A Mixed Bunch

In addition to normal desktop functionality GNOME and KDE provide a variety of applications. This article looks into the new developments on the application front for both of the new desktop environments. From fonts to ssh control. BY ANDREA MÜLLER

he real advantage a desktop environment offers in comparison to a simple window manager is the fact that it provides the users with a useful selection of applications in addition to all the necessary window handling. Users benefit from perfect assimilation of applications into the desktop environment due their homogeneous look & feel, and the possibility of painless interfacing with other applications.

Of course, a detailed discussion of all these applications could easily fill a book, so let's concentrate on the new developments. The fact that less attention is paid to GNOME than to KDE does not imply any prejudice towards KDE on our part. It simply means that the GNOME core package comprises less applications than KDE and that the enhancements are not so extensive.

Having said that, GNOME users really have no reason to complain about a lack of software – there is a wide range of programs available for GNOME from [1]. Applications that have already been ported to *gtk2* are the best candidates for seamless integration with the desktop environment. Seeing as most distributions provide parallel installations of the older and newer *gtk* versions, you should still be able to use applications that have not yet made the transition.



Incidentally, Mandrake and SuSE offer both Gtk versions; Debian provides support for both, and there is even a GNOME 2.2 backport for Debian Woody, by Jamie Strandboge (*http://mirrors. evilgeniuses.org.uk/debian/backports/ woody gnome2.2/*). Woody additionally requires *xft2* and *fontconfig*; this is best achieved by copying Eduard Bloch's directory (*http://people.debian.org/* ~ *blade/woody/i386*) to your *sources.list* to provide access to the appropriate packages when performing an *apt-get update && apt-get upgrade.*

Power-Packed Midget

Instead of arbitrarily adding new applications, GNOME 2.2 concentrates on enhancements that benefit the full range of applications. Thanks to the new *gtk* version, GNOME now supports Unicode, so it only makes sense to use **UTF-8** as the default codepage. Users who regularly need to switch between editing Russian, Far Eastern, or even German documents, will particularly appreciate this change.

Esthetes who were disappointed by the poor font display on Linux, will welcome the move to *fontconfig/xft2*, as it provides a consistently clear and legible font display throughout – assuming that the *GDK_USE_XFT* has been set to 1, that is. (The screenshots for the *File Managers Deluxe* article on page 23 and following were grabbed with this variable set to 0 for comparison's sake.)

The changes made to individual applications show attention to detail in most cases. Thus the GNOME editor *gedit* now has access to a list of recently used documents, and the new spell-checker plug-in is a big improvement. The new output window is practical if you need to copy & paste shell command output into a text – again *gedit* provides

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Name 👻	Size	Туре	Date modified
🔍 CVS		Folder	
🔍 lib		Folder	
🔍 RPMS		Folder	
🔍 scripts		Folder	
src.drv		Folder	
🔍 src.sys		Folder	
c4l_start	82 bytes	unknown type	11 Jul 2002, 22:3
CHANGES	1.3 K	unknown type	11 Jul 2002, 22:3
COMPILE-MANUAL	1.6 K	unknown type	11 Jul 2002, 22:3
configure	533 bytes	unknown type	11 Jul 2002, 22:3
FAQ	4.3 K	unknown type	11 Jul 2002, 22:3
i4l_hardware	19.1 K	unknown type	11 Jul 2002, 22:3
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78 files (1.5 MB), 1 file selected (1.3 K)			

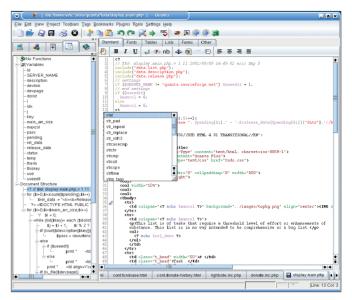


Figure 1: Viewing an archive with fileroller

Figure 2: Document, Structure and Syntax Checking with Quanta

a plug-in. Multimedia fans will pleased to hear that the *eog* image viewer now supports a full-screen mode, and the new control center module allows users to assign tasks to the multimedia keys that many modern keyboards provide.

Old acquaintances such as GNOME games, tools and the popular and ubiquitous panel applets are still alive and kicking.

One application that deserves a special mention is the *file-roller* archiving program that not only interfaces with the desktop environment seamlessly, it also supports a wide range of archive formats, such as *tar*, *bzip2*, *gzip*, *rar*, and *zip*, to mention just a few. You can use the preview window to view archive files, and then opt to unpack individual files or the whole archive. The intuitive GUI (Figure 1) makes child's play of working with archives.

