

What's new in Gnome 2.10

LOOKING FOR TRACKS

The new Gnome desktop adds a variety of applications and applets. Under the hood, Gnome 2.10 is more robust. **BY CHRISTIAN MEYER**

Since version 2.0, Gnome has harvested both criticism and acclaim. Just two and a half years ago, nobody would have considered it possible for a graphical desktop with a six month release cycle to maintain the high quality standards that Gnome has maintained.

Despite the integration of new functions, the basic libraries continue to be downwardly compatible, and this is something that has convinced major IT players such as Red Hat, Novell, or Sun to use Gnome as the basis for their product lines.

The new Gnome Version 2.10 download became publicly available on 9th March. This article will be looking at the most important changes introduced by Gnome 2.10, many of which are not just under the hood, but real eye-catchers.

Eye-Catching Changes

When you launch the desktop, you can't help noticing the new menu structure in

the Gnome panel. Whereas previous versions had two entries: *Applications* and *Actions*, Gnome 2.10 introduces a completely new structure with three categories: *Applications*, *Places*, and *System*.

The *Application* category still has the full set of Gnome programs, but now contains the *Run program...* item, which was previously assigned to the *Actions* category.

Places takes you to frequently used directories. These frequently used directories could include home directories, bookmarks from the file browser dialog, any removable media mounted right now, any network servers, and the last few documents you opened. You can connect to a server from here and search for locally or remotely stored files.

Finally, *System* has a desktop configuration submenu and entries for taking screenshots, locking the screen, and logging off the system. The system administration submenu takes you to the *Gnome*

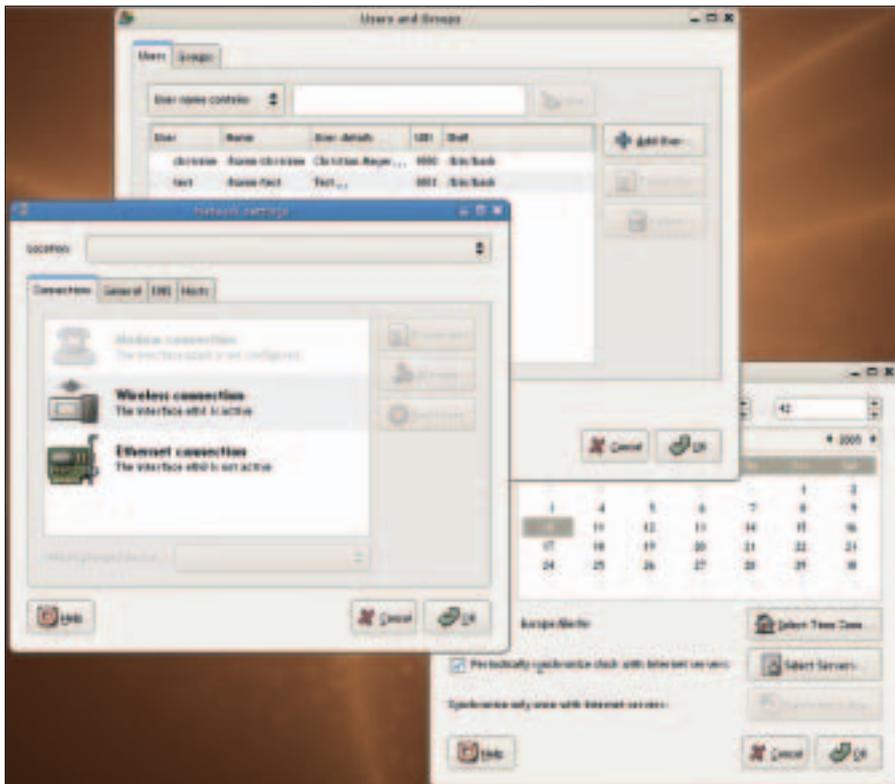


Figure 1: The Gnome System Tools are a convenient interface for system management.

System Tools for a full range of system administration tasks.

Simple System Configuration

Administrators can use the *Gnome System Tools* for easy user management or to set the date and time. *Gnome System Tools* also provides a number of additional options. You can opt to set the time automatically via an NTP server. Network configuration is also child's play. Laptop users will appreciate the ability to create profiles or locations. Depending on where you are, at home or at the office, for example, you simply select the profile appropriate to your current environment. The *Gnome System Tools* allow system administrators to configure modems, ISDN devices, and the wireless network. You can define NFS exports or Samba shares, allowing other users to access them. Figure 1 shows the Gnome System Tools.

