



A look at Gnome 2.12

# A NEW GNOME

Gnome 2.10 reconquered many desktops with its return to values such as simplicity, clarity, and ease of use. The new Gnome 2.12 GNU desktop environment continues this emphasis on the basics.

BY CHRISTIAN MEYER

**E**ven the biggest critics of Gnome have had to admit that the GNU Desktop is gaining support in office and home applications due to its reliable release cycle and excellent quality. Since version 2.10, tailor-made and easy-to-use tools have helped bring Gnome to many desktops despite initial skepticism.

With Version 2.10, the Gnome Project returned to traditional values, setting aside superfluous details. The current Gnome 2.12 release upholds the “more is less” philosophy of its predecessor, doing without bells and whistles and concentrating on essentials. This article will take a quick look at some of the new features in Gnome 2.12.

## New Clothes

The new release relies on a development of the Glider themes from Gnome 2.10. A long discussion about the default theme started on the Gnome project’s mailing

lists back in mid-2005. The participants in the discussion finally reached a decision that was seconded by positive user feedback. It looks like a slightly modified form of “Clearlooks” will be the standard for future versions of the Gnome desktop.

## Panel and Applets

The Panel and applets have learned a few new tricks in version 2.12. For example, the text alignment switches to vertical when the user moves the Panel to the left or right border of the screen. This behavior saves space and is more intuitive.

Programs now flash their names in the window list to show that either an important event has occurred, or that they are ready for use. This new feature is really useful for messenger applications such as Gaim or update tools such as Synaptic.

Gnome now finally has the long-sought menu editor (Figure 1). The editor is a very simple, spartan affair that allows users to hide or display applications in menus. On a more positive note, you can replace the simple editor with a program that gives you more features; many distributions give you Smeg [1], for example, which is far easier to use. The program gives users the ability to create, modify, and delete menu entries.

The Gnome Panel applets have seen a few minor, but no less valuable, enhancements in comparison to Gnome 2.10. The disk mounter applet has been completely reworked to support point & click displaying or hiding. If it discovers a blank CD, the applet suggests burning the CD. Thanks to an improved Gnomevfs library and the continued integration of HAL (the Hardware Abstraction Layer), you can now rely on the correct icon being displayed in the Panel, no matter whether this is a CD drive, a USB stick, or any other type of removable media. This prevents misunderstandings, which were part of daily life with

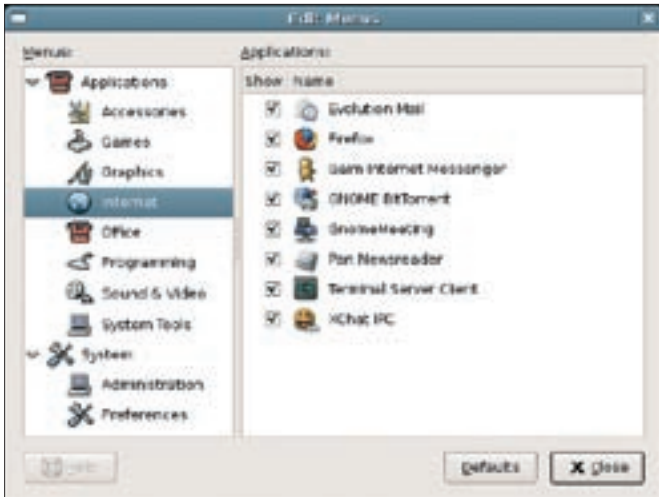


Figure 1: Gnome 2.12 comes with a simple a menu editor.

Gnome 2.10 due to the less-than-intuitive icons.

The battery applet has also been improved; the applet makes experimental use of HAL and will provide improved support for new notebooks in the future. The weather applet now has a search function that removes the need to browse the impressively long list of locations for your home town.

## Nautilus Relaunch

The Nautilus file manager has several new features in Gnome 2.12. The developers have certainly been busy under the hood, and an impressive number of bugs have been squashed.

Things like enhancements to the Nautilus-style spatial mode are more visible. You can now expand folders following the typical tree view approach. This allows users to browse more quickly to subfolders without losing track of where they want to go.

If you prefer navigation mode, look out for a number of interesting changes. For example, the file manager now gives you a path list rather than the traditional URL box. This deliberately echoes the Gtk file browsing dialog to provide a more harmonious overall view. Pressing [Esc] takes you back to the URL box.

