NEW VERSION UPDATE

The GIMP 2.0 Preview

On the CD and DVD

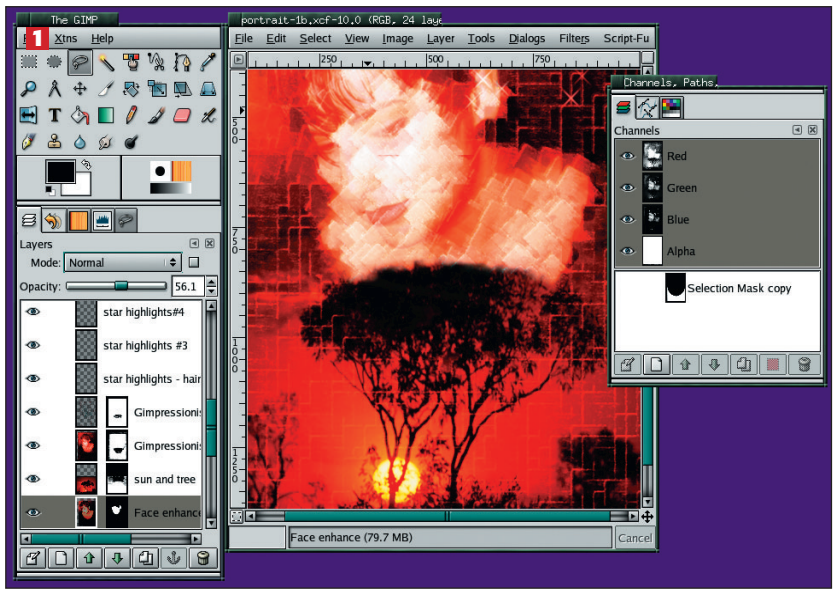
After more than three years of development, the next major step in the evolution of Linux desktop graphics is about to be revealed – and it has been worth the wait, as Michael J Hammel reveals...

The *GNU Image Manipulation Program* – better known as *The GIMP* – is about to take another major step forward. The 2.0 release, which has been in development since late December 2000, is being readied for mass consumption by the small band of volunteers which keeps the red, green and blue blood flowing in this popular project.

The GIMP 2.0 comes with a huge list of improvements, from cross-platform support to a user-friendly design to enhanced text and vector drawing support, and much more. In this article we'll look at what's new, what's improved, and whether they got it right after all this time. To cover it all, we need to start at the most obvious change: the user interface.

DOCKS AND UI

The new UI



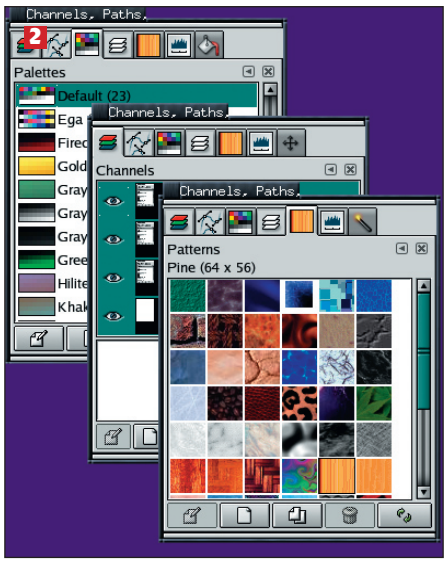
***The GIMP*'s new user interface is both polished and easy to use.**

1 Users of the current release of *The GIMP* have long complained about two big issues with the user interface. First, it just wasn't obvious how to use the *The GIMP*. Too many features were hard to find. Most new users stumbled blindly before ever finding the Canvas menu (right mouse click in an image window).

Second, *The GIMP* does more to clutter a desktop than any open source tool around. Too many windows. So little space. Managing your work environment was never an easy thing with *The GIMP*.

Both of these issues had modest hacks provided during the lifespan of the 1.2 release. This time around, the *GIMP* Developers took a much bigger stab at it.

The 2.0 user interface gets much of its improvements from the *GTK+ 2.x* toolkit it uses. *GTK*, the *GIMP Toolkit*, was born with *The GIMP* but has long since become a powerful entity in its own right. This toolkit allows GIMP to 'dock' its windows – grouping them in both stacked and tabbed formats – to address the desktop clutter issue.

