



# MUUGLines

The Manitoba UNIX User Group Newsletter

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## Next Meeting:

**September 11th, 2008**

**Open Source Geospatial Software**



This presentation will briefly describe what open source software is and how it is licensed along with some examples of widely used open-source software. What to look for as a user of open-source

software will also be presented. Then the field of geospatial software will be described from the organization coordinating the development to the types of open source geospatial software such as map servers, database management systems and mapping clients. If time permits the presentation will conclude with demonstrations of some open-source geospatial software.

Bob Bruce, P.Eng., Geomatics Support Engineer, Lands and Mapping Branch of Manitoba Conservation, will be our speaker for this presentation. Bob specializes in software applications for Geomatics, in particularly Property Mapping Applications. Bob is a registered Professional Engineer in Manitoba, and a member of the Association of Professional Engineers and Geoscientists of Manitoba (APEGM) Professional Development Committee. Bob also does web-based PHP programming and database design in his spare time. Recently he has developed a mapping interface for the Murals of Winnipeg website, where Winnipeg's murals can be viewed using a map interface.

## Where to find the Meeting



The IBM offices, at 400 Ellice Ave, (between Edmonton and Kennedy). 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 7:15 p.m., so the meeting can start promptly at 7:30 p.m.. 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.

## Upcoming Meetings:

**October 9th, 2008**

GnuCash

**November 13th, 2008**

Server Virtualization with Solaris Zones and FreeBSD Jails

Future meeting topics may change.

## Listen in on SIP phones while they are on the hook

Recently disclosed information (<http://lists.grok.org.uk/pipermail/full-disclosure/2007-August/065417.html>) suggests that it is a relatively simple matter to remotely eavesdrop on a broad range of SIP-enabled devices. SIP (Session Initiation Protocol) is a protocol that is used by a lot of VoIP software and associated telephone handsets to establish, modify, and control a VoIP connection between two parties.

The research that was published indicates that, for at least one vendor (Grandstream), it is possible to automatically call a SIP device from that vendor and have it silently accept the call, even if it is still on the hook - instantly turning it into a classic bugged phone. Whereas historic telephony bugs needed physical targeting of the line running to a property or place of business, the presence of VoIP in the equation allows bugging from anywhere in the world with equal ability. Now anyone can do from their armchair what only spies and law enforcement used to be able to do from inside the telephone switch / pit / distribution board, though it's still illegal to do so.

As well as bugging the phone, the action effectively acts as a Denial of Service against the device (after all, it is already engaged in a call).

Having found the bug via fuzzing, the discovering researchers believe that there may be a number of vendors that have created their own SIP networking code, with equivalent bugs contained within.

While the vendor concerned is expected to release appropriate patches soon, the disclosure is likely to turn attention on other SIP device providers.

This may already be happening, with two separate exploits released publicly in the last couple of days targeting Cisco SIP handsets, with the result of a Denial of Service condition against the phones. VoIP client software from eCentrex has also been targeted with public exploit code, except this time it allows for control over vulnerable devices as a result of a remote buffer overflow condition.

Concerned users and administrators who have SIP enabled software or hardware should be aware of their potential limitations and have appropriate mitigation strategies in place, especially if they are used in sensitive areas (military use, national secrets, trade secrets, etc).

## **Sun Microsystems to Change Stock Ticker Symbol to JAVA**



SANTA CLARA,  
Calif. August 23,  
2007 Sun

Microsystems today announced that it will change its Nasdaq

stock ticker symbol from SUNW to JAVA, the ubiquitous technology and brand it created in 1995. The stock ticker change will go into effect for the trading community on Monday, August 27, 2007.

"The Java brand and technology have evolved to be among the most pervasive on the internet, yielding extraordinary awareness for Sun and opportunity for the community that leverages it," said Jonathan Schwartz, president and CEO of Sun. "More than a billion people across the globe, representing nearly every demographic, market and industry, rely upon Java's security, innovation and value to connect them with opportunity. That awareness positions Sun, and now our investor base, for the future."

The Java economy as a whole includes a broad array of businesses built with Java technology, from Google and eBay, to some of the world's largest financial and telecommunications companies. The Java platform powers and is made visible via more than 2.1 billion mobile devices, nearly every PC on the internet and numerous consumer electronics and embedded systems products such as Sony's Playstation 3 video game console. Sun estimates the number of consumers that recognize the ubiquitous cup and steam on Java's brand logo to be in excess of a billion people.

Sun today generates license revenues from Java technology, but more significantly derives revenue from the software, storage, servers, services and microelectronics that power the datacenters behind global Java deployments - whether on handsets, personal computers, or in the network. Sun believes its business is advantaged by such exposure, and the change in ticker symbol more effectively connects it with the marketplace.

