June 2024

PC MONITOR

Durham Personal Computer Users' Club Newsletter



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.

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

Shaping Safer Roads Traffic Optimization

by Michael Duench of Miovision

On ZOOM – Thursday, June 13 2024, 7:00PM



- By Dan Delong

Truecaller

My Android phone "knows" caller numbers on my contact list, but for those not on the list it offers a free screening service. [This is, possibly, a Google thing.] If I select "Screen Call", during an incoming phone call, the caller receives a spoken message, announcing that the message they hear is a screening request; moreover, it instructs the caller to leave an explanatory voice or text message.

[Most callers just hang up, but I've seen a few auto text messages (voice translations) come back from an unknown caller... all were solicitations of some kind.]

I can read a text of all the words being spoken to the caller, but I've never actually heard the voice itself; that is, whether or not it is the voice is a male or a female.

[Yet, I expect it is not the voice of a famous movie star.]

[Google has announced that the Chrome browser used in a Google account will now automatically add certain contact information you encounter on the web, right into your contact list. This will be used, at some later point, to automatically fill in forms on the web, as is currently done with your own personal information stored by Google.]

Truecaller (a paid service) ups the anti somewhat by tracing the caller's number to that individual (in the USA) and recording the conversation, should the call actually be picked-up. Although no mention is made (on the Truecaller website) about a new Truecaller venture, some current customers have had a chance to try this feature—termed, a **personal secretary,** which answers in the same voice as the owner of the phone. Voice intonation is not yet perfect, but is very close to the owner's real voice. Presumably, AI is used to extrapolate speech based on samples provided during the reading of a "learning" passage. [Truecaller can also prevent victimization by scammers.] https://www.truecaller.com/

Ride Sharing

Lyft and **Uber** ride shares have saturated large cities, yet medium sized urban centres may not be covered by these international behemoths. Three other ride shares [<u>YDrive</u>, VanBr, and <u>URide</u>] have gradually moved into the smaller markets, leaving only the smallest of villages and towns to rely on local taxi service.

[Permission to offer local ride sharing is controlled by municipalities.]

Clients wishing to hire a ride must download the appropriate app to their cellphone and register a credit card with the app. **URide** drivers must be 25 or older (no max. age mentioned) have a full G license, drive an insured car no more than ten years old, and allow a police check (not sure who pays for it). **YDrive** customers use a gift card/digital wallet payment method, and it also delivers food. URiders pay with a registered credit card; all tips go to drivers. **VanBr**, originally an Ontario alternate taxi service, appears to have left the business. Each of the surviving ride share businesses cover specific cities, sometimes overlapping coverage areas.

[Club members who are retired (and bored) may wish to look into driving for a ride share.]

Windows 11 24H2

This Win11 update is supposed to run only on newly built computers containing Snapdragon CPUs, NPUs, and lots of RAM, referred to as **Copilot Plus PCs**. However, at least one 'hacker' has managed to run the **Recall** part of 24H2 on older hardware – that is, on hardware lacking both memory and an approved CPU. **Recall** is most controversial aspect of 24H2, as it takes frequent snapshots of everything being done on the computer, with optional reserved storage settings from 25 to 150 GB for Recall storage. Microsoft assures users that selected programs can be excluded from Recall, and that no data exchange occurs with Microsoft remote servers.

[In other words, Recall Snapshot will have an off switch, under "Privacy and security".]

Recall will allow users to scroll through a timeline of these many, many, snapshots and bring any image back, instantly, to full screen. AI comes into the picture when local analysis (OCR and image recognition) of Recall activity allows Copilot the operating system to 'guess' user intent when entering or searching for items. For example, a search for a segment of text on the computer might then return a suggestion to use it in a current document, or in another frequently used app. Similarly, an image search result may suggest how to use it next, based on previous patterns of usage for images from this location. In fact, searching for your 'stuff', frequently frustratingly slow, in past iterations of Windows, will be almost instantaneous.

["Fear Searching No Longer," is the new mantra]

As for **CoCreator**, use it to enhance your artistic efforts. Finally, **Studio Effects** improves the appearance of your web camera sessions (some of which may already be offered by your camera driver or the hosting session's platform). Here is a YouTube demonstration of 24H2's new features.

Hands-on with Windows 11's new AI Recall, Cocreator, and Studio Effects for Copilot+ PCs!

