

# MUUGLines

The Manitoba UNIX User Group Newsletter

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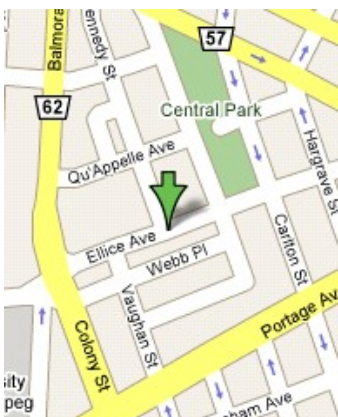
## Next Meeting: November 8<sup>th</sup>, 2011

*Topic: Life on an IPv6 Diet (Mark Jenkins)*

Internet architects introduced version 6 of the Internet Protocol (IPv6) to succeed the current IPv4 standard. However, it's difficult to replace a standard as firmly entrenched as IPv4. Mark has been playing with IPv6 for a few years now, and recently participated as both an end user and service provider on IPv6 day this past June. He decided to put himself on a IPv6-only diet, going without an IPv4 address assigned to any of his personal machines. However, he maintained dual stacks on his routers, allowing others to continue to use v4 address.

In this presentation, Mark will discuss basic routing theory and configuring IPv6, and offer us some reflections on his IPv6 diet. Mark will be bringing a wireless access point, and encourages members to bring their own equipment and attempt to contact using IPv6.

## 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

**December 13<sup>th</sup>, 2011**

Topic: TBD

## Annual General Meeting

Our November 8<sup>th</sup> meeting will also be the Annual General Meeting for MUUG. As always, we will hold an annual election for our board of directors. As well, we will be bringing forward a special resolution proposing minor changes to our by-laws.

## Elections for Board of Directors

The current nominees are as follows:

**Nominee: Sean Cody**

Sean Cody has been a UNIX user since he started university back in 1996. Since then he's worked for and with businesses using UNIX variants in all kinds of strange ways dabbling in almost every corner of the software and hardware stack. He has a B.Sc. in Computer Science (minored in Geology) and continues to eschew graphical UIs and toolkits for the pure elegance of the command line. On the side, he provides subsistent web hosting and consults with small businesses looking to improve their work flow, secure their data and expand their IT capabilities on small budgets. He spends most of his free time dabbling in gadgets, OpenBSD and is professionally focused on system performance and security. He is

also an occasional contributor to and editor of the OpenBSD Journal ([undeadly.org](http://undeadly.org)).

### ***Nominee: Trevor Cordes***

Trevor Cordes has owned and operated TecnoPolis Enterprises – a computer VAR, programming and consultancy company – since 1999. Linux and open source have been the keystone of TecnoPolis since 2000 with the introduction of Linux-based appliances which today are critical to the operation of over 20 local small businesses. Trevor was President of the Atari ST User's Group in 1995 and 1997-1999, and also holds a B.Sc. (CompSci) from the University of Manitoba. His main workstation runs Fedora.

### ***Nominee: Gilbert Detillieux***

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.

### ***Nominee: Michael Doob***

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: Robert Keizer***

Robert Keizer is currently a Systems Administrator at Thinkbox Software. Before that he was a Systems Administrator at Prime Focus and Les.net. His interests include Single System Images and Distributed Computing.

### ***Nominee: Katherine Scrupa***

Katherine has been using Linux exclusively at home for four years, during which she has also been a

member of MUUG. Promoting her learning experiences and solutions to benefit others, her blog can be located at [uniquegeek.blogspot.com](http://uniquegeek.blogspot.com). Her educational pursuits in Computer Science at U of M led her to a Network Technology CCNA program (Hons.) at Red River College in 2010, with emphasis on working with Linux, cabling, and network equipment.

### ***Nominee: Doug Shewfelt***

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 provides system and database administration support for the City. He has been a member of the MUUG board for the past several years.

### ***Nominee: Adam Thompson***

Adam has over 20 years' experience in the IT field, ranging from Programmer to Network Administrator to Chief Technology Officer & VP. He first used UNIX (although he didn't know it) in 1988 while playing NetHack on the QNX BBS in Ottawa. He first ran into UNIX professionally in 1990, and started using Linux in 1991. Adam is the author of several `termcap(5)` and `terminfo(5)` entries, deployed the first cross-platform, public, networked instant-messaging system in Manitoba, and installed the first UnixWare system in Manitoba. He has developed several UNIX/Linux courses, and has also taught RDBMS administration. Adam has been a member of MUUG since 1995, and a board member for most of the last decade.

### ***Nominee: Brad Vokey***

Brad Vokey is the owner of Fortress Software Inc. and the creator of the Matchmaker Fundraiser (a fundraiser that "matches up" over 1 million high school students across Canada and the U.S. during Valentine's). Brad started the company in 1985 using Apple II computers writing the original program entirely in 6502 machine language. The program migrated to 68000 machine language (on Atari ST computers) in 1986 and then eventually to C (and Atari TT computers) soon after. The original C program is still very much alive to this day and is

constantly being tweaked and added to every year. Brad has served on the board of the Atari ST Users Group (STUG) until its dissolution in 2000 and has been a member of MUUG since 2006. He was first exposed to Linux in 1999 with Mandrake 6.0, uses Linux on a daily basis on his company's firewalls, and is looking forward to converting his entire office to Linux "sometime" in the future.

## Special Resolution

It has been nine years since we last updated the MUUG by-laws. (You can find the current by-laws at <http://www.muug.mb.ca/pub/bylaws/oct2002.pdf>.) After reviewing the by-laws of the group, we recommend the following changes.

