

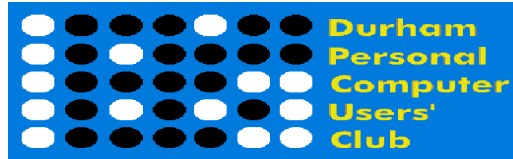
March 2024

# **PC MONITOR**

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Durham Personal Computer Users' Club Newsletter

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## **DPCUC General Meeting**

**Our Club meets monthly on the second Thursday of each month.  
All meetings are currently held using Zoom.**

**We hope some day in the future to be able to meet in person again.**

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**Please visit the Club Web Page for all the latest links and information**

<http://www.durhampc-usersclub.on.ca/>

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### **Next Meeting**

**Auto Show and Win Tunnel Reports**

**Anne and Dan Delong**

**On ZOOM – Thursday, March 14 2024, 7:00PM**

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# FYI

- By Dan Delong

## 1 Consumer Reports on Doorbell Cameras

Doorbell cameras, with the names - *Eken, Tuck, Fishbot, and Rakeblue*, - and likely some others, all sold online, are not secure. Staffers were able to control such brands remotely, without the owner's knowledge or consent.

<https://www.consumerreports.org/home-garden/home-security-cameras/video-doorbells-sold-by-major-retailers-have-security-flaws-a2579288796/>

## Win11 Version 24H2

This Win11 update won't be out for a while—maybe in the summer. When it arrives, the install process will be longer than other updates because it will completely replace the OS.

Among the changes will be an introduction to the **Super User command (SUDO)** like Linux has, and a better phone link, so you can use your phone as a conferencing web cam and audio source.

Copilot will get AI enhancements to handle copied/highlighted content, and a Copilot ON/OFF switch. Archiving will now offer several zip formats, both for creation and for opening.

Quick Settings (**Windows-A**) will contain more apps and will paginate through them.

<https://www.windowscentral.com/software-apps/windows-11/windows-11-version-24h1-changelog-release-date-features-ai-2024-update>

**Windows11 'Moment 5'** might be installing as you read this sentence, since 23H2 released on Leap Day, February 29<sup>th</sup>. <https://www.bleepingcomputer.com/news/microsoft/windows-11-moment-5-update-released-here-are-the-new-features/>

## Freewrite

No, it's not free! **Freewrite** makes a variety of portable devices designed to take the place of typewriters and laptops, strictly for those who like/need to write at the drop of a hat. Journalists, novelists, and diarists would find one of these fold-able keyboards, with a paper-like screen, to be a very handy tool. The designers tout **Freewrite's** distraction-free capabilities, compared to working on phones and laptops, with their attention seeking alerts and other temptations.

<https://getfreewrite.com/>

## Shader AR

Just to demonstrate how powerful AI has become for smartphone users, well ahead of NPUs (Neural processing Units) the **Shader App** accepts voice commands to enhance/augment what your camera sees, in real time, and with full animation. In the example video, a tattooed girl asks **Shader** to give her "elf ears" and a "cyberpunk" look. Although pre-made templates may be available, it appears they are not necessary for this kind of augmented reality.

<https://www.shaderapp.com/>



## Research by Microsoft and Google

Common to both companies – research stress has shifted to medical, matters. While Google is using AI to create better diagnostics, Microsoft appears to focus more granularly on specific diagnostic testing methods. Google's **Med-PaLM-2** is the latest on-line AI doctor venture. In testing, it scored very highly on official medical exams. Both are backed up by impressive **Large Language Models**.

## DDR6 RAM Memory Coming

If you thought DDR4 was top tier, and that maybe, someday, you'd move up to DDR5, well, that's not the end of the story. DDR5 has been out for a couple of years, for some high end desktops, while the DDR6 standard is just now being finalized for use in high-end, enterprise, servers.

DDR6 will have a transfer rate up to 16,800 MT/s as opposed to the DDR4 rate of up to 5,333 MT/s. That's a huge jump in bandwidth from 28.8 GB/s to 134.4 GB/s. DDR6 takes less power to do all of this as well.

