

# MUUGLines

The Manitoba UNIX User Group Newsletter

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Editor: Michael Doob

## Next Meeting: June 9<sup>th</sup>, 2015

### Door prize:

We have door prizes of **two O'Reilly books** this month.

### Presentation: Git Bisect Your Way to Fame and Fortune

Hit a bug that no one is fixing? Don't know enough C to debug it yourself? In this month's presentation, Trevor Cordes will discuss using Git bisect in a process from bug discovery through to kernel patch commit. This isn't some dry, isolated git rehash either: you'll see how to leverage distro resources and integrate them with "vanilla", all from a non-kernel hacker perspective. You'll also learn how to get the necessary attention of the appropriate movers and shakers. Wrapped in a riveting story containing angry wives, Downton Abbey, and a twist ending, this is one presentation you don't want to miss!

### RTFM: fail2ban

The June RTFM will (once again) feature Gilbert Detillieux, this time talking about fail2ban(1), a versatile tool for blocking network abusers.

## Where to Find the Meeting

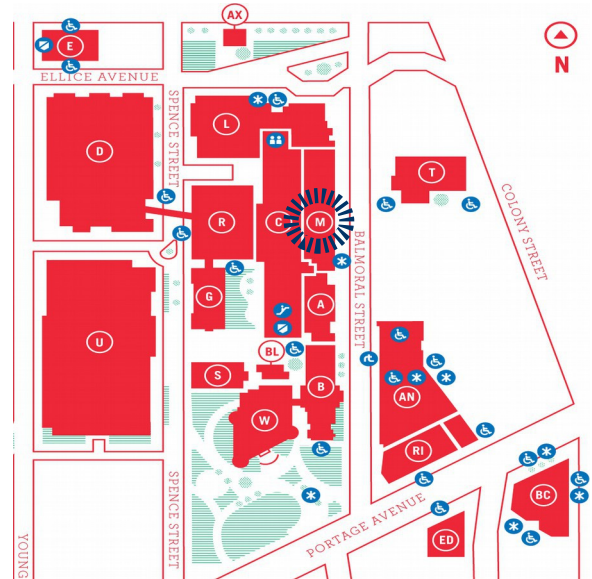
### Temporary New Location – Room 1M28!

This month we meet in room 1M28 Manitoba Hall, University of Winnipeg. Use the entrance on Ellice Ave. between Spence and Balmoral St.

## Upcoming Meeting: September 8, 2015

### Topic: WordPress Group presentation

Location: University of Winnipeg, room to be announced.



## New discount code:

O'Reilly says: Here's a discount code PCBW for you and your members. It's good for 40% off most print and 50% off most ebooks and videos on [shop.oreilly.com](http://shop.oreilly.com).

See Trevor's article about buying O'Reilly books on page 3.

## Distro news: Mandriva goes belly up

After 16 years, the Paris based Mandriva distribution has ceased operation. According to ZDNet, the company had between 10 and 19 employees. In the mid-2000s Mandriva Linux was one of the top 10 Linux distributions, but today it hovers around 80th position, behind OpenMandriva and Mageia, a fork of Mandriva created following a partnership between Mandriva and Russia's ROSA Software.

## Distro news: Fedora 22 is released

### Comments from the Fedora Project:

We are proud to announce the official release of Fedora 22, the community-driven and community-built operating

system now available in Cloud, Server, and Workstation editions.

In addition to the latest versions of all your favorite free and open source software, Fedora 22 marks our second release with distinctly-targeted offerings for cloud computing, the server room, and the desktops and laptops of software developers and creators everywhere. Thanks to the hard work of developers, designers, packagers, translators, testers, documentation writers, and everyone else, we're incredibly confident in saying that this is our best and most polished release yet.

Also with this release, we return to our traditional six-month cadence -- we'll see you back here sometime around Halloween!



## Fedora Cloud

Fedora 22 Cloud edition has a number of interesting updates that should be exciting for users and developers.

- Updated Docker Images – The Fedora 22 release includes updated Docker images that you can use as the base of your containerized applications.
- Vagrant Boxes – One of the oft-requested features for Fedora is an “official” Vagrant box that developers can use to spin up images using the popular Vagrant tool for building development environments. With the Fedora 22 release we now offer Vagrant Boxes for libvirt and VirtualBox, so developers on Linux, Mac OS X, and Windows can spin up Fedora-based development environments with ease. Users can choose a Vagrant box for Fedora 22 Atomic Host and Fedora 22 Cloud base edition.
- Atomic Improvements – Fedora 22 Atomic Host includes a number of interesting improvements, including the Atomic command, updated Docker, Kubernetes, Flannel, and rpm-ostree packages.
- Dockerfiles – Fedora 22 also includes a fedora-dockerfiles package (and up-to-date git repository) for building applications with the base Fedora 22 Dockerfile and additional packages.

