

Updates and Improvements in Gnome 2.18

NEW GNOME

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Gnome 2.18 appears exactly six months after the last stable release.

The developers have focused on stability, but you'll also find some new and improved tools. **BY CHRISTIAN MEYER**

Despite much criticism, the GNU project's official desktop environment is gaining fans. Home users, as well as corporations, are starting to back the combination of Gnome, Gtk+, and GStreamer. Nokia, for example, used Gnome along with Maemo [1] on its N770 Internet Tablet. The N770's successor, the N800 [2], sees a continuation of this strategy.

In April, a number of global IT players, including Intel, Nokia, Canonical, and Red Hat, joined forces to form the Gnome Mobile & Embedded (GMAE) initiative [3]. This marks the entry of the Gnome project into the mobile and embedded market. As a positive side effect, many improvements from the GMAE ini-

tiative will find their way back into the main project.

New Programs

Gnome 2.18 (Figure 2) is available as a Live CD [4] if you want to try it out before you install. The new release sees the introduction of some useful new tools. Security-conscious users will appreciate Seahorse (Figure 1), for example, which hides the complexity of GNU Privacy Guard (GPG). Seahorse integrates seamlessly with the desktop and is perfect for use with Nautilus or Gedit to help users digitally sign files and documents.

Among other things, Seahorse supports simple administration of keys and keyrings, key and keyring synchroniza-

tion with key servers, signing and publishing of keys, and the creation of key and keyring backups. Seahorse also gives users the ability to create, configure, and manage SSH keys.

This intuitive interface makes GPG accessible to non-expert users. It looks like the developers will be merging the Gnome Keyring program and Seahorse in the near future, although it is unclear when this will happen.

Playtime

Version 2.18 marks the first time the developers have included a chess program (Figure 3) with the Gnome Games metapackage. The chess program not only gives users a typical 2D view of the chessboard, but it also supports a 3D view (assuming you have installed the required libraries). Sudoku is another new addition.

The developers have also fixed bugs in games such as Gnibbles, Iagno, and

CAN-U-GO, improving networking capabilities at the same time.

For Developers

Gnome 2.18 also includes some new tools for developers. The Devhelp program helps developers read documentation. Devhelp has a convenient search function, which starts showing results for various functions while you are still entering the search key. Like other Gnome programs, Devhelp relies on the Gecko engine on the display side and uses Gtk-doc, the API reference framework, to extract documentation. In an approach similar to the Epiphany web browser, the program lets you display information in tabs.

Also included is Glade-3, which includes an updated GUI designer for creating widgets (see Figure 4). The latest version replaces the legacy Glade-2 tool. Glade-3 comes with intuitive controls and a clear-cut GUI. Compared with Glade-2, the elements are arranged in a single window with clickable widgets on the left.

The central panel gives you a preview of the user interface and is where containers and GUI elements are positioned. The right-hand panel is divided into two sections, with a widget tree at the top and the properties of the current selection underneath.

Glade-3 integrates Devhelp in many areas. Clicking the button with the red book icon opens Devhelp with the keyword in the search bar. However, Glade-3 does mean more typing for developers because the program does not support automatic source-code generation; in fact, the software will only create XML-based Glade files.

The Anjuta IDE is in early development and will probably not be introduced until the next Gnome version is

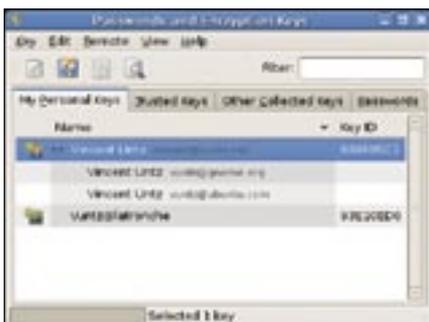


Figure 1: The Seahorse GPG front end simplifies handling of GPG keys.