The side bars now show locations, bookmarks, and mounted removable media – this is useful if you want to access your home directory in a hurry. If you drag a text from an application into a folder or onto the desktop, you will notice one of the more hidden features: in this case Nautilus creates a new file to store the text. In drag and drop opera-

tions, you will notice that Nautilus now displays a preview of the selected text. Earlier versions of the file manager simply displayed a generic icon.

You may be missing the *Terminal* drop-down menu item in Nautilus. Gnome 2.12 replaces this with a Nautilus extension that can easily hold sway with the previous feature: after navigating to a folder, you can simply right click to pop up a terminal window. This is a feature that many users have missed in past versions, as the only way to add it was to use a script.

The Nautilus context menu now also has a *Send to...* item, assuming that you install the relevant extension. The *Send to...* option gives users the ability to mail (compressed) files or folders or use an instant messenger to transmit them. You can look forward to more extensions in the future: Nautilus' architecture provides a perfect jump-off point for new work.

Many requests by Gnome users prompted the developers to add another great feature: Nautilus' integrated burning feature can now burn audio CDs. Finally, Gnome 2.12 comes with all the features necessary to create CDs directly in the file manager.

## Clipboard Convenience

You may be familiar with this annoying situation: you copy text from an application, close the application, and try to paste the text into another application by pressing the typical [Ctrl] + [V] keyboard shortcut. To your surprise, nothing happens –

the text doesn't paste and the text buffer is empty.

In the new Gnome version, a daemon ends this frustrating experience. The daemon waits in the background and watches for this behavior without exacting the performance penalties typical of other environments. The new daemon also follows the standard Gnome approach of honoring the freedesktop specifications [2].

## Epiphany Web Browser

The new version of Gnome's own web browser, Epiphany, also benefits from improved functionality. Even though Firefox integration in Gnome continues to improve, Epiphany still remains the browser of choice.

Epiphany now has no less than 19 add-ons, including an Online/Offline detection feature. The Online/Offline feature automatically detects if the user has an Internet connection, which can save a lot of pointless troubleshooting.

There are now fine-grained controls for tabs, plus improved bookmark management and the ability to integrate news feeds. The fact that the browser now uses **Rendezvous** technology to publish bookmarks to all users on a network is also a good thing.

Epiphany is easily extensible using Python scripts. To allow this, the developers have now integrated the Pyphany library, which used to be an add-on, with Epiphany.

## Mail!

Gnome's popular Groupware solution, Evolution, not only has a number of use-

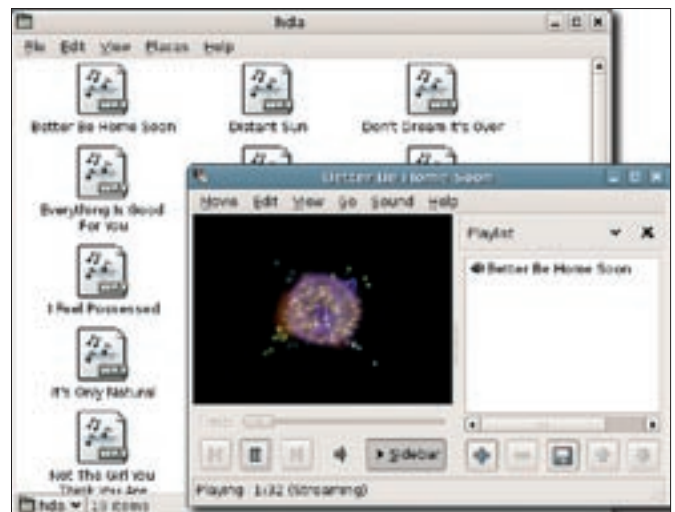


Figure 2: You can play audio files from inside the Nautilus browser.