*[RAM speed can be measured in two ways, depending on clock speed and data rate per clock cycle. For example, a SDR or single data rate module at 1600 MHz, has a data rate of 1600MT/s. A double data rate, or DDR module with 1600 MHz would have a 3200 MT/s. That is a megadata transfer rate (MT) of 3200 MT per second.]*

<https://www.pcworld.com/article/2237799/ddr6-ram-what-you-should-already-know-about-the-upcoming-ram-standard.html>

## Durham Region Buyer Beware Group

This is a private Facebook group, with over 12,000 members. Those who post complaints are required to show proof of cheating.



<https://www.facebook.com/groups/2715703551994680/>

## More on the Samsung Galaxy Ring

In competition with the existing **Oura Ring** (and many cheap knock-offs) the **Galaxy Ring** will monitor and record heart rate, oxygenation, breathing, bodily cycles, and movements (or lack of... as in sleep), in addition to some complementary AI analysis. Should any hiccups arise during data transfer, the **Ring** will coordinate readings with the Samsung Watch readings, thereby improving accuracy. AI will then analyze symptoms and provide health advice to the user, in a secure manner. **No peeking into private health matters by Samsung!** The Galaxy Ring can do more. For example, when paying for items, just bring the Ring near the NFC reader.

<https://www.inc.com/kit-eaton/forget-vr-goggles-samsungs-wants-your-next-new-smart-gadget-on-your-finger.html>

## TCL 50 XL NXTPaper 5G

TCL makes smartphones and tablets, with an eye-saving difference. That difference is in the greater eye-appeal of colour screens with a matte-like finish, similar to paper. Those who spend long hours viewing a rather bright AMOLED screen may prefer it, over a glossy screen.

<https://www.androidpolice.com/tcl-50-series-nxtpaper-availability-details/>

## ZTE Flips Out With Glasses-Free 3D Tablet and Nubia Flip Phone

ZTE is another smartphone and tablet maker. One of ZTE's new products takes 3D images, and displays them in 3D WITHOUT glasses. It does the same for purchased 3D games. Objects seem to jump right out from the screen.

[https://www.gsmarena.com/zte\\_announces\\_nubia\\_pad\\_3d\\_with\\_glassesfree\\_3d\\_viewing-news-57731.php](https://www.gsmarena.com/zte_announces_nubia_pad_3d_with_glassesfree_3d_viewing-news-57731.php)

The **Nubia Flip 5G** is a full-featured ZTE flip phone, at a reasonable price. Unfolded, the screen is a large 6.9 inches, with a refresh rate double that of other phones. Two 50 Mpx cameras and audio boost make these phones attractive to younger buyers.

<https://www.pcmag.com/news/zte-targets-younger-buyers-with-sub-600-nubia-flip-5g-foldable>

## XIAOMI Phone Ultra 14

Not to be outdone by the camera specs of its competitors, the **Xiaomi Phone Ultra 14** is the first phone to use a one-inch sensor and **four 50 MPx cameras**, along with optical zoom. It is so good at taking images and video that the results are hard to differentiate from high end cinematography equipment. The video link (*below*) also shows the new wrist watch and tablet.

<https://www.youtube.com/watch?v=Qt1Hny18MdA>

## Lenovo transparent laptop screen

“Hinting” is, perhaps, the best word to describe a possible retail release of similar products in the future... say, in five years...perhaps?! Artists may be among those most interested in features like this, since the keyboard area is a flat, virtual, touch screen (for texting or stylus drawing). The advantage of transparency is realized when an object seen behind the screen is being traced/drawn, such that the artist need never take eyes off the object.

Fifty-five percent transparency is achieved by employing very small LED pixels. A rear camera is able to send off the image of an object placed behind the screen, and return with AI generated recognition information, or an augmented reality animation.

