MUUGlines

The Manitoba UNIX User Group Newsletter

Next Meeting: January 13th – Perl

This month's presentation, unimaginatively titled "Perl", Sean Walberg will provide a brief walkthrough of the language's features and applications. The talk will focus on the places that Perl differs from traditional languages, and the features that make it worth learning.

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.

Roundtable Meeting: January 22nd

The informal MUUG roundtable meeting will be held at The Second Cup on Edmonton and Graham at 7:30pm on January 22nd. These meetings are very informal, basically just a bunch of geeks having coffee. So please come out and join us for a nice cup of coffee and hopefully some good conversation.

End of an Era

As some of you may already know, after nearly a decade of being the editor of MUUGlines, Kevin McGregor has decided that it's time to pass on the reigns to another volunteer.

I would personally like to thank Kevin on behalf of all the MUUG members for his excellent work on the newsletter.

Shawn Wallbridge

Book Review – Linux Server Hacks

By Sean Walberg

I'm just finishing up Linux Server Hacks. Even with a few years of Linux experience under my belt, I found several handy hacks.

O'Reilly's Hacks Series bill themselves as "Clever solutions to interesting problems", which I'll agree with. The topics presented in the book aren't generally introductory topics, instead they're solutions to specific problems that a systems administrator runs into. For the most part, the hacks are designed to make a complex and common task quicker or easier to do.

One item of note is that the book is devoted to server functions, so you'll find few mentions of anything GUIsh.

Linux Server Hacks has 100 hacks, divided into 8 distinct topic areas. The first is "Server Basics", covering common administrative tasks a server admin runs into. Examples here are "Finding Disk

Hogs", and the best explanation of bash filehandle redirection (ie 2>&1) I've come across.

Chapter 2, Revision Control, covers both RCS and CVS, with an eye to keeping version history of system files. While there is very little "clever hacking" going on here, this chapter does exemplify the specific, problem driven nature of the book, ie this isn't a man page, it's a concise list of instructions to accomplish a task.

Chapter 3, Backups, has some interesting hacks to make copies of data, such as how to keep web clusters in sync, quick and dirty network backups, and CD burning techniques (including copying a web site directly to CD, which isn't recommended).

As a network guy, the next chapter, Networking, was of particular interest. The first couple of hacks on iptables are nothing new, but the rest of the chapter investigates various techniques for building tunnels between machine, and port forwarding techniques.

An important task to any administrator, Monitoring, is way more than simply running "top" (though there is a hack for that). There are several scripts and programs to watch logs, processes, network traffic, and web server usage. There is also a brilliant hack called "Cheap IP Takeover", which lets you cluster two machines together with one taking over the ip address of another in the event of a failure.

Chapter 6, SSH, shows off some advanced features of the tool, from securing passwordless logins across multiple machines, to forwarding ports and X-Windows. Even after using SSH for years, I found some ways to be more efficient after reading these six short hacks.

I must admit that the Scripting chapter is nothing to write home about, but the next chapter, "Information servers", has lots of handy hacks for

BIND, MySQL, and Apache. Apache hacks in particular are abundant.

All told, this book contains a significant number of tips and tricks that will make an experienced administrator's work all the more efficient. The writing style is easy to follow, and the organization of the book makes it easy to find what you want.

One minor point of irritation, though. While there are many examples of code (shell and Perl), they are displayed completely left justified with no indentation. People reading the code to analyze it will become quickly frustrated trying to track down the ending brackets, especially in the multi-page samples.

"Linux Server Hacks" is an excellent book for the experienced admin looking to increase efficiency. There are lots of helpful pieces of information in here. This book is definitely not for the newbie, however!

Check out the home page for the book for the table of contents and a handful of sample hacks.

http://www.oreilly.com/catalog/linuxsvrhack/

Merry Xmas from Sun

Sun Microsystems gave the Linux community an early Xmas present when it released the source code for both the custom user interface and the BIOS of the Cobalt Raq550 series of appliances.

