

» **Gimp** Open source image-editing software you can get your teeth into

Gimp: Enhance

Gimp contains a little-known back door to some powerful layout and preset features. **Michael J Hammel** picks the lock and roots through the stock.



» Map keyboard and mouse buttons to *Gimp* events using the Preferences > Input Devices > Input Controllers dialog.



Our expert

Michael J Hammel

is a contributor to the *Gimp* project and the author of three books on the subject, including his latest, *The Artist's Guide to Gimp Effects*.

Gimp has many features that are seldom explored by the new or even experienced user. Most users are aware that in version 2.6 the menu bar in the Toolbox has been replaced by an eyeball-shot of Wilbur, the *Gimp* mascot. However, few realise that you can get rid of those probing eyes by adding the following line to the `~/.Gimp-2.6/Gimprc` file:

```
(toolbox-wilber no)
```

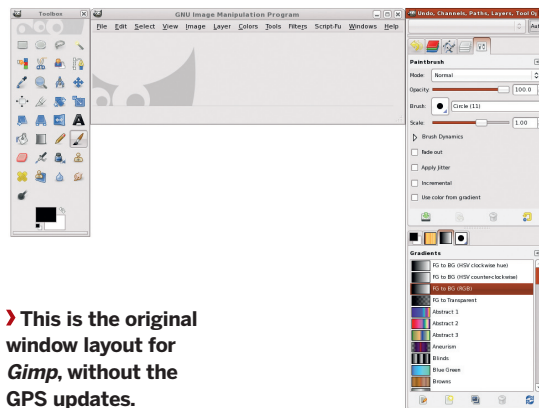
Another hidden feature lets you connect your mouse wheel to certain events, such as scaling the current brush size. This makes working with brushes a pleasant experience when you work with various sizes of image windows.

Two areas of concern to new *Gimp* users, whether at home hobbyists or experienced artists, are the default window layout and the difficulty encountered trying to configure *Gimp*'s tools. Few users are aware that you can hide all windows except the image window by simply hitting the Tab key (hitting it again brings the windows back). But this only hides the windows and doesn't actually change their layout on the screen.

Both of these problem areas can be addressed with hidden features in *Gimp*. And that's exactly what *Gimp Paint Shop* is all about. New users of *Gimp* are sometimes put off by *Gimp*'s multiple windows and the positions they take within a desktop layout. Often this happens when the user is migrating from Windows or *Photoshop* where MDI (multiple

document interface) causes all windows of an application to live within a single parent window. With *Gimp*, the layout uses SDI (single document interface) where each window of a single application is independent of other windows in the same application.

New users, especially experienced designers and artists, also run into difficulty when setting up *Gimp*'s tool to perform various tasks. It can be confusing, for example, to know which brush to use with the Paintbrush versus which to use with the Eraser, not to mention how you might configure the Tool Options for each. Having each tool use a different brush and configuration can make things even more perplexing.



» This is the original window layout for *Gimp*, without the GPS updates.

» **Last month** We showed how to create an iPod advertisement using Gimp.

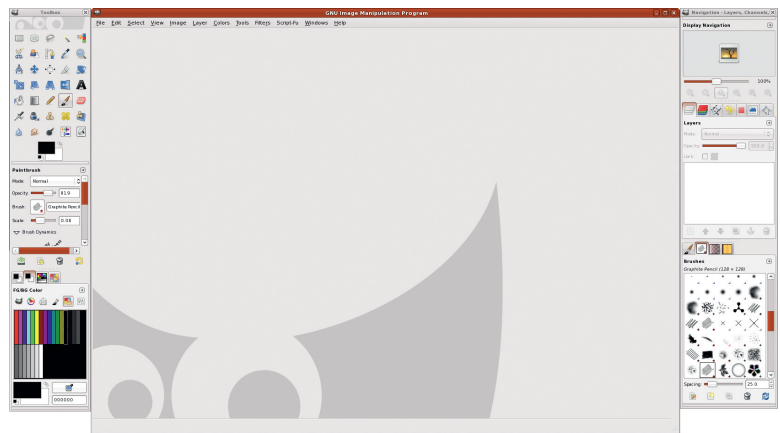
the interface



Ramón Miranda ran into these very issues and decided to do something about it. Starting with *Gimp's* built-in tool presets and with a little help from the *Gimp* community, Ramón was able to configure *Gimp* to ease the confusion for new users. The result of his work is what he calls *Gimp Paint Shop*, or *GPS*.