<https://www.theverge.com/24082244/lenovo-concept-transparent-laptop-mwc-2024-drawing-tablet>

## Seed Studio

**Seed** began by customizing hardware for monitoring things like weather and environmental changes. Seed has recently moved into security, with software called, “the **Magic Box**.” Essentially, it is AI software that identifies risky behavior by humans, **using existing camera surveillance systems**, along with ‘reporting’ fire and smoke events. Magic box uses computer vision to detect people who cross into forbidden areas, and who linger suspiciously. In one instance, Magic Box ‘watched’ a car lot, day and night, for thieves and vandals. [*Theft of new cars has become a serious problem.*] The emphasis here is in prevention. And, since alerts are sent in real time, action can be taken. The recording is not just a record after the fact.

<https://www.seedstudio.com/blog/2023/02/15/ai-driven-video-analytics-for-automotive-dealer-warehouse-security/>

## Intel's 18A

**18A** is an ambitious chip manufacturing method Intel hopes to perfect in the next few years. If successful, it will ensure survival of Intel as a chip foundry, for decades. 18A refers to a method for delivering clean power to the transistors, without requiring as much engineering to avoid electrical interference as signal passes through chip layers. This will be achieved by sending power from below, rather than from above, as is the current practice of all manufacturers, including Intel.

<https://www.pcgamer.com/intel-ceo-admits-ive-bet-the-whole-company-on-18a/>

## Tecno Megabook T16 Pro

This large 2.5K Ultra-clear, 16-inch screen, laptop contains a special NPU (Neural Processing Unit), along with a huge 22 hour battery, up to 1TB storage and 16GB or 32GB DDR5 RAM. The NPU gives instant access to AI enhancements, like image and video creation/altering. For example, during a conference call it can automatically blur the background and make your eyes look like you are directly gazing at the person you are chatting with. Copilot, now included in the Winn11 operating system, will respond to speech or text requests.

<https://www.tomsguide.com/computing/laptops/tecno-unveils-new-megabook-t16-pro-2024-ultra-that-promise-best-in-class-ai-performance>

This laptop is top of the line and can replace most desktops with ease. See more, at the company store.

<https://www.tecno-mobile.com/pc-tablets/product-detail/product/megabook-t16-pro-2024-ultra/>

## Yarbo Autonomous Robot

Yarbo's main unit consists of a tractor-tread mobile, battery-powered, EV unit, with sensors for 360 degree vision, and GPS accuracy within one centimetre. Add-on mechanisms for snow blowing (seen here), grass cutting, leaf blowing, and more, are required to actually get these jobs done. In an unpacking video, I watched, the owner of a new Yarbo ,with the snow blower attachment, let his Yarbo clear a double driveway and sidewalk, in front of his house, in under one hour, on a single charge. Sensors stop the robot if a person gets close, and sensors also direct the snow blower's exhaust.

*[Harvesting and cultivating machines on large farms employ a similar technology, as do self-driving excavators.]*



<https://www.yarbo.com/>

## Hafnia – next gen memory?

**Hafnium oxide (HfO<sub>2</sub>)**, or **hafnia**, indicates properties of long term retention of ferroelectric polarized states at the nano scale, that can be changed by applying a small electric field. If it reaches production as a storage medium, great power saving will result.

<https://phys.org/news/2024-01-hafnia-paves-generation-memory-devices.html>

## Windows Package Manager

Linux users are familiar with package managers for installing software, either through this GUI or the terminal. Windows11 gets one now. I haven't tried it, but will.

<https://www.windowcentral.com/how-use-windows-package-manager-install-apps>

## **Ford's \$20,000 pickup and GM's even cheaper truck.**

**The Ford Maverick** small, hybrid, pickup truck sells for about \$20,000USD, with a range of about 500 miles and decent towing capacity. The president of General Motors announced plans to sell an all electric, single cab, pickup for \$8,000USD. How can this be?

Apparently, automation efficiencies make it possible. Now, this affordable truck will not have all the bells and whistles of today's \$80,000 pickup trucks. But, it will be of far better quality than the cheapest new truck you can buy, a \$2,000 Chinese, small, electric pickup.