FIXD

FIXD is an OBDII vehicle scanner that goes beyond trouble code reporting. It also includes repair estimates via its app. That is the claim. However, recent reviews and comments decline to recommend FIXD, for these [**REDDIT**] reasons.

The free trial period, which should accompany purchase of the device, is not respected. Instead, a \$99 additional annual subscription charge is placed on the account, in order to activate all features. Refund requests are next to impossible.

Further, one complaint claimed the Bluetooth connection was unreliable.

Wired OBDII scanners often include similar features for less.

NOTE:- Used car sellers may simply remove errors codes that cause the check engine light to appear, before allowing test drives. The check engine light will come back on after a longer drive.

https://www.fixd.com

Anker PowerConf C200 2K Webcam

Amazon, and other reviewers, admire this webcam. The price, and features, are right. For \$90 CAD this camera comes with variable field of view, zoom, a clear 2560 by 1440 pixel image, and a quick, manual, privacy shutter. It mounts atop a laptop screen or on a tripod pedestal. https://www.amazon.ca/Anker-PowerConf-Microphones-Adjustable-Correction/dp/B09MFMTMPD/



CloudFlare Took Down Our Website

The above statement has nothing to do with our Club's website! However, CloudFlare hosts many websites, large and small, along with policies and features to make them secure. In this ironic example, a Casino website was "extorted" by CloudFlare, to pay a lot more money for content managed websites needed by this business. A take-away, for anyone paying for hosting services –

Don't let the hosting service manage the renewal of you domain(s).

Keep domain registration and hosting separate, making it much easier to move to another service, should the same thing happen, as described here...

https://news.ycombinator.com/item?id=40481808

The life of a sysadmin is fraught with danger, as described in this long article by Lee Hutchins, who regrets making a change to a heavily used <u>Texas weather reporting site</u>.

Daylight DC1

This tablet-like device improves the E-Reader experience by adding video (60fps, possibly 120fps), emits less blue light (has a sepia-like paper appearance), and it comes with a drawing stylus (for highlighting, notes or making sketches). The screen is 10.5 inches, 1600x1200px, powered by an 8000mAmp battery.

DC1 stands for **D**aylight Computer Model **One**, with a weight of 1.2 lbs. 8GB RAM, 128GB storage, and a customized Android 13 OS. It communicates with WiFi6 and Bluetooth 5. The DC1 may ship in June, for \$729 USD. https://www.theverge.com/2024/5/23/24163225/daylight-dc1-tablet-livepaper

BionicWheelBot

Watching a Sahara Desert spider make better time by switching from a walk/run to a roll, inspired the development of a robotic equivalent. This robot has only 6 legs, like an insect, all of which cooperate in walk/run, but fold into a wheel shape for rolling, while an extra set of extensible legs are used to propel the roll.

 $\underline{https://www.festo.com/ca/en/e/about-festo/research-and-development/bionic-learning-network/highlights-from-2015-to-2017/bionicwheelbot-id_32767/$

Label Makers are not the same as Label Printers

What's the difference? A **label maker** usually has a **keyboard** (today's use the cellphone keyboard, along with an app), while a **label printer** usually gets input from a **computer**. In Canada, Brother and Dymo are well known sellers of these devices. They range in price from under \$50, to well into the hundreds and thousands of dollars. Labelling devices can be affordable, yet the lowest priced models will have limitations in terms of label size and materials cost. The link (below) leads to buying advice and a review of five models sold in Canada. One highly rated machine, not available in retail here is the **POLONO P31S Label Maker Machine**. The price rises to \$65CAD, from \$30USD, when imported by Amazon. Thermal printers, such as this, contain more expensive technology. https://www.ctvnews.ca/shopping/tech/best-label-makers-canada.html

Samsung Galaxy S25 Ultra – even better cameras

The previous, and current, Galaxy S24 Ultra model's already amazing cameras will be upgraded in the newest Galaxy S25 Ultra, running on Android 15. Both have four rear facing cameras. The upcoming S25 Ultra will offer a 200MP main camera (rumoured), a 50MP ultra wide, a 3x zoom 50MP telephoto, and a 5x zoom 50MP super-telephoto; both are optical zooms, all powered by a Snapdragon 8 Gen 4, and 3 nanometre circuitry. Cameras in the 50MP range can record video at 8K.

