

New features in GIMP 2.6

NEW SHORES

After more than eight years of planning, GIMP 2.6 finally includes the Generic Graphics Library. **BY THOMAS LEICHTENSTERN**

Until recently, the feature-rich GIMP graphics program [1] was very much an acquired taste. Too complex for amateur users and lacking CMYK support, GIMP had a way of annoying professional photographers with a meager 8 bits per color channel. The developers took the criticism seriously and improved usability in version

2.4. The introduction of the new GEGL [2] version 2.6 brings GIMP a step closer to the promise of professional image processing. GIMP supports up to 32 bits per color channel and includes sorely missed support for CMYK (see the “GEGL” box).

If you are familiar with GIMP 2.4, you might not notice any major differences in version 2.6. The most obvious change

is that the file window is displayed permanently; GIMP displays the window without first loading a file. Because the window has a menubar, the toolbox has become redundant, and the developers removed it to improve visibility.

When you load an image, the scale is shown as a percentage at the bottom of the screen (Figure 1). Whereas GIMP

GEGL

As early as 2000, GIMP developers looked into implementing GEGL (Generic Graphics Library) with the image editor, even though GEGL was still at the draft stage. Version 2.6 sees these plans enacted.

GEGL is primarily a collection of basic image editing functions that can be combined more or less arbitrarily.

The most important feature of GEGL, which is what makes it so interesting for GIMP, is library functions that can handle images with up to 32 bits per color channel. GIMP was restricted to 8 bits previously, which is fine for JPEG images, but no longer state of art with RAW formats becoming increasingly popular. In addition, the graphics library allows users to work with the CMYK color model, which is

imperative in print applications. With the help of GEGL, GIMP is seeking in the mid-term to move into the professional camp to do battle with applications like Adobe Photoshop.

Although GIMP’s release announcement heralded the new graphics library as the most significant change, neither the GIMP homepage nor the integrated help pages has information for users as to the extent of GEGL integration and where it has actually been integrated.

The user only sees the new library in two places. Clicking *Colors | Use GEGL* enables GEGL, and clicking *Tools | GEGL Operations...* (Figure 2) opens a window with a variety of editing functions that rely on the library. However, help texts are missing in

both cases, and this leaves it up to the user to experiment with the effects of the individual functions. One thing I noted was that the filters are fairly slow: On several occasions, operations took a minute or more in our lab. Considering that high processing speed is supposed to be one of GEGL’s stronger features, this was quite surprising.

GEGL’s other strengths – the use of the CMYK color space and the ability to handle images with 32-bit color depth – are currently inaccessible in GIMP because the program does not implement features for them. It just remains to be hoped that the developers will continue to integrate the new graphics engine step by step as new versions are released.

only offered fixed values previously, it now accepts keyboard input, thus letting users freely scale the image view.

The photo manipulation software now lets users move images off the screen for easier editing of the image border. This makes it easier to tidy up the edges of an image with the brush tool than ever before.

New Functions, Missing Documentation

The developers have also added an extension to the brush tool. Clicking *Brush dynamics* opens an additional field in which you can set the *Pressure*, *Velocity*, and *Random* values.

Unfortunately, the documentation provides no clues as to what these settings do, leaving it to the user to experiment with the settings.

This example is not the only one that demonstrates the need for improvement in the integrated help function; some sections were missing altogether. The problem of incomplete documentation is one that GIMP has in common with many open source projects. Developers still don't seem to relish the idea of documenting the features they produce.