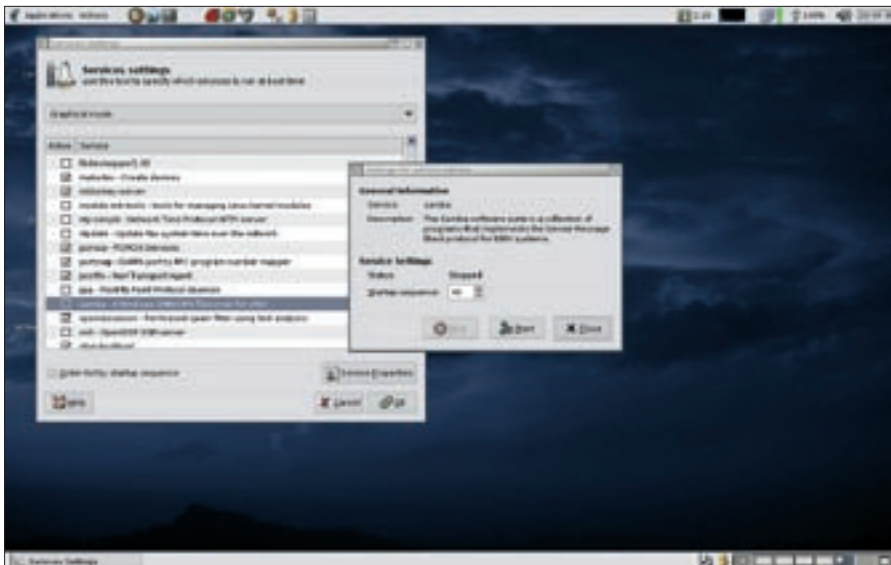


Figure 3: The runlevel editor provides convenient controls for specifying the services that will start when the system boots.

ful enhancements in comparison with previous versions, the developers have also taken care to simplify the menu structure and to reduce the application's memory footprint.

A highlight for security-conscious users: Evolution now finally supports in-line PGP encryption. And you can listen to music tracks in email attachments without having to extract them from the message first. Developers will be interested to hear that the mail library, *lib-camel*, has now been moved to the Evolution data server to support direct and non-convoluted access.

In the future, Ximian/Novell will focus on memory footprint optimization, improving speed when parsing large accounts, and integrating CalDAV (which is already available). CalDAV lets users

publish calendars for access by other people; at the same time the protocol provides an interface for perfect integration with the Hula [3] calendaring and mail server that Novell is currently pushing.

### Full Control

The Gnome Control Center gives users a centralized jump-off point for desktop configuration changes. The widespread misconception that the only way to configure Gnome is via a complicated tool similar to the Windows Registry editor was abolished back in Gnome 2.8. The previous version of the Control Center introduced a few changes to support more fine-grained control.

The current version now adds a new helper that lets users enter their personal details – names, addresses, email addresses, and

phone numbers. These credentials are automatically used by the Evolution addressbook. This is indicative of closer integration between applications.

Changes to most other regions of the Control Center are minimal enhancements or bugfixes. Another goody, the mouse settings dialog, now displays the installed cursor themes and lets you select a preferred theme.

*Gnome System Tools* includes a new program for managing the current runlevel (Figure 3). Due to the feature freeze for Gnome 2.12, this program is fairly basic at present, however, you can look forward to a full-fledged runlevel editor in the next version.

### New Faces, Familiar Tools

Evince (Figure 4) is the new shooting star on the document viewer scene. In contrast to previous versions, which needed a viewer for each document format, Evince combines the major viewers in a single application. Evince gives users the ability to view PDF, PS, and TIFF files with option support for DjVu and Powerpoint; work on more formats, such as MSWord, Abiword, and OpenOffice, is under development. Evince is well on its way to becoming a “killer application” and thus one of the Gnome project's reference programs.

Despite its short history – Evince has only been under development for about nine months – this versatile file viewer already supports production use. The search function in particular is extremely mature: Evince uses an Xpdf fork titled Poppler to do this. Evince also supports simple copying of text passages. Its other abilities include simultaneous viewing of multiple pages and fully functional full-screen and presentation modes. At the



Figure 4: The new multi-talented Evince file viewer can handle PDF, PS, and DVI files.

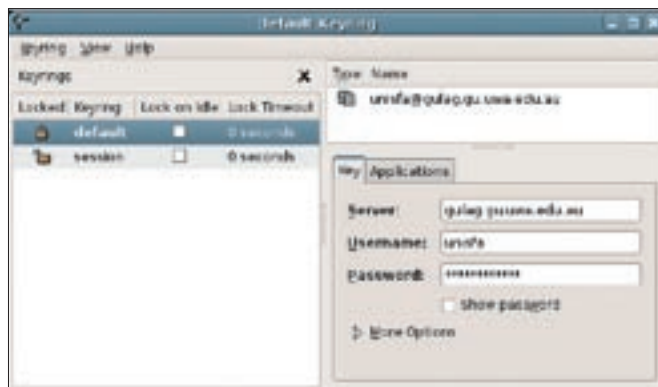


Figure 5: The new Gnome 2.12 Keyring Manager simplifies digital keyring management.



same time, Nautilus leverages the power of Evince to give users PDF previews rather than generic icons.