[On a side note, <u>SAMMOBILE</u> is a popular site for all things Samsung.] https://www.sammobile.com/news/galaxy-s25-ultra-camera-specifications-leak/

Free VPNs aid crimes via botnets

19 million personal computer IP addresses may be involved here, used to gain money from Covid 19 aid scams and bomb threats. Blocking these IPs won't work to prevent exploitation activity. The US Treasury Department has decided to sanction the individuals involved, by naming them for prosecution, even though they are all non-residents of the United States. They reside in China and Thailand. Researchers at the **Canadian University of Sherbrooke** discovered this methodology, over the past two years.

https://arstechnica.com/security/2024/05/us-sanctions-operators-of-free-vpn-that-routed-crime-traffic-through-user-pcs/

Modern Star Gazing

Yes, you still need a good telescope. But, gathering impressive telescope images has changed, from simply replacing the eye piece with a film camera (now a digital camera), to eliminating the final optical and replacing it with a megapixel digital camera sensor that sends the processed image, wirelessly, to an app on a smart phone. This newest generation of smart telescopes are also easier to lug around and set up. While the telescope itself may be located outside (in the cold, snow or rain) the user can be comfortably ensconced in a nearby sheltered location. https://arstechnica.com/gadgets/2024/05/the-unistellar-odyssey-smart-telescope-made-me-question-what-stargazing-means/

Google's Search Algorithms Leaked

My first awareness of this leak, involving 2,500 pages of text, appeared on a Facebook post. Within seconds, as I started reading the article, my browser crashed. [Was this a testament to Google's reach?] Fortunately, I had memorized the URL of the originating post's website (see below). I have no intention of reading that many pages of obtuse prose, but governments wanting to investigate Google, or those wishing to enhance their search standing, may do so.

 $\underline{https://wccftech.com/google-leaked-document-for-ranking-on-search/}$

Google Overhauls Search with AI Overview

Classic (Legacy) Google search results will soon appear last, in the list of search results listing, when **AI Overview** becomes active in every country [beyond its current release in the United States (and possibly, Canada)]. AI Overview's search list will contain a lot more scrapings from the Web, including featured sponsored links in a special pop-out box. If you click on a sponsored link, Google will take care of billings—charges to the sponsor. https://arstechnica.com/gadgets/2024/05/next-up-in-googles-dramatic-overhaul-of-search-ai-overview-ads/

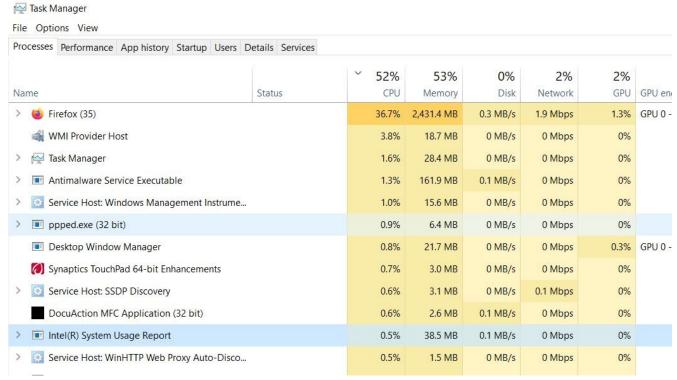
Free, Open Source Games

PC Gamer published this article, with links to hundred of free games, back in September of 2022. Many of games will be familiar to those who played the original arcade versions in the 80s and 90s. They are based on the same underlying architecture as Doom, Red Alert, Civilization, and Sim City.

https://www.pcgamer.com/yall-know-about-these-huge-lists-of-free-open-source-game-clones-right/

Taskmanager – since 1994

Pressing **CTRL-ALT-DEL** to enter the Taskmanager has saved many sufferers of locked computers. However, finding, and clicking on, the offending process, in a list of active processes (that are continually re-ordering, i.e.:-leaping from one location to the other) is difficult. The original author of Taskmanager has passed along a simple tip – also present in his 1994 version – for freezing the Taskmanager display. This allows you to click on a visible, static, process and investigate it further. **Just press the CTRL key**.



 $\frac{https://www.pcgamer.com/software/windows/pc-user-annoyed-about-task-manager-jumping-around-gets-told-how-to-fix-it-with-one-buttonby-the-developer-that-built-the-application-30-years-ago/$

AI is Influencing Elections Today.

