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. We pick the best of the bunch for you. **BY MARTIN LOSCHWITZ**

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This month: Foobillard and VDR 1.2; we will also be reporting on the Freenode IRC network via Debian at the Linuxtag and on Debian's XFree86 packages.

Freenode

E-Mail is the most important form of communication on the Internet. It is slightly over the top, if you simply want to transmit a short message. This is one of the reasons for the popularity of the IRC protocol in recent years. IRC means "Internet Relay Chat" and allows for real-time communications across the Internet.

IRC uses the client/server model. Clients log on to a server and use the server to exchange messages. A conglomeration of multiple servers is referred to as an IRC network. There are many networks at present, the most popular and largest being Quakenet [6], IRCNet [7], and EFNet [8], although there are many more smaller networks.

Freenode [9] is one of these smaller IRC networks, and the fact that Freenode uses the IRC protocol is the only thing it has in common with the others. The idea behind and the functionality of Freenode are completely different from all the rest.

THE AUTHOR

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The history of Freenode dates back to 1993. Users logging on to the *#linux* channel in EFNet at that time, looking for help with the Linux OS, were often disappointed. The channel was used for chatting about more or less everything, with the exception of Linux, that is. Newbies, who had little knowledge of the subject, were unwelcome. Robert Levin noticed this and founded an IRC channel called *#linpeople* with Pauline Middelink. The channel aimed to help anyone disgruntled with *#linux*.

#linpeople later moved to a variety of other IRC networks, moving first to Undernet [10], and then to DALNet [11]. In 1995 someone kindly provided a computer with an ISDN connection at *irc.linpeople.org*; this was the first time an IRC server had been dedicated to answering questions on Open Source projects. The number of users grew quickly and there were always plenty of volunteers willing to help – and not only on Linux subjects.

In 1998 Robert Levin registered the openprojects.net domain, and *irc.linpeople.org* became *irc.openprojects.net*. It was not only the name that changed. Open Projects was a complete network with multiple servers, and the focus had also shifted; in addition to providing general help on the subject of Linux, there was information on nearly every major Open Source project.

2002 saw the biggest change to date: Levin founded a non-profit organization [12] in the USA to take over running the network. The Open Projects Network was again renamed, to Freenode.

The philosophy of the network has hardly changed since its conception. The aim was and still is to offer a communications platform for non-commercial projects. Communication is understood to be both collusion between developers and the opportunity for users in need of help to resolve the issues they are facing.

Many major projects now use Freenode to provide user support or a developer forum. If you use your IRC client to log on to irc.debian.org, you automatically end up at Freenode, for example. And irc.kde.org also points to Freenode. Even the most popular project on the Open Source scene, GNU, has a channel of its own (*#gnu*) on the Freenode network.

Users looking for help on a specific program are more or less certain to find an appropriate Freenode channel.

The Debian XFree86 Packages

If you are familiar with the Debian GNU/Linux distribution, you will probably be aware of the fact that the XFree86 packages that come with the distribution are maintained by Branden Robinson. However, since XFree86 is quite a sizeable project, Branden has hardly been capable of putting in the enormous amount of work connected with these packages. This has meant that packages for major versions often took more than six months after the release to find their way into the unstable tree.

This is set to change now: In a message to the "debian-devel-announce" [15] mailing list Branden announced that the XFree86 packages will be maintained by a team from now on.

Branden announced the team members, at the same time: Daniel Stone, who put in quite a lot of work to package XFree86 4.3.0 for Debian. Ishikawa Mut-

sumi, who will be focusing on True Type issues, and Fabio Massimo Di Nitto, who will be concentrating on improving IPv6 support in the packages. In addition, Juliusz Chroboczek will be helping out with font issues, and Joel Baker will be taking care of XFree86 packages for the Debian/*BSD projects. Branden will be adopting a co-ordinating role and constructing finalized packages from the work put in by the team.

The Team will be using Subversion [16], a replacement for CVS, to co-ordinate its work, with team members adding their modifications to the repository. In his message Branden also clearly stated that the team is not intended to be a closed shop. Thus, if you can provide good reason to be assigned write access, you are likely to receive that privilege. This also means that developers with advanced knowledge of a specific section of XFree86 are welcome to lend a hand.

It remains to be seen if this approach will reduce the delay in the case of future XFree86 releases.

Foobillard

Computer simulations of real sports are very popular. Using the computer for virtual bowling, billiards and darts is a welcome change to ego-shooter action for many users. The problem is that games developers tend to put nearly all their energy into producing games for Windows – other operating systems are simply ignored. Now, a free program called Foobillard [5] brings billiards to your Linux machine.

Foobillard is based on the OpenGL library, so older video adapters without hardware acceleration facilities will severely impact your gaming pleasure.

Launching the program displays a green table with the game of billiards already set up – you can cue off immediately. Unfortunately, the game will tend to be frustrating, if you have not played previously: your opponent's error quotient is set to "0" by default, so if your opponent actually makes it to the table, he will tend to wipe the floor with you. If you want a fighting chance, you might like to set the *--ai2err = 0.5* flag when launching the game.

Besides pool, Foobillard offers three other gaming modes: 9 ball, billiards, and snooker. The program developer, Florian Berger, has captured the details of the pool and billiards scene very nicely.

The program provides granular configuration options. You can specify the table size for each type of game on launching the game – and if you do not like the green baize, you can select a table theme. Even graphical effects, such as light reflections on the balls, are configurable.

Playing the computer would be a trifle dull in the long run, but the author has thankfully provided a function to link two instances of Foobillard across a network. You can arrange to meet your mates for an evening session, or even indulge in a quick game on your lunch break.

So, if you are looking for an extremely well done pool and billiards simulation for Linux, Foobillard is the right place to look.

