MUUGLines

The Manitoba UNIX User Group Newsletter

Volume 25 No. 1, September 2012 Editor: Trevor Cordes

Next Meeting: September 11th, 2012

RTFM: none this month

To allow for a longer round-table session after the summer break, we'll be skipping the RTFM segment of the meeting.

Topic: Network Cabling for Dummies

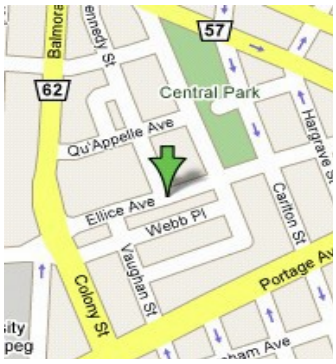
Katherine Scrupa and Adam Thompson will talk about network cabling, and demonstrate how to make your own network cables.

Upcoming Meetings

October 9th, 2012

Annual General Meeting & Elections,
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.

MUUG Board Elections

Call for Nominations

Adam Thompson, Nomination Committee Chair

Hear ye, hear ye! This is a preliminary call for nominees to participate in the election for the MUUG board. Those elected will serve from October 2012 until October 2013. The deadline to nominate yourself, or someone else, is September 25th, 2012. Instructions follow.

The MUUG board is charged with coordinating the meetings and other events by the group. It's fun, and you get a role in guiding the group. All are encouraged to apply.

Every October, the Manitoba Unix User Group holds its Annual Meeting, the main goals of which are to elect a new Board of Directors and to pass any special resolutions (aside from that, it is a regular meeting). Any MUUG member in good standing can be nominated to run for a position on the Board.

As of this writing, the following members have let their names stand for election or re-election:

Trevor Cordes
Owner – Tecnopolis Enterprises

Gilbert Detillieux
Systems Analyst – University of Manitoba

Michael Doob
Professor – University of Manitoba

Robert Keizer
System Administrator – Younes Sleep Technologies

Kevin McGregor
Systems Specialist – City of Winnipeg

Katherine Scrupa
Info Systems Desk Tech – St. John's Ravenscourt

Doug Shewfelt
Systems Specialist – City of Winnipeg

Adam Thompson
Consultant – athompso.net

Brad Vokey
Owner – Fortress Software Inc.

Thanks To Outgoing Exec

Sean Cody, a valued MUUG board member for several years, will not be running for re-election this year. Please join us in thanking Sean for his hard work (especially the great presentations) during his tenure.

MUUGLines Introduces Editors

MUUG members not on the board may not know that this newsletter is written each month by a different member of your MUUG board. Sharp-eyed members may have noticed that style, content bias and opinion vary from month to month. Starting with this month's newsletter, we are including the name of the editor in the front page byline.

Never again will you be left wondering: "who's the freak who wrote this nonsense?" </sarcasm attrib="hopefully">

Apple Wins $1B From Samsung

Apple was awarded by a jury in the USA $1B in damages against Samsung. Apple claimed Samsung infringed on their patents and copied elements of Apple's iOS. Apparently finger gestures like using one finger to scroll and two to pinch-zoom are patentable. Also in contention were rectangles with rounded corners.

Open source advocates should care because a) Android is Linux, and b) ridiculous IP claims hurt everybody, especially open source projects that hold no patents. The chilling effect will be massive.

Didn't the world go through this already in Apple vs Everybody vs Microsoft in the 80's with the "look and feel" cases? They decided back then that a "window" and "icons" were not protected, why would rectangles and pinches be any different? (Many are speculating Microsoft will love this verdict as it helps latecomer Windows Phone.) Expect this ruling to fall on appeal.

Firefox 15 Released

Just when you thought it was safe to blink, another Firefox arrives. Version 15 gives us silent updates, like Chrome. Of course that will be of limited use to most Linux users who will update via their distro repo, but it should help our Windows brethren stay vulnerability-free. Also up is support for SPDY v3, which was developed by Google. It's actually quite nifty in its ability to optimize traffic between compliant clients and servers. FF15 also bestows upon us compressed textures in WebGL, though that will receive limited use by most users at this point in time. Some additional memory handling and HTML5 features round out the release.