That is the theme of a recent **Wired Magazine** article. Swaying the emotions of electors has always depended on the oratorical and communicative skills of contestants. Long ago, politicians could bribe voters with booze, promises (lies), and cash. Politics today has shifted to online, where fake news, in both narrative and in image forms, has pervaded the playing field. Wired Magazine staff are keeping an eye on this practice as it influences the outcome of the 2024 elections in the United States and other campaigns around the World. When millions of people become convinced that something is true, when it is not, democracy is at risk. https://www.wired.com/story/2024-is-the-year-of-generative-ai-elections/

Zipline Drones

Although these Zipline, winged drones air-drop a lot of restaurant food, their real value is in the delivery of life saving medicine to homes and hospitals. Once loaded with cargo, a heavy duty drone is launched by a sling shot; then flies a GPS route to the drop zone, followed by a return to base for retrieval in a capture net. https://www.flyzipline.com/newsroom/newsroom/news

Wi-Fi 6 Adapter

For those who have upgraded to a Wi-Fi 6 router recently, with speeds up to one Gig on th 5 GHz frequencies, it might not be news to you that the wireless adapter inside your computer may not have the same ability. You may need an inexpensive USB Wi-Fi adapter, like the **TP-Link AX1800 Wi-Fi 6 USB** model—the **Archer TX20U Plus**, that also includes WPA3 security. Ethernet connected computers do not need such devices, since a wired connection likely matches Wi-Fi6 download speeds, with an even better ping response time. https://www.tp-link.com/ca/home-networking/high-gain-adapter/archer-tx20u-plus/

Bell's Faster 5G in Toronto, Kitchener/Waterloo

Moving from 3500mhz to 3800mhz for 5G, in selected areas, has been tested with the cooperation of Samsung, such that download speed doubled to **2Gbs**. The theoretical speed limit for 3800mhz is 4Gbs. https://mobilesyrup.com/2024/05/30/bell-3800mhz-spectrum-5g-toronto-kitchener-waterloo/

A Child's Hot Wheels Play Led to the Diverging Diamond Interchange

Only a couple of these "wrong way" interchanges have been built, in the States. Traffic flow has improved, despite worry by drivers unfamiliar with the "wrong-way" concept, much like worry over roundabouts.

Our June speaker, from **Miovision** – the computer vision AI traffic company – may touch upon this new idea. https://www.npr.org/2024/05/28/1243933142/diverging-diamond-interchange-chlewicki

Linux in the News

by Alex Morrison



NixOS 24.05 Arrives with Linux 6.6 LTS, GNOME 46, KDE Plasma 6, and Lomiri

NixOS 24.05 independent distro is now available for download with the GNOME 46 and KDE Plasma 6 desktop environments, Linux kernel 6.6 LTS, and more.

First Arch Linux ISO Release Powered by Linux 6.9 Is Now Available for Download

Arch Linux 2024.06.01 is now available for download as Arch Linux's ISO release for June 2024 powered by Linux kernel 6.9 and featuring an improved installation experience.

Nasty Linux Bug, CVE-2024-1086, Is on the Loose

A few months back, CVE-2024-1086, a nasty use-after-free vulnerability in the Linux kernel's netfilter, was revealed. With a Common Vulnerability Scoring System (CVSS) score of 7.8, this bug, with the foundation for most Linux network firewall and Network Address Translation (NAT) programs, was a nasty little security hole. With...

NetworkManager 1.48 Improves Detection of 6 GHz Band Capability for Wi-Fi Devices

NetworkManager 1.48 is here more than three months after NetworkManager 1.46 and introduces new features like the ability to allow IPv6 SLAAC and static IPv6 DNS server assignment for modem broadband when IPv6 device address is not explicitly passed on by ModemManager.

Ultramarine Linux 40: A Well-Crafted Fedora Spin

A new release of Ultramarine Linux 40 is now available, and we did a test drive for a quick review.

Exciting New Features Are Coming to Thunderbird Mail Client

Thunderbird is closer to new releases with Rust-enabled builds, Microsoft Exchange & native Linux system tray support, and more.

Canonical Releases Ubuntu Core 24 for IoT, Edge, and Embedded Devices

Ubuntu Core 24 is now available for download. This major release of Ubuntu Core comes as a fully containerized variant of Ubuntu 24.04 LTS for IoT, edge, and embedded devices.