Manufacturers of other large EVs must be quite concerned over GM's announcement. Perhaps this is the reason for Apple's discontinuation of the Apple electric car.

The part that doesn't add up for an \$8,000 price is the battery, which currently costs more than this total. Does GM know something about batteries the rest of the industry does not? Will these trucks introduce a completely new (almost free) battery technology?

*[Opinion] I think GM can pull it off. Why?*

Looking toward a rapidly approaching future of self-learning robots—that use AI to 'think' their way through new tasks (just as a human worker might)—will likely mean the whole auto manufacturing and design process may no longer need humans at all.

The only limiting factor, to full robotic mass production, might be raw material supply, specifically, battery metals, as all other raw materials for car building are currently in ample supply.

GM may follow the same playbook as Henry Ford, when he dropped the price of **Model T** Fords, after introducing the moving factory assembly line and increasing worker wages (so his employees could afford to buy the cars they made). When a factory is able to pump out a car every few minutes, economies of scale make them cheaper to manufacture. Middle class affordability was true for all North American car makers through to the 1960s and 1970s. Fifteen million Model Ts were produced, with wooden spoked wheels, simple drive trains, mechanical brakes, and eventually an electric starter. (I think they all had a soft top to keep off rain and snow.)

Keep it simple! Never mind OnStar, self-driving, heated seats... or any of these overprices and underused options. Electric vehicles should, after all, be cheaper to make, to run, and to buy, because they need far fewer components. Furthermore, today's proprietary automobile computers operate all important movements like braking, acceleration, and steering, along with locks, pollution abatement, and lighting. All of this messaging between such components can be achieved with a single glass fibre, or a few thin copper wires, each controlled by one or more computer module (which, themselves, were made by robots).

Intelligent robots will, soon, have sensors superior to humans, and will use those sensors to learn faster, write their own programs/instructions, and then carry out tasks faster than humans, 24/7, as long as electrical power remains turned on. I just wonder how long such models will stay on the road, because, despite protests by car engineers, their bosses insist upon introducing failure points in components, to ensure obsolescence. Robots may, or may not, go with the flow. GM robots may make better cars than would otherwise come out of factories today. How about a car that could last a lifetime, or ten years, whichever comes first?

## **DPCUC President's Notes**

by Peter Camilleri

As I write this, the topic of forced obsolescence is on my mind. In October 2025, Microsoft will abandon Windows 10. Given the severe, and in my opinion, self serving requirements for upgrading to Windows 11, the situation could be severe.

How severe? We could see nearly a quarter of a BILLION computers thrown out and in landfills around the world! That is a staggering amount of e-waste that will need to be dealt with.

So I am thinking about what can be done. More importantly, I am thinking about what we can do. The research is still on-going, but I hope to be able to present my findings and recommendations at a club meeting soon.

In other news, the ad-blocker war with YouTube is really getting annoying. So many mindless, repetitive, time-wasting adverts! I've had enough of this nonsense! So, I am now in the process of setting up a network attached ad-blocking system called a Pi-Hole. This system, based on the Raspberry PI, uses well established Internet protocols to route advert requests away from my computers, phones, and smart TVs and into the oblivion they deserve.

As a side note, I am also designing a power system for that Raspberry PI that will enable it to operate reliably in a 24/7 environment. It seems that power-fail induced memory corruption is a thing that needs to be solved and I could not resist coming up with the most outlandish solution imaginable (for fun?). I will also present a more reasonable solution to this issue.

I hope to present my findings at yet another general meeting when the work has been completed.

Finally; As always, for Ukraine and Gasa; Please, Pray for Peace.

Peter Camilleri, President DPCUC.

## Linux in the News

by Alex Morrison



### [Shotcut 24.02 Open-Source Video Editor Released with Ambisonic Audio Support](#)

Shotcut 24.02 open-source and free video editor is now available for download with ambisonic spatial (spherical) audio support, as well as various improvements.

