MUUGLines

The Manitoba UNIX User Group Newsletter

Next Meeting: June 8th, 2010

IPCop is an open source Linux distribution that turns an old (or new) PC into a stateful firewall. IPCop is geared towards home and SOHO users and offers services such as DHCP server, HTTP proxy, IDS and VPN server, which are all fully configurable through an easy-to-use web interface. IPCop has very low hardware requirements. In this presentation, Jonas Lippuner will show how to install IPCop on an ordinary SD card and a Mini-ITX board.

Before the break, we'll have our usual round-table discussion and RTFM topic. Adam Thompson will be discussing **awk**(1).

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.

Upcoming Meeting: September 14th, 2010

The June 8th meeting is the last before the summer break, with meetings resuming again on September 14th, 2010. The topic is not locked at this time so if you are interested in participating, please contact any of the board members at the next meeting. Or, email us at **board@muug.mb.ca**, and let us know.

OpenBSD 4.7 Released!

As announced on May 19th, OpenBSD 4.7 was released to the general public and the CVS repository tagged with OPENBSD_4_7 (i.e. Stable branch). New to this release is support for the Chinese "home grown" processor/platform known as Loongson, specifically the Lemote line. As well those aging SGI varying sized fridge platforms Origin, Onyx and Tezros are now supported with SMP now active on the Octane.

Of particular interest and note are the updates to the Pf language syntax such that the NAT and RDR phases have been deprecated and are managed via "match lines." Be careful when doing an update as your PF configuration from 4.6 will not work if you are using RDR or NAT features.

For instance,

```
nat pass on external from any to any -> external:0
```

replaced with:

```
match out on internal from any to any nat-to (exter-
nal:0)
```

It seems a bit weird at the onset but once your rules are converted they will look a lot more readable and are more consistent with the rest of the filtering grammar. Unfortunately the miniupnpd daemon (as mentioned in a previous newsletter) is broken by this update. There is a "patch in the wild" but as of yet the port does not work with the base install.

There are many other additions and features to take note of and you can get the full details by reading the official release announcement by Bob Beck at:

http://bit.ly/obsd47

Viewing Man Pages By Hand

Have you've ever wanted to read a man page from a source package without having to install/compile the product directly? Well this happens more frequently than you'd expect and it is possible to view the man pages without having to either install the documents or futzing with the MANPATH.

Man(1) as a tool essentially is a wrapper for other tools which do the labour.

Man pages come in the form "name.#" where name is the name of the man page (corresponds usually with the tool/api/item being documented) and where the # is the manual section the page belongs in. So if you downloaded the new release of fnord and you see a file like "fnord.5" then you've found its man page source.

To view that man page you need to process the source document to the display and then page it (as it break it down into pages instead of just rendering to the screen the entire document immediately).

This is easier than it sounds... All you need to do is pass the document to nroff with the man page option and then pipe that to your pager of choice.

```
nroff -man fnord.5 | less
```

This is essentially what the man(1) command does itself after it finds the document you requested! Given I have to look this up every time I need it, this is a tip worth leaving on a post-it note in a visible place!

Humble Indie Bundle a Huge Success

Taking a hint from the success of MacHeist style bundles a few indie game developers got together to peddle their wares in a bundle. Where this experiment takes off is that these game developers chose to first allow you to pay what you want and even removed and deploy the games sold without DRM and on Linux, Mac and Windows platforms.

The games alone were neat and interesting and even choosing your price netted you another choice to either send your funds to the developers or to split it equally with two charities.

Upon completion this gamble grossed $1,273,613 for these developers and the charities but it doesn't end there. Another interesting statistic from the results is that those who downloaded the Linux versions contributed $14.51 on average with Mac users in second place with $10.18 and trailing the rear, but accounting for over half the volume, the cheap Windows users' average of $8.05.

After the phenomenal success of the project 4 of the 5 developers then decided to Open Source their games as a thank you.

There is a local connection to this project as one of the developers of the offered games (namely Acquaria) is Alex Holowka and hails from Winnipeg! His company is called Infinite Ammo and is one of the developers Open Sourcing his game (though he's not completed packaging it up yet).

VMWare Fusion 3.1 Released

VMWare Fusion is easily one of my favorite Mac OS X applications and has just released it's point revision update. This update focused on bug fixes and performance. Windows graphic subsystems and OpenGL interception (such as GL in any Linux distribution) has had huge gains in performance with some games being playable in a simple window. While this isn't a free application, if you have a Mac is is easily the best platform to virtualize your favorite free software distributions. There are other solutions on the Mac such as VirtualBox and Parallels though Fusion easily eclipses them with its performance and feature set.

