

MUUGLines

The Manitoba UNIX User Group Newsletter

Volume 25 No. 3, November 2012

Editor: Adam Thompson

Next Meeting: November 13th, 2012

RTFM: none this month

Instead: Gadget show-and-tell. Bring along any gadgets or hardware you have so everyone else can see what's out there.

Topic: OpenRISC System on a Chip

Robert Keizer will talk about OpenRISC and its applications:

- Why run an FPGA device
- What you can do with one
- Running a linux kernel on an FPGA
- In-lining custom instructions.
- Location: 400 Ellice Ave.

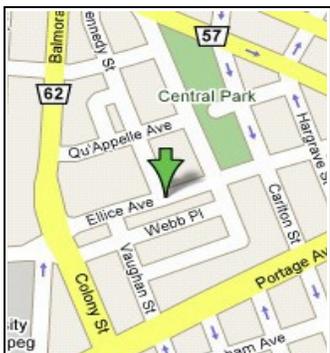
Upcoming Meetings

December 11th, 2012

Topic: Social Event

Location: TBD

Where to Find the Meeting



The November meeting will be at the IBM offices at 400 Ellice Ave. (between Edmonton and Kennedy Streets), for one last time! 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.

Board Elections

As expected, the 2012-2013 board was elected by acclamation. The new board met in October and appointed board members to the various positions, as follows:

- Robert Keizer – President
- Brad Vokey – Vice President
- Gilbert Detillieux – Secretary
- Doug Shewfelt – Treasurer
- Katherine Scrupa – Past President and Member-at-large
- Trevor Cordes, Michael Doob, Kevin McGregor, Adam Thompson – Members-at-large

MUUG Now Homeless

The monthly general meetings must move for 2013, but stay calm and carry on...

IBM (through Steve Moffat) has graciously allowed MUUG the use of their boardrooms and meeting rooms for many years at no charge, including through one entire office move. MUUG has been meeting at 400 Ellice Ave. since IBM's offices opened in that building! IBM is now moving offices again. The new offices are a smaller space, however, with a boardroom that likely won't be big enough for our meetings, uncertain security arrangements, and a

much less convenient location for many of our members.

Your board has been looking for alternate meeting space for several months, but it's extremely difficult to locate space that's suitable, available, *and* affordable. We expect the December meeting – it's a different format anyway – will happen somewhere else. Stay tuned for more information.

For January 2013, however, we're still trying to settle on a suitable place to hold meetings. The ideal location needs to:

- Be centrally located; preferably in or near downtown;
- Seat about 40 people, preferably boardroom-style;
- Be accessible by car, bicycle, bus and foot (including parking and bike racks);
- Have an internet connection, preferably wired ethernet;
- Have a high-resolution (XGA or better) data projector;
- Allow after-hours access, since we meet in the evening; and
- Be free or quite cheap, since we're a non-profit organization that only charges \$20/year!

If you have or know of a location that we should consider, please email or talk to one of the board members ASAP.

Right now, the front-runner is a location at the UofM, and there's a back-up plan in the downtown area.

Electronic Edition of the Newsletter

Just a reminder that if you had signed up for the electronic (e-mailed) edition of this newsletter, you'd be able to click directly on the links below.

We still don't quite have the ability to *not* send you the paper copy, but you'll get the PDF version in your inbox much sooner, and you'll be ready to go when we do finalize the details around not sending paper.

New Arduino Announcements

The official Arduino Starter Kit has been announced and is available for purchase:

<http://arduino.cc/blog/2012/10/03/arduino-starter-kit-is-here-to-rock/>

The latest incarnation of the Arduino has been announced: The 32-bit, 84 MHz Due (“Two”, in Italian):

<http://www.i-programmer.info/news/91-hardware/4965-new-powerful-arduino-due.html>

Since the Arduino platform is completely open, you can expect knock-offs and clones of both items to appear in the near future.

OpenBSD 5.2 Changes

As of OpenBSD 5.2, pthreads(3) should be fully multi-core enabled, allowing multi-threaded applications to run across more than one CPU or core. The biggest change is the replacement of user-space thread scheduler by a kernel-space implementation.

Hibernation now works on i386. Again. Maybe.

SSLv2 has been disabled by default in OpenSSL; if only everyone else would do the same, we might be able to call SSL reasonably secure once again...

Nginx has been included in the base OS – this will presumably allow for the eventual removal of the security-hardened version of Apache that OpenBSD currently uses.

Many, many other changes: see the release notes for details.

<http://www.openbsd.org/52.html>

OpenBSD Mail Lists Become Closed

Due to the increasing amount of spam hitting the various @openbsd.org mailing lists, the project has decided to switch to a subscriber-only model instead of an open mailing list.

You must now be subscribed to the mailing list before you can post to the mailing list. Most of the MUUG mailing lists are set up this way, for the same reason – to prevent spam.

Dell Enters NEBS/ETSI Telco Market

Dell has announced that they are entering the Carrier-Grade market with standard PowerEdge servers reworked to be NEBS Level 3-compliant.

NEBS/ETSI environments are one of the few remaining areas where Sun/Oracle retains a significant lead in hardware, so this bears watching. Running carrier-grade Linux on carrier-grade PowerEdge should be a lot cheaper than paying for Solaris on carrier-grade SPARC (mostly the Netra “T” series).

Since Dell is entering the market as an OEM/ODM, it’s likely it will be many months before any of this equipment gets installed into central offices.

<http://en.community.dell.com/dell-blogs/direct2dell/b/direct2dell/archive/2012/10/30/introducing-carrier-grade-poweredge-blades.aspx>

ARM, Red Hat and AMCC to Develop “Disruptive” RISC Server

As Dell prepares to replace expensive Oracle/Sun equipment in Telcos, ARM and AMCC, in cooperation with Red Hat, prepare to replace “expensive” Dell equipment in data centres.