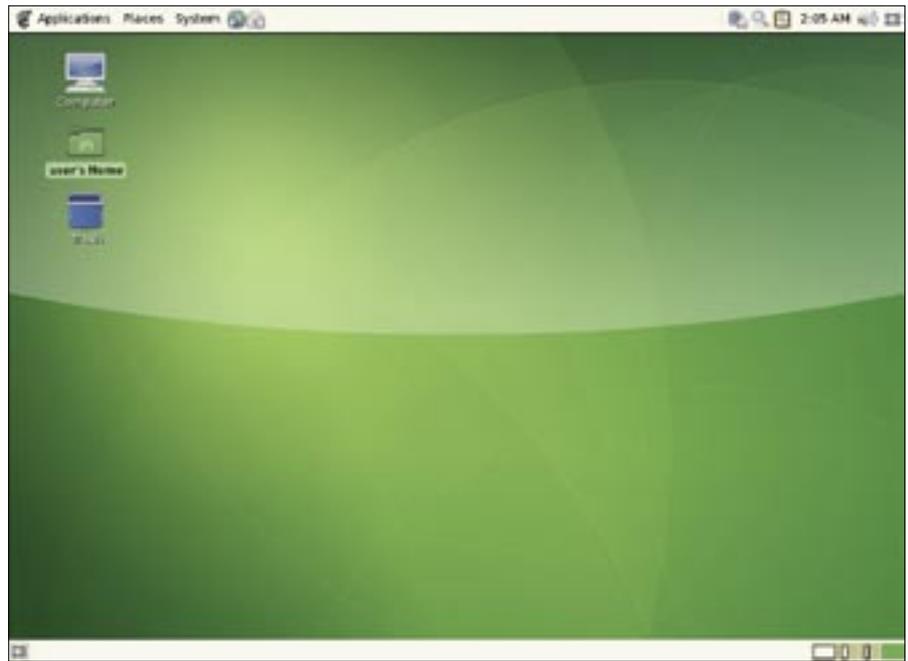


Figure 2: A rich collection of tools resides within the menus of Gnome's uncluttered desktop.

released; the environment will give developers all the components they need to create Gnome or Gtk+ programs directly using core Gnome tools.

Tomboy

Tomboy, the note-taking program, was introduced to the desktop toolbox in Gnome 2.16. The latest version fixes bugs and includes new features. The ability to create lists by means of simple formats is one of the more attractive features. In typical wiki style, the Tomboy program adds a new list entry if you start the entry with an asterisk (*) or minus sign (-). To define the indent depth, you can press the tabulator key.



Figure 3: The Gnome Games metapackage now includes a chess program.

If you drag a Bugzilla URL or an email from Evolution onto the note, you automatically create a new link to the object in question. Clicking the link opens the application with the URL or message.

Baobab

The Baobab system program now gives users a ring diagram to show disk-space usage. This type of diagram turned out to be more intuitive than the previous view mode, which the tool continues to offer as an option.

Evince

The current version of Evince gives users the ability to launch multiple instances, and its presentation mode can be very useful. Just as in a web browser, you can jump back and forth within PDF documents. If you close the document and then reopen it, Evince will automatically take you to the page you viewed last.

Eye of Gnome

Eye of Gnome now parses the Exif information to automatically rotate images. At the same time, the developers have improved the print function; the program now relies on GtkPrint for the first time, as does Evince. The Epiphany web browser and the Evolution mail client both have seen minor code reworking, making them more stable and slightly faster. The GDM display manager now supports D-Bus communication, sup-

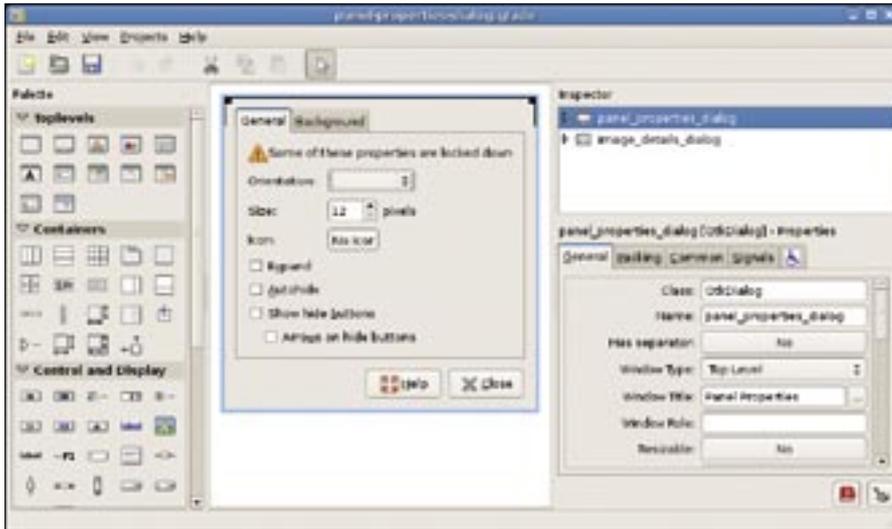


Figure 4: Glade-3 helps developers with GUI programming.

ported by an underlying platform-independent mechanism for system message exchanges.