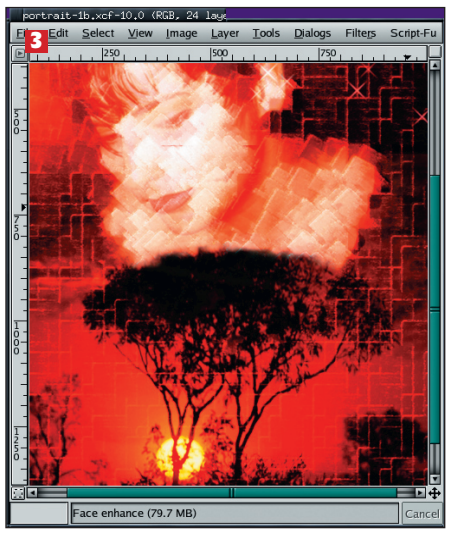


***GIMP* Docks allow multiple windows to be opened in a single, tabbed interface.**

GIMP Docks

2 Docking provides users a method to manage their workspace more effectively, permitting dialogs to remain open and quickly accessed without taking up additional screen space. And there is no limit to the number of docks or stacks allowed. Add to this the new full-screen mode, which can be configured with menus, scrollbars, rulers and other options independent of the normal view mode. The wealth of configuration here is nearly endless.

This new-found wealth of options also leads to the solution for the other big UI problem – ease of use. Menus now adorn the top of Canvas windows by default. These menus, like most features of the user interface, can be hidden from view, opened with the Canvas Menu button (the right arrow in the upper left corner of the Canvas window) or even accessed using the old right mouse click, if desired. Menus are better organised now as well, with layer features in their own menu, colour in their own, and so forth.



The new *GIMP* Canvas window makes menus obvious and configurable.

GIMP Canvas

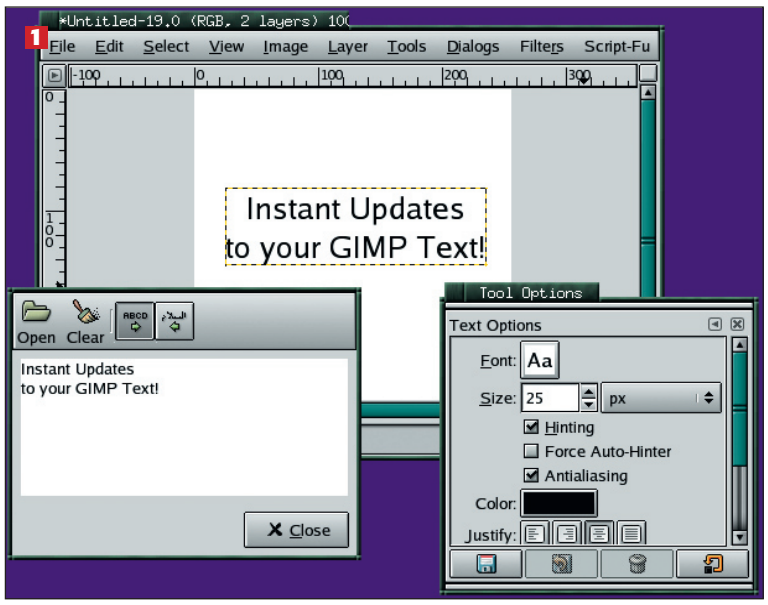
3 Going beyond menus, the Tool Options dialog has improved as well. The Selection tools, for example, all provide buttons to change modes between adding, replacing and subtracting. This feature replaces the overloaded use of **Ctrl/Shift/Alt** key and mouse-click combinations required in *The GIMP 1.2*. And the paint tool options now all come with their own brush and pattern settings. The paintbrush and pencil can use different brushes without you having to change the brush after switching tools. Better yet, the brush, pattern and gradient options can be selected using a mouse wheel in the Tool Options window!

VERDICT: Thumbs up!