GPS is a collection of data files and *Gimp* configuration files that, once installed, ease experienced artists into the *Gimp* world. While many users and developers continue the long debate about which is better, MDI or SDI, Ramón decided to create a layout for *Gimp's* windows that simulates the former yet works within the rules of the latter, while at the same time adding configurations that ease the use of *Gimp* for many common drawing and painting tasks.

Of course, *GPS* isn't for everyone. For a start, it requires a large display, typically 1280x960 or better, although you can alter this with your window layout. Secondly, its primary use is for artists who focus on using *Gimp* for drawing and painting exclusively, not for photo enhancement. The configurations installed with *GPS* are mainly for people who already know how to draw but are not yet familiar with using *Gimp*.



» The *GPS* window layout for *Gimp* – an ideal base of operations for artists who focus on drawing and painting, but who aren't yet familiar with the program.

Package contents

GPS was originally packaged in a RAR file, then later repackaged into a 7zip archive. Neither are common Linux archive formats, so I've repackaged *GPS* again as a typical **tar.gz** file that you can snag from my website (see below) or from the **LXF**DVD.

The package contains the following directories:

- » **brushes** A collection of brushes.
- » **palettes** A collection of colour palettes.
- » **tool-options** A collection of tool presets.

It also contains two files used to configure *Gimp*:

- » **sessionrc** Initialises the window layout for *Gimp*.
- » **toolrc** Adds two commonly used tools to the Toolbox.

“GPS is for artists who focus on using Gimp for drawing and painting”

GPS archive and docs

The original documentation was written in Spanish and provided in PDF format. This was later translated to English and placed on a web page. I copied this and merged it with the original images from the Spanish PDF to produce an edited English language version of the PDF.

The document, like *GPS* itself, is *GPL* licensed, and I've also made available the *OpenOffice.org* version I created to generate the PDF:

- » www.graphics-muse.org/source/GPS.odt
- » www.graphics-muse.org/source/GPS.pdf
- » www.graphics-muse.org/source/gps_v1.0.tar.gz.

Most *Gimp* users know about brushes and where to find them. What they don't know is that various brushes are best used with specific tools. The complete collection of brushes in *GPS* is actually multiple smaller collections of brushes, each designed for use with different drawing and painting tools found in the *Gimp* toolbox.

Instead of choosing the brush and then the tool from the Toolbox, just choose the tool and then select one of the *GPS* tool presets. More on using tool presets in a

» The *GPS* presets for the Paintbrush tool.

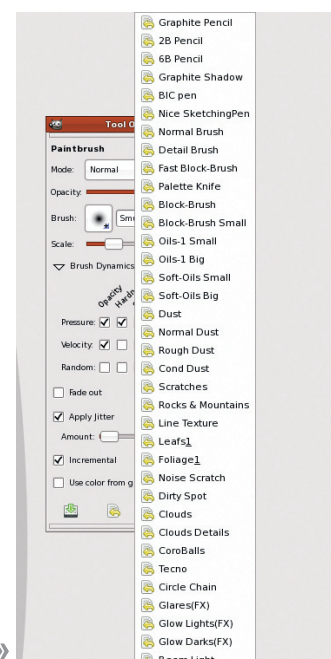
moment. Let's finish the installation first.

Download the archive of choice and unpack it into any directory. To utilise the window layout changes and tool presets, *Gimp* needs to be restarted. If *Gimp* is currently running, exit out of it. The installation process is manual – you'll be copying from a command line. The easiest way to install these files is to copy them all at once to your *Gimp* directory. In the following example, the *tar.gz* version of the archive is used.