Growth

As hyperactive as the KDE developers are, it comes as no surprise that KDE 3.1 adds a substantial collection of new programs to the KDE core distribution packages. Users may well note that familiar programs formerly not supplied with KDE have now been incorporated. The Quanta Plus Web development environment even got its own package (Figure 2).

No matter whether you are designing a private homepage based on a template, or working on a large-scale project with PHP and Java Script, *quanta* is not the kind of program to leave you in the lurch. *quanta* helpfully takes care of uploading your finished work, and scores a bonus for providing **CVS** support for multi-developer projects, provided you install the CVS front-end *cervisia*, that is.

Thanks to the excellent online help *quanta* provides, users should have no trouble familiarizing themselves with the wide range of functions this application provides.

KPovModeler[2], a new addition to the *kdegraphics* package, offers a similarly wide range of functions, but unfortunately very little in the way of documentation. In fact this is one of the major criticisms of a program that was otherwise quite impressive. Users with no experience with raytracing front-ends might find it difficult to produce useful results. But at least a few sample files are included as a reference: they are located in *\$KDEROOT/share/apps/kpovmodeler/examples* (Figure 3).

The KView image viewer, which provides a new purpose-built slideshow plug-in, allows you to amaze your audience with a presentation of your own rendering efforts.

Listen to the Signals

Audiophiles can look forward to two new additions to the *kdemultimedia* package: the *krec* audio recorder, and the KaudioCreator, which helps users to copy their favorite CDs to disk. If you have additionally installed an encoder, such as *oggenc* or *lame*, *kaudiocreator* also takes care of converting your audio files to a more compact format.

KDE 3.1 sticks to existing solutions in the audiovisual area. KDE 3.1's video decoder is based on the *xine* library, which supports a wide range of video formats from AVI, through DivX, to QuickTime.

Educational

There are also a few additions to the *kdeedu* package, although the most significant change is in fact less apparent. The developers authored the *libkdeedu* library to provide improved interfacing between applications in the *kdeedu* package. The library provides

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UTF-8: 7 bit ASCII is not suited to displaying special characters, such as German umlauts, for example, and forces users that intend to use this language to install a special code page, such as ISO-8859-1 that provides the required language support. Cyrillic languages require a completely different codepage. Unicode encoding with UTF-8 eliminates this JSSARY

bedlam as it comprises nearly every alphabet used on this planet.

CVS: Abbreviation for Concurrent Versions System that provides management facilities for projects in various development phases. Version management allows you to revert to a previous version of the project at any stage; thus, CVS is mainly used for software projects.

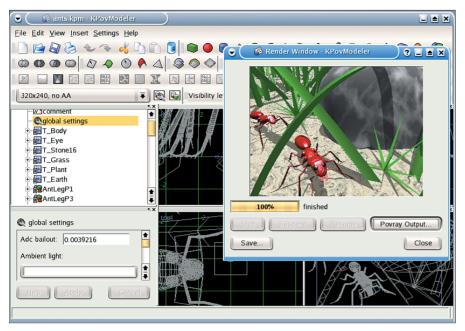


Figure 3: KPovModeler showing a sample file and a rendering window

functions that any *kdeedu* program can access. There is no need for *kdeedu* application developers to re-invent the wheel each time they write a new application; instead they now have access to a codebase that is already in use by other programs.

The new offerings FlashKard and the Japanese reference Kiten are more palpable, and available for immediate use. FlashKard is a register that allows you to import learning cards previously created with the *kvoctrain* vocabulary trainer. In addition to vocabulary revision, the program also helps users memorize dates – and this may be useful for those of you interested in boosting your knowledge of history.

Gaming

If you work hard, you deserve a change from time to time, and nobody appreciates this more than the KDE developers. There are plenty of opportunities for gaming on KDE 3.1, and the new desk-

GLOSSARY

KIO Slave: An input/output module from the KIO library. Every KIO slave is responsible for a single protocol, although this does not necessarily imply a network protocol. All KDE programs have access to these modules, so developers can ignore the details of the underlying protocols, leaving the work to the appropriate KIO slave. top games are a great diversion from the daily grind (Figure 4).

The Uncle Scrooge side to your personality will no doubt enjoy the new network game, Atlantik, which is similar to Monopoly at times, more speculative gamblers might prefer Megami, a Black Jack variant – a great opportunity to lose your last virtual shirt, or win it back again. Klickety provides a pleasant diversion; resembling *ksame*, the aim of this game is to remove pieces of the same color from the board. Kolf is another addition, and as the name suggests, it is a golf game that provides an assortment of courses with various skill levels. It might take you a while to perfect your swing and drive angle, but when you have mastered the various golf courses the game offers, you can fire up the course editor to define a few more challenges.

