



MUUGLines

The Manitoba UNIX User Group Newsletter

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Next Meeting: March 9th, 2010

This month Kevin McGregor will be presenting a “show and tell” of the Marvell SheevaPlug, a Linux-based computer which fits in a power adapter. With a 1.2 GHz ARM CPU, RAM, flash memory, gigabit Ethernet, USB and more all at under 7 watts, this small device has enormous possibilities! Kevin will talk about his particular experience with the SheevaPlug and his planned use for it.



Before the break, we'll have our usual round-table discussion and RTFM topic. Samuel Pauls will be discussing vi and vim.

Where to find the Meeting



Meetings are held at the IBM offices at 400 Ellice Ave. (between Edmonton and Kennedy). When you arrive, you will have to sign in at the reception desk. Please try to arrive by about 7:15pm, so the meeting can start promptly at 7:30pm.

Limited parking is available for free on the street, either on Ellice Ave. or on some of the intersecting

streets. Indoor parking is also available nearby, at Portage Place, for \$5.00 for the evening. Bicycle parking is available in a bike rack under video surveillance located behind the building on Webb Place.

Upcoming Meeting: April 13th, 2010

Do you have a favourite tool or utility that other people should know about? How would you like to present it to our user group? Next month, instead of a single longer presentation, we plan to have two or three short demonstrations, along the lines of our RTFM topics.

If you are interested in participating, please contact any of the board members at the next meeting. Or, email us at board@muug.mb.ca, and let us know.

**We Think Your Friends are
Awesome!**

We Want To Meet Them!

Do you have a friend that is working on an interesting Linux/Unix project?

Why not ask them to present what they are doing at a future MUUG meeting?

Have them email board@muug.mb.ca

VMware Acquires Zimbra

VMware has entered into an agreement to acquire Zimbra, the open source collaboration suite. Currently, Yahoo owns Zimbra.

Zimbra produces server software that provides email, calendar, document editing, and instant messaging. It provides an Ajax-based web interface to use and administer the applications. Zimbra also provides client software that will connect to Zimbra and other email servers.

VMware is a leading provider of virtualization software for servers and desktops. VMware endorses cloud computing, where customers rent computer resources from Internet-based providers, instead of owning their own computer infrastructure. Zimbra was built to use the cloud computing model.

Last year, VMware purchased SpringSource, which produces an application development framework for Java. With their strategy, the VMware vSphere software provides the virtualization foundation for cloud computing servers. On top of this, SpringSource gives a development system for cloud computing applications. Zimbra is the starting point for the next level, a suite of cloud computing applications that VMware can offer its customers.

Cranking up the Speed

The amount of video and voice traffic on the Internet is always increasing, and is consuming a large amount of bandwidth. The core network providers are continually upgrading the capacity of their links. The Minnesota Internet Traffic Studies group (<http://www.dtc.umn.edu/mints/home.php>) estimates the current growth in traffic at 40 to 50 percent per year.

Therefore, providers are now increasing the speed of some Internet backbone connections to 100 Gigabits. The telecom company Verizon recently upgraded a 900 kilometre long link in Europe from 10 Gigabits to 100 Gigabits. Nortel, the builder of the Verizon link,

has also tested a 2000 kilometre link in Australia running at this speed.

For the European link, Verizon was able to run the 100G link on existing fibre optic cable. They could run the new high speed link while the existing 10G link continued to operate on the same link. Instead of using on-off pulses, the new system uses phase shift keying. With this, the transmitter rapidly adjusts phase of the laser waveform to encode the information.

Generally, a faster transmission rate means increased problems with noise. However, Nortel claims that its new equipment is robust enough that they can run 100G connections over lower quality fibre optic links that aren't quite good enough for 10G connections.

At the other end of the distance scale, there is renewed hope for optical computing chips. In August of 2009, a team of physicists from Norfolk State University, Purdue, and Cornell announced that they had tested a spaser – a small lasing device that could form the basis of an optical computing equivalent to the transistor.

Chip manufacturers are running into physical limits over how quickly electrons can move through the wires in the chip. One solution to this would be to switch to optical computing, and use photons instead of electrons – this would permit clock speeds higher than the current rate of about 3 gigahertz. However, traditional lasers require a lot of power and, worse, are very bulky. They work by bouncing photons between mirrors in an optical cavity. The optical cavity can't be any smaller than half the wavelength of light. For visible frequencies of light, this makes the cavity about 10 times the size of electrical transistors.

However, the much smaller spaser consists of a gold core surrounded by a silica shell embedded with dye molecules. These devices are about the size of existing transistors.