Gnome introduced a keyring for password management about a year ago; individual applications can use the keyring for secure services. The new *Keyring Manager* in Gnome 2.12 puts users in full control of key management (Figure 5). You can create, delete, and modify keyrings, or simply remove individual keys. This tool is the first application developed in its entirety by the Gnome Love project [4].

The developers have given the Yelp help browser a new rendering engine. Although the unofficial 2.10 release was the first to have the **Gecko** engine under the hood, Gnome still had Yelp 2.8 up to six months ago.

The Gecko engine and the other Yelp improvements have really made a difference. The application launches more quickly and is far more stable than previous versions. Issues with language-specific formatting rules are now a thing of the past. Gnome help pages use the DocBook format [5]; Yelp converts them

to HTML and displays them. The Gnome help tool has no trouble handling man-pages and info files.

Just like the Mozilla browser, Yelp now also has a widget for text-based searches. Instead of popping up a dialog, a text box for the search key appears at the bottom of the window. This format for searches gives the tool a tidier look.

Epiphany and other programs also have this feature, which was originally introduced by the Firefox browser.

The Eye of Gnome viewer (or EOG for short, Figure 6) – which has not been under active development for quite a while now – is now back in development. EOG can use **ICC profiles** [6] to display color-calibrated images. ICC pro-

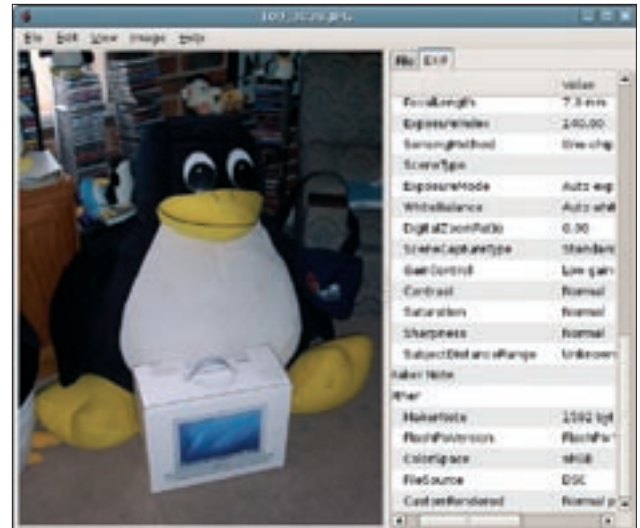


Figure 6: Manage digital images with the Eye of Gnome image viewer.

files are commonly used by graphics professionals.

A minor update of the Gnome search tool has now been released. The new version displays a thumbnail rather than a generic icon preview. Incidentally, the developers have also tidied up the Gnome dictionary and the protocol

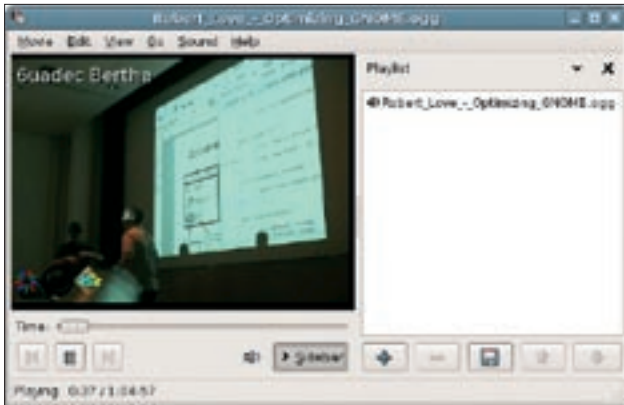


Figure 7: Totem is Gnome's standard multimedia player.

viewer. Both applications are now simpler and more intuitive.

## Multimedia and More

Totem (Figure 7), the standard multimedia player since Gnome 2.10, has again improved. The program shows the power of the underlying GStreamer [7] technology, although you can still use the Xine back-end as an alternative. Gnome prefers free formats, and Totem supports them all without exception. Totem even provides simple integration for proprietary audio and video formats such as MP3 or DivX.

