

MUUGLines

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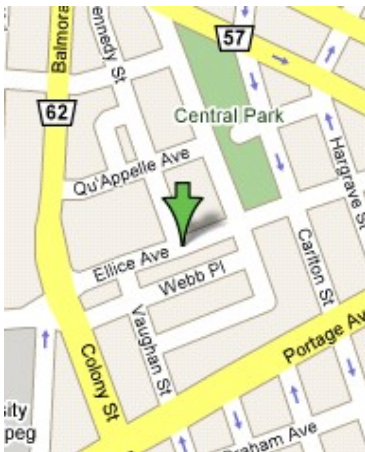
Next Meeting: February 8th, 2011

Topic: FOSS Games

Open source games seem to number in the zillions. This month we'll take a look at a few of them in the form of multiple mini-presentations. Expect a demo-oriented format with plenty of visuals. Mike Pfaffner will lead off. Other presenters TBA.

Also up, Adam Thompson will present an RTFM on netstat, the useful all-things-network display utility that no good network admin should be without.

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.

Upcoming Meetings

March 8th, 2011

Red River College courses and FOSS certification overview and demonstration. Details to follow.

April 12th, 2011

Details to follow.

Linux Skills in Demand

A global outplacement firm reports that job postings seeking Linux knowledge have risen at a faster pace than Windows postings in the same time period. "Skills in the open source operating system are in particular demand... The number of Linux-based projects is rapidly increasing all over this industry."

As an added bonus, "Linux professionals also tend to get a significant salary premium of as much as 10 percent over other IT workers." The flip side however is that firms wanting to hire Linux expertise may find it difficult to find said Linux workers.

<http://tinyurl.com/6y94rs5>

Small-ISP Price Hikes Possible

The CRTC has ruled that large carriers can charge usage-based bandwidth fees to smaller reseller-type ISPs. In turn, the smaller ISPs are expected to pass on the costs to their end-user customers. Previously, smaller ISPs received flat-rate pricing from their parent carriers. Netflix and iTunes video downloads are cited as the impetus behind the move.

These changes may be relevant to Winnipeggers who use small ISPs like les.net. The ruling doesn't take effect until March 31, and there's no guarantee small ISPs will make immediate changes to billing structures.

Similar changes may eventually affect large-ISP (think Shaw) customers. Large ISPs have not been happy with the introduction of Netflix, which gives customers an option of dropping expensive \$50+/month cable TV for \$8/month Netflix TV and movies, all the while saturating Shaw cable modems with the massive bandwidth requirements of such services. Expect further debates on the subject in the future.

<http://tinyurl.com/4rrqvzb>

OpenSSH 5.7 Released

Exciting new features include:

Elliptic Curve Cryptography modes for key exchange and host/user keys. These provide better performance and shorter keys than plain DH and DSA.

The ability to copy files with scp between two remote hosts directly from the local host, without passing the data through the local host.

A new IPQoS option to allow the user to specify arbitrary TOS/DSCP/QoS flag values.

<http://openssh.com/txt/release-5.7>

KDE 4.6.0 Released

This update provides updated Plasma workspaces which make it easier to associate applications with activities such as work or home tasks. Netbook enhancements optimize for speed and touchscreen interfaces. Also, desktop widgets can now be written in QML, the declarative Qt language. Dolphin gets *faceted browsing* which lets you filter files by metadata.



<http://kde.org/announcements/4.6/>

Intel Announces 2nd Gen Core

Announced at CES 2011, Intel has upgraded its Core™ CPUs for both desktop and mobile computers. The newer processors, codenamed *Sandy Bridge*, will provide improved power efficiency and performance. A relatively new development sees GPUs integrated directly into the CPU for vastly improved “onboard” video speed, as well as reduced cost because of the resultant simplification of the chipset.



Expect computers containing these new CPUs to arrive soon at a dealer near you.

<http://tinyurl.com/5whexue>

Affordable 3D Printing

Linux Pro Magazine had an excellent article last year (issue #116) about building your own inexpensive 3D printer. A 3D printer is a device that takes CAD files and rapidly turns them into real-life 3D solid objects out of inkjet-like droplets of plastic, PVC or even wild materials like peanut butter! The process is quite amazing to watch, as solid objects appear out of nowhere in front of your eyes.

With a little DIY and open source, you can build these marvels for \$750-\$4000. A few open source schematics, parts lists and firmware/software projects are freely available on the internet. Popular ones include CupCake, Fab@Home and RepRap.

Methinks this would make quite an interesting thing for a group of MUUGers to create for the use of all members!

<http://tinyurl.com/4sre3aq> (purchase required)

Cheap Linux Pro Magazine Trial

Linux Pro Mag is again offering uber-inexpensive trial subscriptions of 3 months for only \$3.



It has a different feel than Linux Journal, with a heavy European flavor. It has a heavy user slant, with a secondary emphasis on programming and administration.

If you test it out, make sure you read the terms and cancel within the time frame mentioned or you will be billed for an entire year automatically. It's quite an expensive yearly subscription price!