The release announcement can be found at:

http://bit.ly/9bZxuN

And if you want someone else's point of view, the first review can be read here:

http://bit.ly/ds3OKc

Seagate Releases a Hybrid HDD/SSD

You can now buy a reasonably priced ($156US for 500GB) hybrid 2.5" SATA drive that includes 4GB of SSD cache on a 7200RPM drive. Early reports show that while it will never compete with the mighty SSD's it can come pretty darned close. The caching system is an adaptive cache where frequently accessed blocks are saved to the SSD and served up as requested before scheduling the disk. To the more algorithm-inclined amongst us this screams to be very similar an LRU cache but why be that specific in a product release? This essentially means the more you do the better the performance will be. The tests so far show 3+ boots will net increasing better boot time and application responses. The best article I've read so far is on the HotHardware site and located here:

http://bit.ly/bhweqq

SSH Multiplexing FTW!

If you manage a few legacy machines with rather slow CPU's (say aging Sun boxes like the Netra or Ultra series or SGI or some random old 386/486 etc) logging in remotely via SSH can be a nightmare for the impatient. Just creating SSH keys on some architectures can take 5-10 minutes! Another similar edge case is a high latency or bandwidth limited network path. In both of these situations having a bevy of open SSH sessions can be borderline maddening.

Luckily there is a new feature of OpenSSH to the rescue. Assuming you have or can install OpenSSH v4 or later you can use something called session multiplexing. What this feature does is on the first SSH session to a host a named socket is created on your local host that can be referenced by other invocations of SSH to multiplex a new SSH session of the same TCP session.

If you are a nut like me and have dozens of SSH sessions open while debugging things this can help reduce the probe effect of having many encrypted sessions open as well on CPU constrained systems saves on cycles but allows more shell sessions.

Enabling it on your machine is very easy (assuming both sides support the feature). All you need to do is set the ControlMaster and ControlPath variables in your .ssh/config file like the following:

```
Host *
ControlMaster auto
ControlPath /tmp/%r@%h:%p
```

When you ssh to a particular host a socket will show up in /tmp, named "username@host:port". This file will be used to "mux" new sessions.

If you are on a shared system, using /tmp isn't really a good idea and would be a security issue so another method would be to create a tmp-like folder in your user account and set up ControlPath accordingly.

```
mkdir -p ~/.ssh/mux
echo ControlPath ~/.ssh/mux/%r@%h:%p >>
~/.ssh/config
```

Given SSH is a rather "Swiss-army knife" of a tool it stands to reason that some uses will not work so well with a multiplexed session. If the particular usage allows for setting SSH options you can just set -o ControlMaster=no or change the "Host *" line in the SSH config to be specific for hosts on which you want MUX'ing available.

Subversion via svn+ssh is one such usage that doesn't like muxed sessions. Fortunately this is easy to repair as in your subversion config file you just need to pass specific SSH options (similar to resetting or choosing a different identity) by adding an entry to the tunnels section of the subversion config (usually located in ~/.subversion/config).

```
[tunnels]
ssh = ssh -o ControlMaster=no
```

Once that is set you can use muxing to that host but the invocation of subversion will opt-out of any existing muxed socket to that host and work as expected.

BSDCan 2010

On May 13th and 14th Ottawa once again was the home to BSDCan. Prior to the conference proper is the usual tutorials and FreeBSD summit.

There were a variety of technically heavy talks this year with Will Backman (of BSDTalk fame) delivering the keynote speech.

Many if not all of the slides for the conference are online at the BSDCan schedule site:

http://bit.ly/bsdcan2010

Drue Lavigne was kind enough to cobble together a list of the recorded videos of talks and links to pictures which you can find here:

http://bit.ly/9ByZup
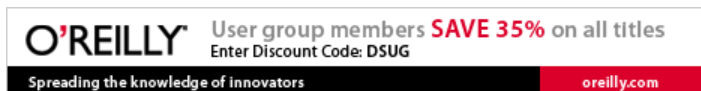
Chrome 5 Released – Mac & Linux Ports Now Stable

While available on the Mac and Linux platforms for some time via developer previews and daily builds. Chrome was recently released as a stable revision for both platforms.

I have been using it on my Mac for a while now and with my "must have" extensions finally working (Ad-Block,FlashBlock, etc.) I can swap over for personal browsing. Chrome is really darned fast; much faster than FireFox 3 with the same extensions.

The UI and preferences are still a bit awkward and I can't replace FireFox completely as the SSL client certificate support only works in Windows (though I've yet to see it work myself).

Regardless it is nice to have some competition for FireFox these days on the "other platforms."

I would suggest visiting the Google Blog announcement and check out the speed test videos near the bottom for a good laugh.

http://bit.ly/dq3M4O

Notable Releases For May, 2010

- OpenBSD 4.7
- Clonezilla Live 1.2.5-17
- Fedora 13
- Nexenta Core Platform 3.0 RC1
- Mandriva Linux 2010.1 RC
- Puppy Linux 5
- Red Hat EL (CentOS/SL) 5.5
- Ubuntu Studio 10.04

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?