



# MUUGlines

The Manitoba UNIX User Group Newsletter

## Next Meeting: April 13th – Handheld Linux

Brian Doob will discuss running (and installing) Linux on a handheld computer. This will include a demonstration of a Compaq iPaq running OPIE (the Open Palmtop Integrated Environment). OPIE is a complete open source environment for handheld computers.

## 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 Ellice from IBM, for \$1.00 for the evening. Indoor parking is also available nearby, at Portage Place, for \$2.00 for the evening.

## Sun and Microsoft settle for \$2 billion

In an announcement that stunned many people, Sun and Microsoft settled their outstanding lawsuits for nearly \$2 billion and agreed to cooperate in the future. Microsoft paid \$700 Million to settle the antitrust lawsuit, \$900 Million for patent lawsuits and licensed various Sun technologies for \$350 Million.

Sun will also license various Microsoft communications protocols. Microsoft will be allowed to continue supporting their Java Virtual Machine that was pulled from Windows XP.

Sun and Microsoft will also work together to integrate Java and .Net. Sun will also cease to support the European Union's antitrust case against Microsoft.

## Review: Apache Cookbook

By Sean Walberg

Apache Cookbook  
Ken Coar & Rich Bowen  
O'Reilly, 2004  
234pp, \$29.95USD/\$46.95CDN

I finished going through O'Reilly's Apache Cookbook a little while back, but it came in handy so often at work, I never brought it home to complete the review!

Like the other entries in the Cookbooks Series, the Apache Cookbook focuses on common problems, their solutions, and an explanation of the thought process behind it. For an application such as Apache, this is the perfect way to help people out.

Each recipe poses a common problem, such as how to install the web server or a module, a concise solution, and a discussion of how the solution works. Even though some solutions are "there is no solution" (such as how to log the IP address of a proxied client), the fact that it is stated as such, along with an explanation

of why (either technically impossible, or no such software written) is still helpful.

The breadth of topics is good, starting out on basic installation from source, RPM, or helper scripts, moving onto logging, virtual hosts, and security, and covering more advanced topics such as proxying and url rewriting.

I found that the books treatment of logging, normally a mundane topic, was particularly good. Many of the recipes may not have had immediate practical value, such as logging cookies, but they all showed off how versatile Apache is. The procedure for logging a cookie turns out to be fairly simple, but in doing so the reader is shown the many ways that the CustomLog directive can be used. For logging proxied requests, something that this author has unsuccessfully tried to do in the past, the answer turns out to show off some Apache features that let the administrator set environment variables for the request that get picked up later in the process. Along with logging specific things, alternate methods of logging, such as SQL and Syslog, are also shown. Surprisingly, I saw no mention of what to do with the logs once they've hit disk, even if it were a few links to packages such as Webalizer or AWStats

Chapter 5, "Aliases, Redirecting, and Rewriting" shows some of the more powerful aspects of Apache, namely its ability to manipulate any aspect of the query. There are several practical recipes here, such as moving parts of your site to another url, mapping several URLs into one file, and so forth. This chapter shows off many of the regular expression features, not only the obvious sledgehammer of `mod_rewrite`, but many of the Match commands, such as `RedirectMatch`, and `ScriptAliasMatch`.

The chapter on SSL is also very helpful, guiding the user through many scenarios such as generating keys,

requiring SSL for certain sections of the site, and even using client certificates.

Likewise, the chapters on proxies and performance are excellent if the topic is of interest to you, or you find yourself in need.

The book covers both Apache 1.3 and 2.0, being careful to make notes where the configurations differ.

I brought this book in to work when I first got it, which coincidentally was around the time where some of us were doing some Apache work. The book proved indispensable, answering everything from "Why does the site work with a trailing slash, but not without?" (hint, check your `ServerName` directive) to setting up SSL and some site redirections. This book will be close at hand the next time I have an Apache question.

Apache Cookbook combines an easy to follow writing style with a format conducive to solving problems. Anyone who works with Apache will want this book handy.

## Buy a Sun Desktop at WalMart?

WalMart in the US has begun selling MicroTel PC's with Sun's Java Desktop System. The systems start at \$298US up to \$698US. The \$398 Microtel SYSWM8003 comes with an Advanced Micro Devices Athlon XP 2400+ processor, 128MB of memory, a CD-ROM drive, a 40GB hard drive and Sun's StarOffice software suite--but no monitor. The \$698 SYSWM8006 has Intel's Pentium 4 processor, 256MB of memory, an 80GB hard drive and a CD-RW-DVD combination drive.

