

MUUGLines

The Manitoba UNIX User Group Newsletter

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Next Meeting: February 12th, 2008

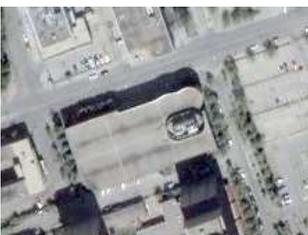
KDE 4.0

KDE consists of an international technology team that creates many software products. KDE is one of the largest open source projects in existence, with several thousand contributors worldwide. On January 11th, KDE 4.0 was released to the world after several years of redevelopment which includes a number of major advances in technology and portability.

Many of the features and capabilities of KDE 4.0 will be demonstrated, with special attention being paid to those features which are interesting to those in attendance. KDE's history and community organization will be discussed, including information sources for those that are interested in tracking the development of KDE.

Troy Unrau will be presenting on behalf of the KDE project. Troy is a part-time coder and a member of KDE's Marketing Working Group. During the day, he is an undergraduate geophysics student at the University of Manitoba.

Where to find the Meeting



Meetings are held at the IBM offices at 400 Ellice Avenue between Edmonton and Kennedy (see aerial view at left). When you arrive, you will have to sign in at the reception desk, and

then wait for someone to take you (in groups) to the meeting room. Please try to arrive by about 7:15pm, so the meeting can start promptly at 7:30pm. Don't be late, or you may not get in – but don't come too early either, since security may not be there to let you in before 7:15 or so. Clearly, the suggestion is: Punctuality is appreciated. Non-members are welcome, but may be required to show photo ID at the security desk.

Limited parking is available for free on the street, either on Ellice Avenue or on some of the intersecting streets. Indoor parking is also available nearby, at Portage Place, for \$3.00 for the evening. Bicycle parking is available in a bike rack under video surveillance located behind the building on Webb Place.

Upcoming Meetings:

March 11th, 2008: Rockbox

Montana Quiring and Jeff Green will present Rockbox, the open source firmware for MP3 media players. It aims to be considerably more functional and efficient than your device's stock firmware while remaining easy to use and customizable. It runs on a plethora of hardware platforms and frees the user from the shackles of DRM. Visit

<http://www.rockbox.org/> for more info on the players it supports.

Future meeting topics are subject to change. Please check the MUUG web site for the most up-to-date details.

Intel Releases Full Docs

At the recent linux.conf.au, Intel announced the release of the manuals (intellinuxgraphics.org) for its 965 Express and G35 Express chipsets under the Creative Commons Attribution-No Derivative Works 3.0 United States License.

This four volume set of manuals documents all portions of the hardware necessary to produce and maintain a complete driver, including accelerated media encoding and decoding, 2D and 3D graphics.

Containing over 1600 pages of text and figures, the Programmers Reference Manual includes everything from low-level register definitions and discussions on how each functional hardware block works through descriptions about the hardware architecture. Each documented feature includes a discussion on how the hardware works and how the hardware designers expected the software to operate.

Greg Kroah-Hartman of the Linux Driver Project remarked, "Congratulations to Intel for releasing a set of comprehensive documents that ensures that Linux will work wonderfully on their hardware with open and supportable drivers."

Samba 4.0.0alpha2 Available

From The Samba Team

Samba 4 is the ambitious next version of the Samba suite that is being developed in parallel to the stable 3.0 series. The main emphasis in this branch is support for the Active Directory logon protocols used by Windows 2000 and above.

Samba 4 is currently not yet in a state where it is usable in production environments. Note the WARNINGS below, and the STATUS file, which aims to document what should and should not work.

Samba4 alpha2 follows on from our first alpha release, made in September, and the Technology Preview series we have offered for some time now.

Warnings

Samba4 alpha2 is not a final Samba release. That is more a reference to Samba4's lack of the features we expect you will need than a statement of code quality, but clearly it hasn't seen a broad deployment yet. If you were to upgrade Samba3 (or indeed Windows) to Samba4, you would find many things work, but that other key features you may have relied on simply are not there yet.

For example, while Samba 3.0 is an excellent member of an Active Directory domain, Samba4 is happier as a domain controller; this is where we have done most of the research and development.

While Samba4 is subjected to an awesome battery of tests on an automated basis, and we have found Samba4 to be very stable in its behaviour, we have to recommend against upgrading production servers from Samba 3 to Samba 4 at this stage. If you are upgrading an experimental server, or looking to develop and test Samba, you should backup all configuration and data.

New Features

Samba4 supports the server-side of the Active Directory logon environment used by Windows 2000 and later, so we can do full domain join and domain logon operations with these clients.

Our Domain Controller (DC) implementation includes our own built-in LDAP server and Kerberos Key Distribution Center (KDC) as well as the Samba3-like logon services provided over CIFS. We correctly generate the infamous Kerberos PAC, and include it with the Kerberos tickets we issue.

The new VFS features in Samba 4 adapts the filesystem on the server to match the Windows client semantics, allowing Samba 4 to better match windows behaviour and application expectations. This includes file annotation information (in streams) and NT ACLs in particular. The VFS is backed with an extensive automated test suite.

A new scripting interface has been added to Samba 4, allowing Python programs to interface to Samba's internals.

