PC MONITOR

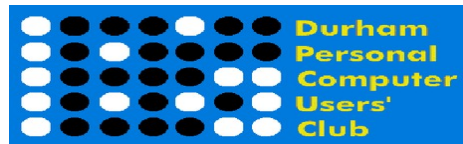**Sept 2024**

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/

INSIDE THIS ISSUE

Next Meeting

Cybersecurity

by Mark Hunter

On ZOOM – Thursday, Sept 12 2024, 7:00PM

FYI   - By Dan Delong

Victrola Journey+ Belt Drive Bluetooth Turntable

Brand new belt drive turntables can be had for under $100 *(half that for open box)* and most are able to play old records, be they 78's, 45's, or 33 1/3s. In order to transfer such music to computer digital storage some additional RCA phono' cables, and a pre-amp, with USB, may be required. If simply listening to records is all one wishes to do, most of these units will output to Bluetooth or a phono jack. Even though belt drives may not be the best, with respect to tonal accuracy, re-tuning is possible in software, like the free **Audacity** audio recording program.
https://www.bestbuy.ca/en-ca/product/open-box-victrola-journey-belt-drive-bluetooth-turntable/17662278

Divoom Ditoo Retro Pixel Art Game Bluetooth Speaker with 16X16 LED

Kids listen to a lot of streaming music these days, usually with Bluetooth earbuds. An alternate device, that includes some cute artistic animations on a coloured16 by 15 pixel screen, plus a joystick controller, and some keyboard-like buttons (with retro thematics) adds even more interest and enjoyment to the music. Sound is quite good, for the size of the speaker. Screen action can be further controlled/designed with an app on a smartphone. As a boon for parents, it can also become a clock/alarm.
https://divoom.com/

Smart TV Service Menu

Users are not supposed to fool around with this hidden feature. Do so, knowing that the only way to restore some settings may be through careful record keeping with respect to default settings. PCWorld has sussed out how to gain access to the **Technical Service Menu** for most popular brands.

Those settings are:

> *Update*: *Update the device's firmware.*
> *Calibration*: *Make precise and wide-ranging adjustments to screen settings, including color temperature and white balance.*
> *Display* *settings: Change sharpness and screen resolution.*
> *Audio* *settings: Manipulate the time offset between the picture and sound track (audio latency) or adjust the equalizer.*
> *Diagnostic* *tools: Run diagnostic programs or perform self-tests to detect faults with the speakers, connections, or display.*
> *Tuner* *settings: Make in-depth system settings on the TV tuner by manipulating signal amplification, adjusting search parameters, or making tweaks to frequency bands.*
> *Network* *settings: Set LAN and Wi-Fi connections, change the network configuration, or perform network diagnostics.*
> *Energy* *options: Tweak energy consumption settings during operation and standby mode behavior.*
> *Device* *settings: Reset to factory settings or lock certain features.*
> *Developer* *options: These settings are usually of little importance to end users. Developers may find these settings useful to test different features for compatibility or performance.*

https://www.pcworld.com/article/2420976/unlock-the-hidden-menu-on-your-tv-with-this-secret-button-combo.html

SAMSUNG, 7 Years of Updates

The newest smartphones and TVs will get software updates for the next seven years. That doesn't mean these Samsung devices will no longer work after seven years. Just that they will receive the latest updates, then no more updates, just like computer operating systems.
[-No mention regarding the service life of Samsung refrigerators or washing machines.]
https://arstechnica.com/gadgets/2024/08/samsung-tvs-will-get-7-years-of-updates-starting-with-2023-models/

The Forever Bike Battery

Claims of 90% compatibility with current e-bikes may be true, for this start-up. That does not necessarily mean full portability between different bike designs, but it does mean the battery you "make" for your bike is user fixable, with respect to electronics and easily replaceable battery cells. Each order is shaped to match the physical space available for designing a battery unique to your bike, and with enough power to match demand. Furthermore, the battery case is fireproof, in the unlikely event that a lithium fire should start.
https://www.gouach.com/

"FLOORP" -the new browser!!

What kind of a word is that—**Floorp**? I believe it was created by its Japanese developers.
[After all, two vowels, sandwiched between double consonants, is pronounceable.]

This newest browser is much better than its name suggests! It is based on Firefox and Vivaldi, with lots of new, added, features, and many more add-ons that are customizable. **Floorp** is secure; it includes an integrated note taker and an active 'web-within-a-web' window.