New Programs

Gnome 2.10 now has the popular *Totem* and *Sound Juicer* (Figure 2) multimedia applications. Totem is a multi-functional tool that relies on the Gstreamer framework [1] by default, although Totem can also use the Xine libraries if you prefer,

and this may be a better choice in some cases.

Totem plays both video and audio files. The player is easy to configure, a fact that both newcomers and more experienced users will appreciate. Among other things, users can configure the audio system (this is interesting for 4.1/5.1 surround systems) and the visual effects when playing audio files.

The "Sound Juicer" CD ripper converts your CD collection into a more convenient format for MP3 players. The

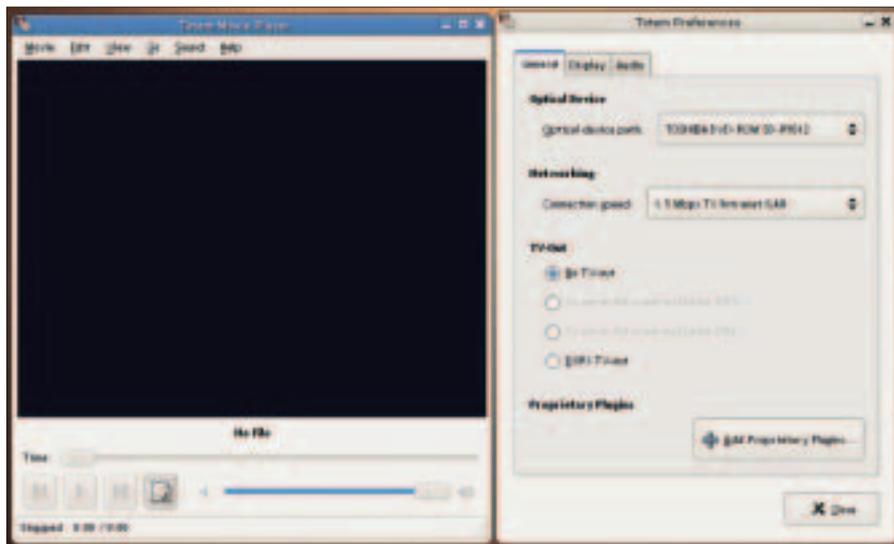


Figure 2: The versatile Totem multimedia player is simple to configure via a configuration dialog.

program works more or less completely autonomously, including title and genre assignments.

Improvements

Nautilus, the Gnome file manager, has been treated to many practical updates. Replacing certain system components has done wonders for Nautilus' performance, and this is something you will notice when you first launch the file manager and when you use it later. Also, Nautilus will rename new directories immediately – this is something users had to do manually in previous versions. Pressing the keyboard shortcut [Ctrl] + [L] takes you directly to a specific directory. Network connectivity is also improved, as are the integrated burning function and the *Open with...* dialog, all of which should make life much easier for Linux newcomers (see Figure 3).

The Metacity window manager no longer takes the focus away from the window in which a user is currently working. This somewhat irritating behavior affected the productivity of the system in previous versions.

The Gtk+ library gives developers a type ahead feature that any Gtk+ programs can leverage. In tree and list view, or file browser dialogs, users can simply type the first few letters of the word they are looking for, and the selection will automatically jump to the first match. Nautilus itself does not harness this feature, but it does have something similar. This said, it looks very likely that Gnome 2.12 will include support for this.

Last but not least, the *Desktop Background Preferences* dialog (Figure 4) and drag&drop with Mozilla/Firefox have been improved. And the developers have removed any number of minor bugs from all over the desktop.

Web Browsers and Email

The Epiphany web browser, which is based on the Gecko engine, is now fully compatible with the current Mozilla and Firefox versions and has an optimized full-screen mode. Just like Firefox, Epiphany now displays an icon to let users know whether they are accessing a secure page (via https). Extensions allow you to add to Epiphany's feature list. Earlier versions of the browser loaded any extensions on launching the program, and consumed vast amounts of memory by doing so. Now there is an extension manager for more convenient integration and management of required modules.

The Evolution groupware solution combines email, contact, and to-do list management, calendar functionality and many other things. As it supports both Novell Groupwise and Microsoft Exchange, it integrates seamlessly in both environments, and additionally supports Scalix [2] and the Sun Java Enterprise System Calendar Server. Novell is currently investing heavily in continuing the development of Evolution; and Novell's Hula project [3] in particular has caused a stir lately. Watch

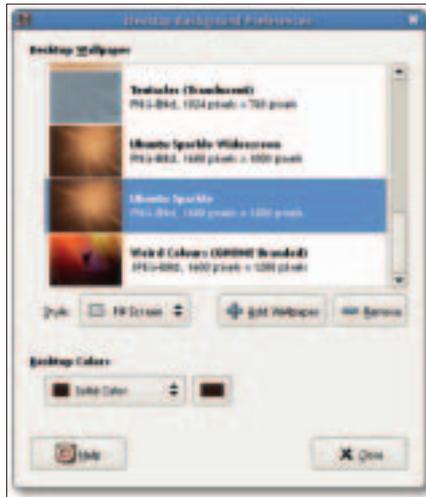


Figure 4: The Desktop Background Preferences dialog in its new clothes.

this space for details of a connector very soon.

