

What's new with Gnome 2.28?

# POLISHING THE DESKTOP



Danila Krylov, 123RF

New features and below-ground tweaks make the Gnome desktop lean and free of legacy ballast. **BY CHRISTIAN MEYER**

**R**ight on schedule, the Gnome team released the latest 2.28 version of the popular GNU desktop [1] (Figure 1). The focus for this release was mainly on cleaning up: The developers discarded unnecessary function calls, and various libraries were tagged as “obsolete.”

In preparation for the next generation version 3.0 of Gnome, the team again polished some of the desktop’s rough edges, thus preparing the way for the new major release. If work continues at the current pace, the developers really will meet the March deadline for Gnome 3.0, but the new Gnome already feels leaner, more stable, and faster than previous versions.

Libraries such as Libgnome and Libbonobo, as well as legacy abstraction layers for filesystem access (Libgnomevfs), are either gone or used very sparingly. Trimming these expendable components has led to resource savings and faster launch times. Many of the library functions have been shifted to Glib or Gtk+ or are still making the move. In the long term, these two components will be all developers need to program applica-

tions of any size. Other libraries – including GConf – are already available for initial use, although they are in very early development versions.

In November, the team will be deciding whether Gnome 3.0 will appear next spring, or not until the fall. If Gnome 3.0 is released in March 2010, it will be built on the current Gtk+ 2.18 and Glib 2.22. However, the developers point out that the move to Gtk+/Glib 3.0 would be fairly trivial.

The decision to leave icons out of the menus and buttons in Gnome 2.28 provoked some debate. The Gnome developers claim that this design gives the dialogs and menus a more uncluttered appearance. Exceptions just go to prove the rule, and as such, the developers made dynamic objects an exception to this rule; they include menu entries for applications, files, or bookmarks. (Individual distros such as Ubuntu give users the option of restoring the original view method.)

## Evince

The Evince document viewer benefits from a leaner structure and supports a

large number of file formats, such as Postscript, PDF, TIFF, and the DJVU raster graphics format. Evince also includes a presentation mode: Instead of using OpenOffice Impress natively, you can now export slides to PDF and present them in Evince.

As a recent addition, the program also supports notes, although the function is currently restricted to displaying existing notes. If it crashes, Evince will automatically open the last accessed document.

## Empathy

The Empathy [2] instant messenger is based on the Telepathy communications framework and impresses users with an improved contact list window (Figure 2). Ekiga [3] was previously the only program capable of handling audio and video calls in the Gnome world. The latest version of Empathy means that you no longer need Ekiga. Full-screen mode is recommended for DSL connections.

If the connection does not provide incoming video, Empathy will show you the contact’s avatar. The developers have also added an easy reconnect function. Drag-and-drop-based reorganiza-

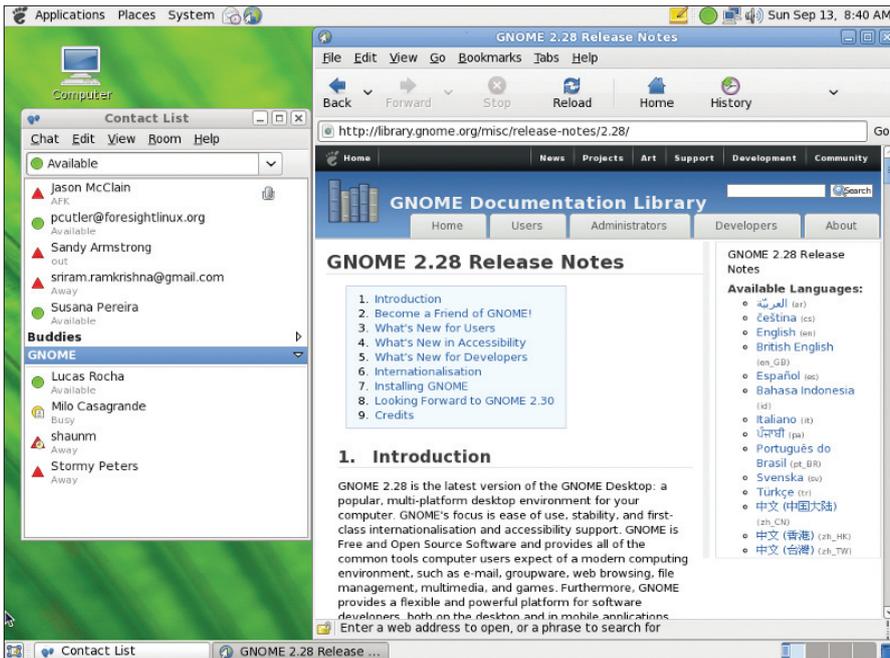


Figure 1: Gnome 2.28 is making its way to Gnome desktops around the world.

