

MUUGLines

The Manitoba UNIX User Group Newsletter

Volume 32 No. 3, November 2019

Editor: Trevor Cordes

Next Meeting: November 12th, 2019

Feature Presentation: PowerShell Core

Kevin McGregor will introduce PowerShell Core, an open-source and cross-platform (Windows, Linux, and macOS) automation and configuration tool/framework that works with your existing tools and is optimized for dealing with structured data (e.g. JSON, CSV, XML, etc.), REST APIs, and object models. It includes a command-line shell, an associated scripting language and a framework for processing cmdlets.

The latest meeting details are always at:

<https://muug.ca/meetings/>

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Door Prizes

It's an interesting book this month: The Geek Atlas by Graham-Cumming on O'Reilly. It highlights 128 places in the world "where science & technology come alive." It not only lists and describes each location: it provides some scientific background as well. "Every site in this book has genuine scientific, mathematical, or technological interest – places guaranteed to make every geek's heart beat a little faster." While heavily slanted towards the UK and USA, our lowly Canada manages to get an entry! Can you guess what it is?

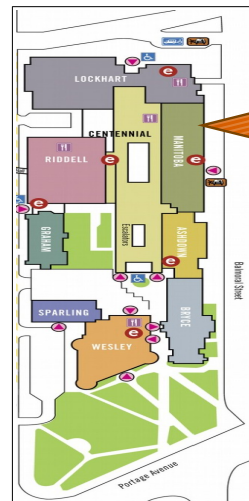
This month you'll also have 30+ new e-book titles to select from, should you be a lucky winner, ranging from security to command line to audio and video editing.

Remember, door prize entry is free to all who show up, but only those who stay until the draw can win. Members get an extra initial members-only draw. Good luck to all!

Where to Find the Meeting

University of Winnipeg, Room 1M28

Meetings are held in the University of Winnipeg's Centennial Hall, in the middle of the University Complex.



We can be found in room 1M28.

Doors are usually open by 7:00 pm with the meeting starting at 7:30 pm. Parking is available on the surrounding streets and in the parkade above the bus depot across Balmoral Street. See uwinnipeg.ca/maps for further information about parking and access to the campus.

2018-2019 MUUG Board Elections

Adam Thompson, Nomination Committee Chair

Every November, the group holds its Annual General Meeting. The main goals of the meeting are to elect the new board, and to pass any special resolutions, if required. The Board may consist of up to nine (9) people.

Those elected will serve on the MUUG board from November 2019 to November 2020. Any MUUG member in good standing may nominate someone they feel would make a good candidate, including themselves.

The MUUG Board is tasked with coordinating the meetings and other events hosted by the group. It's fun, and you get a role in deciding what the group will do. It requires attending the additional ten board meetings each fiscal year. All members are encouraged to apply.

The following 8 members are allowing their names to stand for re-election. (*Election will be by acclamation if the number of members running is not greater than the number of available board positions.*)

Trevor Cordes

Owner, Tecnopolis Enterprises

Trevor Cordes (B.Sc. CompSci) has owned and operated Tecnopolis Enterprises – a computer VAR, programming and consultancy company – since 1999. Linux and FOSS have been the keystone of Tecnopolis since inception. Since becoming a family man, he has shifted his primary focus to e-commerce development and operation. Trevor was President of the Atari ST User's Group for four years in the '90s. He prefers Fedora and Perl.

Gilbert Detillieux

Systems Analyst, University of Manitoba

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.

Kevin McGregor

Systems Administrator, City of Winnipeg

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.

Katherine Scrupa

LAN Administrator II, Steinbach Credit Union

Katherine has been a member of MUUG since 2006, during which she has been using Linux at home. Her educational pursuits in Computer Science led her to a Network Technology CCNA (Hons.) program at Red River College in 2010, with an emphasis on networking and system administration. Katherine's current work comprises of root cause analysis, configuration management, automation, and security.

Adam Thompson

Consultant, Infrastructure Technologies, MERLIN

Adam runs the 2nd-largest ISP in the province... 2nd-largest between the hours of M-F 8:30am-4:00pm, that is. While principally responsible for the large network and interfacing with other carriers, Adam has secondary responsibility for all the UNIX systems at MERLIN. He has a long and storied history of UNIX usage dating back to 1988 (playing Hack on the QNX BBS!), and he learned Solaris 4.x instead of completing his engineering degree, which he considers a pretty good exchange.

Tyhr Trubiak

Systems Administrator, Thorkelson Consulting

Tyhr Trubiak has been a member of MUUG since 2013. He manages a mix of Red Hat/CentOS and OpenSUSE servers within VMWare, as well as some Windows and Cisco devices. His first exposure to UNIX was when he received his B.Sc. CompSci at the University of Manitoba, which he found similar to his first love - the Commodore Amiga. He hasn't found a desktop distro he's liked enough to remain loyal to since, but is currently testing Elementary OS on his laptop. He has enjoyed 2D node-based digital compositing in the past (Blackmagic Fusion, formerly known as Eyeon Fusion), acting and anything Jeep related.

Brad Vokey

Owner, Fortress Software

Brad is the owner of Fortress Software Inc. And the creator of the Matchmaker Fundraiser (aka “Matchomatics” - a fundraiser that provides compatibility lists for millions of students across Canada and the US). Brad started the company in 1985 using Apple] [computers and 6502 machine language. Then switched to 68000 machine language on Atari ST computers in 1986 and then to C on Atari TT030 computers soon after. The original C program and Atari TT030 computers are still very much alive and in use to this day! In 2004, Brad started using Linux on TecnoPolis servers, and joined MUUG in 2006. He previously served on the board of the Atari ST Users Group (STUG) and became a board member of MUUG in 2011. He has been keeping our finances in order as your MUUG treasurer since 2013.