IBM Announces 5.5GHz Big Iron

IBM's newest z-series mainframe, dubbed the EC12, will have a 5.5GHz six-core CPU. This probably makes it the world's fastest (clock rate) commercially-available CPU. EC12, like all z-series, supports RedHat and SUSE Linux.

The EC12 cost $1bn to develop and can be yours for only around $1m.

Use Seagate Only 100 Days

With the onslaught by SSDs and continuation of inflated pricing due to Thailand floods, hard drive makers continue to make the most mind-boggling decisions to stick it to the consumer. In addition to the previously-reported reduction to 1 year warranties on most WD and Seagate drives, Seagate has made a little-reported change to their mainstream and most popular drive series.

Hidden in the Barracuda spec sheet is a little stat named "power on hours"; effectively a recommended duty cycle. The spec is 2400 hours. Which is 100 days per year. Basically what this says is that if you use the drive 24/7, that may cause premature failures at a higher rate. Since even a home PC, and especially a RAID/NAS setup, can run 24/7, this may

become a big concern in the near future for unsuspecting consumers.

WD also has drives with lower duty cycles — their "Green" series — though since they are 5400rpm they usually are passed over for serious applications anyhow. First hand experience has shown this writer that the Green series drives have high failure rates and very bizarre failure modes and symptoms.

Since Seagate provides only 1 year warranties on Barracudas, one can deduce that you are guaranteed only 100 working (24-hour) days out these drives before they are designed to fail. Yes, MTBF's and failure rate math doesn't work out quite that badly, but it does make food for thought.

Another thought is that SMART records the cumulative power-on hours a drive has been subjected to. In theory, Seagate could tell if a RMA drive had been used beyond its stated spec. Might we soon see RMA rejections based on this criteria?

This is all part of the hard drive industry's shift to intended-use pricing, where the cheapest drives are only allowed on rarely-used home desktops, and every step up you make can double the price. The steps currently appear to be: home, home power user, business "nearline", business server room. Probably gone are the days where smart builders and data centre ops (like Google) can use masses of cheap mainstream drives and achieve satisfactory failure rates.

5 Most Popular Distros

Based on pre-installed server OS and web browser surveys, Steven Vaughan-Nichols reports the world's favorite distros as (in countdown style):

5.Debian

4.Fedora

3.Ubuntu

2.Mageia (Mandriva fork (Mandrake fork (RH fork)))

1.Mint

With a nod to the real #1 "distro": Android.

Manitoba Gets HW Eco Fee

Get ready to open that wallet... Following in the footsteps of other provinces, Manitoba, as of August 1, has an Environmental Handling Fee (EHF) on many computer and consumer-electronic products. The fee is an up-front cost paid at the point of purchase of new products. The fee is meant to offset the cost of eventual environmentally-friendly disposal of said products. In practice nearly all retailers are simply tacking on the fee at point of sale, passing it on to the consumer.

Some example computer-related fees are:

•$15 per desktop, or desktop used as a server

•$3 per laptop or tablet

•$9.25 for LCDs 29" or less

•$8 per printer or scanner

•$1.10 per mouse or keyboard

While the fees don't sound like much, most computer LCDs are around $130-$160 now making the $9.25 fee equate to an additional 7%: almost like a second PST.

Loopholes abound: the regulations are vague on the subject of internal computer parts not sold as a complete computer. Calls to three local Winnipeg computer retailers revealed that all three are not charging any fees on internal parts purchased a la carte. That includes a complete system (case, cpu, motherboard, ram, cards, power supply) purchased as parts. So DIYers rejoice, you'll save $15 per computer. Pity the retailers/VARs who may find themselves arguing with customers as to whether an ambiguously-worded fee is applicable.

Also vague is the definition of a desktop computer: "a computer terminal designated to reside on a desk or similar work surface". Since many/most "desktops" usually reside on floors, does this mean they are exempt? Is a floor a work surface?