Sun released the BIOS and custom backend for the Cobalt Qube in July. The project that has sprung up is called Blue Quartz. They have already managed to integrate it with RedHat 9.

Sun purchased Cobalt in 2000 for $2.2b to help it compete in the low-end server market. Sun's failure to capitalize on the Cobalt market is blamed, by some, on internal culture and

indecision on how to market Linux and Solaris alongside each other.

Core Xfree86 Developers Disband

On December 30th the Core Xfree86 developers voted to disband.

No one seems to have an official reason for the decision, but several anonymous sources have stated that it was a mutual decision, the core team themselves voted in favor of the decision.

Development will still continue and some developers are looking at this as a positive development.

Linux Kernel 2.6.x

The much awaited 2.6.0 kernel was released on December 18th 2003. Quickly followed by 2.6.1-rc1 on December 31st.

Arguably the biggest improvement in 2.6 is scalability, in both directions. Much of the uClinux project has been merged into the kernel and lots of work has been done on improving the performance of Linux on large SMP systems.

SGI has done a lot of work on supporting NUMA (Non-Uniform Memory Acess) servers including the 64 processor Altix 3000.

A really good overview of the improvements in 2.6 is available here:

http://www.kniggit.net/wwol26.html

Compile away, if you dare.

Graphical interface to OpenBSD's pf

The guys from SecurityOffice have released MetaCortex, a graphical interfaces to pf, the packet filter built into OpenBSD.

It provides a graphical view of PF statistics, PF log analysis, local system status, system logs and even a web based ruleset generator. It was released under a BSD style license and requires Apache and php4.

You can find it here:

http://www.securityoffice.net/products/metacortex

Sun Releases Java Desktop System

Sun has decided to enter the Linux Distribution market with the Java Desktop System. Yes, even though they don't mention Linux in the name, it is in fact a Linux Distribution.

It is based on SuSE and comes with Gnome, Star Office 7.0, Mozilla 1.4, Evolution 1.4.5 and the 2.4.19 kernel.

It is currently being offered at 50% off on the Sun website, which works out to $50 per user.

OSNews has a nice review of Sun JDS at:

http://www.osnews.com/story.php?news_id=5286

VMWare Offer

VMWare has sent us the following offer.

"If you send us a list of your members' names and email addresses (with their permission!), when they support our Linux development efforts by purchasing a copy of VMware Workstation, we will send them a $100 rebate. The program for Linux group members will begin on December 22, 2003.

In the next 6 weeks, we'll also be providing all registrants with a referral code. This code will both provide your colleagues with a 5% discount off of VMware Workstation and provide you with 15 VMware Points when they purchase it on our web site. Approximately every 6 weeks, we'll send you a statement of your points earned, at which point you can redeem them for various product and merchandise."

If you are interested in this promotion and want us to submit your name and email to VMWare, please send us an email to vmware@muug.mb.ca

From the Roundtable

In this new column, I am going to review a topic that came up during the roundtable discussion at the Meetings or on the Roundtable mailing list.

This month's topic is from the Roundtable mailing list.

John Lange posted asking for suggestions on recovering some data from a hard drive that was on its deathbed.

One idea to solve the problem was to put the hard drive in the freezer, which can sometimes loosen things up enough to hopefully recover data.

Another suggestion, by Jeff Green, was to try an application called dd_rescue. This application, written by Kurt Garloff, is very similar to dd, but it does not stop when it encounters an error. This allows you to keep reading from the disk even when you encounter bad sectors, which hopefully will allow you to recover those critical files.

There is also a bash script that will act as a front end to dd_rescue that may speed things up for you. It's called dd_rhelp.

John reported that after running dd_rescue, he was able was able to recover the files he needed.

I hope to never need to use them, but they sound like they would make a good addition to any emergency toolkit. You can find them at the following locations.

dd_rescue:
http://www.garloff.de/kurt/linux/ddrescue/

dd_rhelp:
http://www.kalysto.ath.cx/utilities/dd_rhelp

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