

MUUGLines

The Manitoba UNIX User Group Newsletter

Volume 25 No. 2, October 2012

Editor: Katherine Scrupa

Next Meeting: October 9th, 2012

RTFM: none this month

Instead: Longer roundtable and/or break
Annual General Meeting & Elections

Topic: Arduino

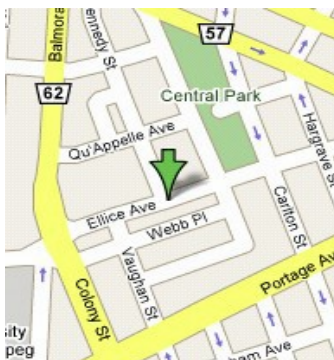
Sean Walberg, a local network administrator, web developer, tech writer and editor, will show us what we can do with the Arduino open-source microcontroller.

Upcoming Meetings

November 13th, 2012

Topic: Open System on a Chip, by Robert Keizer

Where to Find the Meeting



Meetings are held at the IBM offices at 400 Ellice Ave. (between Edmonton and Kennedy Streets). 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.

Elections for Board of Directors

The Current Nominees are as follows:

Nominee: Trevor Cordes

Trevor Cordes has owned and operated Tecnopolis Enterprises - a computer VAR, programming and consultancy company - since 1999. Linux and open source have been the keystone of Tecnopolis since 2000 with the introduction of Linux-based appliances which today are critical to the operation of over 20 local small businesses. Trevor was President of the Atari ST User's Group in 1995 and 1997-1999, and also holds a B.Sc. (CompSci) from the University of Manitoba. His main workstation runs Fedora.

Nominee: Gilbert Detillieux

Gilbert Detillieux has been working with UNIX as a programmer, system administrator, and trainer since 1980. He worked as a computer consultant specializing in UNIX, from 1983 to 1989, and is currently working as a Systems Analyst for the University of Manitoba's Department of Computer

Science, where's he's worked since 1989, installing, supporting and upgrading the department's network and UNIX server infrastructure. He was co-founder and past president of the Technical UNIX User Group (now MUUG), and has been an active member of the MUUG board ever since.

Nominee: Michael Doob

Michael Doob is a member of the Mathematics Department at the University of Manitoba. He has been using UNIX since 1990, primarily as a working environment for mathematical publishing. He has been a member of MUUG for over a decade and has given a number of presentations for that group.

Nominee: Robert Keizer

Robert Keizer is currently a Systems Administrator at Thinkbox Software. Before that he was a Systems Administrator at Prime Focus and Les.net. His interests include Single System Images and Distributed Computing.

Nominee: Kevin McGregor

Kevin McGregor provides server, platform and infrastructure support in the City of Winnipeg's Information Systems Department. After having briefly used UTS on an Amdahl mainframe in university in the mid-80s, he dabbled in Coherent and then converted to Linux and OpenBSD. He has been a member of MUUG since the early 90s, edited the group's newsletter for a number of years, presented various topics at MUUG meetings and has served on the board for the majority of his membership.

Nominee: Katherine Scrupa

Katherine is a I.S. Service Desk Technician at St. John's-Ravenscourt school. Katherine has been using Linux exclusively at home for five years, during which she has also been a member of MUUG. Promoting her learning experiences and solutions to benefit others, her blog can be located at uniquegeek.blogspot.com. Her educational pursuits in Computer Science at U of M led her to a Network Technology CCNA program (Hons.) at Red River College in 2010, with emphasis on working with Linux, cabling, and network equipment.

Nominee: Doug Shewfelt

Doug Shewfelt first encountered UNIX in 1980 at the University of Manitoba. He has been worked in various IT positions for the City of Winnipeg since 1985, and currently provides system and database administration support for the City. He has been a member of the MUUG board for the past several

years.