Wyatt Zacharias

Cloud Systems Administrator, Pricerazzi

Wyatt Zacharias is a cloud system administrator at Pricerazzi, focusing on infrastructure automation with technologies such as Terraform and AWS. Previously, Wyatt worked at Manitoba Blue Cross, managing a mix of RedHat, CentOS, and HP-UX servers, and a mix of network equipment including Checkpoint and Fortigate firewalls, and Cisco routers and switches. Wyatt has been president of MUUG for the previous four years, and served as vice-president the year before that. Wyatt Graduated from Red River College in 2014, and is a RedHat certified engineer.

The following member is a nominee allowing his name to stand for election for the first time.

Troy Denton, P.Eng

Senior Telecom Engineer, 24-7 Intouch

Troy Denton’s first encounter with Linux was as a cash-strapped teenager, when he installed Puppy Linux on a “rescue” PC (Troy had saved it from a computer retailer’s dumpster). Since that fateful night, Troy went on to graduate from the Electrical & Computer Engineering program at the University of Manitoba, and has worked in telecommunications, medical devices, and embedded control systems.

Troy is new to the MUUG board in 2019. He has previous board experience as the chair of IEEE Young Professionals Winnipeg, and as a Director at SkullSpace. Troy has also facilitated many embedded systems and Linux workshops for the University of Manitoba, Red River College, SkullSpace, and the Millennium Library.

Troy enjoys using Linux and open source software both professionally and personally, with his distro of choice being Debian. Using Linux for circuit board design, music production, software development, and 3d printing makes him feel warm and fuzzy inside. You can see a number of his projects at troydenton.ca.

Fedora 31 Arrives

Another six months, another Fedora. Nothing terribly earth-shattering this time: it smells like another forced-to-upgrade-if-you’re-running-two-fedoras-ago moment.

What do you get? GNOME 3.34 brings visual changes and performance improvements. 32-bit (i686) support is dropped for boot images and kernel, but support remains for libraries and applications. Glibc is 2.30. NodeJS is 12. Native *non-free* H264 support is improved. As usual Fedora is on the kernel bleeding edge and comes with 5.3 out of the gate.

There’s also more Wayland bits and bobs, like XWayland running only on demand, and Firefox running in native Wayland. Those who still like window managers will be happy to know they can yet again safely and completely ignore Wayland and just use X11.

There is now a “Fedora Flavor” called *Fedora Astronomy*, and also *Fedora IoT* that provide all the tools you’ll need for their respective subjects in one downloadable image.

Listed as an “improvement”, root password-based login in ssh has been disabled. However, reading the missives on the subject, it seems that you can just re-enable the option in the `sshd_config`, so this author isn’t quite sure what the brouhaha is exactly.

A slightly more drastic change is Python 2 is being dropped and all Python 2 packages will disappear by

January 1, 2020. If you haven't converted your old scripts to Python 3 yet, now is the time. As a Perl monger, I revel in the schadenfreude as I sit here running perl scripts I wrote in 1993 without any subsequent modification.

7,000 Old MS-DOS Games Free

OK, this has absolutely nothing to do with *NIX or FLOSS, but it does have something to do with "free as in beer" and will tickle the interest of any reader from Gen-X or older.

The Internet Archive has created a repository of old "Abandonware" MS-DOS games, many from the '80s and '90s. They've made each game easy to play with included emulators as well as an in-browser emulator. The native emulators are geared towards running on Windows/Mac, but savvy *NIX users should have no problem running them in similar emulators.

Notable titles include Doom, Sim City, Wolfenstein, Carmen Sandiego, Dune 2, Leisure Suit Larry, and MOO1. You can thank us later for killing all your free time!

<https://tinyurl.com/y5cfdbb2>

https://archive.org/details/softwarelibrary_msdos_games/v2

Sudo Bugs Root

The Stupid Longstanding Bug Of The Month has got to go to sudo. It was discovered that by passing a crafted, bogus user id to sudo using the -u option, you could run a command you're allowed to run as another non-root user as root.

Before you freak out, many distros' default sudoers configurations would seem to be unaffected by this bug. However, if you have added custom entries that have "ALL" in parentheses after the equals sign, the specified commands can be run as root even if you've also included "!root" in the parentheses!

```
bob myhost = (ALL, !root) /bin/id
# sudo -u#-1 id -u
0
```

This is due to setresuid(2) and setreuid(2) treating id -1 specially – essentially just doing a no-op. That means the resulting command is run as the user sudo is run as, which, of course, being setuid root, is root. Doh.

The bug is fixed in 1.8.28.

https://www.sudo.ws/alerts/minus_1_uid.html

Intel Rumoured To Cut Prices

AMD has made a comeback with its successful Ryzen CPU line in the last couple of years. In retaliation, Intel is rumoured to be slashing some prices in the near future. Some pundits believe the biggest cuts will be to the Xeon SKUs.

<https://tinyurl.com/yy795u6b>

Microsoft Competes On Terminals?

Oops. Another not-so-*NIXy topic. But since many MUUGers are also forced to use Windows regularly, this tidbit could be apropos.

Microsoft has released Windows Terminal in the hopes of "building a better command line experience for developers". Surprisingly, MS has released it as open source. They are keen to show that you can run Linux within Windows using WSL2 and control it with this new Windows Terminal.

<https://www.youtube.com/watch?v=KMudkR-cwjCw&feature=youtu.be>



A big thanks to Les.net for providing MUUG with free hosting and all that bandwidth! Les.net (1996) Inc., a local provider of VoIP, Internet and Data Centre services, has offered to provide a 10% discount on recurring monthly services to MUUG members. Contact sales@les.net by email, or +1 (204) 944-0009 by phone, for details.