### *Special Resolution #2011-01 to Amend the By-Laws of the Manitoba UNIX User Group*

We, the undersigned, hereby resolve that the By-Laws of this Group be amended pursuant to paragraph 12 as follows:

1. Add to paragraph 1 two new clauses:

(g) "mailed" means delivered in written form, or any functionally or legally equivalent form, by any service the Board deems as generally reliable and suitable as postal service for the relevant purpose.

(h) "written" and "in writing" shall include any functionally or legally equivalent form of communication, specifically including digital forms where applicable.

/\* This will allow us to use email or other more modern forms of communication wherever they would be more appropriate than sending mail through Canada Post, as well as allowing for members with disabilities (e.g. blindness). \*/

2. Alter paragraph 4, clause (g) from "except as provided in paragraph 5, clause (ii) C" to "except as provided in paragraph 4, clause (a)(ii) C".

/\* Typo that no-one noticed in 9 years, apparently. \*/

3. Alter paragraph 5 clause (b) from "as long as his successor remains President and he remains a Member" to "as long as he remains a Member and his successor remains President".

/\* It's never been an issue, but this removes the slight ambiguity in the way it's worded right now and makes it unambiguous. \*/

3. Alter paragraph 11, clause (i) iii to instead be clause (i) iv.

4. Alter paragraph 11, clause (i) ii to instead be clause (i) iii.

5. Add to paragraph 11 a new clause (i) ii:

ii) The board shall appoint a Banking Committee pursuant to paragraph 5 clause (i) consisting of at least three Members in good standing, one of whom shall be the Treasurer. These members may be made Honorary Members, per paragraph 4 clause a ii B, if necessary to ensure the continued operation of the Group. In addition to the powers delegated under paragraph 5 clause (i), the Banking Committee and its Members shall abide at all times by the Duties laid out in paragraph 5 clause (f).

6. Alter paragraph 11, clause (i) iii from "Deposits may be made by any of the Officers of the Group" to "Deposits may be made by any of the members of the Banking Committee".

7. Alter paragraph 11, clause (i) iv from "require the signatures of any two of: the President, Vice-President, Secretary, or Treasurer" to "require the signatures of any two of the members of the Banking Committee".

/\* These changes are required both to ensure continuity of MUUG's operations from year to year, and to make it easier for the us to comply with Canadian law. \*/

Signed,

Adam Thompson  
Gilbert Detillieux  
Doug Shewfelt

Trevor Cordes  
Rob Keizer

Accepted and published by the Secretary on October 25th 2011.

## Name Based SSL Virtual Hosting

Often, organizations want multiple virtual hosts to share a single IP address and port. The client specifies the a named virtual host, and the server sets up the connection to that host.

However, with a SSL connection, the host can't read the request to determine the virtual host name until it establishes a SSL connection. The traditional approach is to establish a SSL connection with a default virtual host, and once the SSL connection is set up, the server and the client renegotiate a connection to the desired named virtual host.

Generally, the client would expect to connect using the certificate assigned to the named virtual host. Since the server is building the SSL connection with a default virtual host, the client browser would raise warnings that the host name on the certificate doesn't match the host name of the actual SSL connection.

The Apache web server has a little known extension to SSL called Server Name Indication. This allows the client to include the requested host name in the initial request for the SSL connection. Therefore, the server can correctly select the desired named virtual host before it establishes the SSL connection.

You must have a newer version of a browser that supports Server Name Indication. If you use one of these browser versions (or later), you should be able to use this feature: Firefox 2.0, Opera 8.0 (with TLS 1.1 enabled), Internet Explorer 7.0 (on Vista, not XP), Google Chrome, or Safari 3.2.1 on Mac OS X 10.5.6.

## Suse Working on OpenCloud

Suse is working on software that will help enterprises build private cloud computing environments. Suse OpenCloud is based on the OpenStack platform.

The software is designed to be compatible with the major virtual machine platforms. Suse has an early

version available for download and testing, and plans to have a final version available within a year.

## Nokia Developing Linux-based Smartphones

Nokia is developing a Linux-based operating system for its entry-level smartphones to replace the Symbian operating system. Nokia will continue to use the Windows Phone platform for its higher-end smartphones. Nokia is hoping to use the lower priced Linux phones to bolster its sales in developing economies, such as China and India.

## Are We There Yet?

The British Broadcasting Corporation is often willing to try out technological approaches to fulfill its mandate. Since it wants to provide extended services for its hearing-impaired customers, it implemented a voice-recognition system to generate real-time text captioning on its live TV programs. However, voice recognition is still difficult to get completely right.

The voice recognition system identified Labour leader Ed Miliband as “Ed Miller Band”. It converted a statement that the government was “making helpful decisions” into “making holes for surgeons.” During the Queen mother's funeral, the system transcribed the speaker as asking for “a moment's violence for the Queen Mother”, instead of a moment's silence.

Residents of one town were alerted to prepare themselves for an upcoming visit from the “Arch



The image is a promotional banner for O'Reilly user group members. It features a black and white illustration of a raccoon holding a wrench and a screwdriver. The text on the banner reads: "User group members SAVE 40% off print and 50% off ebooks". Below this, it says "ENTER DISCOUNT CODE: DSUG". The O'Reilly logo is prominently displayed, along with the tagline "Spreading the knowledge of Innovators" and the website "oreilly.com".

bitch of Canterbury”.