MUUGLines

The Manitoba UNIX User Group Newsletter

Volume 38 No. 5, January 2026 Editor: Wyatt Zacharias

Next Meeting: January 6th, 2026
In Person and Online

As usual MUUG is meeting on the first Tuesday of the month.

Main Presentation - Linux File System Encryption

With increased threats to information security, and increased demands for compliance with privacy laws, data encryption is becoming an important requirement. But deciding between available solutions can be complicated. Multiple options are of course available for Linux, but which one is best may depend on your use case.

In this presentation, Gilbert Detillieux will describe 3 different options: LUKS works at the raw disk/partition level, and may be best for removable media, laptops, and systems where full disk encryption is needed. At the file-system level, eCryptfs and Fscrypt allow for encryption on a file or directory basis, with support for multiple users and keys. Each solution has its limitations and advantages.

The latest meeting details are always at:
`https://muug.ca/meetings/`

If your MUUG membership has lapsed, please help support us by renewing today! Payment can be made via e-transfer, credit card, or PayPal here:
`https://muug.ca/about.php#payment`

Where to Find the Meeting:

NEW LOCATION

Winnipeg Senior Citizens Radio Club
598 St. Mary's Rd. Winnipeg, MB.

MUUG has moved to a new location to start the new season. Winnipeg Senior Citizens Radio Club (WSC) has graciously offered to host MUUG meetings going forward. Several current and past MUUG members are also members of WSC. MUUG President Wyatt Zacharias will be our WSC liaison and duty officer.

WSC is located at 598 St. Mary's Road, 2nd Floor, a block South from the St. Mary's / St. Anne's fork, on the West side beside the Miller's Meats. It's in the old fire hall, so you really can't miss it! Look for the red doors.

Please Remove Your Footwear

To keep the carpets clean and dry please remove your outdoor footwear at the top of the stairs.

The meeting space is on the **2nd floor** and there is no elevator, so attendees will have to be able to climb 1 flight of beautiful character style stairs. Apologies to anyone requiring accessibility. It is also possible to attend via online videoconferencing:
`https://muug.ca/meet`

ReactJS - React Server Components Hit With CVE 10.0 – "React2Shell"

On December 3rd a critical vulnerability resulting in pre-authentication remote code execution was disclosed for React Server Components. The cause of the vulnerability was due to code unsafely de-serializing payloads from HTTP requests to server function endpoints.

Web developers using ReactJS scrambled to determine whether they were vulnerable and apply required updates. Affected packages include: react-server-dom-parcel, react-server-dom-turbopack, and react-server-dom-webpack.

https://www.cyber.gc.ca/en/alerts-advisories/al25-018-vulnerability-affecting-react-server-components-cve-2025-55182

https://www.wiz.io/blog/critical-vulnerability-in-react-cve-2025-55182

FFMpeg Project Resorts to DMCA Takedown of Non-Compliant Vendor Code

The FFMpeg project maintains one of the most extensive media libraries used all across the internet. Rockchip is a Chinese SoC (system on a chip) designer who produces designs for ARM based systems such as tablets and small board computers, similar to the Raspberry Pi.

The FFMpeg project claims that for over 2 years Rockchip have been distributing FFMpeg library code in their repositories without the correct licensing. After no action from Rockchip to correct the situation FFMpeg made the decision to file a DMCA takedown request to github to remove the offending repository.

Rockchip's repository is currently unavailable so it is not possible to see what licenses were in use and not all contents of the repo are available in the wayback web archive but from commit comments it appears that MIT licenses may have been in use by the repo.

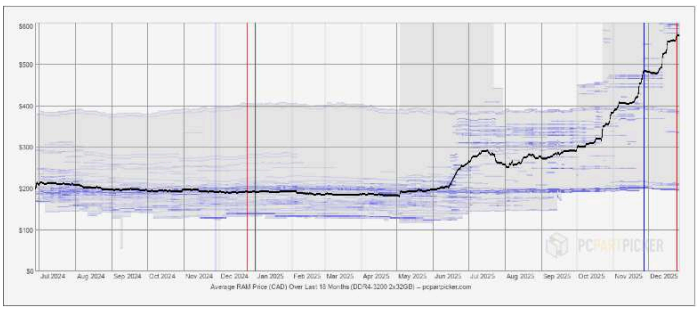
https://x.com/FFmpeg/status/1761005762233413654

https://x.com/FFmpeg/status/2004599109559496984

RAM Prices Skyrocket as AI Boom Devours Everything In Its Path

If you've been in the market for a computer upgrade recently you may have noticed the latest eye-watering prices on current DDR4 and DDR5 RAM stock.

The website PcPartPicker.com tracks component prices over time. Starting in mid-2025 RAM prices started a steady march upwards in price with most memory module options doubling or tripling in price since the start of 2025. As of December 2025, many RAM modules are at all time highs with no significant price drops in the last 6 months.



DDR4-3200 2x32GB (Average price in CAD over last 18 months)
Chart by PcPartPicker.com

Many in the industry are placing the majority of the blame on the AI goliaths for creating massive new demand for DRAM stock as they build new compute capacity for their models. Demand by AI has grown so significant that Micron Technology has made the decision to exit the consumer market and discontinue their Crucial brand to focus solely on large scale purchasers.

