MUUGLines

The Manitoba UNIX User Group Newsletter

Volume 37 No. 5, January 2025 Editor: Alberto Abrao

Next Meeting: January 7th, 2025, 7:30pm

Feature Presentations: My Favourite Browser Plugin(s), and Open Source Apps

This month we return our focus to the desktop by discussing and demonstrating a couple of Trevor Cordes' favourite browser plugins. Yes, there are a million of these things, and everyone has their own set of "indispensables". The choice often comes down to what itch you have to scratch, and what cool ones you've been introduced to by friends – or MUUG.

Trevor personally hates clutter in web pages he frequents. So he'll show you how to clean things up with ABP and uBlock Origin. But we're not just talking ads: nope, you can remove basically any piece of nonsense on any site with a bit of extra work. You'll see the easy "anyone can do it" way plus the "completely insane" complex way – including when sites purposely try to sabotage your blockers. Winning!

Trevor may also discuss/demo NoScript, Dark Reader and Video Background Play Fix: all things he cannot possibly live without. If you don't leave wanting to install a few of these then you must be from outer space!

Kevin McGregor will also present an overview of a variety of user-focused, open-source applications, from typical office applications to media editing, games, utilities and more.

If you show up in person you will be treated to more beverage choices than we've offered in over a decade: coffee, tea, and pop, as well as cookies. And parking is free, copious, safe, and just a handful of feet from the door.

Please stay home if you are sick that day.

To attend via internet, check and refresh the following link after 7:00pm. There is no need to create an account in BBB, nor login. Just enter any name as your screen name and hit **join**.

`https://muug.ca/meet`

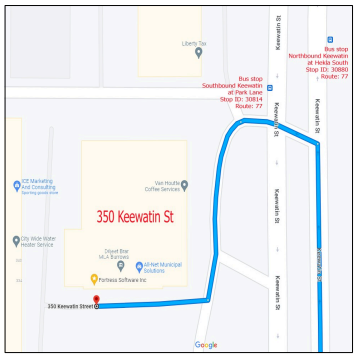
The latest meeting details are always at:
`https://muug.ca/meetings/`

Where to Find the Meeting

We are continuing to meet on the first Tuesday of every month.

Fortress Software Inc.
350 Keewatin St – Unit #2

Doors will open at 7:00pm. Meeting starts at 7:30pm.



If driving, enter the lot using the most north-eastern entrance (far right in the top picture) and drive around to the south west corner of the building (see route in map detail). You can use any of the free, ample, and safe parking spots that say "reserved" or "MUUG" in front of units #1 through #4 before entering into unit #2. Look for the sign over the door!

Bus stops #30814 and #30880 (route 77) are only 150 meters away. The last bus leaves for Polo Park at 10:15 pm and for Garden City at 10:31 pm. Logan Ave. bus routes #19, #26, and #27 are a 600 meter (8 minute) walk to the south.

Kernel 6.12 confirmed as a Long Term Support (LTS) version

Kernel 6.12 was confirmed as the latest Long Term Support (LTS) kernel.

After 20 years of development, patches that allow real-time operation, or PREEMPT_RT in the Kernel's usual parlance, are now part of the mainline.

The website Phoronix has a few tests `comparing the performance of 6.6 LTS and 6.12 LTS`, and it looks promising for the new version.

Red Hat Enterprise Linux 10 Beta is now available

Red Hat also announced the availability of Red Hat Enterprise Linux (RHEL) 10 Beta for testing.

It looks like a solid release so far. Being Wayland-only is not surprising, seeing that Red Hat invested a lot in it. What has everyone talking is its choice of Kernel.

Once again, Red Hat went with a non-official LTS version. RHEL 9 used 5.14 instead of 5.15. RHEL 10 will use 6.11, instead of 6.12. To make matters more confusing, CentOS Stream is on 6.12.

Meanwhile, the "clones" now have a life of their own

AlmaLinux also announced their Beta a couple of days after RHEL did.

While they also kept Kernel 6.11 like their upstream, they differentiate themselves by 1) bringing back drivers that Red Hat removed from their kernel; 2) adding back SPICE drivers to their Virtualization solution, which is great for Windows VMs; and 3) offering a version that is compatible with the so-called x86-64-v2 architecture. Red Hat is dropping support for these, and Alma is picking up the slack.

The x86-64-v2 dilemma

Not all x86-64 processors are created equal.

Just like the MMX back in the Pentium days – oh, I do remember my first Pentium MMX, *those were the days, and yes I am old, don't mention it* - instructions are constantly added to make processors faster and more efficient.

Using those instructions is great, assuming everyone who is going to run the software you provide has hardware capable of leveraging them.

If you compile it all yourself, you can pick and choose the instructions you'd like to target. However, distributions tend to offer precompiled binaries, and thus need to "pick a lane", so to speak.

Often, they go for maximum compatibility. Now, though, this is changing. Aiming for the Athlon 64 and Core 2 Duo vintage leaves a lot of performance on the table, so the bar was raised to x86-64-v2, the "classic" Intel Core 1st gen, and AMD Bulldozer, also known as "FX" (2011).

Now, the bar is being raised again. Which would be fine, but things are more complicated now. As Intel rested on their laurels for most of the twenty-tens, these processors were adequate for longer than they would otherwise, and there are many machines in service that sport them. But it gets worse!

The main driver of this change is to leverage "AVX" instructions. AMD supports these since "Excavator" (2015). From that point, all their products support x86-64-v3..

For Intel, it's complicated. Although the first processors from Inte with support for these instructions came out in 2013 – Intel Core 4th gen, Xeon "V3" etc, Pentiums and Celerons were not so lucky. These only started supporting AVX at the end of 2020.