tion of contacts in the list works better than in previous versions. The conversation dialog gives users a choice of themes to customize dialogs. If your nickname appears in one of the chat conversations, the software will show you an optical signal in the tab for the corresponding channel.

Geolocation features debut in the latest version of Gnome: Now you can publish your current position to an XMPP contact (Jabber, Google Talk). To protect

your privacy, the system adds an offset to the location data, and to learn the location of another user, just mouse over a name.

Further highlights include the integration of Vinagre [4] and Vino, the remote desktop client and server for Gnome. If you want to share your desktop with another user, you simply select the contact in the contact list. The user at the other end is sent an invitation. If they accept your invitation, Vinagre automatically

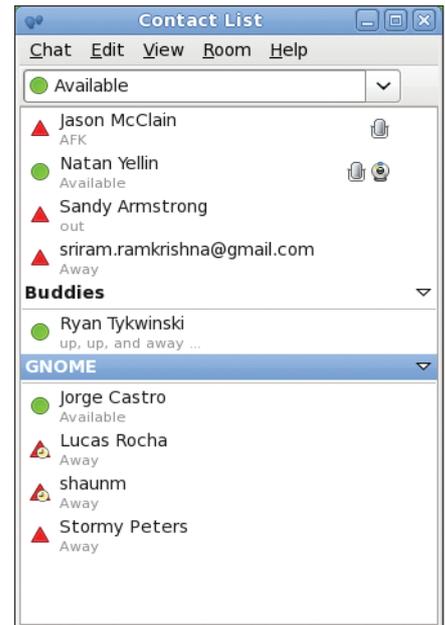


Figure 2: Track your Empathy chat friends with an improved contact list.

launches and sets up a connection to the inviter's server – this feature removes the need for time-consuming IP address and port searching.

## Epiphany

The developers behind the Epiphany web browser changed the Internet page rendering engine from Mozilla's Gecko engine to Webkit [5]. Webkit typically needs less memory. At the same time, Webkit, which has seen major contributions by Apple, renders pages more quickly.

The change involved a number of Gecko engine-related issues. Right now, Epiphany is unable to store passwords and login credentials – this is one of Webkit's weaknesses – but the problem will be fixed in the next version. The Epiphany team asks users to test the browser extensively and report any bugs they find to Gnome Bugzilla.

## Time Tracker

The Hamster time tracker [6] (Figure 3) contains several useful enhancements. The developers completely reworked the overview, which now groups the period and category graphs. Night shift workers will also benefit from new functions. The export function has some new options; for example, Google Calendar and Evolution now accepts the Hamster data. If necessary, Hamster will also export CSV (comma-separated value) files,