Features

Strong Tracking Protection

By default, Floorp includes a robust tracking blocker, protecting users from a variety of malicious trackers lurking on the web. Additionally, it provides fingerprinting protection.

Flexible Layout

Floorp's layout customization is unlimited. Move the tab bar to the bottom of the window, hide the title bar, and more. Create your own Floorp.

Customizable Design

In addition to the usual Firefox theme customization, Floorp allows you to switch between five different interface designs, including OS-specific themes.

Regular Updates

Floorp is based on Firefox ESR. Floorp will be updated every 4 weeks, with security updates provided before each Firefox release.

No User Tracking

We don't collect personal information from users. We don't track users. We don't sell user data. We have no affiliation with any advertising companies.

Powered by Open Source

Floorp's source code is entirely open, allowing anyone to view it and contribute to the project. Not only is the browser itself open source, but the build environment is as well.

https://floorp.app/en

"Something has gone seriously wrong." – Linux Dual Boot

A recent MS Windows software upgrade has caused dual boot Linux systems to NOT boot (into Linux). Microsoft has known about this breach of its own secure boot sequence for a couple of years. The solution has not been found, yet a work around is described in an article, which, unfortunately, makes Windows less secure.
[My solution, on older hardware (with spinning drives, or SATA SSD) is to install each OS on a different drive. Then plug in the SATA cable for only the drive with the desired OS, when needed. Call it the "manual dual boot" system.]
https://arstechnica.com/security/2024/08/a-patch-microsoft-spent-2-years-preparing-is-making-a-mess-for-some-linux-users/

Over-gadgeting in new cars

Although buyers of new cars have come to expect a plethora of advanced driving aids, like:- park/drive-by-wire, lane drift avoidance, electric steering/braking to control skids and crashes, lots of air bags, infotainment screens, heated/powered seats/windows/roofs/locks, remote/key-less starting, econo mode, tire monitoring, rain sensing wiper, auto lighting and auto hi/low-beams—adding them increases not only the purchase price but the cost to fix them. Many drivers seldom use a significant number of these features.
https://arstechnica.com/cars/2024/08/ai-good-passenger-infotainment-screens-bad-says-car-technology-survey/

Raspberry Pi 5

Tom's Hardware provides the latest, partial specs for the Pi 5, including some details about its "**dark silicone**", that are sections of the CPU's die circuitry eliminated or replaces by simpler designs. The Pi 5 is a 2GB computer (or 4GB, or 8GB), with better heat dissipation and lower power requirements. The reviewer suggests this model would make a good base for a home server.
https://www.tomshardware.com/raspberry-pi/raspberry-pi-5-2gb-delid-uncovers-dark-silicon-and-improved-power-performance

IBM's Tellus II Processor

Intended for installation in mainframe computers—to aid fraud detection through AI on-a-chip enhancements—it has some impressive stats, among them, 43 billion transistors and 24 trillion operations per second.
https://www.tomshardware.com/pc-components/cpus/ibm-intros-telum-ii-processor-55ghz-chip-with-onboard-dpu-claimed-to-be-up-to-70-faster

Windows Downdate

This is not something you want on your computer. Yet, there is no way to know if this Python script has taken away the ability to install the latest security patches from Microsoft. The after effect is that Windows 10/11 and Server becomes open to older attack methods. Microsoft recommends a defence by configuring the "**Audit Object Access**" settings to monitor and identify exploitation attempts.
https://www.bleepingcomputer.com/news/microsoft/windows-downdate-tool-lets-you-unpatch-windows-systems/

Wired Magazine Explores AI Hardening

Hardening refers to resistance to things like misinformation, rudeness, deepfakes, and propensity to design weapons of mass destruction. *(Cheating on exams is already a lost cause.)* Some AI companies publish compliance rules that are more cautious than those coming from government. Researchers are constantly probing large language models for weaknesses.
https://link.wired.com/public/36419759

128TB PCIe Storage

Should you wish to own 'Massive Desktop Storage' with a 28GB/sec transfer rate, at the very reasonable price of $26,000USD, go for it. A 64TB version sells for $10,000USD. This highest capacity storage is attained by inserting 16 8TB SSD cards into 16 air cooled slots.
Since no mention was made about redundancy, it might be wise to buy two of them, just to be on the safe side.
https://www.tweaktown.com/news/100220/highpoints-new-128tb-gen4-aic-card-has-16-sabrent-rocket-4-plus-8tb-ssds-costs-25-999/index.html

