. This is also partially true for the *GIF* format, which can contain a still image as well as animation. The Gimp makes each layer of an image a frame in the animation. Only the GIF format can save an animation stack. The names of the layers are used to find animation information. The duration of a frame can be given in the layer's name. For example, an entry of "500ms" will display this animation frame for half a second before the next frame is shown. With the "combine" and "replace" parameters, you can determine if the layer is combined with the existing image, or if the frame completely replaces the previous image.

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