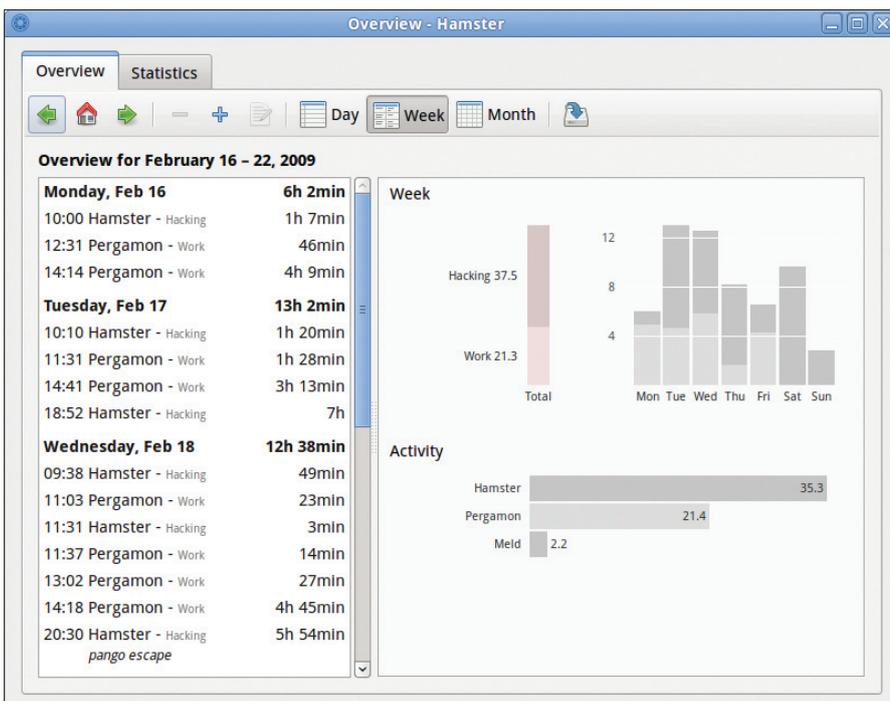


Figure 3: The Hamster applet helps you record working hours.



Figure 4: The Cheese webcam tool comes with a new layout and several other enhancements.

which spreadsheets such as Gnumeric can handle.

## Versatile Video Player

Totem [7] is not just a video player. Plugins let users add new functions to the software. For example, the YouTube extension removes the need to launch a browser to view movies on the web, and the search function finds videos in next to no time. The developers put a great deal of work into Totem plugins with the new version, greatly improving the performance by doing so.

The GStreamer back end [8] adds a function for navigating to the DVD player. Additionally, when you quit, it will remember where you stopped watching a video. Because GStreamer, the underlying multimedia framework, is now mature enough, the developers have completely dropped the Xine back end for Totem. Another convenient feature lets you move forward a single frame by pressing the period (.) key.

## Say Cheese!

The developers behind the Cheese [9] webcam tool (Figure 4) completely reworked their program, which now moves the preview bar to the right for low-resolution camera images, thus making better use of the available space. For image sequences, the software now offers a simple option for defining the interval between individual images. Additionally, it shows images that you cap-

tured by pressing the buttons on some webcams.

## Bluetooth

Gnome 2.28 adds a module to the mobile software stack to help users set up Bluetooth devices (Figure 6). This new module gives you a useful centralized overview of Bluetooth communications between computers, laptops, keyboards, mice, or headsets. No need to configure Internet access via your cellphone manually: the network manager now has a new entry that lets you enter access credentials for your cell.

## Future

Along with the Gnome 2.28 release, the developers offered a sneak preview of the next major version. Gnome 3.0 breaks with more or less all of the previ-

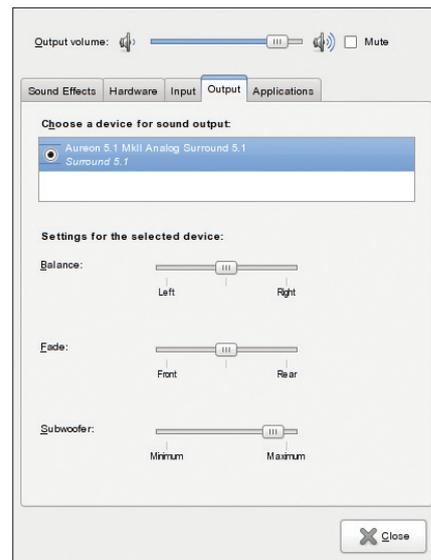


Figure 5: The Gnome 2.28 Volume Control now has separate input and output device tabs.

ous interface design concepts with respect to panels and window managers. The new Gnome shell steps in to replace them. A new Overview mode shows your desktop and workspaces and allows you to add and remove workspaces and move windows between them.

The Panel menus are still there, but they look very different. The shell displays the active applications, bookmarks, and recently accessed documents on the left of the screen in Overview mode. This is also where you will find a search function for programs and documents.