Ruggedized, Portable Computers

Some of these portable computers (essentially, computers/servers with many screens and lots of storage) are weighty enough, at 35 or more pounds, to require a luggage handle. The tech specs, for both military and retail users, are of the latest and best variety, yet pricing requires contact with the German sales department. A storage capacity of 80TB is provided on military server versions.
[The Road Runner 'toon character might have ordered this ACME product, since he appears to have no budget limitations.]
https://acmeportable.com/

NotePAC III Lite

CNE 2024 Intel Sponsored

Although **The Ex** will have ended by publications date, this year's Enercare Centre Great Hall hosted a huge Intel sponsored retro gaming area, equipped with old CRT sets and Arcade machines, as well as banks of the newest streaming games. It also featured Canadian game developers, who showed-off their latest creations in a contested environment. A few high school robotics teams showed up as well. One Lego Robotics floor space was opened to young children, learning simplified, on-the-spot programming. This was a popular, and well attended area of the **CNE**.
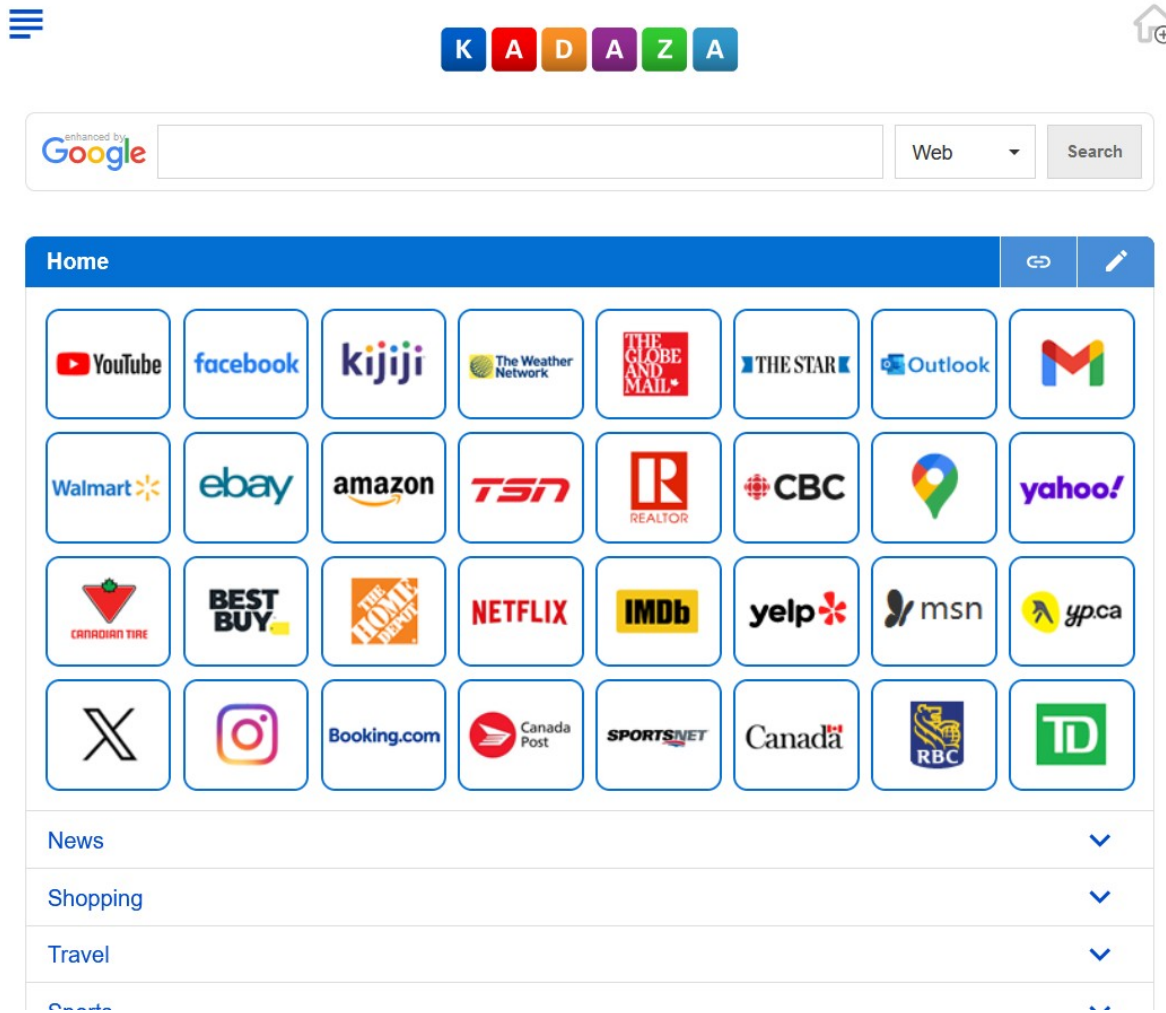
GPU Optical Connection

