An Up-to-date Overview of Free Software and its Makers

Projects on the Move

Free software covers such a diverse range of utilities, applications and other assorted projects, that it can be hard to find the perfect tool from all that programming effort. As the range increases so rapidly, you occasionally need a little help to make your choice of what to use. We pick the best of the bunch for you.

BY MARTIN LOSCHWITZ



his month, we will be looking at Kopete 0.7, which has just been through a major overhaul, Stud.IP, a project that should make life a lot easier for colleges and universities, and Anthony Towns' announcements on Debian's plans for the Sarge Release.

Kopete Take Two

Version 0.7 of the Kopete [1] communications client has just been released. The new version includes a lot of additional features that make Kopete even more fascinating. Most of these changes have taken place under the hood, as Kopete uses the look&feel of the KDE desktop.

A redesign of the complete protocol layer now allows multiple accounts to log on to an instant messaging network. Although Version 0.6 was capable of

AUTHOR

Martin Loschwitz is from Niederkrüchten and a developer for Debian GNU/Linux. Martin's leisure time is mainly pre-occupied with activities in the Debian or GNU community. managing multiple accounts, it was restricted to one account per protocol, and that deterred many people from using Kopete. Just like the previous version, Kopete 0.7 implements individual protocols as modules.

A spellchecker is quite unusual for an instant messenger. Kopete supports the popular Ispell [2], Aspell [3], and Hspell [4] spellcheckers that spellcheck input on-the-fly and underline any unknown words. If you do not require this function, you can spellcheck a document manually before you transmit it. The dictionary is user-selectable, and this is a good thing, as it allows you to talk to different people in different languages. The spellchecker is again a module that is loaded at runtime.

The developers have also enhanced the implementation of the individual protocols. The Yahoo protocol and IRC modules are completely new, and full support for Gadu-Gadu and Jabber is now available. Kopete can speak IPv6 and provides a *whois* command. From a usability point of view, the add buddy

dialog in the contacts list can now be used to search for IRC nicknames or channels. And the OSCAR protocol implementation for ICQ and AIM has also been completely overhauled.

One of Kopete's special features is its support for GnuPG, which allows users to encrypt ICQ and AIM messages. A GnuPG key can be assigned to each user in the contacts list. This tells Kopete to encrypt any messages to these users, ensuring message privacy. Any third party logging the message exchanges will see only the encrypted data.

The function for logging message exchanges that was part of the main Kopete program in version 0.6 has now been exported to the history plugin. Another new module allows users to add effects to their messages. Kopete has also gained a lot of ground in the security stakes, no longer storing passwords in the clear, but encrypting them on the hard disk.

Kopete has been through a major overhaul on its way to version 0.7. The program has improved in all areas and

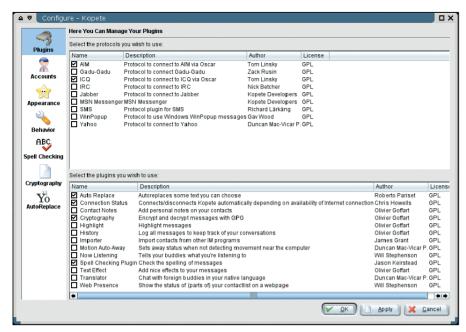


Figure 1: The Kopete configuration dialog. The developers use modules to implement protocols and auxiliary functions. These modules are loaded at runtime by users

has developed into a genuine instant messaging all-rounder.

Stud.IP

The vision of the "Virtual College" has been bandied about by the media for quite a while now. It conjures up images of students being provided with laptopbased Internet access in classrooms, allowing them to benefit from the boundless scientific resources on the Web. Sadly, there is a large gap between this vision and the current scenario. Although most universities do have Internet rooms, there is no sign of laptops for students. Even facilities that would not pose any technical problems are not available to students at many colleges, or badly implemented at best. These include distributing syllabus information via a central server or a facility that would allow students to generate their own personal study plan from a list of available seminars.

The Stud.IP [5] project is an attempt to tackle this problem using only Open Source software. Stud.IP provides a groupware platform for students and college teachers which allows them to manage assignments on the Internet. Where possible, the developers concentrated on hiding technical aspects from the user, allowing newcomers to quickly come to terms with the user interface.

The Stud.IP software integrates a large functional range with a standardized interface. This allows teachers to create seminar schedules and send them to their students. Stud.IP also handles attendance lists. Teachers can publish recommended reading lists that students can access before or after the lecture.

The developers also kept students' individual requirements in mind. Each user can create a personal diary. After setting up a database, students can create and print personal timetables. The archive function allows students to collect content for seminars they have attended and store it for revision. The Stud.IP concept envisages a homepage for each user.

Stud.IP offers students a variety of communication forms. They can set up

chatrooms and forums for global access. This is particularly useful where students of various faculties are distributed across multiple accommodation facilities and even different cities.

Stud.IP is a distributed application. It does not provide a single database for a whole university, but multiple smaller databases for individual faculties or departments. This avoids confusion caused by mixing up content provided by individual faculties. And staff can also be managed by faculty or department.

A comprehensive privilege management system allows users to permit or deny individual actions. For example, teachers could be allowed to post news items, whereas normal students would not be permitted to do so.

Despite this modularity, Stud.IP can handle matters that affect a college as a whole. The personnel database can be used to for staff management, taking individual consultation times and contact addresses into account. The program can also manage classroom schedules.