VDR

Digital Video Broadcasting (DVB) provides for high quality digital TV reception. A DVB PCI card allows you to receive digital TV on your computer, and the DVB drivers created by the LinuxTV project [1] ensure that most cards will work on Linux. Real DVB viewing pleasure needs more than just a driver: without a TV application it would be impossible to switch channels or record a program.

Klaus Schmidinger has written a TV application called VDR [2], which is short for *Video Disk Recorder*. The program is designed to provide a complete range of DVB functions on Linux: channel switching, recording, and cutting.

After more than a year spent on development, version 1.2 was recently released, – reason enough for us to look at the changes.

The user interface has not changed noticeably, with menus retaining their previous colors and patterns and showing little evidence of new items. So you will need to look under the hood for the enhancements.

The developers have put a lot of effort into implementing a plug-in interface, and this is purely pragmatic. Previously, if you needed to change the way VDR 1.0 behaved or add new functions, there was no alternative, but to patch the source code. Applying multiple patches often proved difficult, as they tended not be compatible.

Version 1.2 puts an end to that issue: VDR has become lean and mean, and easily extensible thanks to this new plug-in interface. To implement a new function, you simply write a plug-in, which is then loaded at runtime.
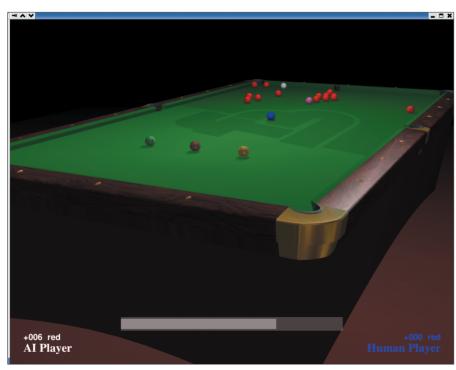

+006 red
AI Player

+000 red
Human Player

Figure 1: A nice game of snooker on your own computer? No problem for Foobillard

Figure 2: A multitude of plug-ins is available for VDR

Figure 3: Linuxtag is an annual event for Open Source Projects of all flavors

Shortly after the interface was presented, with VDR 1.2 still under development, several plug-ins were announced, with plans for even more appearing on the Internet. The collection has grown enormously since then. For example, there is a plug-in that converts VDR into a DVD player, and another that allows you to view mail on the TV. Yet another, called "AnalogTV", serves as a bridge between the digital and analog worlds, allowing you to output a stream from an analog TV card (like the Hauppauge WinTV) on your TV via VDR. If you are interested in an overview of the plug-ins currently available, you can check at [3].

"Timeshift" technology is another of the program's features. It allows you to record the program on one channel and view a second channel at the same time. VDR 1.0 needed a second DVB card to do this but if your card has the appropriate firmware you can now Timeshift with this new version.

Vast improvements with regard to stability and speed are also evident: whereas VDR 1.0 showed a tendency to crash, the VDR 1.2 "Release Candidates" turned out to be extremely stable. In addition, the program has become noticeably quicker – particularly so, when switching channels or opening menus.

Further enhancements to VDR 1.2: Improved use of Common Access Module functions for decrypting Pay TV channels, improved support for infra-red remote control via LIRC [4], a fully fledged implementation of the DiSeqC

standard. The new release is definitely worth looking into!

Debian and the Linuxtag

The Linuxtag took place in Karlsruhe, Germany, between July 10 and 13; its motto was just like previous years': "Where .com meets .org" (see our report on p85). In addition to commercial exhibitors, you could look forward to a variety of free software projects – including the Debian project of course.

Debian had a busy time organizing and planning their booth. Martin Schulze's Linuxtag project database [13] boasted a list of 30 people all keen to participate in the event. Martin Michlmayr, the Debian project leader, jetting over from Melbourne to join in with the fun. The Linuxtag is always a multicultural affair anyway, with developers from Austria, Denmark, England, Germany and even Hungary in attendance.

Plans had been laid down for another Debian Day, a conference at the fringe of the Linuxtag, to provide a platform for presentations on Debian projects mainly targeted at experienced users and Debian developers. Amongst other activities, Martin Michlmayr reported on the current status of the project, Daniel K. Gebhart shared his experience with the Debian Mentors project [14] which aims to support people who wish to become official Debian developers.

There was, of course, another special Linuxtag CD from the Debian project, including a version of the current Debian Stable Release, Woody, with a variety of additional goodies, such as XFree86

4.2.1. The CD was distributed free of charge at the Debian booth.

That's all folks!

… for this month at least, but I do have one request before I 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 [17]? I look forward to your comments! ■

INFO

[1] LinuxTV: *http://www.linuxtv.org/*

[2] VDR: *http://www.cadsoft.de/vdr/*

[3] Plugin for VDR: *http://www.cadsoft.de/vdr/plugins.htm*

[4] LIRC: *http://www.lirc.org/*

[5] Foobillard: *http://foobillard.sunsite.dk/*

[6] Quakenet: *http://www.quakenet.org/*

[7] IRCNet: *http://www.ircnet.com/*

[8] EFNet: *http://www.efnet.net/*

[9] Freenode: *http://www.freenode.net/*

[10] Undernet: *http://www.undernet.org/*

[11] DALNet: *http://www.dal.net/*

[12] Peer-Directed Projects Center: *http://peerprojects.org*

[13] Linuxtag: *http://www.linuxtag.org/*

[14] Debian Mentors: *http://mentors.debian.net/*

[15] Message from Branden Robinson: *http://lists.debian.org/debian-devel-announce/2003/debian-devel-announce-200306/msg00000.html*

[16] Subversion: *http://subversion.tigris.org/*

[17] Tips and suggestions: *projects@linux-magazine.com*