The most obvious change to Totem is the integrated playlist in the main window. This layout gives users quicker access to track collections. The tool now adds support for DVD menus and subtitles. Work on a Mozilla plugin has begun, and some initial results are in evidence: Totem now plays movies from within Mozilla/Firefox.

Gnome 2.12 also comes with Soundjuicer, an application for ripping audio CDs. The current version has a few new features, including the ability to listen to tracks before ripping them. By default, Soundjuicer stores the ripped CD content in OGG format.

## Egyptian Vectors

The Gimp toolkit (Gtk+ for short) now uses the Cairo [9] vector library. One advantage of Cairo is that graphical ele-

### GUADec Talks

Most of the talks at this year's GUADec Gnome Developer Conference in Stuttgart, Germany, are available as OGG streams; you can download the streams at [8], and view them in Totem if you are interested.

ments can now be scaled without pixelization and loss of detail. The most important thing for developers is that Gtk+ remains downwardly compatible.

In the future, users can look forward to accelerated output thanks to OpenGL. Initial demos look extremely promising and demonstrate that

Cairo and Gtk+ have a lot of potential. At present, developers are working on a Gtk engine based on Cairo [10]. The Mozilla Foundation is also thinking of using Cairo in version 1.9.

## Stargazing: Gnome 2.14

At present, work is already well underway on the next version of Gnome, which – as always – is scheduled for release six months after the date of the current release, that is mid-March, 2006. The next Gnome desktop will include a large number of enhancements that were not ready in time for the Gnome 2.12 deadline.

One of the most important design targets is “intelligent” desktop behavior – fairly autonomous customization to use with or without a network connection. Reducing the memory footprint is another major goal of the next release, as is maximizing the performance of Gnome programs.

At the same time, the developers are looking to integrate the Panel and Nautilus more closely, and to integrate the Epiphany download manager with Nautilus. Some parts of the Gedit editor are being re-written by developers right now, so you can expect a new-look Gedit in Gnome 2.14.

The “Ridley” [11] project is trying to consolidate the rambling library nimbus that surrounds Gnome and Gtl+ to simplify the development of Gnome applications. The idea is to integrate smaller libraries directly with Gtk+. It looks likely that Gtk+ 2.10 will integrate the lion's share of Gnome core functionality. Package maintainers are already looking forward to this.

The GnomeMeeting developers are working hard on a new version that will

compare well with Skype and other proprietary VoIP programs. The Mono community continues to churn out more and more applications – such as Banshee, which can play various audio formats. But that's not all: Banshee will allow users to play tracks directly, synchronize their iPods, import audio CDs, and manage playlists. The application also has an ID3 tag editor.

The developers of GStreamer also intend to complete work on a new version before the new release. This would present an ideal opportunity to integrate an error-free variant of the audio framework with Gnome 2.14. The GStreamer homepage at [12] has more details.

For a more detailed list of the design targets for the future Gnome 2.14 release, check out the Gnome Project roadmap at [13]. ■

## INFO

- [1] Smeg: <http://www.realistanew.com/category/projects/smeg/>
- [2] Freedesktop: <http://www.freedesktop.org>
- [3] Hula project: <http://www.hula-project.org>
- [4] Gnome Love project: <http://live.Gnome.org/GnomeLove>
- [5] DocBook info: <http://live.Gnome.org/DocBook>
- [6] ICC info: [http://www.color.org/icc\\_specs2.html](http://www.color.org/icc_specs2.html)
- [7] GStreamer: <http://www.gstreamer.net>
- [8] GUADec conference streams: <http://stream.fluendo.com/guadec/>
- [9] Cairo vector library: <http://cairographics.org/introduction>
- [10] Clearlooks engine based on Cairo: <http://www.stellingwerff.com/?p=5>
- [11] Ridley project: <http://live.Gnome.org/ProjectRidley>
- [12] GStreamer 0.10: [http://sourceforge.net/mailarchive/forum.php?thread\\_id=8245644&forum\\_id=5947](http://sourceforge.net/mailarchive/forum.php?thread_id=8245644&forum_id=5947)
- [13] Gnome roadmap: <http://live.Gnome.org/RoadMap>

## THE AUTHOR

Christian Meyer has been involved with Gnome for five years and chairs Gnome Germany, which was founded in October 2004. You can contact Christian by mail at [chrisime@gnome.org](mailto:chrisime@gnome.org).