Nominee: Adam Thompson

Adam has over 20 years' experience in the IT field, ranging from Programmer to Network Administrator to Chief Technology Officer & VP. He first used UNIX (although he didn't know it) in 1988 while playing NetHack on the QNX BBS in Ottawa. He first ran into UNIX professionally in 1990, and started using Linux in 1991. Adam is the author of several `termcap(5)` and `terminfo(5)` entries, deployed the first cross-platform, public, networked instant-messaging system in Manitoba, and installed the first UnixWare system in Manitoba. He has developed several UNIX/Linux courses, and has also taught RDBMS administration. Adam has been a member of MUUG since 1995, and a board member for a decade.

Nominee: Brad Vokey

Brad Vokey is the owner of Fortress Software Inc. and the creator of the Matchmaker Fundraiser (a fundraiser that "matches up" over 1 million high school students across Canada and the U.S. during Valentine's). Brad started the company in 1985 using Apple II computers writing the original program entirely in 6502 machine language. The program migrated to 68000 machine language (on Atari ST computers) in 1986 and then eventually to

C (and Atari TT computers) soon after. The original C program is still very much alive to this day and is constantly being tweaked and added to every year. Brad has served on the board of the Atari ST Users Group (STUG) until its dissolution in 2000 and has been a member of MUUG since 2006. He was first exposed to Linux in 1999 with Mandrake 6.0, uses Linux on a daily basis on his company's firewalls, and is looking forward to converting his entire office to Linux "sometime" in the future.

Slackware 14.0 Available

This stable release gives your choice of Xfce 4.10.0 or KDE 4.8.4. It includes Perl, Python, Ruby, gcc 4.7.1. and even more developer tools. Apache and PHP are on the list, as well as several web browsers. For encrypted network communications, OpenSSL, Open SSH, and OpenVPN are available. For multimedia, Amarok, K3B, and gimp are ready to go. A good package for sysadmins and web developers. For more info, visit <http://www.slackware.com/announce/14.0.php>

Python 3.3.0 Release Overview

Major changes include locally-installed libraries for virtual environments which are optionally segregated from the system-wide site packages, and a windows launcher for .py files.

The changes for the virtual environment package is meant to be similar to the 3rd-party *virtualenv* package (the folks at Python note their version has "tighter integration with the interpreter core.")

The Windows 3.3 installer now contains a launcher that is invoked implicitly when double-clicking *.py* files. The most recent version of Python is used by default (if there is more than one installation), but can be overridden in the script to use a different version on the system, if it exists.

New syntax features:

- New *yield from* expression for generator delegation.
- The *u'unicode'* syntax is accepted again for str objects.

New library modules:

- faulthandler* (helps debugging low-level crashes)
- ipaddress* (high-level objects representing IP addresses and masks)
- lzma* (compress data using the XZ / LZMA algorithm)
- unittest.mock* (replace parts of your system under test with mock objects)
- venv* (Python virtual environments, as in the popular *virtualenv* package)

New built-in features:

- Reworked I/O exception hierarchy.
- Rewritten import machinery based on *importlib*.
- More compact unicode strings.
- More compact attribute dictionaries.

Significantly Improved Library Modules:

- C Accelerator for the decimal module.
- Better unicode handling in the email module (provisional).

Security improvements:

- Hash randomization is switched on by default.

See <http://docs.python.org/py3k/whatsnew/3.3.html> for further details.

Implementation Improvements: Distros Battle SecureBoot

by: Trevor Cordes

As mentioned in a previous MUUGLines, Windows 8 will introduce *SecureBoot*, a feature to force hardware to only boot cryptographically signed OS's. The problem for the open-source world is the key must be signed by Microsoft! Finally they will have their world domination! Ehem. The distros are finally fighting back:

Fedora has stated it will pay \$100 to get their bootloader signed with a MS key. That's a cop out, but it will allow Fedora to run without requiring user BIOS tweaks.

Ubuntu has stated it will make its own similar "standard" in the hopes that hardware manufacturers will use their standard (and signing key) instead of Microsoft's. Good luck with that, Canonical. Fight the good fight!

SUSE will combine the two, utilizing Fedora's signed GRUB 2 bootloader, while also trying to get hardware vendors to include a SUSE key.

Oddly, the BSD camp appears to be quite quiet on the issue with only a smattering of forum hits coming up in Google. Get organized, BSD!

