

The Manitoba UNIX User Group Newsletter

October 2007 Volume 20 No. 2

Next Meeting: October 9th, 2007 GnuCash



GnuCash is a free software accounting program for personal and small business use. It runs on multiple UNIX-like platforms.

The presentation will cover some of GnuCash's features and also double as a fast introduction to

bookkeeping. Potentially covered: account types, double-entry accounting, reports, invoices, bills, employee expenses, scheduled transactions, loan calculations, and demystifying "debit" and "credit."

The presenter, Mark Jenkins, is a recent graduate of the Computer Science Honours program at the University of Manitoba. Mark has contributed a very small bug-fix patch to GnuCash but expects to contribute more in the next year; his employer, ParIT Worker Co-operative, recently received a grant that will fund additional development.

Where to find the Meeting



Meetings are held at the IBM offices at 400 Ellice Ave. (between Edmonton and Kennedy). When you arrive, you will have to sign in at the reception desk, and then wait for someone to

take you (in groups) to the meeting room. Please try to arrive by about 7:15pm, so the meeting can start

promptly at 7:30pm. Don't be late, or you may not get in. (But don't come too early either, since security may not be there to let you in before 7:15 or so.) *Non-members are welcome, but may be required to show photo ID at the security desk.*

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 \$3.00 for the evening. Bicycle parking is available in a bike rack under video surveillance located behind the building on Webb Place.

Upcoming Meetings:

November 13th, 2007 Server Virtualization with Solaris Zones and FreeBSD Jails

December 11th, 2007 Linux on a Stick (TBA)

Future meeting topics may change.

MUUG Board Election 2007-2008

As part of the October 2007 meeting, we will be holding an election for the positions of directors to the MUUG board. The following nominees are candidates for election. Since the number of candidates (7) is less than the number of vacancies as last set by the board (8), in accordance with MUUG

By-laws 5.(c) and 10.(d), the nominees shall be deemed to be elected by acclamation.

Nominee: 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. He also contributed to the implementation of the initial MUUG Online system, in 1992, which he's since maintained through two complete replacements and numerous upgrades over the years.

Nominee: Michael Doob, Professor, University of Manitoba

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 the last decade and has given a number of presentations for that group.

Nominee: Kevin McGregor, Network Analyst, City of Winnipeg

Kevin McGregor provides network administration and system support services for the City of Winnipeg. 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: Montana Quiring, Systems Administrator, University of Manitoba

Montana Quiring is the IT and Systems Administrator for Housing and Student Life at the University of Manitoba. He has been using UNIX and Linux for almost 10 years. At first it was something to play with but is now part of his everyday home and work life. He has training in Linux, networking, writing and speaking. He has experience in IT training, administering, managing, consulting, servicing and publishing. He takes pride in making many older computers usable and more secure for friends and students by installing lightweight Linux distro's on them. He also maintains a Linux PDA website and co-produces some Linux podcasts.

Nominee: Doug Shewfelt, Systems Specialist, City of Winnipeg

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 supports the City's corporate financial systems. He has been a member of the MUUG board for the past several years.

Nominee: Adam Thompson, Consultant

Adam has over 15 years' experience in the IT field, ranging from Programmer to System Administrator to Chief Technology Officer. He currently teaches a variety of IT courses and provides consulting services to clients.

Nominee: Shawn Wallbridge, System Administrator, Frantic Films

Shawn Wallbridge discovered Linux in 1996 while at Red River College. Over the years he has used Unix wherever possible for various functions. He is currently the Systems Administrator for Frantic Films and runs a Web hosting company in his spare time. He has been a MUUG member for over seven years and has done numerous presentations for MUUG.

My Bug's Life

By Sean

Recently I bit the bullet and submitted a bug report for a quirk I've found. The following is a short tale of the experience and how the problem was resolved.

I was readying myself for DefCon and I didn't want to bring my primary laptop with me (for obvious reasons) so I started prepping my \$work supplied OBSD laptop (affectionately named 'craptop').

This laptop (a Dell C610) is an old beast. Purchased refurbished for very cheap with a used battery and I've never used it untethered for longer than 5 minutes so I had to re-think my options. After updating to 4.1 current and setting up all kinds of bits and bobbles that I would need to communicate with \$work (for the inevitable emergency), I starting worrying about battery life. I then remembered about SpeedStep and the OBSD support for it. I tried it when I first got the laptop and forgot about it.

You can see if your CPU is supported by checking out the hw.setperf sysctl as follows:

```
sean@craptop~$: sysctl hw.setperf
sysctl: hw.setperf: value is not available
```

Wait... not available? I'm sure it worked before. With that I dismissed the issue as 'user error' during the update and with running out of time decided to go to DefCon without the aid of a computer.

After I got back the problem languished for a while (as I was still unpacking) and computer problems were the last thing I cared to deal with. Eventually things settled down and I decided to look into the issue.