GPUs are becoming to fast and powerful that they cannot accept data at their full AI potential. A direct optical (fibre) connection would solve this problem. Tests show a bi-directional data rate of 800GB/sec, for a total transfer rate of 1.6TB/sec.
https://www.techspot.com/news/104495-broadcom-working-integrate-optical-connectivity-directly-gpus.html

GIGABYTE X870 EAGLE Wi-Fi 7 Motherboard

This is a newly added model in the **AMD Ryzen Zen 5 9000 Series**. Canada Computers will be the first to sell them in Canada, but no price has been given by Gigabyte, or CC, yet.

https://www.gigabyte.com/ca/Motherboard/X870-EAGLE-WIFI7#kf

Vulnerable Undersea Trunks

We tend not to think about just how numerous and essential undersea cables and pipes are. Some deliver fuel or electrical power, while others make communications between far flung countries possible. If an adversary were to destroy any of these, turmoil would ensue. That's why NATO is taking the matter seriously – creating workarounds for internet trunk lines in particular.
https://www.techspot.com/news/104501-russia-could-target-undersea-cables-gps-cripple-western.html

Can AI Improve by Teaching?

That is the question that a Microsoft researcher is trying to answer. As the old saying goes, "You don't really know it, until you can teach it." Large Language Models may be able to improve themselves, in particular areas of knowledge, without diving back into a huge pool of data to do so. In other words, some more powerful models teach many smaller models, similar to a students taught by one teacher. The results may indicate improved learning in both.
Can LLMs Learn by Teaching? A Preliminary Study - Microsoft Research

Google Research

Google focuses a lot on human languages... translations between them, natural voices, and grammatical structures. Another important area for both Microsoft and Google is **Health**.
Both are getting better at analyzing CatScans and other visual signs of illness. Google researchers are also listening for signs of health problems, by analyzing sounds. Coughing, by those who may be ill, or about to be sicker, is being recorded for digital signature clues to various illnesses. In fact, just a change in voice or breathing can lead to a diagnosis, long before other indicators show up.
https://blog.google/technology/health/ai-model-cough-disease-detection/

KADAZA.CA

In the early days of the Internet, before maturation of powerful search engines and AI inputs, users often created their own home page set of organized links, once they had gained a grasp of HTML web page coding.

Kadaza has provided a similar, enhanced, service since 2008, and supports quick links to Canada's most visited sites (with clickable, site specific, logos), along with a lot more commonly visited sites, in well organized drop down menus, illustrated with 23 more screens of linked logos. If you make Kadaza your homepage, you can add more categories, and more quick links, as well as themed background appearance changes.

The Kadaza homepage also feature a Google search field, even if you have chosen a different search client; but Settings allows that to change as well. Clicking on the top left '*hamburger*' brings up a virtual keyboard. The Edge browser offers to "*Personalize Your Feeds*", resulting in some of the same 'quick link' effects.
https://www.kadaza.ca/

DPCUC President's Notes   by Peter Camilleri

Way back in 2019, when we still had in-person meetings, I did a presentation about the use of the github repository for content creators. Recently, I came across a very useful resource for those involved in creating content. It is the Awesome Design repository. It is a curated list of useful resources including stock images, icons, logos, fonts, and more, plus a lot of links to discussions, advice, tutorials, and even books.