So did they get it right? Absolutely. The new layout is user friendly, easy to navigate and clutter-manageable. Menu options can still be set to user defined keystrokes, so there is no loss of functionality there. The highly polished icons in the Toolbox and dialogs make *The GIMP* look more like its proprietary cousins on Mac and Windows systems. Adding the 'Select by Color' option to the Toolbox is a big help too. In the 1.2 version, this very useful feature got buried in the Canvas Menu's Select submenu – and didn't have a Keyboard short cut or Keyboard accelerator. All these new features lead us to say the *GIMP* developers wiped the ease of use and clutter issues right off the canvas. »

WRITING IS IMAGERY

Another big failing of the 1.2 version of *The GIMP* was text handling. The built-in Text Tool was primitive by today's standards, and the problem was made only more complex with the addition of a second tool, better attuned to multiline text, but which was not set as the default text tool. Font previews were unavailable and editing text was only possible if the secondary tool were used to create the text – the default tool didn't allow for text editing once the text was rendered.



Text Tool

1 *The GIMP 2.0* has but one Text Tool, but its tool options provide as much functionality as its predecessors and both the options and text editing window are easier to use. Text editing is done in a small preview window and changes are reflected immediately in the Canvas window. Editing is done by selecting the Text layer – which is now more easily identifiable by a Text icon in the Layers dialog. Multiline text is possible, including proper handling of newlines.

One of the other difficulties with using text in *The GIMP1.2* was a lack of font previews. Choosing a font was simple enough – in fact, it might have been easier in 1.2 if you knew about font families or styles. But there has never been a facility to preview fonts as they would be rendered in a Canvas window. In *The GIMP 2.0* this issue has been addressed in the Text Tool Options dialog. The Font Selection button shows a sample of the currently selected font. Opening the Font Selection tool provides previews of all fonts in either list or grid views. Other options include setting the text justification and hinting, line spacing and indent.

The *GIMP* Text tool is greatly simplified, yet more flexible that its 1.2 counterpart.

VERDICT: Thumbs up, mostly

So did they get it right? For the most part, yes. From the ease-of-use perspective, the Text Tool is quite an improvement. Editing text is far easier and intuitive, and the results are immediately apparent. The unification of the best of both of the old text tools gives the new tool better flexibility and ease of configuration. Text rendering was fair in *The GIMP1.2* and has improved with integration of the FreeType libraries in *The GIMP 2.0*. Overall, handling of text has greatly improved.

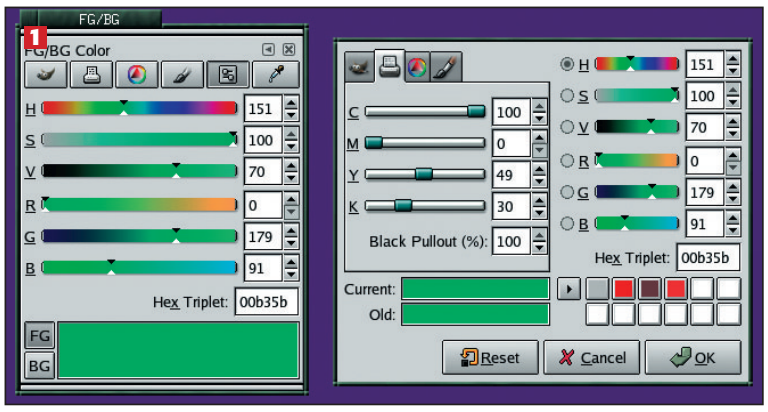
But all is not perfect here. Font previews are valuable, but resource-consuming if you have hundreds (or thousands) of fonts. The previews can definitely slow your system. And there is no configuration option to turn off the previews, so every time you have to select a font you can be slowed considerably.

Other issues are less obnoxious. The currently selected font name is not listed anywhere except in the font selection dialog. And while the direction of the font can be selected – an interesting option indeed – this option is in the text-editing dialog instead of the Tool Options. Considering that text justification is in the tool options, you'd think that other text characteristics would be there as well. Kerning is also not supported in *The GIMP 2.0*, even though the underlying FreeType libraries do support it.

Most of this is nitpicking, though. All things considered, we have to give a conditional thumbs up to the text handling improvements.