"We are seriously considering Wal-Mart to be the PC supplier for Sun Microsystems," Jonathan Schwartz, head of Sun's software group.

Sun Java Desktop is based on SuSE Linux and starts at \$50/year/seat for corporate licenses.

Sun is also working on 'Project Janus' which will provide binary emulation for Linux x86 binaries on Solaris x86 with "less than a 5% performance difference". Sun is working to get Solaris x86 supported on many Xeon and Opteron systems.

## OpenBSD 3.5 release set for May 1st

PreOrders have begun for OpenBSD 3.5. Some very impressive features have been added to this release.

- Supporting the AMD64 architecture natively, with full 64-bit support, 8 extra registers in the architecture to significantly increase performance, and a memory management Non-Executable bit that permits full W^X support.
- Network boot support for i386 and amd64, using pxeboot
- spamd gains greylisting support. This allows greylisting (a very powerful spam reduction technique) to be done on a firewall for many mail hosts, no matter what MTA is being used.

## Load Balancing and Redundant firewalls with OpenBSD 3.5

Probably the biggest feature to be added to 3.5 is CARP and pfsync, which allow for two machines to act as one firewall and if/when one fails, the other will pick up automatically, but they will keep the existing states, which means that any connections that are already open will stay open.

CARP stands for Common Address Redundancy Protocol, which allows a backup host to assume the identity of the primary host. The two (or more) CARP hosts have a virtual MAC address and one or more virtual IP addresses.

The CARP master sends out a CARP broadcast message on a regular basis and if the backup host(s) does not receive this message, then it takes over as master.

*pfsync* handles keeping track of the existing connections. *pfsync* sends updates to the other host(s) with the details of the states of each connection so if/when a machine fails, the others know everything about the existing states and can take over seamlessly.

This feature is pretty impressive, it will provide a cost effective and solid way of protecting networks where downtime is not an option.

## pflogsumm – Postfix Log Entry Summarizer

pflogsumm is written in Perl and generates a nice report of the statistics of your mail server (obviously running Postfix). It is very simple to install. It depends on the Date::Calc perl module, so you will want to make sure that is installed first. Then just download the latest version (as of this writing it is 1.1.0) from [http://jimsun.linuxnet.com/postfix\\_contrib.html](http://jimsun.linuxnet.com/postfix_contrib.html), then untar the file with

```
tar xvzf pflogsumm-1.1.0.tar.gz
```

Then move the perl script to /usr/local/sbin (or wherever you like)

```
mv pflogsumm-1.1.0/pflogsumm.pl /usr/local/sbin/
```

Then make change the permissions

```
chmod 500 /usr/local/sbin/pflogsumm.pl
```

Now it is installed and we can see if it works properly.

First, check to see what your mail logs are called, on Debian the file you will want is /var/log/mail.log,

under OpenBSD you probably want `/var/log/maillog.0`. You can just cat the log file and pipe it to `pflogsumm.pl`, then pipe the output to mail. So this command should work for you....

```
cat /var/log/mail.log | \
/usr/local/sbin/pflogsumm.pl -d \
yesterday -u 20 | mail -s "Report" \
root
```

This will generate a report for yesterday, limiting the detailed list to 20 hosts (you can change this as you see fit, but it can generate a huge email) and pipe the email to root (which most likely is sent elsewhere).

Once you get the output and confirm it is displaying what you want, you can automate the delivery of the emails. I simply created a shell script called 'postfix-report'

```
#!/bin/sh
cat /var/log/mail.log | \
/usr/local/sbin/pflogsumm.pl -d \
yesterday -u 20 | mail -s "Report" \
root
```

with the above command and put it into `/var/cron.daily` on my Debian machine. I now get a nice email every day showing me the stats of my mail server.

You can find more information about `pflogsumm` and many other neat add-on's to Postfix here....

[http://jimsun.linxnet.com/postfix\\_contrib.html](http://jimsun.linxnet.com/postfix_contrib.html)

## MUUG Shirts

We have spare MUUG Golf Shirts if people are interested, we have various sizes available for \$40 at the regular MUUG 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](mailto:editor@muug.mb.ca)