

MUUGlines

The Manitoba UNIX User Group Newsletter

Next Meeting: October 12th – Thin Clients

By centralizing your computing resources and using any of a variety of thin-client technologies, you can realize savings in both cost and labour. Adam will demonstrate some of the thin-client technologies available today, especially those that allow diskless operation. PXES in particular will be highlighted, due to its ease of deployment.

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 up (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.

Limited parking is available for free on the street, or in a lot across Elice from IBM, for \$1.00 for the evening. Indoor parking is also available nearby, at Portage Place, for \$2.00 for the evening.

MUUG Board Election 2004-2005

As part of the October 2004 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 (5) 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. He 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: Kevin McGregor, Network Specialist, 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. He has been a member of MUUG since the early 90s and has served on the board for the majority of that time.

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, athompso.net

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 three years and has done numerous presentations for MUUG.

Linux Unwired

Weeks, Dumbill, Jepson O'Reilly, 2004 \$24.95USD/\$36.95CDN

Review by Sean Walberg

While Windows users have no problem using all the wireless gear out there, not everything is supported in Linux. Add to this the command line tools for dealing with wireless, and you have a recipe for confusion. "Linux Unwired" demystifies the Linux Wireless system, and provides guidance for purchasers to make sure that they buy the most supported equipment possible.

It should be noted early on that 802.11b is not the only thing covered in the book. The other variants (a and g) are there, in addition to IRDA (infrared), Bluetooth, and Data over Cellular. On the latter point, much of the content deals with US based providers, but it still provides a good backing on the subject for those of us outside the country.

802.11b is the main focus, taking up around half the book. It starts with a discussion of the chipsets behind the cards, and how the map to Linux support. Here is where the reader gets advice on which card to buy, or at least what to look out for when buying a card. One thing I found interesting was the WLAN driver loader, which is an inexpensive product that lets Linux load binary WLAN modules. Some cards are not supported enough in Linux to do things like WEP security, which is where this product comes in. Again, the book leads the reader around the situations when this is necessary and when it isn't.

In addition to WEP, other methods of authentication are covered such as 802.1x authentication and 802.11i, the successor to WEP. It's also a good example of the broad scope of the book and a focus on interoperability with existing systems, rather than assuming the reader is building everything from the ground up.

Access points take up two chapters, the first looking at how to use them with Linux. Before reading this book, I was under the impression that access points all used web browsers or telnet for configuration, but apparently some need Windows software. There are situations where people have developed software to emulate this functionality, and pointers are provided. The second of the two chapters is on building your own access point, which is a fascinating look at using micro-linux distributions and mini-x86 hardware to build access points with rich functionality (for those less adventurous or well funded, the same can be done with any old hardware). There is also a look at soldering on a serial port to a popular Linksys router to allow command line access to the underlying Linux OS.

Bluetooth and IRDA are less common uses of wireless that let computers speak to phones and PDAs. I was completely unaware of the level of support that existed in Linux until after I read these ts <u>t2-landspeed</u>) was brok f detail than Once more researchers

chapters. While the Bluetooth coverage was comprehensive, it went to a deeper level of detail than I thought necessary, such as a detailed breakdown of the Bluetooth stack of protocols. However, at the end, it is possible to use Bluetooth and IRDA to pull data from devices, and to connect to their resources (ie modems and databases) over the air.

I should also mention the chapter on GPS. It is fairly thin on its own, but as an addition to the 802.11b section (ie wardriving), it does well.

A couple of things stood out about this book. The first is that the target audience isn't necessarily Linux geeks, but Linux users. You don't have to be a Linux guru to get this stuff running, the level of detail is sufficient to get anyone who isn't scared of a command line up and running. The second is that the authors spent a lot of time testing various hardware. Many wireless cards and Linux distributions were tested in the early chapters. Where several options for software existed, they were all looked at (such as the source vs binary drivers mentioned above). This all adds to the book's value not only as a howto manual for wireless, but also as a guide for navigating through product and software selection.