My first step was updating to -current (4.2-current specifically). Problem persisted. Popped in my 4.0 CD's and it worked which led me to believe something changed in the time between 3.9 and now. I rolled up my sleeves hoping to get in some diff action but then realized I had absolutely no clue

where to look. Did a few greps the source tree only to find myself more lost and confused.

At this point I knew I had a bug and had no idea how to fix it so my last resort was to report the bug. Given the 'have a problem? send a patch' culture of OBSD I was leary to submit an incomplete bug report. I've filed bug reports in the past to other 'free software' projects only to find the experience more trouble than it was worth. On a whim and a prayer I gathered my notes and submitted the bug report.

I sat back and waited for the torrent of flames and 'send a patch' messages but none seem to come. While lurking online I noticed gwk@ mention my bug so I contacted him and asked if there was more info I could provide. He gave me a few diffs to apply (to get the stepping info and other chip identity data) and no more than a few days later he sent over a patch which corrected the problem.

sean@craptop:~\$sysctl hw.setperf

hw.setperf=100

sean@craptop:~\$md5 -t

MD5 time trial. Processing 10000 10000-byte blocks...

Digest = 52e5f9c9e6f656f3e1800dfa5579d089

Time = 0.720812 seconds

Speed = 138732429.537799 bytes/second sean@craptop:~\$sudo sysctl -w hw.setperf=1

hw.setperf: 100 -> 1 sean@craptop:~\$md5 -t

MD5 time trial. Processing 10000 10000-byte blocks...

Digest = 52e5f9c9e6f656f3e1800dfa5579d089

Time = 1.080001 seconds

Speed = 92592506.858790 bytes/second

sean@craptop:~\$apm

Battery state: high, 100% remaining, 382 minutes life estimate

A/C adapter state: connected

Performance adjustment mode: manual (1199 MHz)

sean@craptop:~\$sudo sysctl hw.setperf=1

hw.setperf: 100 -> 1 sean@craptop:~\$apm

Battery state: high, 100% remaining, 382 minutes life estimate

A/C adapter state: connected

Performance adjustment mode: manual (799 MHz)

This version of SpeedStep only supports two settings (full and reduced) so the above proves that is working for my instance. Unfortunately I don't have any other Intel machines so I couldn't try it on other chipsets but the bug was fixed and I'm a happy camper.

When I asked him for more information about the problem (I don't enjoy being clueless) he pointed me towards this SpeedStep Enhanced Whitepaper (ftp://download.intel.com/design/network/papers/30117401.pdf).

Shortly after that conversation gwk@ submitted the patch to tech@ looking for testing. The patch was then committed into current. Later beck@ closed the bug.

The experience was everything opposite of what I was expecting and I will be far less hesitant to submit bugs in the future.

That being said, a few things to remember before submitting bugs.

- 1. Verify the issue persists between the previous release and the current stable release.
- 2. Verify the issue persists while using a GENERIC kernel config. Using custom kernels is totally unsupported and makes developer's lives difficult.
- 3. Make some notes on what you tried, how you tested and generally be as verbose as possible regarding your installation and your approach to the problem.
- 4. Try things out on -current before reporting as the bug you found may have already been found and fixed.
- 5. Check the mailing lists, news groups and Google to make sure that either there is no mention of your bug or anything close to it.
- 6. Submit your bug report with note of all the above.
- 7. Don't expect immediate response. The developers are busy people and your bug is just another drop in the bucket. But at the same time, if you do your homework it will make it that much easier for them to help you quicker.
- 8. Finally, be proactive. The bug won't fix itself but at the same time don't sit back and assume the developers will just take care of it all. Try to find any way you can help or better yet fix it yourself and 'submit a patch.'

This was originally posted to **undeadly.org** (http://shorterlink.org/3207)

Helvetica

The Cinematheque is screening *Helvetica*, by Gary Hustwit, on Friday, October 19th at 7pm, which may be of interest to some.

A feature length film about typography, graphic design, and global visual culture. It looks at the proliferation of one typeface (Helvetica) as part of a larger conversation about the way type affects our lives.

Helvetica encompasses the worlds of design, advertising, psychology and communication and features interviews with some of the most illustrious and innovative names in the design world including Matthew Carter, Hermann Zapf, Experimental Jetset, Massimo Vignelli, Neville Brody and many more.

Sending Us E-Mail?

Due to the amount of e-mail MUUG receives, we've set up an auto-reply to give you immediate feedback, and redirect some of the e-mail to the appropriate places. Why not look at

http://www.muug.mb.ca/about.html#contacts first?

Share Your Thoughts

E-mail us with your comments on the newsletter, whether it's criticisms or commendations, and continue to send in articles or ideas for the same. Specifically, what sort of material you would rather see: Announcements, technical articles, new products, or...?

If you have a How-To or other idea, and aren't ready to give a presentation at MUUG, an article is a great alternative! If you can write better than the editor, that's terrific; if you can't, submit it anyway and we'll get it into shape for publication. We know that many of you have some great ideas and lots of knowledge. Why not share? Send Mail to: editor@muug.mb.ca.