Stud.IP provides a Web-based user interface and does not require a specific operating system or browser. The program provides its own tools for special tasks, such as creating personnel or telephone directories.

Stud.IP is particularly interesting for colleges that require a mature product for internal administrative tasks. The functions described in this article are just a small cross-section of the whole range. A test setup of Stud.IP is available at [6]. The test setup provides administrative access to allow anyone interested in the software to gain some appreciation of Stud.IP's potential. You might also like to

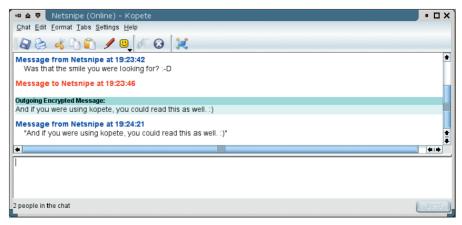


Figure 2: The new version of the Kopete Instant Messenger uses GnuPG to encrypt messages

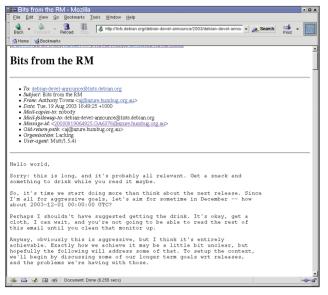


Figure 3: Announcing the timetable for the next Debian Stable release

check out [7] and [8] as examples of university Websites that have already deployed Stud.IP.

Sarge Comes Marching In

Debian Release Manager, Anthony Towns, announced [9] that preparations for the latest stable release of the operating system are near completion. This version will be known as "Sarge". In an extremely long message to the *debiandevel-announce* mailing list, Anthony stated that Sarge will follow the typical approach of a gradual freeze prior to release.

Anthony quoted December 1 as the date for the release, dividing the run-up period into sections in which the developer team will be expected to reach specific milestones. Although admitting that his approach was aggressive, Anthony said that the proposed deadline was "entirely achievable" in the context of the measures he suggested.

One measure was to lift the normally strict restrictions on NMUs (Non-Main-

[?] Debian Installer Main Menu Choose the next step:

Here is the main menu of the Debian installer.

Choose language
Detect a keyboard and select layout
Detect COROM devices and mount the CD in /cdrom
Load installer modules
Verify the cd contents
Execute a shell

<Go Back>

(Continue)

Figure 4: The Debian installer is one of the major new features in Debian Sarge. Debian Release Manager Anthony Towns set December 1 as the release date

tainer Uploads) between August 23 and September 24. Non-Maintainer Uploads are those packages which are uploaded to the Debian archive by people other than the package maintainers themselves. This usually requires the okay from the maintainer, or it can occurs when the maintainer fails to respond to any bug reports.

The more liberal NMU upload policy is expected to quickly

reduce the number of release-critical bugs [10], which totalled 850 as of August 19. However, developers cannot be expected to reduce the number of release-critical bugs to zero by December 1. There were still 684 bugs on October 3. Removing packages with bugs from testing will probably not help solve the problem. The system freeze is due on November 1.

In his message Anthony Towns also described how the current Debian release process works from his own viewpoint and went on to point out its weaknesses. Criticism has been levelled at the project's release policy for some time now. Desktop users can rely on Debian stable being a mature system, but the software is typically not the newest. Developers and users alike have thus questioned the usefulness of the stable distribution. Anthony stated that stable releases are targeted at admins who require an absolutely predictable system. Updating a system every few months would be far preferable than

> spending valuable time installing fixes every other week. Anthony's schedule aims to provide more predictability for releases.

People who prefer to use the newest software, would typically install testing or unstable, said Anthony, although this could also lead to a few issues. Package maintainers tend to wait too long before uploading packages to unstable. In this context, he encouraged greater use of experimental, which is designed for alpha release packages or CVS snapshots. Branden Robinson recently placed an XFree86 package in this branch, as he did not consider the package to be stable enough for the unstable branch.

Many factors would suggest that Anthony's gameplan is not feasible. Adam Heath [11] wanted to know if Anthony had considered Dpkg v2, a project Adam has been working on for months. And even the Debian installer [12], which will replace the existing installer in Sarge, is still causing a few issues.

That's all folks...

... for this month at least, but we do have one request before we go: If you can recommend a program that you would like to see featured in *Projects on the Move*, why not mail me with your suggestion [13]?

INFO

- [1] Kopete website: http://kopete.kde.org/
- [2] ispell website: http://ficus-www.cs.ucla. edu/geoff/ispell.html
- [3] aspell website: http://aspell.net/
- [4] hspell website:
 - http://ivrix.org.il/projects/spell-checker/
- [5] Stud.IP website: http://www.studip.de/
- [6] Stud.IP test setup: http://demo.studip.de/
- [7] Stud.IP personnel example: http://www.anthro.uni-goettingen.de/ mitarbeiter.html
- [8] Stud.IP newsticker example: http://zim.uni-goettingen.de/puk/
- [9] Message from Anthony Towns: http://lists.debian.org/debian-develannounce/2003/debian-devel-announce-200308/msg00010.html
- [10] Release-critical bugs: http://bugs.debian.org/release-critical/
- [11] Response from Adam Heath: http://lists. debian.org/debian-devel/2003/ debian-devel-200308/msg02780.html
- [12] Debian installer website: http://www. debian.org/devel/debian-installer/
- [13] Tips and suggestions: projektekueche@linux-magazin.de