Amarok 3.0.1 Open-Source Music Player Improves the Wikipedia Applet

Amarok 3.0.1 open-source music player is now available for download with an improved Wikipedia applet, as well as various other improvements. Here's what's changed!

CentOS 7's Final Countdown: 30 Days Left Until Support Ends

CentOS 7 users, time's running out! Support ends June 30, 2024. Switch to a new Linux distribution ASAP. Here are the possible upgrade paths.

Mike Karels has passed away

[Briefs] Posted Jun 4, 2024 20:00 UTC (Tue) by corbet

We have just received the sad news that longtime core BSD developer Mike Karels has died; he will certainly be missed.

Comments (2 posted)

DPCUC President's Notes

by Peter Camilleri

I am writing this note after an extensive road trip through Quebec, New Brunswick, and PEI. How does this relate to computing? On this trip, we made extensive use of two GPS systems. The Sat Nav built in to our car and the one in my phone.

Why two systems? Well initially we were using the car's system, when on the way to New Brunswick, it decided that the Trans Canada highway was closed and tried to route us to Maine. There was no way to tell it otherwise. So we switched to my phone which avoided getting us stuck at the border.

Later in Fredericton, one of the bridges was closed. The car GPS kept trying to get us to cross a closed bridge. With no way to change it's mind it was back to the phone.

So, you may be thinking that, the answer is simple. Use your phone! Well not entirely. You see there were long stretches of highway when my phone was unable to reach any cell towers. There were no signal bars. At those times we had to use the car with its limited, but entirely local database of maps.

The moral of this story: No matter how good the technology:

Always have a backup!

Finally, I keep repeating this because we should never accept that war is "normal". The violence in Gasa and Ukraine continues. I know there is little we can do to improve matters so all I can say is:

Pray for Peace.

Peter Camilleri, President DPCUC.

Linux – Rescuezilla

By a Guest Writer



Rescuezilla – A Flexible Backup Solution By Alan German, Treasurer

Ottawa PC Users' Group, Ontario, Canada https://opcug.ca

Published in Ottawa PC News (May 2023)

Editor: brigittelord (at) opcug.ca

For several years, my disk imaging backup program of choice has been Macrium Reflect Free Edition; however, recently, Macrium's developers announced that the free version is to be discontinued. Security updates will be provided until January 1, 2024, after which, although the program can still be used, no new features or support will be provided. Consequently, this seems to be a good time to seek out an alternative backup solution for the long term.

The other aspect of this issue is my growing preference for Linux over Windows, especially given that none of my computers will support Windows 11, and the end-of-life date for Windows 10 is October 2025. However, my previous experiences with disk imaging programs for Linux have found these lacking the flexibility and ease of use offered by their Windows counterparts.

For example, Clonezilla has an old-style, text-based interface that is somewhat complex and difficult to navigate. The program can create a backup using either its *save disk* or *saveparts* feature. *Savedisk* allows the entire disk to be restored but will not restore single partitions. In contrast, *save parts* will restore one or more partitions but will not restore the master boot record or the partition table and so can't be use to restore the entire disk. Clearly, this is not very helpful when it comes to flexibility in restoring disks and/or partitions.

But now, there is a new kid on the block – Rescuezilla – that offers a user-friendly, graphical user interface, clearly-defined icons and menus for specific tasks, and the flexibility to save and restore both disks and partitions.



Rescuezilla can be downloaded as an ISO file (the current version is *rescuezilla-2.4.1-64bit.jammy.iso*) that can be used to create a bootable USB flash drive. As the "jammy" portion of the file name indicates, the USB boots into a version of Ubuntu Linux; however, this operating system is initially hidden from the end user as Rescuezilla loads in full-screen mode.

The main menu provides *Backup* and *Restore* options, in addition to icons for *Clone*, *Verify Image*, and *Image Explorer*. The latter option is a work in progress and is intended to allow mounting a disk partition directly from the backup image in order to extract individual files and folders. However, for our present purposes we will just consider the main two options for *Backup* and *Restore*.