COLOUR MANAGEMENT AND OS SUPPORT

1 *The GIMP* is the tool of choice for Web developers working on Unix systems, but to go beyond this, the application needed to support multiple operating systems (besides Unix) and provide better colour management. The latter issue is a big one if *The GIMP* is ever to move seriously into the prepress arena.



***The GIMP* supports multiple platforms natively, but is that enough to keep users of those OSes happy?**

COLOUR MANAGEMENT AND OS SUPPORT CONTINUED

Colour Tools

1 In 2.0, the *GIMP* developers tackled multiple platform support the old-fashioned way – they let someone else do the work. *GTK2*, the software that gives the GNOME desktop its look, provides applications the foundation for running on multiple platforms with limited porting work. That geek-speak means that *GTK2* lets *The GIMP* run on Windows and Mac as a native application. While the *GIMP* developers still had plenty of work to do to clean the application for consistency across the three major platforms, most of the heavy work is handled by *GTK2*. The result is an expanded audience for *The GIMP 2.0*.

Colour management improvements came in bits and pieces with *The GIMP 2.0*. CMYK support – one of the most requested features for 2.0 – can be found in the Color selection dialog in the new Printer colour tab. This will be helpful when you know ahead of time the colour you will be using for a print job.

Other colour management improvements include a new colour mixer that allows selection of a colour from any part of the screen, not just from Canvas Windows. The Levels dialog now provides eyedropper selection of black, gray and white points. And the histogram is available as a dock, making it visible at the same time that the Curves dialog is being used.

VERDICT: Thumbs at half-mast

So did they get it right? Not really. OS support is a winner. More users these days are coming from the ranks of the unwashed Windows world than that of Unix. Mac use is growing fast, with OS X's support for X applications running side-by-side with native Mac applications. Having *The GIMP* on all three platforms makes the Unix bias less than it once was and, at a minimum, puts the application in front of the eyes of those who might not otherwise have seen it.

Colour Management, on the other hand, falls short in 2.0. The promise – implied or literal – was for 16-bit colour support in 2.0, and sadly we're seemingly no closer to that goal now than in December 2002. While there are many technical reasons for this, the problem is one of perception – the development team let the idea spread that the support was coming, specifically with 2.0. If wasn't going to happen, they should have nailed the lid down on that idea far sooner. Without 16 bit support, there is no chance of real colour profile support or colour gamut handling. 16-bit support is paramount for real-world prepress and video work. This issue aside, the improvements related to colour management are fairly minimal from the user perspective. The user interface improvements are not enough to win over the newly introduced Windows and Mac users, though: there has to be more meat on the bone.

The trouble here amounts to a PR failure more than a technical one, but no matter the reason, we have to give a thumbs down on colour management and platform improvements for 2.0. Plans call for 16-bit support (via another project called *GEGL*) in the next year; but that may be too late for the new crowds, and we've heard promises before... LXF

MORE GIMP-ROVEMENTS

More power, more options...

There is nowhere near enough space here to cover all the changes in *GIMP 2.0*. Some of the other notable improvements include:

- Improved vector (re: path) support.
- A visual undo history – you can see the changes previous edits created.
- Templates, such as PAL/NTSC, A4, Letter, and CD Cover, for new canvas windows.
- A visible grid that complements the use of guides.
- Built-in Session management.
- New layer modes: hard and soft light, grain merge and grain extract.
- Native Python support.

One change you won't see – or probably even notice – is an improved code base that will allow the developers to add features or extend existing features more easily than the code from 1.2. In fact, part of the reason for the delay in the 2.0 release was to clean the code up and make it easier to add features like 16-bit support. Time will tell if this hidden improvement will have been worth the wait. You'd have to be a real stick in the mud not to give the latest *GIMP* a hearty thumbs up.

Developers may lack an understanding of PR, but that can't detract from obviously talented work. *The GIMP 2.0* offers most users better means to be productive and creative. And in the end, isn't that what we really want from an Open Source project?

The *GIMP* community is an integral part of the app's success, and there are some great online resources: *The GIMP*: www.gimp.org, *GIMP* Registry: http://registry.gimp.org/index.jsp, Graphics Muse Tools CD: www.graphics-muse.com/gfxmuse/gfxmuse.html, Tutorials and other useful links: www.graphics-muse.com/cgi/gmcat.pl?id=11