The Samba 4 architecture is based around an LDAP-like database that can use a range of modular backends. One of the backends supports standards compliant LDAP servers (including OpenLDAP), and we are working on modules to map between AD-like behaviours and this backend. We are aiming for Samba 4 to be powerful frontend to large directories.

Changes Since Alpha 1

In the time since Samba4 Alpha1 was released in September 2007, Samba has continued to evolve, but you may particularly notice these areas:

- MMC Support: The Active Directory Users and Computers console now handles group membership correctly.
- Member/memberOf: These and other linked attributes are now kept in sync
- Subtree renames: Renaming a subtree of LDAP objects is now possible, with all linked attributes being kept consistent.
- Python Bindings: Bindings for a future move to Python as the internal scripting language have been created.
- Shared library use: In support of projects such as OpenChange, which depend on Samba4, more of Samba4 is built as shared libraries.

FreeBSD-6.3-Release

The FreeBSD Release Engineering Team

This release continues the development of the 6-STABLE branch providing performance and stability improvements, many bug fixes and new features. Some of the highlights:

- KDE updated to 3.5.8, GNOME updated to 2.20.1, Xorg updated to 7.3
- BIND updated to 9.3.4
- sendmail updated to 8.14.2

- lagg(4) driver (link aggregation, failover, fault tolerance) ported from OpenBSD/NetBSD
- unionfs file system re-implemented
- freebsd-update(8) now supports an upgrade command

For a complete list of new features and known problems, please see the online release notes and errata list, available at:

<http://www.FreeBSD.org/releases/6.3R/relnotes.html>
<http://www.FreeBSD.org/releases/6.3R/errata.html>

The FreeBSD Security Team intends to support 6.3-RELEASE until January 31st, 2010.

Ubuntu 6.06.2 LTS Maintenance Release

This is the second maintenance release of Ubuntu 6.06 LTS, which continues to be supported with maintenance updates and security fixes until June 2009 on desktops and June 2011 on servers. This maintenance release focuses on improving hardware support for popular server platforms, including updated server installation media.

Over 600 post-release updates have been integrated, so that fewer updates will need to be downloaded after installation, and a number of bugs in the installation system have been corrected. These include security updates and corrections for other high-impact bugs, with a focus on maintaining stability and compatibility with Ubuntu 6.06 LTS.

See <http://www.ubuntu.com/usn> for a list of Ubuntu security updates.

As of 2008-01-10, all updates affecting packages on the CD have been applied. A summary of notable updates follows. See <https://bugs.launchpad.net/ubuntu> for specific information about a particular bug number.

Xen 3.2.0 Announced

On Keir Frasier of the Xen Development Team announced “We’re pleased to announce the official release of Xen 3.2.0! This has been a while coming, and represents the culmination of a lot of work to improve architectural cleanliness ‘under the hood’, while also providing a range of new user-visible features including:

- Xen Security Modules (XSM)
- ACPI S3 suspend-to-RAM support for the host system
- Preliminary PCI pass-through support (using appropriate Intel or AMD I/O-virtualisation hardware)
- Preliminary support for a wider range of bootloaders in fully virtualised (HVM) guests, using full emulation of x86 ‘real mode’.
- Faster emulation of standard (non-super) VGA modes for HVM guests
- Configurable timer modes for HVM guests, depending on how the guest OS manages time-keeping
- Many other changes and enhancements across all supported machine architectures

Wine 0.9.54 Announced

The Wine development team announced the release of version 0.9.54 of Wine, a free implementation of Windows on Unix, on January 25.

What’s new in this release? Photoshop CS/CS2 should now work; a number of RPC fixes; various improvements to the debugger support; and lots of bug fixes. See www.winehq.org for more information.

Linux Has Better Windows Compatibility Than Vista

One user over at wastingtimewithmikeandari.wordpress.com was so frustrated with gaming on Windows Vista that he

tried comparing gaming on Vista to that on Linux using Wine. He writes:

“This post is clearly a bit biased. What shocked me though was how easy it was to find games that didn’t run under Vista but did in Linux by using Wine or DOSBox. I’m not a huge gamer, so I don’t have a huge collection of games to try out, but even still with just a few hours of frustrating work, I have been able to show that not only is Linux a reasonable alternative to Vista for gaming (XP is still king though), but also that Linux handles application failures more gracefully than Vista. Every game but Blackthorne crashed my Vista box, this didn’t happen a single time under Linux.”

Sending Us E-Mail?

Due to the amount of e-mail MUUG receives, we’ve set up an auto-reply to give you immediate feedback, and redirect some of the e-mail to the appropriate places. Why not look at <http://www.muug.mb.ca/about.html#contacts> first?

Share Your Thoughts

E-mail us with your comments on the newsletter, whether it’s criticisms or commendations, and continue to send in articles or ideas for the same. Specifically, what sort of material you would rather see: Announcements, technical articles, new products, or...?

If you have a How-To or other idea, and aren’t ready to give a presentation at MUUG, an article is a great alternative! If you can write better than the editor, that’s terrific; if you can’t, submit it anyway and we’ll get it into shape for publication. We know that many of you have some great ideas and lots of knowledge. Why not share? Send mail to: editor@muug.mb.ca.

To do two things at once is to do neither.
—Publilius Syrus