If you are ever interested in creating, I can recommend:

Awesome Design
https://github.com/gztchan/awesome-design

Secondly, in just over a year, Microsoft will abandon Window 10. Many of us cannot use the official upgrade path to Windows 11 and to be honest, the flaws in that operating system make such an upgrade questionable. I suspect that the club will be taking a closer look at this issue, but in the meantime, Linux remains a strong contender. I do recall that we discussed this web site before, but I present it here again:

Linux Distro Chooser
https://distrochooser.de/

Thirdly, I still remember my first hard drive with a capacity of 16 megabytes. I remember thinking just how vast it seemed to me. Recently, I came across a video about a 16 terabyte hard drive. Equivalent to about a million of my first hard drives. If interested, here is the video or just search YouTube for the title:

16TB Toshiba HDD Upgrade

https://youtu.be/9Zq6e5og4Bc?si=pVVaesFnCZUpISU

Finally, a sad reminder. Please pray for peace in Gaza and Ukraine.

Peter Camilleri, President DPCUC.

Linux in the News   by Alex Morrison

Armbian 24.8 Released With Linux Kernel 6.10, Expanded Desktop Options

Armbian 24.8 comes three months after Armbian 24.5 and introduces enhanced stability for RK3588 hardware with the latest bootloader upgrades, smoother visuals with 4K60p video acceleration for KDE Plasma and GNOME images, and full support for the BigTreeTech CB1 IO board for your 3D printing projects.

Nitrux 3.6.1 Immutable and Systemd-Free Distro Improves Language Support

Still powered by a Liquorix-flavored Linux 6.9 kernel, Nitrux 3.6.1 looks like a small release that mainly adds support for additional languages, including Ukrainian, Georgian, Korean, Kurdish, Romanian, Slovak, Slovenian, Albanian, Serbian, Swedish, Turkish, Catalan, Tatar Crimean, Czech, Welsh, Danish, Greek Modern, Estonian, Persian, Finnish, Irish Gaelic, and Hindi.

Mozilla Firefox 130 Is Now Available for Download, Here's What's New

Mozilla Firefox 130 open-source web browser is now available for download wtih various new features and improvements. Here's what's new!

Debian 12.7 "Bookworm" Released with 55 Security Updates and 51 Bug Fixes

Debian 12.7 is now available for download as the latest release of the Debian Bookworm operating system series with 51 bug fixes and 55 security updates.

Wireshark 4.4 Released with Automatic Profile Switching, Many Improvements

Wireshark 4.4 open-source network protocol analyzer is now available to download with improved graphing dialogs, automatic profile switching, improved display filter support, and more.

Linux – Is it time to switch to Linux?

Microsoft End of Life Times

Windows 7

After 10 Years security updates and technical support for Windows 7 ended on Jan 14 2020

Windows 8.1

As of Jan 10 2023 Microsoft no longer provides security updates or technical support for Windows 8.1

Windows 10

As of Oct 14 2025 Microsoft will no longer provide security updates or technical support for Windows 10

You can update to Windows 11 if the PC you use meets the necessary Windows 11 requirements.

Many PCs that are still working well and would work for a few more years that do not meet Windows 11 requirements are prime candidates for running a Linux system.

Many users who do not want Windows 11 or who purchased a new PC that had Windows 11 preinstalled but found it not to their liking are also able to run a Linux system.

Most Linux systems can be run from a Live USB or a Live DVD without affecting the installed Windows system.

A few tools that are free to use to make a live Linux system USB are Rufus, Etcher, Unetbootin and my favourite Ventoy.

A USB of 4 Gig or larger should be used.

With Ventoy a slightly larger USB is best as Ventoy allows you to make a multiboot USB.

You install Ventoy to the USB then just copy as many Linux ISO images as you want to test to the key.

When you boot from a Ventoy USB a menu appears listing all the ISO images on the key. Just select an image and it boots.

When you test with a live USB you will find out if the WiFi will work,if video works and sound works all before installing Linux.

Youtube has many videos explaining how to use any of the options listed above.

Questions about Live USBs or installing a Linux system can be answered at any of the Linux meetings. All are welcome!!! Contact me for a Zoom link

Sudoku   Sept 2024   by Alex Morrison

EASY

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

HARD

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.
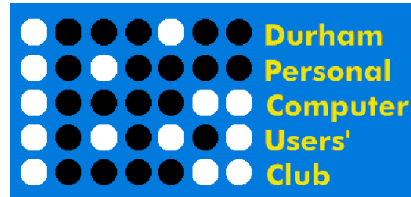
Special Interest Groups

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/

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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.