Networking

It is hard to imagine Linux without a network, and again KDE provides a fair amount of support for users in this area. Of the programs that traditionally reside in the *kdenetwork* package, KMail has probably been through the biggest changes and enhancements. Refer to [3] to find out how the new version differs from its predecessor.

Although it must be said that the enhancements are hardly surprising – just like those that *korganizer* went through as a component of the *kdepim* package – after all, both packages are scheduled for a merger to provide an integrated Groupware application for the next KDE version 3.2.

Remote Desktop

krdc and *krfb* are two new arrivals on the network scene and represent the two components required for desktop sharing on KDE. These tools allow you to share your desktop with another user on your

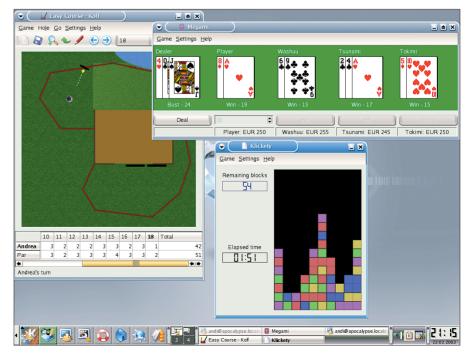


Figure 4: The new KDE games, Kolf, Megami and Klickety

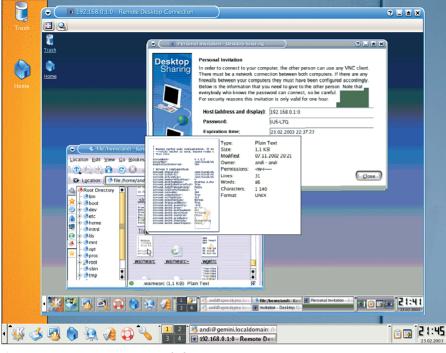


Figure 5: Guest access to a remote KDE desktop

LAN or across the Internet, and this might be useful if you need to demonstrate complex steps. If, on the other hand, you need some online help, you can allow another user to connect to your system and take control of your mouse and keyboard.

The *krfb* component is required to share a desktop; the sharing session is initiated by creating a invitation to share that is either mailed or supplied by phone.

You do not need to be a networking expert to supply the required details. All it takes is the IP address of the guest computer. You can then mail your invitation, or write down the password that *krfb* generates and use some other way to inform your guest. The invitation expires after an hour for security reasons; you have to re-issue your invitation in case of delay.

The user at the other end of the connection can then launch the *krdc* client program, type your computer's IP address in dotted decimal format 192.168.0.1:0 (where :*O* represents the shared desktop), and supply the connection speed.

At your side you are then prompted to accept the connection. Thus, there is no danger of a connection being established without your knowledge or permission. After your visitor has supplied the prearranged password, she should see something similar to Figure 5.

The low color-reso-

lution in Figure 5 is not

due to a printing error

but reflects the 256

color display selected

by KDE by default to

allow for acceptable

screen drawing speeds

across slow connec-

tions. Having said that,

you really do need DSL

speed or better to

leverage the remote

desktop functionality;

if you don't have

DSL speed, you might

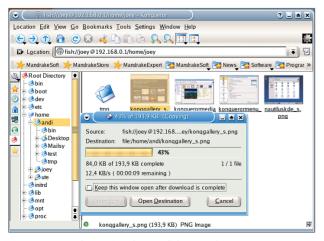


Figure 6: SSH and SCP using the new fish://KIO slave

prefer to stick to tried and trusted SSH sessions.

Instead of using the traditional, command line based *scp* file transfer tool, you might like to try the new *fish://KIO* **slave** tool implemented on the new KDE version that allows you to establish *ssh* or *scp* sessions to remote machines on the KDE desktop.

Although this sounds complex, it is in fact quite simple to use. If you type something like the following at the *konqueror* URL prompt:

fish://joey@192.168.0.1

konqueror asks you to supply the password for *joey* on the remote system. After supplying the correct password, you are placed in *joey*'s home directory, and can copy files back and forth (Figure 6).

What else?

Considering all the new features, there simply is not enough room to describe the enhancements made to the KDE applications. But it is safe to say that the current version is not simply geared to bug fixing and achieving stability. Instead, a smattering of new options has been added to various applications.

Readers who require harder facts on the changes might like to take a look at the extensive KDE 3.1 changelog [4].

INFO

- [1] http://www.gnome.org/softwaremap/list
- [2] Frank Wieduwilt "Well rendered",
- Linux Magazine, Issue 23, p38 [3] Andrea Müller and Patricia Jung "Mail and more", Linux Magazine, Issue 29, p44
- [4] http://www.kde.org/announcements/ changelogs/changelog3 o 5to3 1.html

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