

Software News

■ Samba ups the tempo

Version 3.0 of the well-known open source/free software file and print server suite for MS Windows clients was published in September. The Samba team say it's "another very significant milestone in the life of the Samba project", since version 3.0 includes a lot of new features, such as the replacement of Windows NT 4 domains, complete integration with Windows security, newly implemented Unicode character sets and detailed new documentation.

Samba 3.0 contains the first implementation of Windows NT primary and backup domain controller functionality. This makes it possible to transparently migrate existing Windows NT domains to Samba 3.0, without having to recreate the user and group accounts. Additionally, you can choose from various LDAP back-ends to achieve better integration with existing customer directory ser-

vices. To provide better security, Samba 3.0 comes with Kerberos 5 authentication, SMB signing and CHANNEL security for secure remote procedure calls.

Unicode character set support is now implemented, which guarantees that clients can use whatever language they want, connect to a single file server, and store names in their native character sets. This type of internationalization support is a very important issue for the Samba team, since they are a global project.

Lots of new features require new documentation – Samba 3.0 has an updated HOWTO collection, which you can find in the documentation section of the website. There is also a second edition of "Using Samba" by Jay Ts, Robert Eckstein, and David Collier-Brown (O'Reilly & Associates), which includes a copy of



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Samba 3.0. "Using Samba" is published under the GNU Free Documentation License and an HTML version of it is included in the Samba distribution.

Since the initial release, a preview release of Samba 3.0.1 has been announced and is available for download. Samba 3.0.1pre1 includes several bug fixes, but is mainly for testing and not intended for production servers. You can find the source code and several binary packages in the download area of the Samba mirrors.

<http://www.samba.org/>

<http://www.unicode.org/>

<http://samba.org/samba/docs/>

■ Virtual Xen Reality

The Systems Research Group of the University of Cambridge Computer Laboratory announces the release of Xen 1.0, a virtual machine monitor for x86 architectures. With Xen it is possible to run multiple guest operating systems in an environment, providing protection, resource isolation and accounting. Tests have shown that guest operating systems run at at least 92% of native hardware speed under Xen, which is significantly faster than both VMware and User Mode Linux.

Xen is Open Source software, released under the terms of the GNU General Public License and can be downloaded from the project's homepage. The software is available as a bootable CD, with Red Hat Linux 9 as the guest operating system, or as a build tree snapshot.

Xen Demo CD 1.0 is a stand alone demo and runs entirely off the CD, which means you don't have to install anything on your hard disk. Have a look at the *README.CD* ([http://www.](http://www.cl.cam.ac.uk/Research/SRG/netos/xen/readmes/README.CD)

[cl.cam.ac.uk/Research/SRG/netos/xen/readmes/README.CD](http://www.cl.cam.ac.uk/Research/SRG/netos/xen/readmes/README.CD)) to find out if your hardware is supported. At the moment Xen runs only with a few processors, chipsets and network cards. In addition, it is recommended that you have plenty of RAM (at least 256 MB) in your machine, since mutable file system data is stored there.

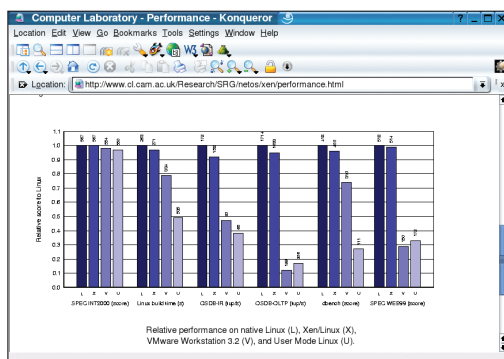
If you decide to install Xen on your hard disk, follow the instructions from the *README.CD* and simply use the CD as an installation source. You will need to be using Grub as your boot manager.

Even if Xen currently runs on x86 only, it could be ported to other architectures. So far, three different operating systems run on Xen: Linux with a 2.4 kernel ("XenoLinux"), Windows XP (code not published yet, because of license problems), and NetBSD.

While the Linux and Windows XP ports work very well, the NetBSD port has stalled. That means, that for the moment it is only possible to run multiple copies of Linux on Xen – the developers have successfully booted over 128 copies of Linux on the same machine (a dual CPU hyperthreaded Xeon box).

On its website, the Xen team mentions that it would like to port the system to FreeBSD 4 and is looking for volunteers. If you are interested in contacting them, you should join the Xen-devel mailinglist on <http://lists.sourceforge.net/lists/listinfo/xen-devel>.

<http://www.cl.cam.ac.uk/Research/SRG/netos/xen/>



rpmSEEK.com tracking Debian

rpmSEEK.com, who claim to be the largest search engine for Linux rpm packages and one of the largest web directories for Linux software in general, now offer Debian packages in their database. This allows Debian users to take advantage of the search facilities, that rpmSEEK.com have previously only offered for rpm-based distributions.