OpenAI has been highlighted as a particularly egregious offender in creating these market conditions with their recent Project Stargate partnership with the US government. As part of the project OpenAI has signed procurement deals with Samsung and SK Hynix for up to 900,000 wafers per-month, representing approximately 40% of the global supply capacity.

https://ca.pcpartpicker.com/trends/price/memory/

https://investors.micron.com/news-releases/news-release-details/micron-announces-exit-crucial-consumer-business

https://www.tomshardware.com/pc-components/dram/openais-stargate-project-to-consume-up-to-40-percent-of-global-dram-output-inks-deal-with-samsung-and-sk-hynix-to-the-tune-of-up-to-900-000-wafers-per-month

January Door Prizes:

This month, Andrew Popowich (one of Brad Vokey's *other* nephews) has graciously donated a complete Raspberry Pi 4 CanaKit for MUUG to give away!

Release date: Q1 2022
Model: 4 Model B
Revision: 1.5
Memory: 4 GB

Complete with:

- CanaKit Premium Black High Gloss case
- 2m micro-HDMI to standard HDMI cable
- USB-C power supply 5.1V-3.5A
- USB-C power switch
- Samsung 32 GB EVO Plus Micro SD card
- Ubunto 24.04 1 LTS (Noble Numbat) pre-installed

We will also have our usual selection of e-books and a physical copy of the latest *Linux Pro Magazine*, available to win

Checkout `https://muug.ca/prizes` to see the list of e-books up for grabs.

Sendmail Block Spammy Addys

by Trevor Cordes

Run your own sendmail server? Do you accept a wildcard To envelope address – accept any local-part user name even though they don't exist as local users on your system (via virtusertable)?

Do you find that some ancient email addresses you know you don't use anymore have been 100% spam for years? Ya, your Bayesian filter catches them all, but you still need to peek at them once in a while to make sure.

Now you can block them forever more at the sendmail server level, whilst still maintaining your wildcard acceptance. Just add an entry for the bad address in virtusertable, before the wildcard:

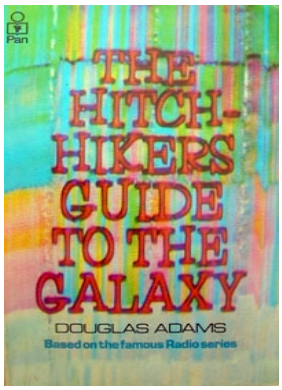
```
onlyspams@muug.ca error:nouser User
does not exist
```

The space after the address may have to be a tab. Don't forget to restart sendmail to rebuild the db!

Any MTA sending to that address will now get a 5xx level error, probably 553. Senders (sane ones) will usually sense that and stop trying, and unsub it from their lists. In any event, you don't have to worry about it again.

Fedora Naming Releases Again?

by Trevor Cordes



If you've upgraded to Fedora 42, you may have noticed that release codenames seem to be back? Either that or *all our base belong to Adam.*

```
>cat /etc/fedora-
release
Fedora release 42
(Adams)
```

It would appear that this is the first named release since they stopped the practice just before Fedora 22 (ed: wow! time flies). Glad to see it back.

If you're feeling nostalgic, these are the best names over the years:

- F18 Spherical Cow
- F17 Beefy Miracle
- FC6 Zod

and who can forget...

- FC1 Yarrow

And in typical nerd fashion, there are strictly defined rules for proposed names:

> *Name n and n+1 must share an "is-a" (not a "has-a") relationship, but n and n+2 must not share the same is-a relationship as n and n+1.*

Help us promote this month's meeting, by promoting this poster on your workplace bulletin board or other suitable public message board:

`https://muug.ca/meetings/MUUGmeeting.pdf`

Auto-Optimized Binaries Incoming

by Trevor Cordes

Currently, in Fedora, glibc-hwcaps provides a way for libraries to auto-select the best supported optimized version of library code to run. What this means in English is if you have a pretty new CPU with lots of wacky new extensions, glibc can auto-select the best version of a library that is optimized for your CPU, and ignore the substandard versions compiled to support Pentium III's.

Proposed for F43 (was set for F42 but didn't make it), is an extension to this feature to programs themselves. In theory this will allow programs that can make serious use of newer processor features to run much faster than the "stock" versions. Gains of 120% faster have been cited.

This will only occur if the rpm maintainers of a given package make use of this option. It would probably only affect a small number of programs when it first appears, but should expand over the coming years.

Have an ancient CPU? This benefits you as well, as it reduces the pressure on distros to arbitrarily select a higher minimum supported CPU. This means your ancient CPU should be supported by your favorite distro for longer.

It works via a small helper binary, and a program in /bin is symlinked to this helper. When run, the helper will look at your CPU specs and pick the best variant of the actual program to run.

Of note, ELF allows for IFUNC to select variants of functions that are CPU optimized, but its use requires implementation in code. Apparently that is not trivial, and not all programmers would be interested in spending their time on it. This new F42 feature allows packagers to make these choices and implement solutions, independent of programmers.

https://fedoraproject.org/wiki/Changes/Optimized_Binaries_for_the_AMD64_Architecture_v2

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https://www.linux-magazine.com/

MUUG would like to thank Michael W. Lucas for donating one of his ebooks every month as a door prize. You can view and purchase his tech books here:

https://www.tiltedwindmillpress.com/product-category/tech/