Compared with earlier versions, the developers have put a huge amount of work into the new components: so much so that the new interface is very different from previous versions with regard to both functionality and looks. Netbook

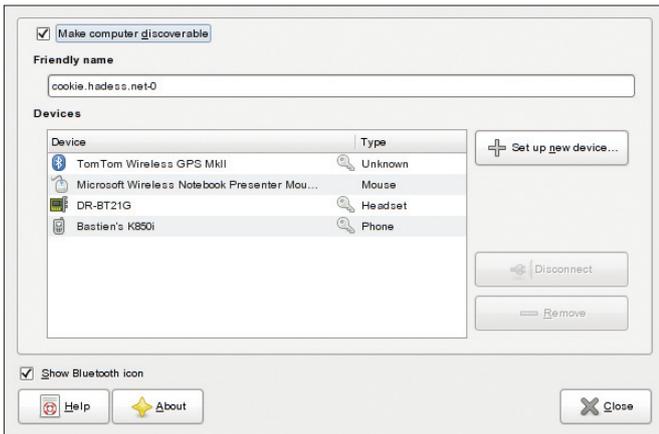
## Other Improvements

The Gedit text editor has seen some serious clean-up work, and the developers have also ported the program to Mac OS X. Pango, which is responsible for text rendering, has been treated to a new engine, which renders uneven fonts in a far superior way and saves memory at the same time. VTE, the terminal widget in Gnome Terminal, needs less memory in the latest version.

The Evolution integrated mail and contact suite is more stable. The developers started concentrating on Evolution 2.30/3.0 at a very early stage. Among other

things, version 2.28 contains an improved attachment bar that offers an upload progress indicator, and now you can modify the data format that is used by the groupware client.

Gnome power management can now handle laptops with multiple batteries, and it allows users to power off internal disks. If you have a sound system with a subwoofer, you can control it directly via Volume Control. The developers also reworked the Audio dialog. The controls for input and output devices now reside in separate tabs (Figure 5).



**Figure 6: Managing the Bluetooth configuration in Gnome 2.28 is easy with the new Bluetooth module.**

owners will benefit from the new interface design; the shell is perfectly suited for smaller screens.

With increasing amounts of data and larger hard disks, it is becoming increasingly difficult to find files. Gnome Zeitgeist, a program that supports access to frequently used files, is the developers' answer to this dilemma. Zeitgeist indexes bookmarks, your browser history, and the list of recently opened documents. You can even add search keys to files to help you find them more easily in the future. Right now, it is too early to tell whether these features will be available through the Nautilus file manager.

The far leaner platform will remove the need for programmers to constantly search for functions – many features are integrated with Gtk+ or Glib [10]; many obsolete libraries have been ditched from the platform.

In the past, the developers maintained that moving the Gnome 3.0 release back to the fall of 2010 was not a problem. The Gnome shell has the necessary feature set, but it still lacks many configuration options, and many of the ideas proposed in the wiki [11] have not been implemented.

On the other hand, it is impressive to see how fast the Gnome team has implemented the Gnome 3.0 concept, which

was just a paper tiger a year ago. The reason for this could be that the shell was mainly programmed in JavaScript, which promises visible results in far less time than C/C++ or Java. Another benefit that JavaScript offers is that many web programmers are familiar with the language, which

opens development work to a far larger community of developers.

In November, the developers will be deciding whether to go for the March or September 2010 release date for Gnome 3.0. The decision might already be made by the time you read this. No matter which way this decision goes, the new Gnome interface concept sees Gnome start out on a major departure from the wider field of free and commercial competitors who still follow the fairly aged WIMP paradigm (Windows, Icons, Menus, and Pointer). Developers interested in more details of the changes and new features of Gnome 3.0 should refer to the release notes [12]. ■

## INFO

- [1] Gnome: <http://www.gnome.org/>
- [2] Empathy: <http://live.gnome.org/Empathy>
- [3] Ekiga: <http://www.ekiga.org/>
- [4] Vinagre: <http://www.gnome.org/projects/vinagre>
- [5] Webkit: <http://www.webkit.org/>
- [6] Hamster project: <http://live.gnome.org/ProjectHamster>
- [7] Totem: <http://www.gnome.org/projects/totem>
- [8] GStreamer: <http://www.gstreamer.net/>
- [9] Cheese: <http://www.gnome.org/projects/cheese>
- [10] Gtk+: <http://www.gtk.org/>
- [11] Gnome shell information: <http://live.gnome.org/GnomeShell>
- [12] Gnome 2.28 release notes: <http://library.gnome.org/misc/release-notes/2.28/>

## THE AUTHOR

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