"Linux Unwired" is perfect for anyone who wants to use wireless on Linux, be it connecting to an 802.11b network, or trying to use a cell phone to send a fax. Those looking to purchase equipment will want to go through the book first to make use of the product advice and compatibility testing.

More information is available from the O'Reilly website at

http://www.oreilly.com/catalog/lnxunwired/index.htm l which includes a sample of chapter 3, "Getting on the network"

NetBSD sets Internet2 Land Speed Record

NetBSD does it again: after the original Internet2 Land Speed Record set by NetBSD in 2004 May 3 (http://www.NetBSD.org/Changes/index.html#interne <u>t2-landspeed</u>) was broken, NetBSD shines again: Once more researchers at the Swedish University Network (SUNET) have broken the Internet2 Land Speed Record, using the upcoming version of NetBSD 2.0.

The new records are 124.935 Pbmps in a single stream (was 69.073 Pbmps), and 122.367 Pbmps in multiple streams. NetBSD was used once more due to the ``scalability of it's TCP code".

More information about this record including the NetBSD configuration can be found at: http://proj.sunet.se/LSR3-s/ for single stream and http://proj.sunet.se/LSR3-m/ for multiple streams. And the website of the Internet2 Land Speed Record (I2-LSR) competition is located at: http://lsr.internet2.edu/.

Internet routes around 'damage'

By Shawn Wallbridge

I was recently sent a link to a website (I am not mentioning the site to protect the guilty) that lets you send someone a shorter link (to fit within the 72 characters that some mail clients wrap at) and the site just redirects you to the full URL.

I have found this site handy in the past, but I failed to notice that it redirected you to 3 or 4 domains before sending you to the right URL. I admit that I didn't investigate very much, but I assume these domains are used for tracking and other nefarious purposes.

So, I did what any self-respecting 'hacker' would do, I created a site, in about an hour, that does the same thing, minus all the tracking. If you need to send someone a link and it is rather long, feel free to use <u>http://shorterlink.org</u> to send them 'a shorter link'.

Setting up a Web Log with Wordpress

By Shawn Wallbridge

I read an article on WordPress, a web log package, in Linux Journal and it sounded pretty interesting. I have

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had a web log on and off since 1999 and I decided to give it a try.

It requires MySQL (3.23.23 or higher) and PHP (4.2 and higher).

I simply created the MySQL database (with appropriate database permissions for the userid I was using), normally your hosting provider would do this for you.

Next up was to download and unpack the package. The latest stable version is available at:

http://wordpress.org/latest.tar.gz

Then I copied wp-config-sample.php to wpconfig.php. Then I edited the config file and edited the MySQL settings to work with my database:

```
// ** MySQL settings ** //
```

```
// The name of the database
define('DB_NAME', 'database');
```

// Your MySQL username
define('DB_USER', 'user');

```
// ...and password
define('DB_PASSWORD', 'password');
```

// 99% chance you won't need to change this
//value
define('DB_HOST', 'localhost');

Once you have finished making those changes, you can go to wherever you uploaded your files and customize your installation, just add wpadmin/install.php to the path of the files on your webserver (for example, I put WordPress in journal/ on my site, so the install page would be at:

http://www.wallbridge.net/journal/wp-admin/install.php

This will create all the database tables and set everything up for you. Once you customize your site, you can create users and add and remove features from your site. Overall I am extremely pleased with WordPress, especially it's literally 5 minute install.

You can find out more here: http://wordpress.org/

Future Meeting Topics?

If you have any ideas for future meeting topics, please send them to <u>board@muug.mb.ca</u>, we would like to hear from members with what they would like to see presented. And if you would like to do a presentation we would love to hear from you.

Be the coolest geek in your office: buy a MUUG golf shirt!

We have three spare MUUG Golf Shirts left for sale, one medium blue and two XL beige. They are \$40 and we would really like to sell them. Mostly so I can stop carrying the box back and forth to the meetings.

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