Now, before anyone gets a little too smug because those are "lowly" processors, things get even worse. Intel, for the longest time, had a terrible habit of using Error Correction Code (ECC) memory support as a way to segment their offerings. More often than not, you would not be able to get an i5 or i7 with ECC support. At that level, Intel wanted you to get a Xeon if you are doing "server" duties. However, you often could get a Celeron, Pentium or i3 with ECC.

Confused already? The reason was simple: many low-end servers, "network appliances", and so on, demanded cheaper processors. As these can be used on the enterprise, and wouldn't cannibalize sales from the higher-priced models, Intel enabled ECC for many of their cheaper offerings, but still no AVX for offerings launched before the third quarter of 2020.

You may be the unfortunate soul who finds out that your reasonably new and 100% enterprise-class gizmo does not support the new shiny. Not so smug now, eh?

Debian 13 (Trixie) alpha also out!

On the quiet side of the Enterprise Linux wars, Debian chugs along as the reliable workhorse that does its own thing, and leaves the messing around for the Ubuntus of the world.

Debian 13 (Trixie) alpha was just released. It is starting to look like they found a comfortable cadence on the new cadence of 2-year Long Term Support from the Kernel developers, releasing a version every two years or so.

In-between these, there is always kernel-backports if you're not desperate for a later version – notice I didn't say "latest" here, as it tends to lag significantly.

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Speaking of Debian and Kernels...

As 6.12 was raised as the latest LTS kernel, 4.19 received its last patch, being now at End of Life (EOL).

Debian 10 uses Kernel 4.19. If you're still on it, well, get on it!

Gaming on Linux: Tux Racer comes full circle, now with your favourite steering wheel

Winter is always amazing to explore The Great Indoors. And one of the great sights found there is... gaming!

Now, do one better. Game on Linux. Why would you tolerate a reboot during your favourite match, if you can do so at your leisure, and just focus on the fun?

Or on the history. I remember when no one would even dare to think this day would come. When "Tux Racer" was more of a meme than a game.

Well, things have changed. With Steam, Proton, and the sheer will of the community, gaming on Linux is a reality.

Last winter, I set to build a living room PC that would exclusively run Linux. I wanted something that both my wife and I could use, to watch movies, YouTube, play music... and games!

Fedora KDE was the distribution of choice, on a machine AMD Ryzen processor and AMD Radeon video card.

Last winter, Cyberpunk 2077 was all the rage, using the Xbox Controller via Bluetooth. Summer brought the Steam Deck, and then I ended up playing a lot of both American and Euro Truck Simulator. Winter comes, and Santa brings the gift: a sim racing wheel.

Oh, if only Linux supported that... oh, wait, it does! As long as you do some research beforehand, it works a charm. And, just like the Xbox Bluetooth controller, the open-source drivers and utilities offer extra goodies.

With the Xbox controller, **xpadneo** allows pairing multiple controllers using a single Bluetooth dongle, while Windows require a dongle for each controller.

With the steering wheel – in my case, a G29 – you get **better** force feedback support than on Windows by using the **new-lg4ff** module. Also, **oversteer** gives you the management tools you need to manage your wheel.

And, for the games, Steam takes care of it. Kick back and enjoy!

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/

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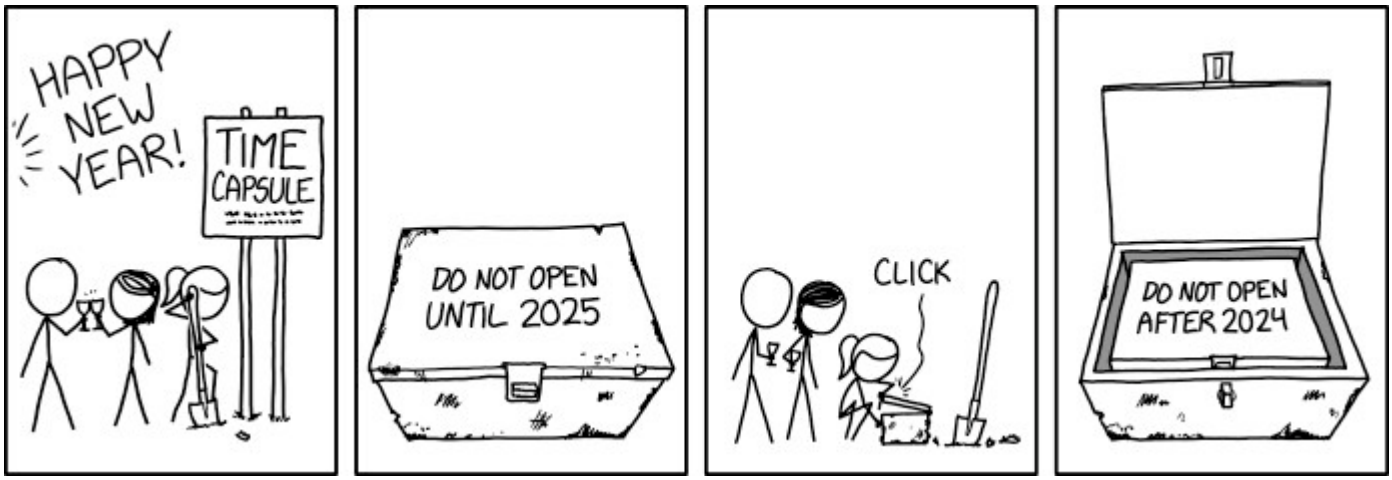
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