<https://www.linuxpromagazine.com/Subscribe/Trial-Subscription>

Egypt Shuts Off Net

January 28, 2001: Egypt has apparently shut down the internet within its borders. It accomplished this by reportedly disabling the country's DNS servers. Outages are affecting not just ordinary citizens, but businesses and schools. Egypt is attempting to crackdown on the ongoing protests in the wake of the Tunisian popular uprising.

<http://tinyurl.com/4933elq>

Capacitor Plague Continues

It's a problem most of us have seen in the last decade: unstable computers caused by faulty capacitors on motherboards and in power supplies.



These bulging or goo-leaking cylindrical components have caused the industry massive grief and continue to plague users to this day.

If you have a computer showing stability problems (crashing, freezing, USB problems), check your caps for any sign of bulging. Good caps should be so flat on top they are almost concave. Once a cap starts going bad, it will only get worse, until one day your board fails to POST.

The only solution is to desolder the bad caps (and all caps of that same value on the board) and solder on new ones, preferably high-quality Japanese-made caps. The process is tricky and tedious and often it is

cheaper to just buy a new board. However, a new board usually entails a new CPU, new RAM and possibly a new power supply, as well as often an OS reinstall (especially Windows).

DIYers with decent tools can attempt the repair themselves. Various how-to guides are on the internet.

If you choose to discard a bad-cap board rather than fix it, please bring it to a MUUG meeting and Trevor Cordes will happily accept it for repair and find a good home for it rather than toxifying our landfills.

http://en.wikipedia.org/wiki/Capacitor_plague

MozRepl Lets You Program Firefox

by Trevor Cordes

Want to do some “web scraping”? Sometimes you want to programmatically access a web site, to crawl it to scrape all files for example. If the site uses non-basic web authentication, common nowadays, you can't use a simple recursive crawler like wget. Luckily tools like Perl's WWW::Mechanize came along providing extremely simple ways to create your own crawler that can tackle most sites.

Then along came the curse of javascript. Some sites now **require** javascript in order to login or use the site. WWW::Mechanize javascript capabilities are in their infancy and not, in this author's opinion, usable at this stage.

To the rescue comes a strangely-named MozRepl. Instead of trying to recreate the browser logic in perl as Mechanize does, this tool hooks into Firefox itself giving you guaranteed site compatibility. If the site works in Firefox, it can be programmatically controlled. The downside (or neat upside?) to this is



MozRepl actually controls a visible Firefox window so you can watch as your code chugs along.

Of course, someone has created a perl module interface into MozRepl: `WWW::Mechanize::Firefox`. This gives you the familiar Mechanize-style functions. MozRepl itself is a Firefox extension easily installed into Firefox. Some of the pieces are still new and buggy, and the execution wall-time can sometimes be agonizingly slow, but with a bit of tinkering this toolset can solve the heretofore unsolvable.

<https://github.com/bard/mozrepl/wiki>

<http://search.cpan.org/~corion/WWW-Mechanize-Firefox-0.43/>

Useful UN*X Hints

by Trevor Cordes

Here are a few useful little tips I've picked up over the years that can save you some time:

- In X, in a terminal window (tested: `xterm`, `gnome-terminal`), you can double-click to select a word and triple-click to select a line. This is very handy when combined with dragging to easily select a set of words or lines. For instance, triple-click + drag on the third click is the easiest way to select a block of lines, with no need to fiddle with selecting the precise first and last characters.
- **ionice**: You've heard of **nice**, which lets you tell the OS to lower the priority of a process so it doesn't slow the system down as much. There's also now an **ionice** which does the same thing but for I/O priority instead of CPU priority. The is great for heavy I/O jobs (think large disk reads/writes) as Linux has some known shortcomings with regards to sluggishness and read starvation. Use like: `ionice -c2 -n7 -t` command. The `-n` sets the priority with 7 being the "nicest" (lowest) priority. Requires a package called **util-linux-ng** on Fedora. Search your repos for other distros.

- To be super-nice, combine **nice** and **ionice** together like: `nice -n19 ionice -c2 -n7` command. To use it easily all the time, add it to your shell aliases!
- Ever "view source" on a web page only to be baffled by the apparent disconnect between what's on the rendered page and what the source shows? That's because modern Web 2.0 pages can load some of their content after the initial page load, using AJAX. Fortunately, a tool now exists that can show you the "finished" source, as well as provide many other useful tools: *Web Developer* add-on for Firefox. Install this tool and use the CTRL-SHIFT-U view source option.

<https://addons.mozilla.org/en-US/firefox/addon/web-developer/>

- Still using **xv**, the venerable X image viewer that's now over 20 years old? There may finally be a worthy successor. Check out **cv**, a perl module/program that tries to remain true to **xv**, but do so with greater speed and less bugginess. Sorry, there's no color editor yet.

<http://search.cpan.org/dist/Gtk2-CV/>

- The most useful alias I've ever defined:

```
alias b 'cd ..'
```

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