



# MUUGLines

The Manitoba UNIX User Group Newsletter

September 2010

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## Next Meeting: September 14th, 2010

### A Trio of RTFM, Part Deux!

Once again, this month we offer a trio of RTFM presentations. To start, Gilbert Detillieux will be introducing the `diff(1)` command. Next up, Michael Doob will follow up on Adam Thompson's June `awk(1)` RTFM, showing you how to use it for more substantial scripting. Finally, Sean Cody will present the `screen(1)` and `tmux(1)` commands.

### 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. 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

*Gilbert Detillieux*

*Election 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 2010 until October 2011. The deadline to nominate yourself, or someone else, is September 28, 2010. 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 of the current Board have let their names stand for re-election:

### **Sean Cody**

Senior SysAdmin. - Prime Focus VFX Services

### **Gilbert Detillieux**

Systems Analyst - University of Manitoba

### **Michael Doob**

Professor - University of Manitoba

### **Kevin McGregor**

Network Analyst - City of Winnipeg

## Montana Quiring

Systems Administrator - University of Manitoba

## Doug Shewfelt

Systems Specialist - City of Winnipeg

## Adam Thompson

Consultant - athompso.net

Of course, this list is just a starting point. Any member in good standing of the group can be nominated simply by getting the support of one other member. If you feel you would like to contribute to the group by running for a board position, please don't hesitate to do so. In fact, we'd like to see the number of board members increase.

If you want to be nominated, or to nominate someone else, send a letter to the group's postal box or deliver it in person to a current board member. The letter must contain the name, title, and employer of the nominee, along with a short (100 word or so) biography, and must contain the signatures of the nominee and one other member. The letter must be received no later than September 28, 2010, which is 14 days prior to the October 12 meeting.

Although the by-laws require that the nominations be done in writing, with signatures, you can speed up the process by sending e-mail to [election@muug.mb.ca](mailto:election@muug.mb.ca), with the above information, and sending the signed paper copy later. In this case, please include the e-mail address of both the nominee and the supporter on the CC: list of the message, so that all parties concerned have a record of the communication. Nominees should familiarize themselves with the MUUG bylaws, found here:

<http://www.muug.mb.ca/pub/bylaws/>

If you have any questions about the election or the nomination process, please contact Gilbert Detillieux, either by phone (474-8161) during business hours, or by e-mail to [election@muug.mb.ca](mailto:election@muug.mb.ca) anytime.

We are on the cusp of this time where I can say, 'I speak as a citizen of the world' without others saying, 'God, what a nut.'  
-- Lawrence Lessig

## How Google Uses Unix

While trolling the internet for something interesting, I found an older article that piqued my interest. This article (<http://lwn.net/Articles/357658/>), dated October 21, 2009 is about how Google uses Linux and specifically how it manages its own custom kernel modifications. One rumour I've heard often enough is that Google maintains its own kernel, writes its own BIOS and essentially micromanages their entire tech stack. This has always intrigued me and this article talks about how Google manages their kernel modifications and also brings up why they haven't migrated some of their changes upstream to the main kernel. To give you a scope on their modification the article states for the 2.4.18 kernel they patched 2000 files adding 492,000 lines of code (a terrible metric but an impressive number regardless). We don't usually get a nice view on the real low level use of \*nix in large enterprises so this article was a nice breath of fresh air (despite being almost a year old).

Please, help me bring my boyfriend back from "Linux Land." His name is Zach. If you find him, you may have to shut off the computer you find him in front of to get him to speak in anything other than "C". Sometimes he will speak to you in French, but that's only because he has his phone in French. I don't speak French so this too has become a wedge in our relationship. This is a severe issue. Please fix this.

-- "Ilana" files a bug report  
([https://bugzilla.gnome.org/show\\_bug.cgi?id=626593](https://bugzilla.gnome.org/show_bug.cgi?id=626593))

## Crash Course on Kernel Development

Robert Day (@[rpjday](#) on Twitter) has and is continuing to build an online course which aims to be an introductory crash course in Linux kernel development. The course is designed to take you through setting up a build and development environment and moves on to adding a few basic "features" to your custom kernels. What sets this apart from the various other options online is that his course is being offered online for just \$39 (Canadian). Mr. Day was also a technical editor for Robert Love's book named Linux Kernel

Development. If you are interested in evaluating or even taking his course you can find more information about it on the [crashcourse.ca](http://bit.ly/9MM5Ui) site at <http://bit.ly/9MM5Ui>.

*So remember guys. Windows suspend/resume may work just fine. Mac too. But Linux's suspend/resume isn't a buggy pile of crap. It's an intelligent buggy pile of crap, that just wants to be loved.*

-- Christian Hammond

## OpenSolaris Cancelled

A document claimed to be a leaked Oracle engineering memo describes how Solaris will be released in the future. It sounds like the community project known as OpenSolaris will no longer exist.

“We will distribute updates to approved CDDL or other open source-licensed code following full releases of our enterprise Solaris operating system. In this manner, new technology innovations will show up in our releases before anywhere else. We will no longer distribute source code for the entirety of the Solaris operating system in real-time while it is developed, on a nightly basis.”