In addition to the new package type, there are some new features in the extended seek area: Not only can you define the package type you're looking for (rpm, deb or both), but also select the distribution, choose additional archives in which to search or specify the processor architecture.

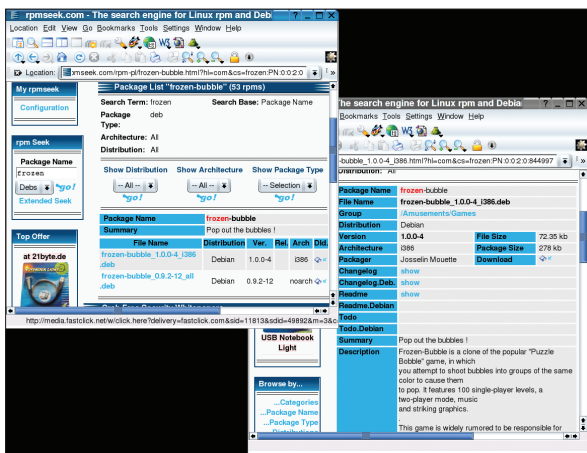
Furthermore, search terms can be entered in various fields, allowing you to look for matching package names, file names or summary descriptions. You can also search for packages that either provide or require the matching package.

If you don't mind cookies, you can even use the My rpmseek search mask to predefine your search criteria, such as package types, distributions and system architectures. Your

configuration options will then be stored permanently by accepting cookies from rpmSEEK.com.

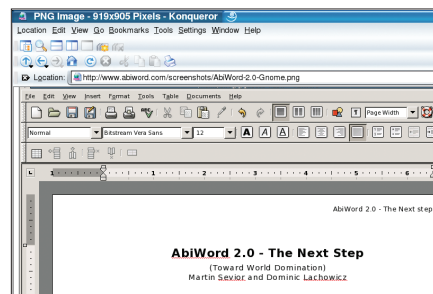
Search engines like rpmSEEK.com are a useful resource providing an overview of which distributions have which packages available, both officially and from third-party sites. Of course, official distribution sites often have more specialized search facilities. Debian, for example, lets you limit your search to a particular release, but on the other hand doesn't search unofficial sites scattered around the rest of the web. Future plans of rpmSEEK.com include searching for tar-archives and other Debian-based distributions.

<http://www.rpmseek.com/>



Gnomes invade the Office

GNOME-Office 1.0 is out and comprises new versions of GNOME-DB, Gnumeric and AbiWord. Version 2.0 of the word



processor AbiWord includes several new features such as tables, footnotes, mail-merge, database connectivity, revision marks and numerous server-side features, such as command-line scripting. Import of MS Word documents is supported along with import/export of RTF (Rich Text Format).

AbiWord plugins allow the word processor's functionality to be extended. Amongst these are plugins for the Gimp or Microsoft Paint, a BabelFish Plugin, which allows you to translate text into other languages, and the BZ2 plugin, which compresses documents automatically using bzip2.

GNOME's spreadsheet Gnumeric is also included (version 1.2.0) and provides a comprehensive set of accurate analytics, including a solver, goal seek, iterative expressions and 100% coverage of MS Excel worksheet functions. The developers also added support for encrypted xls files, Applix 5, PlanPerfect, Quattro Pro, and OpenOffice.org import. The long term goal is to have closer collaboration between Gnumeric and other Open Source spreadsheet projects, like for example KSpread.

The GNOME office suite is defined by underlying technologies, and not by an arbitrary, fixed number of applications. For instance GNOME-DB allows easy access to data via a unified data access architecture. In GNOME-Office you can find version 1.0 of this interface, which includes support for PostgreSQL, MySQL, Oracle, Firebird and much more.

<http://www.abiword.com/>
<http://www.gnome-db.org/>
<http://www.gnome.org/projects/gnumeric/>

New Look for the Chameleon

The latest SuSE Linux release 9.0 comes with a wide range of new features. These include support of the NTFS file system used by Microsoft Windows 2000 and XP. Additionally, the installation tool now allows you to resize Windows 2000 and XP partitions on your hard disk, so it becomes easier to make room for Linux. Besides, SuSE's system assistant YaST ("Yet another Setup Tool") comes with some new modules, which help you to set up Samba, DNS, DHCP, Apache and NTP. Moreover, YaST now helps you with repairing and restoring your system with the new "SUSE System Doctor".

SuSE Linux 9.0 runs version 2.4.21 of the Linux kernel in the background. A sneak preview of the 2.6 kernel is also available. Other new versions of major components include GCC 3.3.1, XFree86 4.3, KDE 3.1.4, GNOME 2.2 and glibc 2.3.2 as well as the new OpenOffice.org

1.1, Gimp 1.3 (developer's version) and 1.2 (stable), the layout program Scribus and MainActor 5 (demo version). Menus are now using vfolder (virtual folder) technology, which means you can find the most important programs in only two levels. The expected release date for this distribution is the end of October.

<http://www.suse.com/>