A new function has also been added to the freehand selection tool. It lets users

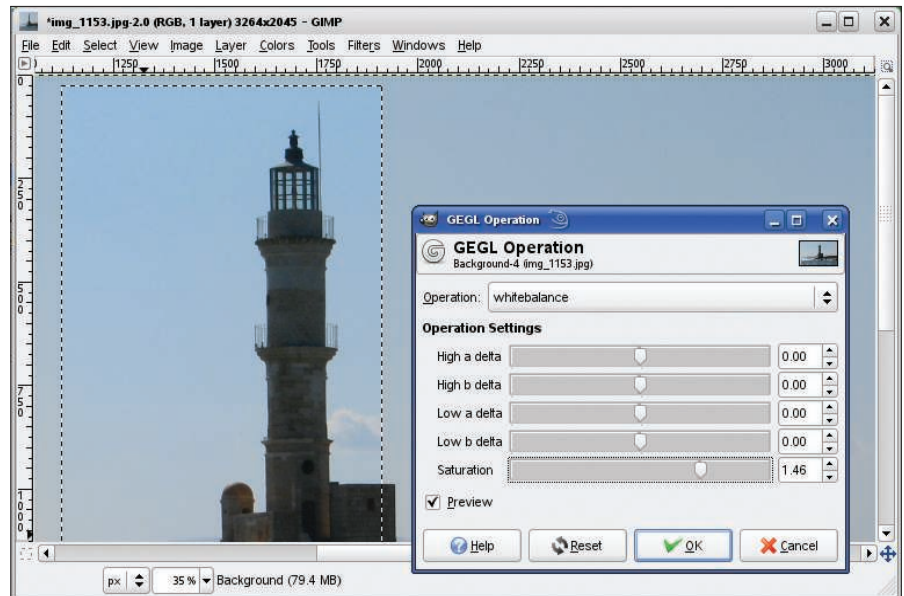


Figure 2: The GEGL Operations dialog give users a first impression of what the new graphics library is capable; however, neither the functions nor the processing speed were particularly impressive.

either draw freehand lines or use a polygon selection, in which each node has a round handle that can be dragged to the required position.

The *Select by Color* tool enables a function similar to the wand, but differs in that it does not select contiguous areas but rather all the areas with the same color in the image. The *Threshold*: slider

lets you set a decimal value for the tool's sensitivity with respect to color differences.

All told, the changes are easy to keep track of, compared with 2.6's predecessors, and are not on the same scale as the quantum leap from 2.2 to 2.4, which saw a complete revamp of the interface and implementation of numerous additional features.

Conclusions

If you were expecting a host of new features in GIMP 2.6, you will be disappointed. The changes, compared with the previous version, are primarily cosmetic.

What is certainly the most important extension – the option to enable GEGL – will support images with a color depth of up to 32 bits per channel. However, this function and the CMYK color model, which is vital in printing, are not currently implemented.

This said, you have to give it to GIMP for making tremendous progress in the past two years.

If the developers keep walking down this road, the program is very likely to become a genuine competitor for the current king of the hill, Photoshop. ■

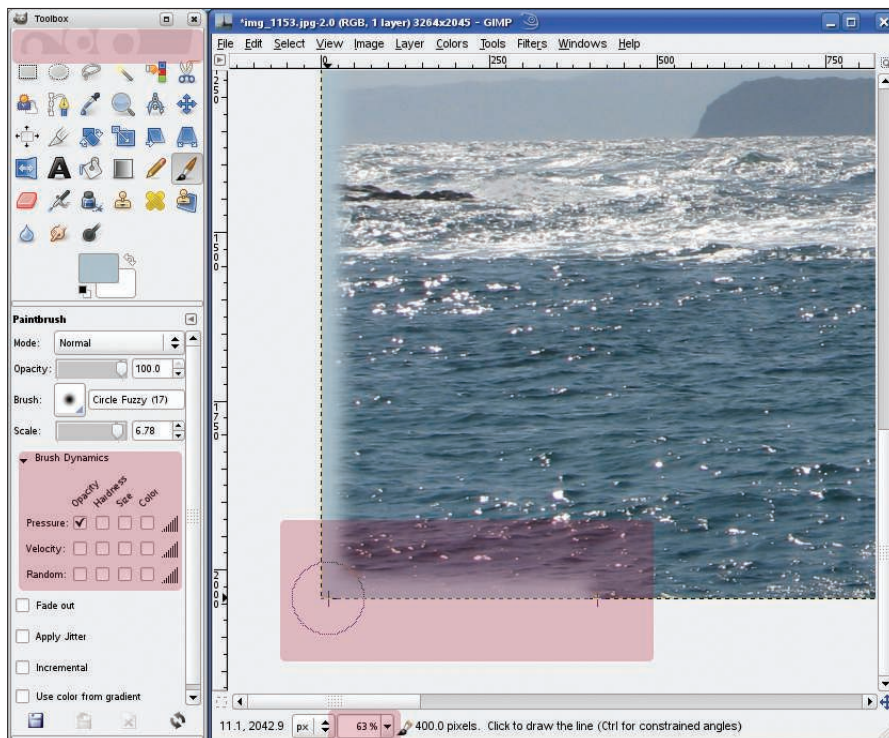


Figure 1: The major changes at a glance (marked in red) : Images can be scrolled off-screen; the menu bar in the toolbox is now displayed permanently in the main window; new functions are available for the brush tool.

INFO

- [1] GIMP: <http://gimp.org>
- [2] GEGL: <http://gegl.org>