Strangely enough, servers are exempt from fees. Who knows if servers-used-as-desktops are exempt, which this writer builds frequently as ECC workstations. Also exempt are all previously-owned products, which is good news for sellers of used parts and does produce the benefit of encouraging reuse.

Your editor is a computer reseller, and is quite astounded at the incompetence shown in these new regulations. The definitions and examples are poorly thought out and worded, leaving egregious loopholes that are sure to cause headaches if consumers catch on and claim their purchase should be exempt. It certainly appears that no one in the industry was consulted. My business, registered with all levels of government including provincial, was not notified in any way

regarding this new EHF program. It was only via friends and mainstream media that we found out we were going to be forced to collect a new tax^H^H^H fee before the deadline.

Readers who are resellers, or even those who casually buy parts and build computers for friends, should consult the EHF websites to see if they must register and collect or face stiff penalties. If you purchase (for resale) only finished-products (like whitebox computers) from registered distributors (all the ones I know in Ontario are registered) then you may not have to ever remit under this program since you will pay your distributor the fee when you buy the product.

http://recyclemyelectronics.ca/mb/

Apocalypse April 8, 2014

Not UNIX related in any way, shape or form, but nonetheless critical to all computer people: Windows XP (and Office 2003, including Outlook, a major virus vector) goes off support April 8, 2014. After that date, no more security patches will be supplied by Microsoft. As of today, over 50% of the world's computers (billions?) still run XP, a number likely to shrink ever more slowly. This writer predicts world annihilation, or a Microsoft extension, though MS has already come out with statements that they will NOT extend support. Now where's Milla Jovovich?

Book Review: Code Simplicity

Review by Trevor Cordes

A new O'Reilly book by Max Kanat-Alexander (of Fedora and Bugzilla fame) attempts to describe the "missing science" of good software design. It posits that a scientific view was heretofore absent in the literature. Thus it aims to remediate that dearth by putting forward simple and concise laws in the hope of encouraging better design and code.

The intended audience is all programmers and designers, and people who may interface with them, such as project managers and requirements writers. Remarkably, the text is completely programming language and technology agnostic and refrains from devolving into a religious "my language/OS/paradigm is better than yours" diatribe.

Though the book is not quite what I was expecting from the title and synopsis, I think it achieves its main goal of trying to introduce a new science for an important subject. The first thing you'll notice is that the book is quite short: only 72 pages sans appendices, but the price is proportionately lower as well. The main cause of brevity is the complete lack of any examples, whether in code, pseudo-code or plain English. I was expecting some mid-level concept samples along the lines of: "working with technology X, it is advantageous to structure your design like Y." Instead, the book is entirely focused on the extremely high-level (theory only). I would like to stress, however, that it is all written in plain English , understandable by anyone, with only a slight hint of anything mathematical. Since I was hoping to see some real-world mid-level nuggets I could apply directly to my programming projects, I was left somewhat disappointed.

Code Simplicity does hammer home its main premise, which is simplicity should be introduced at all stages. Unfortunately, at a few points in the book certain concepts are reworded and repeated — sometimes in the same paragraph — adding nothing new. I did come away from the quick read with some useful new knowledge I can apply to my projects.

The big revelation for me was the equation regarding the relationship between present implementation effort versus future maintenance effort. (I won't give away the punchline here: buy the book!) While years of programming experience have left me with hunches and vaguely articulated methodologies that serve me well, it was quite eye-opening to see such concepts defined in indisputable mathematical terms.

I also enjoyed the axiomatic explanations of bad/junior programmer *faux pas* such as cutting and pasting code to re-use elsewhere with only minor changes versus abstracting out a subroutine. Next time a junior programmer you work with wants to know why they can't do such apparently harmless (in their mind) things, you can actually provide an explanation instead of just saying, "it's bad."

In conclusion, I would wholeheartedly recommend this book as a quick read for programmers and anyone programmers are required to work with. The simple rules should help any programmer, from novice to expert, achieve better results, and I will personally attempt to adhere to them in my own projects.

Thanks to O'Reilly for providing MUUG with a free copy which we will be giving away as a door prize at a future general meeting.