Selecting *Backup* launches a wizard that steps through the required process. Firstly, the source drive that is to be backed up is selected from a menu of available disks. *Back* and *Next* buttons on the individual screens allow easy navigation. The subsequent screen, *Step 2: Select Partitions to Save*, allows selection of the partitions that are to be included in the backup. Windows users should note that since we are using a Linux system, no drive letters are used. Rather, the partitions are listed with drive and partition numbers, the size of the drive, the file system, and any partition label.



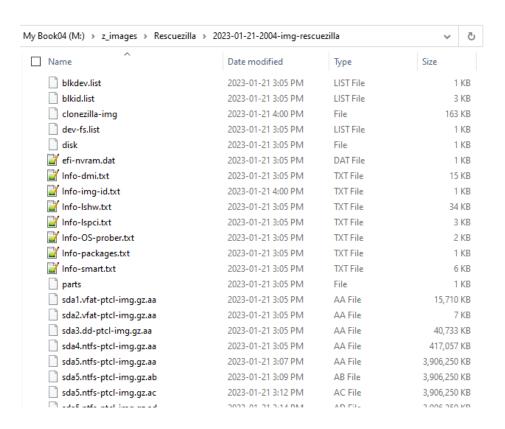
If not all the partitions are to be backed up (or restored), it's clearly important to be able to identify the desired partition using the information that is displayed. For example, the screenshot shows the partitions for a disk that dual boots Windows 10 and Linux. The Windows partition (Drive C:), Partition 5, is labeled as Windows 10, while the Linux partition, Partition 9, is using the ext4 file system.

By default, all of the available partitions are checked and so, to make a full disk image backup, we just have to press the *Next* button. The subsequent screen allows selection of the destination drive on which the disk image is to be stored. This is followed by a similar screen that selects a folder on the destination drive as the storage location. Once again, a Linux protocol specifies a mount point as */mnt/backup*. This can be refined by using the *Browse* button to point to a specific folder on the destination drive, e.g., */mnt/backup/z images/Rescuezilla*.

The next screen provides a default name for the backup image (e.g., 2023-01-21-2004-img-rescuezilla), allows this name to be customized, and displays an option to include descriptive text. This is followed by a screen on which the compression algorithm and level can be specified. These can readily be left at their default settings of gzip and 6, respectively.

The final screen provides a summary of settings selected, including the source drive and the partitions to be backed up. Clicking on *Next* starts the backup process, which then runs unattended.

The resulting image takes the form of a folder with multiple files that are clearly a mix of administrative information and segments of compressed partitions (e.g., sda5.ntfs-ptcl-img.gz.aa, ...gz.ab, ...gz.ac). In my baseline test, the overall file compression was approximately 60%.



Restoring from a backup image is essentially the reverse of the backup process. The image file on the backup disk is identified; the partition(s) to be restored and the disk on which the partition(s) is to be restored are selected. I tried a number of restorations, including just my dedicated data drive, which I could verify against a file-by-file backup stored on a USB flash drive. I also restored the Linux operating system partition and swap area (Partitions 9 and 10), and the entire drive. In each of the latter cases, success was confirmed by the fact that the disk subsequently booted normally into both Linux and Windows via the GRUB boot menu.

For me, these tests have confirmed that *Rescuezilla* is a viable backup-restore solution for my system. For Linux users, the processes and nomenclature will be straightforward. Windows users will perhaps need to pay attention to the listings of disks, partitions, and folders, as the designations (e.g., mount points) are quite different between Linux and Windows. However, that being said, the fact that *Rescuezilla* functions as a live-USB provides a ready-made backup option for both operating systems and can be used even if the PC refuses to boot normally from the hard drive.

DOWNLOAD from here ----> https://rescuezilla.com/download



Free Linux Wallpaper from Manjaro



Sudoku

June 2024

by Alex Morrison



EASY

	7	8	6	1			2	
9			4		3			8
				2				9
	4			6			3	7
6		7	9		4	1		5
1	9			5	88		4	
3				8				
7			3		2			1
	8			4	5	3	9	

Sudoku

The game boards on this page were produced using **Sudoku** on MxLinux 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

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

HARD

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

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

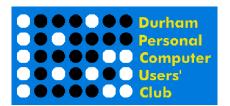
Durham Linux User Groups

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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Newsletter Information PC Monitor is the official publication of the Durham Personal Computer Users' Club and is published monthly at Oshawa, Ontario.

The DPCUC mailing address is dpcuc@live.com

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