Users will be more interested to hear that offline mode support is now a lot smoother than in previous versions. Files can be attached to events, and Evolution also supports extensions, which are enabled and disabled in a management dialog in a similar style to Epiphany extensions.

Application Programs

GnomeMeeting is now more tightly integrated with the operating system; it shares the Evolution address book, meaning that users only need to enter contact information once to have this information available at a central location. If you have installed Zeroconf [4], GnomeMeeting will automatically locate other GnomeMeeting users on a network.

The Gedit text editor not only supports syntax highlighting, but also locates and highlights matching pairs of brackets in source code (Figure 5). This is a good thing for programmers who were used to this feature from experience with Emacs, Vim, and developer environments. The Bash and Tcl environments are now supported. As is the case with many other programs, the launch time for Gedit has improved drastically.

The latest version of the File Roller archive manager now supports AR type files (this is the default compression type for Debian), Debian archives, password protected RAR archives, and 7 ZIP archives. File Roller is designed to reflect the click behavior set in Nautilus. If you

opt to double click in Nautilus, File Roller will follow suit.

The Gnome dictionary now has a spell checker. This has the advantage of finding words, even if you are not quite sure of how they are spelled. Just like Wikis, the texts now link to other dictionaries on the Web, and printing is now supported.

The system protocol viewer was a fairly neglected tool in previous versions. In fact, some people were in favor of removing it from the Gnome core. Gnome 2.10 sees the introduction of a few interesting new features to the tool. For example, you can now monitor multiple files, including compressed or non-local files (on network drives), with the viewer. It also provides a search bar for more efficient searching and allows users to copy data to the clipboard.

The formatting tool has also been completely reworked. Whereas it was only capable of formatting floppies in previous versions, it now supports removable media.

Gnome Panel and Gnome Applets

As the central control element, enhancements to the panel added support for icon themes and SVG for Applets. The *Run program...* dialog is a lot quicker, and applets in transparent panels are now transparent throughout.

The mount control applet no longer confuses users with complex configuration and technical jargon. Drive icons hiding behind windows on the desktop are no longer a problem. The applet, which is visible in the panel, displays the set of mounted disks and even allows admins to unmount.

The weather applet now supports a lot more locations and gives users detailed information on the weather at their

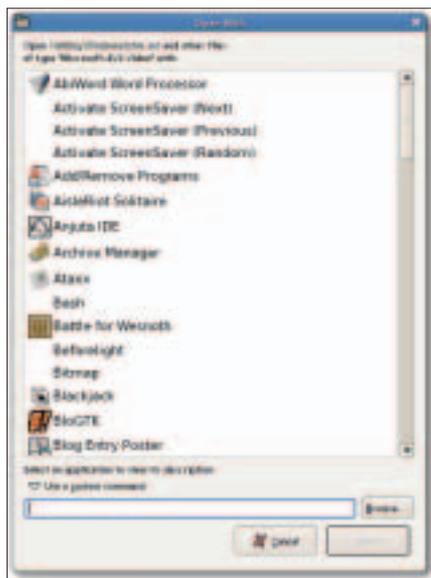


Figure 3: The new "Open with..." dialog gives newcomers a more intuitive approach to using Linux.

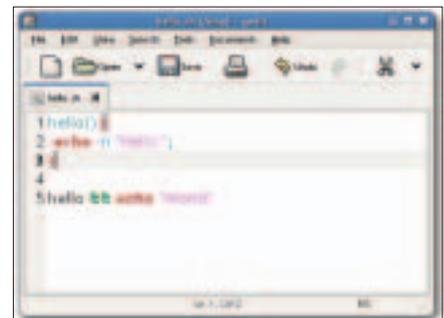


Figure 5: Besides syntax highlighting, Gedit now highlights matching pairs of brackets.

selected location, including sunup and sunset times (this is only available for major cities).

The sticky label applet now remembers which desktop and monitor you added a notice to. The complete list of new applets supplied with Gnome 2.10 includes:

- a modem applet which integrates perfectly with system management.
- a trashcan which allows users to drag&drop files to dispose of them in the usual way. Clicking on the icon opens the trashcan and reveals the files and directories hiding there.
- a CPU clock speed display, which is useful for displaying the clock speed for laptops with AMD PowerNow! or Intel SpeedStep technology (Figure 6). you can select a clock speed here, if automatic clock speed scaling is not enabled.