## **Seagate to start offering Solid State Disks in 2008**

Seagate will introduce the drives across a range of products including desktop and notebook PCs, offering various storage capacities.

SSDs, as solid-state drives are also known, use flash memory instead of magnetic disks to store information. Flash is a type of non-volatile memory, which means the chips retain stored information when power is off. Other memory types, such as DRAM, lose data when the power goes off.

SSDs offer a couple advantages over disk-based drives: they're lighter, consume less power, and more rugged, making them ideal for laptops and mobile devices. They are also more expensive, but the price gap is narrowing as flash memory becomes increasingly cheaper.

Seagate already makes hybrid drives, which combine flash memory with magnetic disks. Its Momentus 5400 PSD hybrid drive stores the most commonly accessed data on flash memory instead of on disks, which improves read time and speeds up the process of booting a computer, the company said.

The drives are intended to be used in laptops and are available in capacities up to 160GB, according to Seagate's Web site.

Seagate will use the new flash drives to augment its product lineup for certain applications, but predicts far greater demand for its hybrid, or "flash-embedded," drives. "We have a pretty compelling product in hybrid drives; that's where we see a large part of the storage market going in the future, much bigger than SSD," said Woody Monroy, a Seagate spokesman.

## **Via announces 1Watt x86 CPU**

Taiwanese chip and board vendor Via Technologies has introduced a new ultra-low voltage (ULV) processor aimed at industrial, commercial, and ultra-mobile applications. Touted as the "world's most power-efficient" x86-compatible CPU, the 500MHz

Via Eden ULV processor debuted at an Embedded Systems Conference in Taipei.

"Eden" is Via's branding for its line of embedded processors, which target passively cooled applications in industrial equipment. Eden chips use the same "Esther" core found in Via's "C7" branded desktop processors. However, Eden parts are tested for higher-temperature operation, to better support passively-cooled applications. And, like Via's C7-M parts for mobile applications, they use a smaller 21mm-square package than the desktop parts.

Via launched its ULV line in March of 2006, offering ULV versions of both Eden and C7-M parts. Prior to the launch of the 500MHz part, the Eden ULV line included parts clocked at 1GHz and at 1.5GHz.

Via says its Eden ULV 500 draws a minimum of 0.1 Watts, when idle, and a maximum of 1 Watt. This puts the part below the TDPs (thermal design power, or total dissipated power) advertised by AMD for its LX line of low-power x86-compatible parts.

The Eden ULV 500 probably uses more power than various 486- and Pentium-class SoCs (system-on-chip processors) available, however, such as the SIS550, ZF86, STPC, and so on. However, the Eden part should offer much higher performance, thanks to support for MMX and SSE2 instructions, faster system and memory buses, larger caches, and so on.

The Eden ULV processor would typically be paired with Via's CX700M integrated northbridge/southbridge, which adds another 3.5 Watts to the power budget. However, the CX700M saves power by supporting more power-efficient DDR2 memory, Via points out. The Eden ULV/CX700M combo can actually prove more power-efficient in large-memory systems than RISC-based SoCs that integrate processor and bridge functions on the same die.

The bottom line, according to Via, is that the 1-Watt Eden ULV 500 and 3.5-Watt CX700M companion chip can be used to build sub-10-Watt systems that nonetheless support a wide range of multimedia, connectivity, and storage options.

## **BitTorrent Admin forced to switch to Windows**

Due to the rules of his probation, Scott McCausland is being required to switch from Ubuntu to Windows.

In September 2006 he plead guilty to two charges 'conspiracy to commit copyright infringement' and 'criminal copyright infringement' for uploading 'Star Wars: Episode III' before it's theatrical release. He received a sentence of 5 months in jail and 5 months home confinement. His probation requires his internet access be monitored by the US Department of Justice. Unfortunately, the monitoring tool that they use is Windows only. So, his choice is either not use a computer or switch to Windows.

## **Debian turns 14**

Debian turned 14 on August 16th. Without the Debian project there would be no Ubuntu.

Debian was begun in August 1993 by Ian Murdock, as a new distribution which would be made openly, in the spirit of Linux and GNU. Debian was meant to be carefully and conscientiously put together, and to be maintained and supported with similar care. It started as a small, tightly-knit group of Free Software hackers, and gradually grew to become a large, well-organized community of developers and users.

Debian is pronounced / ' de.bi.ən/. It comes from the names of the creator of Debian, Ian Murdock, and his wife, Debra.

The original Debian announcement from 1993...

<http://shorterlink.org/542>

A Brief History of Debian...

<http://www.debian.org/doc/manuals/project-history/>

## **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 em-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](mailto:editor@muug.mb.ca)