## Fedora Server

- Database Server Role -- The Fedora Server edition focuses on easy of different server roles. Fedora 21 debuted with a Domain Controller Role featuring FreeIPA. For this release, we've added a Database Server role, built around PostgreSQL.
- Default to XFS filesystem -- The default file system type for Fedora Server installs will be XFS

running atop LVM for all partitions except /boot. The /boot partition will remain a non-LVM, ext4 partition due to technological limitations of the bootloader.

- Cockpit will be compatible between OS releases -- Cockpit is a server manager that makes it easy to administer your GNU/Linux servers via a web browser.
- Easy to use. Cockpit is perfect for new sysadmins, allowing them to easily perform simple tasks such as storage administration, inspecting journals and starting and stopping services.
- No interference. Jumping between the terminal and the web tool is no problem. A service started via Cockpit can be stopped via the terminal. Likewise, if an error occurs in the terminal, it can be seen in the Cockpit journal interface.
- Multi-server. You can monitor and administer several servers at the same time.

## Fedora Workstation

- Better notifications. Thanks both to work done in GNOME 3.16 and other projects like the Automatic Bug Reporting Tool (ABRT), notifications keep you better informed, but interfere less with your work. They now appear anchored to the center of the top bar, and no longer cover up the bottom of the screen where you are often reading a terminal or browser. An unobtrusive marker appears in the calendar to let you know you have unread notifications. If ABRT detects a serious bug, a friendly notification appears and allows you to report the bug information, but doesn't overload you with details. And if you're a serious Terminal user, longer background jobs now notify you when they're done, so you can get on with other work and pick up the results when you're ready.
- Refined themes. The GNOME Shell and other themes and design are refined and improved. Now you can more easily identify information on the screen, adjust window size and placement, and navigate your files and folders. Improved bridging between desktop environment themes allows apps from other environments like KDE to look and feel more like native apps as they're updated to take advantage of this feature. Standard scrollbars have been replaced by a minimal, overlaid indicator, while a scrollbar trough is shown when needed. This create a cleaner, less distracting view which helps you

focus on window content. These “overlay scrollbars” are also better suited to mouse scroll wheels and touchpad scrolling.

- Application improvements.
- Software: The Software app has more and better data than ever before, and makes it easy for you to find a wide variety of useful free software. It also makes keeping your system up to date a snap. The Software app also can install all sorts of extras such as fonts or media helpers.
- Files: The updated layout in Files gives a better view of your files and folders, and a new view popover makes it easy to change the zoom level and sort order from a single place. You can also now move files and folders to the trash intuitively using the Delete key, rather than the Ctrl+Delete keyboard combination.
- Image Viewer: The Image Viewer has been redesigned to reduce the amount of window chrome and give more space to images.
- Boxes: The user interface for Boxes, the application for virtual and remote machines, has a large number of improvements, including new preferences dialogs, a revamped box creation assistant, a feature to send keyboard shortcuts to a box, and display scaling by default.
- Vagrant: Developers will appreciate the addition of software development environment software Vagrant into Fedora -- it'll work using our included virtualization technology, with no need to install third-party virtualization (like VirtualBox). Use this to work on top of the Cloud images mentioned above, or launch your own Vagrant boxes.



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## How To Buy An O'Reilly Book

By Trevor Cordes

So O'Reilly came out with a few books that piqued your interest and you've decided to buy a batch. You like print books. Print books can be expensive. Maybe you want to throw some older titles in there you've been eyeing for years. What's the best way to buy?

I found myself in that situation, my O'Reilly “want list” having grown to over 100 titles. So I whipped up an overly-complicated spreadsheet and went book hunting. My results are somewhat surprising.

The methods investigated (and tested) include buying from: O'Reilly direct using MUUG's 40% off promo code; eBay; Amazon direct (new); Amazon's “used” marketplace; Indigo direct; and Indigo used. (All references to Amazon are for [amazon.ca](http://amazon.ca).) Personally, I have no problem with used: I don't mind wear and tear as long as marking and highlighting are near zero and the cover looks pretty good.

Wanting to support the publisher, I first tried O'Reilly direct via [oreilly.com](http://oreilly.com). Their site is excellent and selecting books to buy is a breeze, and the MUUG 40% off discount is enticing. They will show you the shipping price mid-way through the checkout process so you can gauge costs (they use DHL). The shipping price seems to be price-based (not weight-based) and the sweet-spot appears to be just under \$100 (subtotal after discount), at which shipping was \$19.50. (All O'Reilly prices are in US\$ and books are shipped from the US.) That was for a 5-book order. Adding another book raised the shipping to \$29.28, and one more \$31.44. So play with your order to ensure you stay in an attractive tier.