For the full memo, see <http://permalink.gmane.org/gmane.os.solaris.opensolaris.general/52752>.

## Bad Timing for Illumos

On August 3, storage vendor Nexenta Systems hosted a conference call announcing Illumos, a project to free the OpenSolaris distribution. Garrett D'Amore, a former Sun and Oracle Solaris developer and now senior director of engineering at Nexenta, disclosed the goal of the project: Illumos will replace all proprietary code that is still in OpenSolaris by open source code. (More at <http://www.illumos.org/attachments/download/3/illumos.pdf>).

Although its name suggests something else, OpenSolaris has never been completely open source. Some

critical components are only available as binaries because of copyright issues. The most critical part is the internationalization framework of libc, but also the NFS lock manager, portions of the cryptographic framework, and numerous critical drivers are proprietary. This presents a lot of challenges to downstream OpenSolaris distributions, such as Nexenta and Belenix. We only have to look at Darwin, Apple's open source part of Mac OS X, to see what the effect can be of some critical components that are closed: Darwin never really took off as an independent operating system.

## Ubuntu 10.04.1 LTS Released

The Ubuntu team is proud to announce the release of Ubuntu 10.04.1 LTS, the first maintenance update to Ubuntu's 10.04 LTS release. This release includes updated server, desktop, and alternate installation CDs for the i386 and amd64 architectures.

*Intel and Nokia were pushing MeeGo, and I talked to their security people at the show. The MeeGo security architecture seems to be more about protecting the device from the user than protecting the user's data from malicious code. The architecture's security goals align more with those of the access providers and content providers.*

-- Dan Walsh

## Mascot for Ubuntu 11.04 Announced

Mark Shuttleworth says “The Narwhal, as an Arctic (and somewhat endangered) animal, is a fitting reminder of the fact that we have only one spaceship that can host all of humanity (trust me, a Soyuz won't do for the long haul to Alpha Centauri). And Ubuntu is all about bringing the generosity of all contributors in this functional commons of code to the widest possible audience, it's about treating one another with respect, and it's about being aware of the complexity and diversity of the ecosystems which feed us, clothe us and keep us healthy. Being a *natty* narwhal, of course, means we have some obligation to put our best foot forward. First impressions count, lasting

impressions count more, so let's make both and make them favourable.”

See the full post at <http://www.markshuttleworth.com/archives/478>.

## Slight Delay for Fedora 14

New Fedora project leader Jared Smith has announced that the release of Fedora 14 has been pushed back a week, from October 26 to November 2. “Today we held our readiness meeting for the Alpha release of Fedora 14. As you may know, this is a meeting with representatives from the Development, Release Engineering, and Quality Assurance teams. In these meetings, we evaluate the list of blocker bugs and give a ‘go’ or ‘no go’ signal on the state of the Fedora release. [...] in short the decision was made that the release has not passed its release criteria.”

What a thing it is to have a country that can't be wrong, but if it is, is right, anyway!

-- William Dean Howells

## BackupPC 3.2.0 Released

BackupPC is a high-performance, enterprise-grade system for backing up Linux and WinXX PCs and laptops to a server's disk. BackupPC is highly configurable and easy to install and maintain.

Given the ever decreasing cost of disks and raid systems, it is now practical and cost effective to backup a large number of machines onto a server's local disk or network storage. This is what BackupPC does. For some sites, this might be the complete backup solution. For other sites, additional permanent archives could be created by periodically backing up the server to tape.

BackupPC is written in Perl and extracts backup data via SMB using Samba, tar over ssh/rsh/nfs, or rsync. It is robust, reliable, well documented and freely available as Open Source on SourceForge (<http://backuppc.sourceforge.net/>).

## Debian Live Studio

In the tradition of NimbleX and SUSE Studio comes an alternative for those who prefer Debian. Debian Live Studio allows users to build their own Debian Live system with just a few mouse clicks.

Debian developer Chris Lamb has created a web-based service to allow users to build their own customized live operating systems. After selecting your preferred options, the server builds and readies your image. Users can select from CD, DVD, USB, or Netboot images. Debian Live Studio requires registration, but is free of cost to use and consists of 100% free software.

The service is still new and more features are planned, but it is usable now. In fact, Lamb would welcome feedback. In addition, he's looking for a more permanent hosting solution for his service. Contact Lamb via email at [debian-live@lists.debian.org](mailto:debian-live@lists.debian.org). See the FAQ (<http://studio.debian.net/faq>) for more information.

## iXsystems' FreeNAS Snapshot

iXsystems has released a snapshot of the FreeBSD 8.1-based FreeNAS. It features a move to the `/etc/rc.d` startup scripting, a new Django-based GUI and should set the stage for a more modular system in the future. This snapshot is for developers only. It is not functionally complete yet, and there are likely many rough edges. The GUI is currently incomplete. It can configure your network address and not much else. The screens for the other items are in place, and they write to the proper database table, but the system doesn't read that info in on boot. Configured by hand, most functionality should be available.

## Sending Us E-Mail?

Due to the amount of e-mail MUUG receives, we've set up an auto-reply to give you jaunty 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?