A new mixer has joined the existing applets in Gnome 2.10.

Like the remaining system, the revamped mixer uses the Gstreamer framework. The configuration dialog for the mixer looks cleaner and gives users *Playback*, *Capture*, *Switches* and *Options* tabs (Figure 7). If you have installed

ALSA support, you can switch between OSS (the legacy sound system) and ALSA (which became the standard with kernel 2.6). Switching to ALSA helps you avoid a flood of sliders and buttons, which are a common plague in other environments.

The new Gnome version has dropped three applets, which have either been replaced or were unmaintained. These applets are the CD-Player applet; the WLAN applet, as its functionality has been part of the network monitoring applet since Gnome 2.8; and the email



Figure 6: The new CPU clock speed applet allows you to monitor and set your laptop's clock speed.

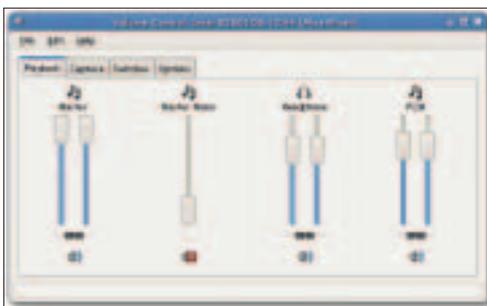


Figure 7: The revamped mixer applet looks really clean, as it does without superfluous elements.

alerter, as its maintainer has no time to work on it.

Fun and Games

Users can now challenge their neighbors on the local network to a game of Nibbles (which uses the same technology as GnomeMeeting). Although the game is very simple, it is much more fun than previously.

Same Gnome has revamped graphics and new board sizes. And it allows you to take back wrong moves. A few bugs that interrupted the game flow have also been removed.

Future

One topic that is the subject of heated discussion is the amount of memory that Gtk+ -based applications require. The developers are working hard on sorting out this problem. You can check out their progress at [5].

Gnome 2.12, which is due for release mid-September, is also being developed in parallel. Although we can't be sure what 2.12 will have in the way of new features, let's look at two examples just to whet your appetite.

Many users have had a menu editor at the top of their wishlists for a long time. Although Gnome 2.10 honors the Freedesktop specification for menus [6], it does not give users a convenient menu management tool. Gnome 2.12 looks set to change this.

And things are starting to liven up on the 3D desktop front. Sun's "Looking Glass" [7] demonstrates that this is not just a gimmick. A 3D Gnome might be based on Luminocity, a hybrid window and composition manager. To see for yourself, check out the impressive Luminocity videos [8] for more details of the desktop.

Should some Luminocity features prove stable by the time Gnome 2.12 is released, you will see them in Metacity, Gnome's standard window manager. However, Luminocity must be viewed as a test environment at present; it is not intended for production machines. If you are interested, check out [9] for a how-to on building Luminocity.

Conclusion

Version 2.0 of Gnome shows the desktop heading in the direction of intuitive use, simple configuration, and a productive environment. Many features missing in earlier versions have been added or completed in the last few months.

Gnome 2.12 will keep heading down this path, and attempt to remove some rough edges. The Gtk+ 2.8 library will be an enormous boost to speed, which is a failing in any Gtk+ based programs at present. However, there is no way of telling if this version will be the basis for the next Gnome. ■

INFO

- [1] GStreamer: <http://www.gstreamer.net>
- [2] Scalix: <http://www.scalix.com>
- [3] Hula project: <http://hula-project.org>
- [4] Zeroconf: <http://zeroconf.sourceforge.net>
- [5] Information on Gtk+ memory usage: <http://live.gnome.org/MemoryReduction>
- [6] Freedesktop menu specifications: http://freedesktop.org/wiki/Standards_2fmenu_2dspec
- [7] Sun Looking Glass: http://www.sun.com/software/looking_glass/
- [8] Luminocity Videos: <http://www.gnome.org/~seth/blog/xshots>
- [9] How-to on building Luminocity: <http://live.gnome.org/Luminocity>
- [10] GUADEC 2005: <http://2005.guadec.org>

Gnome Hands On

The Gnome developer conference GUADEC [10] scheduled to take part in Stuttgart, Germany, at the end of May promises to give attendees insights and a look at the future of Gnome. The VIP list for GUADEC includes Mark Shuttleworth (Canonical/Ubuntu Linux) and Miguel de Icaza (Novell/Gnome Initiator).

THE AUTHOR

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