Then something interesting happened. O'Reilly charged me GST at the source (they must have a Canadian presence). Then, when DHL delivered the package, they charged me GST and a (reasonable) \$14 brokerage fee. That GST double-bill should not happen. DHL should recognize GST was paid and not charge me anything, especially when shipped to my business (not personal) name. It turns out O'Reilly doesn't show on the waybill invoice that GST was charged! Not only did it not say “GST” but there was no tax line item at all and the bottom-line total shown did not match the invoice O'Reilly emailed me! I complained to O'Reilly and they refunded me the GST but not the brokerage fee. They were surprised to find out their system did not print the tax on the invoice and they said they'd fix it. If you order direct from O'Reilly, make it clear you want the GST to show on the waybill invoice so you don't get similarly stung.

So in the end I ended up paying per book just a bit over US\$ cover price in CA\$. So a \$29.95 O'Reilly list price, minus 40%, plus shipping, plus GST, plus brokerage, minus refund, plus (roughly 1.22) exchange rate, cost me \$31.03. Not bad, but not 40% off! And not like our

US neighbours get with their free shipping and no duties/taxes! So can a better deal be found?

For “new”, you almost certainly will do better with Amazon or Indigo/Chapters. A note about Indigo: their prices in store are not their prices online. In store you’ll pay cover prices on nearly everything. So if you don’t need it today, use their website instead. I thought Amazon would kill Indigo on pricing, but in most cases the prices were nearly perfectly matched, and in more than a handful of cases Indigo beat Amazon, sometimes by a wide margin. I got the impression that Indigo often does better on brand new books and less-popular titles. Also, prices change semi-regularly. So if you’re shopping for new books, sorry, there’s no hard rule, always check both sites. (And remember Indigo is Canadian-owned, so that’s a plus if you like to support Canadian businesses.)

Some examples:

Title	Amazon	Indigo
<i>High Performance Responsive Design</i>	40	29
<i>Linux System Programming</i>	40	47
<i>Learning Responsive Web Design</i>	26	31
<i>Wicked Cool Perl Scripts</i>	39	24

In my current data (rounded to the nearest dollar), 27 titles have the same price at both stores, Amazon is cheaper on 17, and Indigo is cheaper on 8. Both sites offer free shipping with absurdly low thresholds, so S&H isn’t a factor if you buy 2 or so books at a time.

What about used? First, strike eBay off the list. I stopped checking them after the first random 10 books I looked up were vastly more expensive than the other options once you included eBay sellers’ notoriously variable and extortionist shipping prices.

Amazon and Indigo seem to have cracked the used book market with their model. They allow book sellers worldwide to list with them, similar to eBay but with fixed prices. More importantly, they both enforce a fixed per-book shipping price of \$6.49 CA\$ and prices on the Amazon.ca and Indigo marketplace are all in CA\$, so really what you see is what you get: no surprise extra fees, and no brokerage and taxes 99% of the time. One to three cheap books per package don’t seem to get the attention of CRA at the border, so no

ding there. The only time you pay GST is when the seller is in Canada. Strangely, that is rare, as almost all sellers are in the USA and UK. Almost every seller that has “Canada” in their name is actually not in Canada! So you can pretty much bank on paying the list price plus \$6.49 dead on.

Even better, the sellers all compete using pricing software that tries to undercut the other guy, and as a result most books more than a few years old are available for under \$3 in a condition I find acceptable. In many cases they are under \$1, even down to 1¢. Newer books, and some of the more rare/obscure titles, can be \$10–\$20. The newest books are often more expensive via the marketplace (with the fixed shipping price) than the new price direct from Amazon / Indigo with their free shipping. 99% of the time Indigo “used” prices were more (usually \$5+ more) expensive than Amazon. My hunch is Indigo charges sellers a higher “cut”. Unless things change, you can safely skip checking Indigo’s used prices.

As for book condition: I found it pretty hit and miss. Amazon’s grading system is better, and you should be satisfied with any book listed “very good” or better. I also bought many “good” books that were entirely fine. Some books arrived better than listed, less than 10% arrived in worse condition. Only one warranted a complaint and the seller instantly refunded me the book (but not shipping) price. The worst condition book I received was one with the previous owner’s name written in marker on the inside cover (ok), cover (not ok), and fore edge (horribly annoying). Such instances were rare, and always on a “good” rated book. I didn’t risk an “acceptable” book. Indigo uses a star-rating system which is poorly defined. I found that you should aim for 3+ stars. In the end, my optimized shopping method became: call up the used list, find the cheapest “good” that wasn’t an ex-library book, then compare with the cheapest “very good”. If the price was close, buy the better condition book.

On a personal note: because I want to support O’Reilly and see more books published on the topics I enjoy, I made a choice that I would not buy any used books newer than eight years old. Obviously, we can all ponder the consequences of everyone buying every book for 1c. YMMV. As of now, I’ve filled out my O’Reilly library substantially at an average of \$8.59 (all said and done) per used book -- not bad for \$25-\$70 cover prices. Happy O’Reilly shopping! And let’s all thank O’Reilly for the dozens of free door-prize books they’ve donated to MUUG over the years.