### [KDE Plasma 6 Desktop Environment Officially Released, This Is What's New](#)

KDE Plasma 6 desktop environment, as well as KDE Gear 24.02 and KDE Frameworks 6 software suites are now available with many new features and improvements. Here's what's new

#### [Tails 6.0 released](#)

[\[Distributions\] Posted Feb 28, 2024 19:24 UTC \(Wed\) by jzb](#)

[Tails 6.0](#) is now available. Based on Debian, [Tails](#) is a portable operating system designed to run from a USB stick and help users avoid surveillance and censorship. This release updates most Tails applications, and includes important security and usability improvements.

One major new feature in 6.0 is to provide warnings to users about [errors when reading or writing](#) to persistent storage. This release now ignores USB devices plugged in while the screen is locked, and [removes](#) some file and disk-wiping features from the Files application that are "not reliable enough" on USB sticks and SSDs to continue offering to users.

Users of Tails prior to 6.0~rc1 will need to do a [manual upgrade](#) to retain persistent storage. New users can download Tails for [USB](#), or as an [ISO](#) to create a DVD or run Tails in a virtual machine.

[Comments \(none posted\)](#)

### [Wind River Linux Drives New Solutions for Software-Defined Vehicles](#)

Mainstream consumers typically do not know the Linux operating system powers their email service, favorite websites, television sets, and even...





# Linux – MXLinux Update

By Alex Morrison

Well it has been 1 month and a bit longer since I switched my main desktop OS from PCLinux to MXLinux.

The desktop dual boots Windows 11 and whatever Linux I might try next.

MXLinux boots to a fine /KDE desktop of Linux. In order to best illustrate the features of MXLinux I will offer a few images below.

This image shows the Welcome screen and it can be opened from the MXTools menu.



MXLinux is based upon Debian Linux as are many other Linux systems including Ubuntu and its offspring.

The next image is a snapshot of the MXTools menu which is larger than my capture software can handle.

There are many Useful utilities in the MXTools section.

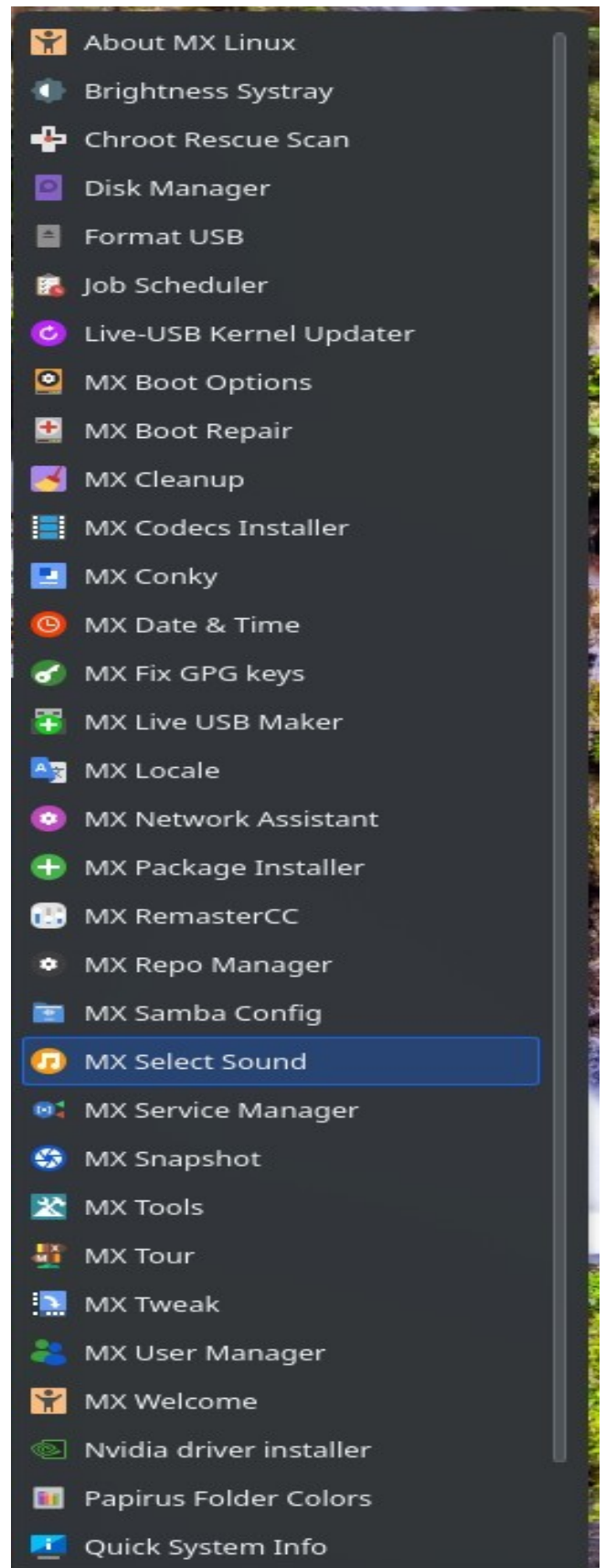
I have Boot options including Boot repair.