A new 64-bit ARMv8 chip (the “X-Gene”) is in development, dubbed a “server-on-a-chip”: by integrating all the common components of a server onto a single chip, the partners hope to dramatically decrease both price and TCO for high-density server environments.

Red Hat is busy adding ARM support back into Fedora. Canonical has recently been adding ARM support to Ubuntu as well, although they’re not connected with this particular project (yet). Note that Ubuntu already runs on the ARM-based Chromebook from Samsung, and the Nexus 7 tablet from Samsung.

It remains to be seen how open and standardized an ARM server market will be, compared to today’s commodity x86 server market, but it’s hard to see how having more choice would be a bad thing.

Red Hat Achieves CCC EAL 4+

Red Hat has announced that they have succeeded in obtaining Common Criteria Certification at Evaluation Assurance Level 4+, the highest level possible for an unmodified commercial operating system, for Red Hat Enterprise Linux 6.2.

Red Hat has a good history of certifying their products for use by government and military customers, but until now, RHEL 6 was not certified.

Some parts of RHEL 6 are also under evaluation for FIPS-140-2 compliance, and certification activities are continuously ongoing. In the meantime, RHEL 5 remains a FIPS-140-2 compliant option.

“Linux More Viable than Windows 8”

Video-game developer Valve has already committed to porting the Steam platform to Linux. They’ve made significant progress with a number of games, even claiming *better* performance under Linux than Windows 7 for several titles, including *Left 4 Dead 2* (315fps vs. 270Fps).

Now, a Valve engineer has expanded on their CEO’s comments, telling an audience at the Ubuntu Developer Summit that Linux is a more viable gaming platform than Windows 8.

<http://www.ubuntuvoices.com/2012/10/valve-linux-more-viable-than-windows-8.html>

<http://www.joystiq.com/2012/08/04/linux-left-4-dead-2-outperforms-direct-x-windows-version/>

Ubuntu 11.04 Reaches End-of-Life

Ubuntu 11.04 “Natty Narwhal” reached its end-of-life milestone on October 28th, 2012. No further updates will be released for 11.04 from now on.

The supported upgrade path is to 11.10 (“Oneiric Ocelot”), and from 11.10 upgrades are supported to 12.04, and from there to 12.10. Upgrading directly to 12.04 LTS should work, but may not be officially supported.

Ubuntu 12.10 Released

The latest version of Ubuntu is now out. The most contentious feature is the integration of online search results into Dash search results. Use of Ubuntu as a thin-client has been eased by the inclusion of remote RDP login directly from the main ?DM login screen.

For those wanting to get their toes wet before committing, WUBI support is back – you can now once again install and run Ubuntu without repartitioning your hard drive!

FreeNAS 8.3 Released

FreeNAS 8.3-RELEASE is now available, including ZFS pool version 28 support.

This is particularly interesting to those of you running large amounts of storage, as ZFS v28 includes native de-duplication at the dataset level. From the release notes:

ZFS v28 includes deduplication, which can be enabled at the dataset level. The more data you write to a deduplicated volume the more memory it requires, and there is no upper bound on this. When the system starts storing the dedup tables on disk because they no longer fit in RAM, performance craters. There is no way to undedup data once it is deduplicated, simply switching dedup off has NO AFFECT on the existing data. Furthermore, importing an unclean pool can require between 3-5GB of RAM per TB of deduped data, and if the system doesn't have the needed RAM it will panic, with the only solution being adding more RAM or recreating the pool. Think carefully before enabling dedup! Then after thinking about it use compression instead.

So... maybe that's not such a great feature after all. Testing it makes sense, though, and using a dedup'd volume for disk-to-disk backup may still make sense: if you can save a lot of money on disks, you can probably afford to increase the amount of RAM in the server. There are a few other major changes in the 8.3 release, see the release notes for details:

<http://sourceforge.net/projects/freenas/files/FreeNAS-8.3.0/RELEASE/>

Ubuntu 13.04 Developed in Secret?

Mark Shuttleworth has apparently decided that it's better to alienate the worst of his critics right up front, develop new features in secret, then release them to the world with a big "Ta-Da!"

At least, that's the consensus that's come about after his blog post about setting up a community "skunkworks". To be fair, there really isn't any other way to take this comment:

So, we thought we would extend the invitation to people who trust us and in whom we have reason to trust, to work together on some sexy 13.04 surprises.

It will remain to be seen how the community at large reacts to this, but since it's Mark Shuttleworth, he's going to do whatever he wants regardless of community opinion, and most users will probably be reasonably happy with the way it turns out in the end.

<http://www.markshuttleworth.com/archives/1200>

http://www.computerworld.com/s/article/9232701/Key_parts_of_Ubuntu_13.04_to_be_developed_in_close_secret?taxonomyId=122

Honeynet Project Maps Attacks

Honeynet is a non-profit organization with the purpose of investigating the latest attacks and developing open source security tools to improve Internet security. Recently they made news by releasing a realtime map that pinpoints attacks captured by honeypots. They stress that this is alpha software, and that it is in no way representative of current attacks. The software is open source under the LGPL.

<http://www.unixmen.com/watch-worldwide-cyber-attacks-live-with-honeymap/>

<http://map.honeynet.org/>

Register Your O'Reilly Books

O'Reilly Media

(everyone's favourite

computer book publisher) has a new online feature

whereby if you "register" the O'Reilly books you

own, you can receive special benefits. Benefits

include: Ebook upgrades to errata-repaired versions,

discounts of 40% on new paper editions and 50% on

Ebook editions, and other special offers.

Signing up is easy, you can use your existing oreilly.com account. Search the titles or enter in all your ISBN's in one online form.

O'REILLY®