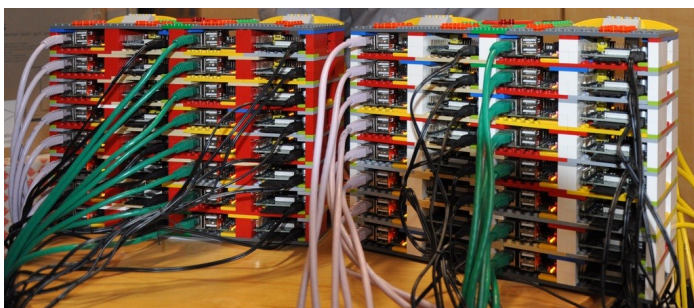
This editor believes this will all blow over and become a non-issue. The alternative is too awful to contemplate. Has anyone thought about what will happen when these signed-only computers start to age and keys change. Are we in for accelerated obsolescence if new OS's aren't signed for old hardware?

Concerned readers can sign a petition spearheaded by the FSF: google **fsf boot petition**.

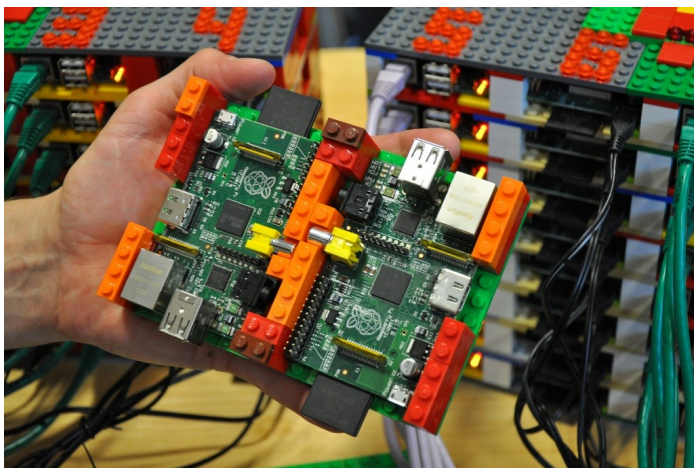
Calibre Now at 0.9.0

Calibre, a multi-format ebook reader for Linux, MacOS X, and Windows is now at Version 0.9.0. It boasts a better book viewer, much better Android support, lots of conversion engine enhancements, and library management improvements. There is also now a portable version meant to be used via a USB stick, which keeps the library and settings together when moving around. If you like ebooks, this software is a must-have!

Raspberry Pi Supercomputer?



A team led by Professor Simon Cox at the University of Southampton (United Kingdom) has built a 64-node supercomputer with Raspberry Pi and Lego racks. With 64 processors and 1 TB of memory, you can build your own, following their guide available at <http://www.southampton.ac.uk/~sjc/raspberrypi/>



Open Source Release of Common Desktop Environment

As of the beginning of August, CDE has been released as open source under the LGPL, and can be downloaded as of today for Debian and Ubuntu.

Developed by Hewlett-Packard, IBM, Novell, and Sun in the early 1990's, CDE was part of an effort to bring UNIX into the future and compete with other other operating systems making inroads into their market. CDE was mostly seen on UNIX systems like Solaris and HP-UX.

As the open source world developed, it came up with KDE and GNOME instead. Xfce, sometimes nicknamed "Cholesterol Free Desktop Environment", was initially developed to be a fast and lightweight open version of CDE.

Why bother now, or why care now? Thom Holwerda, writer for osnews.com, puts it this way:

"CDE has achieved something that no other desktop environment has ever given me: a complete and total dedication to expected behaviour - or, put differently, a complete absence of unexpected behaviour. It is hard to put into words, but when you are using CDE, you are rarely, if ever, surprised by the results of your actions.

In addition to that, CDE never goes out and do things without your consent. It does not bother you with pop-ups, (modal) dialog windows, or more of that nonsense. It is focused on just one thing: serving you, The User. CDE will not do things without your full permission, something so many other desktop environments do constantly."

Whether your desktop feng shui is minimalistic, you're looking for a user interface with very low overhead, or you're having a retro mood, it may be worth a look.

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