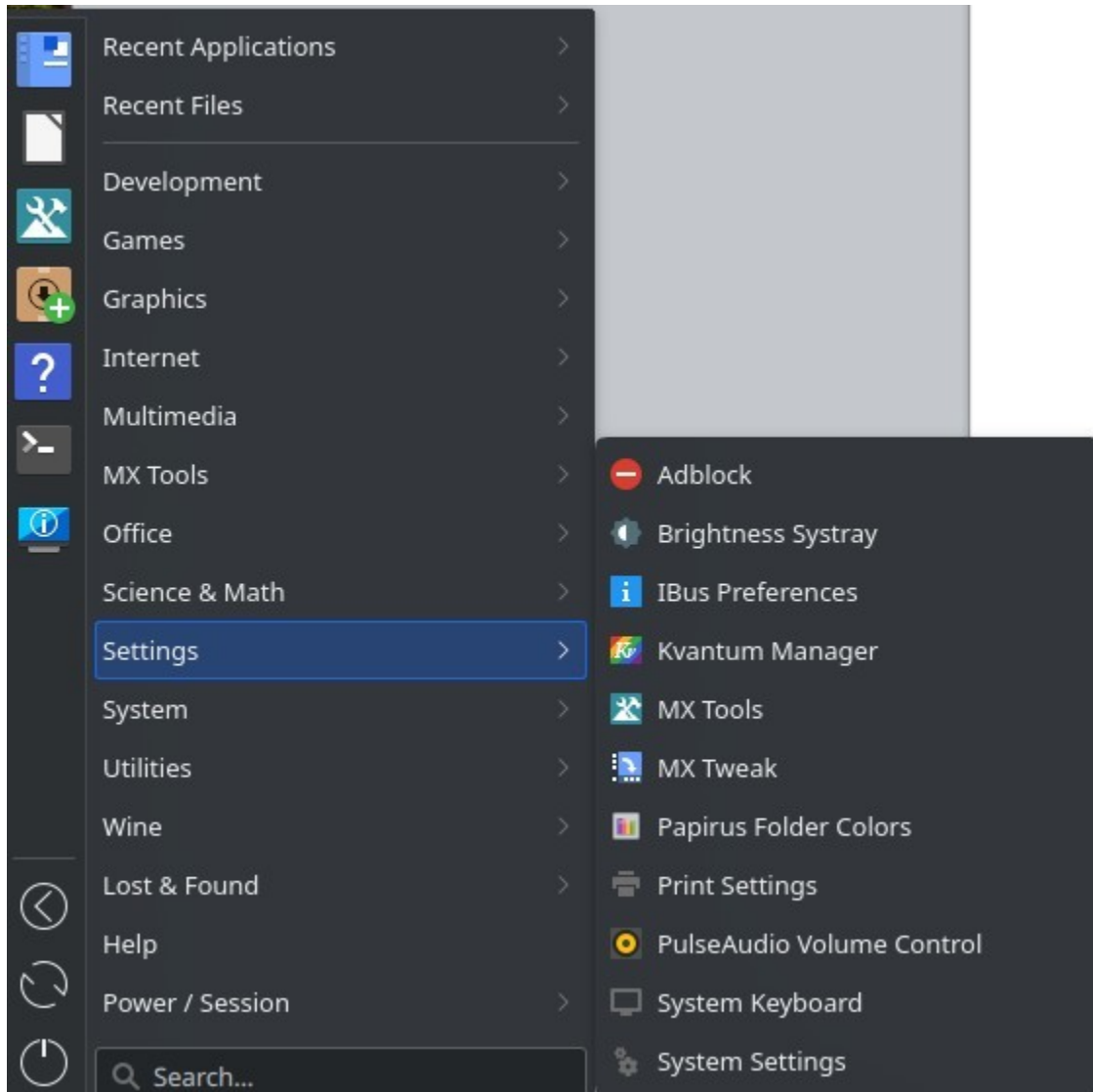
I can format a USB or Create a Live USB

I can run a cleanup if needed.

All the usual codecs can be installed from the one click menu

You can set Date and Time or Locale in the menus





I captured the image above to show the settings menu options and list a few other menu options.

System Settings offers the usual list of utilities to Enable the user to add Wallpaper, add a second user and change the theme used by the desktop system,

I have Wine installed to use a Windows software that allows me to connect using Wireless to my TVTuner [Tablo}

MXLinux has proved stable and fast loading. Anyone interested in Trying MXLinux you can download the ISO of your choice and boot from a DVD or USB without installing to take a look at it.

I recommend the KDE version --> <https://mxlinux.org/download-links/>





# Sudoku

March 2024

by Alex Morrison

**EASY**

				9		8	5	7
			1					
			6	8	4		2	
	9	8	2					6
				4				8
3		2		1				
4	2	3						
9					1	4		
	1					7		

## Sudoku

The game boards on this page were produced using **Sudokuki** on Mageia 64 Bit running KDE Plasma.

The objective is to fill in the missing numbers ensuring that every 3 X 3 grid has the numbers 1 through 9 with no repeats and every full column or row has the numbers 1 through 9 again with no repeats.

If you have troubles solving the puzzles send an email to me and I will send you the solution.

Have fun! Alex

**MED**

			9					
	4	8		5				