The spaser may be able to work about 1,000 times faster than a transistor. As well, researchers are eyeing nanolasers as a way to increase storage density on hard disk drives.



Edubuntu

Ubuntu has a variant for the classroom called Edubuntu. It adds a number of educational applications and games to the standard Ubuntu distribution. Previous versions were available as an add-on to the standard Ubuntu distribution; with version 9.10, Edubuntu is available on a stand-alone DVD.

One of the goals of Edubuntu is to make it easy for an educator with limited technical expertise to install and manage the software.

Edubuntu offers four levels of application bundles, aimed at preschool, primary, secondary, and university students. It provides a number of mathematics applications, such as math puzzles and drills, an algebra expression solver, a function plotter, and an interactive geometry program. For the sciences, it offers a virtual globe and atlas, a planetarium, a physics experiment simulator, and a periodic table application.

Edubuntu also has a number of graphics programs, including GNU Paint, QcaD computer-aided design, a diagram editor, and a page layout and publishing program.

PC-BSD 8.0 Released

PC-BSD is a variant of FreeBSD designed for the desktop of a casual user. It's intended to make FreeBSD easier to install and use. It now has the improvements made to the new FreeBSD 8.0 system, which include upgrades to the wireless network stack, the USB stack, and VirtualBox support.

KDE 4.4.0 Released

KDE announced the release of the KDE Software Compilation 4.4.0. They have added over a thousand new features to this release. Some of the major im-

provements include an alternative desktop designed for netbooks and small notebook computers, and a number of social networking and collaboration functions. One new feature will let you collect multiple applications into a tabbed group – this helps manage large numbers of applications on your desktop.

Choosing Browsers in Europe

In the first week of March, Microsoft will be rolling out its Browser Choice Screen for Europe. This is the result of negotiations between Microsoft and the European Commission to resolve a number of competition issues.

Microsoft agreed that it would use its automated update procedures for the Windows operating system to send a browser choice screen to users of Microsoft's Internet Explorer. The screen will display a selection of the leading Internet browsers. The user can choose to stay with Internet Explorer, install an alternative browser, or get additional information about the browser choices. The user can also elect to defer the choice, and have the browser choice screen ask again at a later date.

Hey, I Recognize You!

Is your browser a rugged individualist? Or does it just blend into the crowd? The Electronic Frontier Foundation has a project called Panopticlick that will examine your browser's configuration, and compare it to the setup of other browsers in its database.

The project members point out that even if you have cookies turned off, web sites can collect information about your browser's configuration. Often, there is enough information to track you as a unique user and identify you on return visits.

To test your browser, go to panopticlick.eff.org and click on the "Test Me" button. It will return an analysis of properties such as browser version, plug-ins, time zone, and installed fonts, and describes how distinctive your browser is, compared to the several hundred thousand fingerprints already in the project's database.

Fedora Reorganizes Development Branch

Fedora traditionally has used its Rawhide branch as the place where developers tested new code. Rawhide served as the pre-release version of the upcoming Fedora release. As the next Fedora release date approached, the project team restricted code additions to Rawhide, and worked to stabilize the upcoming release.

This meant that for a period of time there was no place for developers to test their new code. Also, when the code freeze was relaxed, Rawhide received a sudden flood of new code which could make Rawhide unusable until the developers could fix the bugs in the many new additions.

The developers concluded that the requirements for a pre-release version of the software were not compatible with the needs of an experimental development environment. Therefore, they are now splitting off a pre-release branch of the code. Rawhide will be the experimental area, where developers can test out new ideas for future versions of Fedora. They will have a separate pre-release branch, where the developers will work to stabilize the code base that will form the next release of Fedora.

“Never Reboot” Service for Linux

The company Ksplice (<http://www.ksplice.com/>) offers a “never reboot” subscription service for Linux. With this service, Ksplice will apply hot patches to your system; you won’t have to reboot to apply most security upgrades.

They have been providing a free edition for Ubuntu for several months, and now have a monthly subscription for a number of other Linux systems, including Red Hat Enterprise, CentOS, and Debian.

Intel and Nokia Announce MeeGo Platform

Intel and Nokia announced that they will be merging their Intel Moblin and Nokia Maemo operating sys-

tems to create a Linux-based MeeGo platform. This operating system may be used in a range of mobile devices, including smart phones, netbooks and tablet computers. The LG company has announced that they will move one of their upcoming phones to the MeeGo operating system.

Nokia led the smart phone market share in 2007, but now has significant competition from phones from Research In Motion and Apple. The Google Android platform is also gaining market share.

Sending Us E-Mail?

Due to the amount of e-mail MUUG receives, we’ve set up an auto-reply to give you jaunty 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...?

What Do You Think?

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.