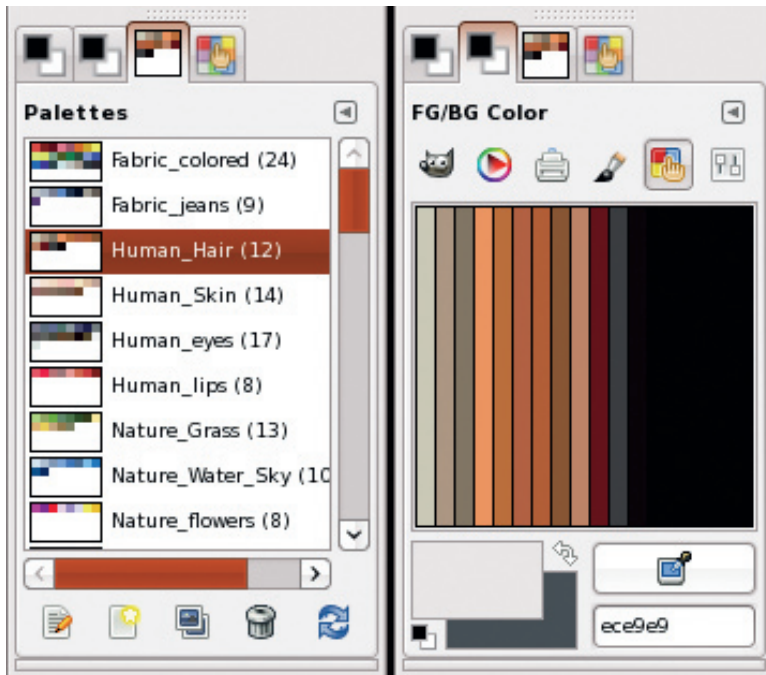
```
% tar xvzf gps_v1.0.tar.gz
% cd gps_v1.0
% cp -r * ~/.Gimp-2.6/
```

Gimp window layout

The installation of *GPS* is copied in a new **sessionrc** file. This file is read by *Gimp* at startup to place *Gimp's* various windows in the same position on the desktop as the last time *Gimp* was run. The file is rewritten when *Gimp* exits. By copying in the *GPS* version of the



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» **GPS provides ways of quickly setting the foreground and background colours by using multiple related windows in a single dock.**

sessionrc file the window positions are re-initialised to the preferred *GPS* layout. Any changes that are made during the *Gimp* session will be saved to the **sessionrc** file.

The *GPS* layout makes a number of changes to *Gimp*'s default window layout. First, it opens nearly all the available windows into a set of five docks. It then places two of these docks beneath the *Gimp* Toolbox on the left-hand side of the display. The other three docks are added as a set of connected docks on the right side of the display.

Finally, a blank image window is opened by default. The blank window is new in *Gimp* 2.6. It's actually a placeholder for the first image window you create or open (File > New, for example), so it can be easily adjusted. For some users this gives the impression of the familiar MDI interface provided by *Photoshop*. For old timers like me, however, it just takes up a lot of screen space. For artists it doesn't matter much, since they're likely to be using a lot of that empty space while editing their artwork.

Experiment with this layout by making changes to the docks, window sizes and positions. If the changes aren't suitable, just exit *Gimp* and copy in the original *GPS sessionrc* file, then restart *Gimp*.

Ramón took special care in selecting which dock to add a window. For example, the Tool Options is in a dock by itself and is directly beneath the Toolbox – right where you'd expect to find it. Beneath this dock is another dock with tools for setting the foreground and background colours.

On the right side of the display, the top dock has the Navigation window. Many users are familiar with the Quick Navigation button on the lower-right of the image window. However, this feature also has its own window. Ramón placed this window at the top of the toolbar, making it easy to scan an image and position it using a visible window instead of a pop up feature. Below the Navigation window is a dock with most of the rest of the windows an artist will need, including

layers, channels, paths, undo, selection and histogram. This dock is a bit crowded but it does provide quick and ready access to features without having to use menus.