	5		4	2				1
		1			7	3	8	
							7	
	9				6		4	2
						2	9	
9			6	4				
8	1							

**HARD**

5			8	2				
	8							
		1		6			5	
	5							8
		3		9				2
	4		6				7	
				1	7			3
1							2	7
			3			6		4

IF you don't Like Sudoku puzzles – try these pages

<https://www.boatloadpuzzles.com/playcrossword>

<http://www.freegames.net/puzzle-games.html>

<https://www.cryptograms.org/play.php>

**SPECIAL INTEREST GROUPS SIG's**

Special Interest Groups are for members only.

SIG's are really free monthly seminars with question and answer sessions following the presentation(s)

Members of SIG's enjoy a feeling of community and share common goals and interests.

Most SIG's are informal and members who attend them set the agenda for the meeting based on their own needs.

New ideas for SIG groups are welcome.

**Special Interest Groups**

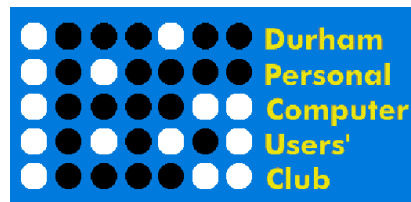
**Durham Linux User Groups**

**Coordinator: Ed Goudge**

**Our Linux group meet on the first Thursday of every month.**

**All meetings are currently held using Zoom.**

**We hope some day to meet again in person.**



**DPCUC  
EXECUTIVE**

**2022-2023**

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HOME PAGE --- <http://www.durhampc-usersclub.on.ca/>

**Newsletter  
Information**

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The PC Monitor cannot be responsible for errors or inaccuracies in the content, although efforts will be made to publish information accurately.