Multimedia

Gnome also gives multimedia a higher profile. In addition to the Ogg Vorbis codec are now MP3 and AAC codecs. This means that in the future, users will be able to convert CDs to the format they need, while removing the issue of incompatibility with, for example, the iPod. The volume control now also supports professional sound cards.

Other Improvements

Additionally, developers have continued to remove barriers and adapted the GUI to support more languages. Asian characters, such as those used in Chinese or Japanese, can now be displayed vertically from the top down.

The integrated Orca screen reader module, magnifying glass, and dictionary are available with the technologies that support barrier-free access. Finally, the desktop now has a new speech synthesizer.

Bugs happen, and if you want to report one, you can use Bug Buddy. The reworked program structure provides more information about applications that fail to work because of bugs. This helps developers analyze the source of the crash more precisely.

In Messaging, Gnome now shows you when another user tries to access your desktop via VNC, and remote desktop controls help you define who gets access. If you prefer to do without inter-

ruptions, you can just reset remote connections in the message box.

The Gnome Power Manager now gives users the ability to control the clock speed, if your hardware supports the feature. A slower clock speed typically means longer battery life, a feature that road warriors will appreciate.

What the Future Holds

Unfortunately, some programs haven't made the cut because they are not up to production use or are just plain buggy. One example of this is NetworkManager. Some distributions, such as Ubuntu, have incorporated the tool anyway. The NetworkManager program has a simple interface – it slots into the message field and shows a list of all available wireless networks. This said, you are still able to configure network cards manually.

The new scanning infrastructure, which answers to the slightly unintuitive name of flegita, will not be available until Gnome 2.20 or later. Flegita [5] was developed during the "Google Summer of Code 2006" and works for the most part, but the developers decided to postpone integration.

The Totem media player now has a plugin system, which makes it easier to extend the program. Totem's structure is reminiscent of designs used by Rhythmbox or Epiphany, for example. If enough time is left, the developers will be looking to add DVB support.

The Archive Manager does not currently support access to remote files because of a lack of Gnome VFS integration. Gnome 2.20 will probably remove

this program, thus giving users the ability to open and unpack archives on remote machines.

One of the biggest changes will be happening to Gnome VFS. Up to now, an independent library has provided the required functionality.

Alexander Larsson is currently working on a version for integration with Glib, which means that resources will be available to non-Gnome programs if they rely on Glib [6].

The Ridley project has continued with its cleanup operation – the developers have now taken on the thankless task of removing, simplifying, and systemizing functions from Libgnome and other libraries and collating them centrally. Gnome 2.18 tagged the following libraries as obsolete: Orbit2, Audiofile, Es-

sound, Libart_lgpl, Libbonobo and Libbonoboui, Libgnome and Libgnomeui, Libgnomecanvas, and LibIDL.

The next version of Gnome will have even fewer dependencies, which in turn will mean lower memory consumption. The rest of the roadmap is available on the project homepage [7].

Compared with the current version, Gnome 2.20 will be even more innovative – a good reason to look forward to September 2007. ■

THE AUTHOR

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INFO

- [1] Maemo: <http://www.maemo.org>
- [2] Linux Magazine review of the Nokia N800: http://www.linux-magazine.com/issue/78/Nokia_N800_Internet_Tablet_Review.pdf
- [3] Gnome Mobile & Embedded Initiative: <http://www.gnome.org/mobile/>
- [4] Gnome Live CD: <http://torrent.gnome.org>
- [5] Flegita: <http://www.gnome.org/projects/gnome-scan/>
- [6] Gnome VFS information: <http://mail.gnome.org/archives/gnome-vfs-list/2006-September/msg00023.html>
- [7] Gnome roadmap: <http://live.gnome.org/RoadMap>