At the bottom of the right-hand side docks is a dock with windows related to brushes, gradients and patterns. This grouping is consistent with the grouping of windows for managing the foreground and background colours. The layout is very intuitive.

With this updated layout users will no longer have to scan the Windows menu or look for windows hidden under other windows (as is often the case using SDI and Linux window managers). Now, all the windows are opened immediately when *Gimp* starts and are stored in docks where they can be easily located.

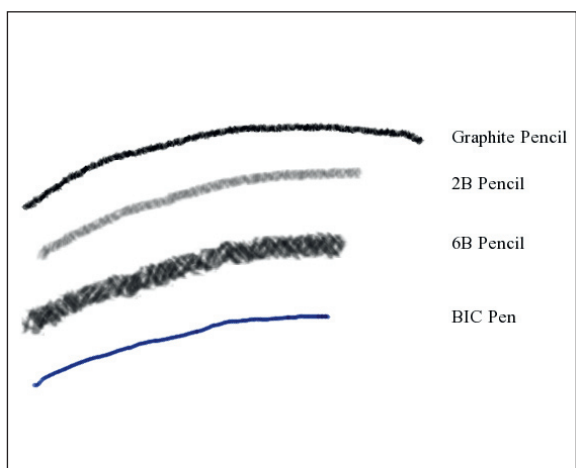
Using tool presets

The next big improvement brought by *GPS* is the tool presets. Most users probably aren't familiar with these. A preset is simply the Tool Options for a particular tool saved to a file. For example, when you choose the Text tool from the Toolbox you usually have to use the Tool Options to update the Font, Size and Hinting settings for a particular text format. The Tool Options dialog has a save feature so these settings can be named and saved to a file. Later, you can use another Tool Options feature to load those settings by simply selecting the named preset. *GPS* provides one or more presets for the following tools:

- » Airbrush.
- » Bucket Fill.
- » Clone.
- » Eraser.
- » Ink.
- » Paintbrush.
- » Rectangle Select.
- » Smudge.

It also has presets for a Mix Brush tool. This tool is only available, however, if your version of *Gimp* has the *Gimp Painter* patch applied. Most users won't have this and they won't be able to install it unless they're familiar with building *Gimp* from source code.

Take a look at the Tool Options window by choosing the Paintbrush tool. The Tool Options is the box directly below the



» **With *GPS*, it's not just a paintbrush, but a collection of paint and drawing tools rolled into one. Further, each *Gimp* tool becomes a collection of tools using *GPS* presets!**

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Toolbox. At the bottom of this window are a set of four buttons. These buttons are used for managing presets for the currently selected tool. These buttons are, from left to right: save, load, delete and reset.

When you make changes to the Tool Options dialog you can save those changes to a named preset. Just click on the save button. This will present a list of existing named presets. Choosing one of the named presets will overwrite its saved settings with the settings from the Tool Options window. Alternatively, the New Entry menu option can be used to create a new named preset. Be careful saving to an existing named preset as there is no undo operation to return to the previous saved settings.

Once a preset has been saved, it can be loaded using the load button. This button also provides a menu of named presets from which to choose. Selecting one of these will update the Tool Options window with the saved configuration.

The delete button should be used with tender care. It will remove all named presets. If this happens accidentally, just reinstall the *GPS* package. If you're paranoid about losing presets you should consider setting up a *Cron* job to back up your presets periodically. The last button in the Tool Options window, reset, is used to return the Tool Options settings to their default state. Resetting the Tool Options window will not affect any of your saved presets.

Quick colour changes

Before getting into what you can actually do with this package there is one additional feature to examine. *GPS* provides a collection of colour palettes. These contain colours that many artists would find useful, including human skin and hair, jeans, grass, water and flowers.

Using the palettes effectively requires using the *GPS sessionrc* configuration. This places the colour palette windows in a dock at the bottom of the Toolbox window. There are multiple windows here available in four tabs. To use the *GPS* palettes, choose a palette from the third tab then select the colour to use from the second tab. The second tab can be used to set either the foreground or background colours using the selected colour palette.

Touring the GPS presets

So what can *GPS* do for the artist? Examining the PDF documentation will give you some clue here. Ramón provides an excellent comparison of the various tools performing the same functions (drawing lines and a small ball). Some of those examples are included here.

Dabbling with the many presets, it becomes quickly apparent just how powerful this package is for configuring *Gimp* to behave like specific real-world tools, such as a graphite pencil or a BIC pen.

The lines shown here were drawn after choosing the named preset. The differences are distinct and very much simulate the real artist tool for which the preset is named. The only configuration required to achieve this was the selection of a *GPS* preset – no fumbling around for the right brush, configuring its spacing, or updating the Tool Options for the Paintbrush tool. One click for the load button and one click to choose the preset is all it takes.

Gimp Painter

This patch creates a new tool for blending colours on the image window. The patch was created by a Japanese developer and can be found on SourceForge. There's also a brief discussion on how to apply the patch and build *Gimp* on Blogspot.

» *Gimp Painter* can be found at <http://sourceforge.jp/projects/Gimp-painter>.

» For the discussion, visit <http://klettersblog.blogspot.com/2008/10/Gimp-painter.html>.

I'd love to provide more advanced examples of this wonderful package, but alas, while I understand *Gimp* fully I'm far from an accomplished artist.

Summary

GPS is a relatively simple extension to *Gimp* considering it has no additional code and offers no additional plugins. Instead, it's completely based on less well known and much

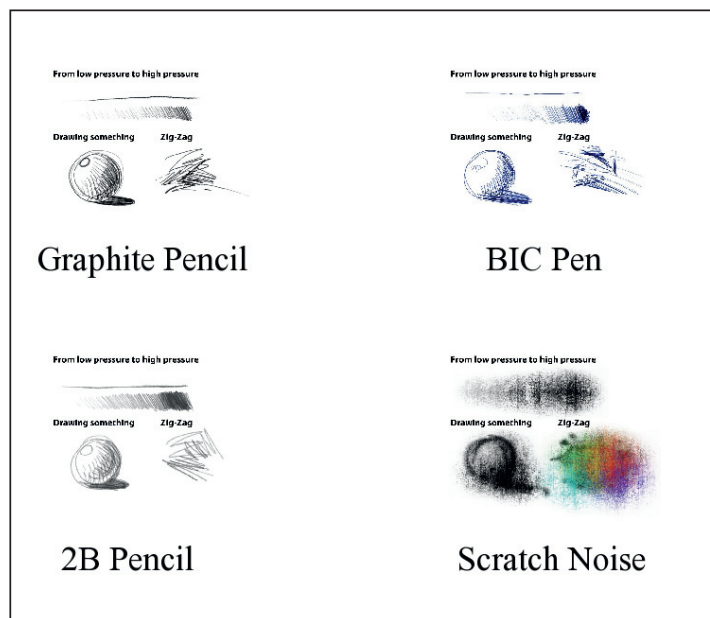
less discussed features of *Gimp* – presets and docks – that make it a powerful image editing tool. A little experimentation with *GPS* shows that this package is ideal for users with drawing

tablets. This is because the stylus of the drawing tablet can now take on the characteristics of real world drawing tools instead of just being a different kind of input device. Most of the presets include settings for brush dynamics such as Pressure, Velocity, Hardness and Size. All of these are meaningful specifically to tablet users.

But don't think that *GPS* is just for experienced users with tablets. Quite the contrary. The *GPS* window layout and predefined Tool Options make *Gimp* behave much more like real world drawing and paint tools. And that in itself will make *Gimp* more inviting to new users. **LXF**

» The natural tool presets available for use in *Gimp*.

“A little experimentation shows GPS is the ideal tool for tablet users”



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