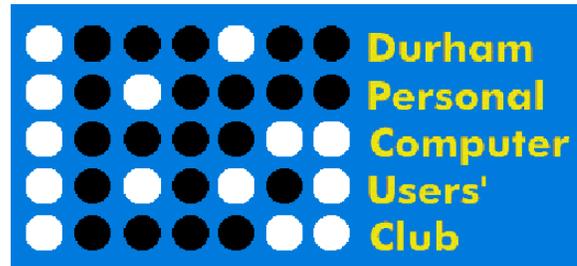


July 2019

PC MONITOR

Durham Personal Computer Users' Club Newsletter



June Prize List

Lloyd Lindsay \$9.00
Alex Morrison \$5.00

Prize List will return in July. Save your June tickets!

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

Linux vs Windows vs Mac

By Alex Morrison, John McRae
Mark Hunter

Faith United Church at 1778 Nash Road, Courtice

Thursday, July 11, 2019 7:00PM

FYI

- By Dan Delong

Swann Security

Your insurance company may thank you, if you install a home monitoring device. However, the expense involved (\$200 to \$300, or more) and complexity of some installs might be a downer, even though being able to see a potential intruder, in the act, while away on vacation, would be highly beneficial. As an added bonus, some set-ups can also monitor audio, and send loud warnings to the bad guys. **Swann** sells many devices in Canada, through a number of well-known retailers. One of their most desirable U.S. products seems easy, for self-installation. If you already have automatic outdoor lights, it replaces the lights, along with a movement sensor in the camera. When the camera sees humans prowling around, it turns on the lights and starts recording video. Since Wi-Fi transmission of video is an option, real-time watching on your computer, or phone, can be performed from anywhere. Here's a link to comparisons of Swann security options: - <https://www.swann.com/blog/compare/> .

5G Wireless – a Big Deal

When 5G comes to Canada, in 2020, phone data speeds 20 times faster than current 4G will attract a lot of users, especially those who cannot get decent Wi-Fi service at their current urban location. Before 5G can happen here, the frequency band used will need to be re-auctioned by the government. Furthermore, cell phone manufacturers will need to include special, proprietary, circuitry in their devices. I believe all the activity we see currently in our area, installing fibre, may also be in preparation for low power 5G transmitters (which will become more numerous and closer together than current Wi-Fi transmitters). No 5G phones are currently available here, because the service is not yet active, or even close to being active. Yet many people (in Canada and the US) believe it exists, both as a service and as an upgrade to their phones. Consumer Reports listed only one provider, Sprint, as offering some test locations for 5G in sections of four major south-eastern US cities. Unfortunately, AT&T has used the term “5G Evolution” to suggest (and sell) an active service that does not really exist. Another hitch in this matter... Huawei owns so many 5G patents that, along with mistrust over the Chinese government’s influence over the company, competitors will need to find alternatives to these patent claims. *[Just off the press: - Lenovo, another Chinese company, has just announced its first 5G phone (12GB RAM, 512GB storage and 4 cameras).]* <https://www.androidheadlines.com/2019/06/analysis-american-5g-support-mobile-misunderstandings.html> *[Just off the press again: - Trump, “the president with a big brain” has removed the Huawei ban, more out of concern for the loss of business to US companies due to Huawei’s ‘monopoly’, than from concern for national security.]*



Volkswagen Goes Electric



The years 2020 and 2022 are not that far off. “Twenty-twenty-two” is when the all-electric ‘Vanagon’, or **I.D. Buzz** will finally be in production. I recently watched a 30 minute video (*not the one at the link blow*) of the prototype on trials in California, along with three other, smaller, I.D.s from Volkswagen. [*I.D. appears to be code for this new electric line of vehicles.*] This company was serious when it recently announced the move to a full line of electric vehicles, all of which will eventually be self-driving models, by 2025. North American makers, GM, Ford, and Chrysler, as well as the Asians, must also have their own approaches to this same end. However, the I.D. Buzz’s yellow/white paint combo is a nod to the 60s many Volkswagen vans, so popular (and, now, expensive) with surfer dudes. Hence, buyers may not care if this model also carries a premium price. **Tesla, watch out!**

<https://www.vwmodels.ca/conceptcars/electric>

Passports and Drivers Licences join phone banking

You might as well give up on privacy when ‘everything’ is going digital. The government already has your documents in digital form, so why can’t you have them on your phone? Some states are giving [drivers licenses](#) over to users, as a trial. Canada will be putting some passports on phones in 2019... again, as a trial. I assume, at some point, this will become mandatory for travellers. Canadian passports already store the data in a chip located somewhere in/on current paper passports. Another 2020 Canada/Netherlands trial will allow travellers to show their phone and hop on a plane without a ticket or a passport. Paperless is good. Privacy is hopeless.



<https://www.narcity.com/news/ca/on/toronto/toronto-pearson-airpot-launches-paperless-international-travel-for-the-first-time-ever>

Artificial Intelligence and Ethics

This link (*below*) provides an overview of current thinking with respect to national policies regarding potential harm from artificial intelligences. I believe it was Isaac Asimov who, in the 1950s, suggested the prime directives for an android should be these three simple laws: - **Law 1.** Thou shalt not harm a human being; **Law 2.** Thou shalt obey a human being, as long as not breaking the first law; **Law 3.** Look after yourself, as long as not breaking Laws 1 or 2. Of course these laws assume robots will have gained sentience, or self-awareness. Currently, A.I. is restricted to helping humans and, as such, they are non-sentient, rather benign, assistants. Already, deep learning algorithms make real-world decisions for us, and then act upon them, as in A.I.’s use for instant translations, appointment reminders, autonomous driving, and information searches (Siri, for example). However, self-driving car developers are in a quandary concerning deadly behavioural decisions. For example, what should a car on a collision course, with a pedestrian, do? Should it save the passenger(s) in the car, or the pedestrian(s), assuming it is facing a no-win situation? Governments are now concerned about losing their national sovereignty through lack of security of vital information handled by A.I. (among many other potential problems). Each nation aims to develop codes of ethics, while at the same time financing A.I. research, to the tune of 2 billion for S. Korea, 21 million for Canada, and zero dollars by the United States (*Although they are redirecting current scientific funding to A.I.*).



<https://blog.seagate.com/human/how-will-we-make-sure-ai-is-ethical/>

Seagate 16GB 3.5 inch drives

We can't buy the EXOS X16, but server farms and governments can. These drives are special, not only in using a new density improving combo (light/magnetic) recording head, in combination with helium, but in being certified for cryptographic work. [<https://blog.seagate.com/craftsman-ship/hamr-milestone-seagate-achieves-16tb-capacity-on-internal-hamr-test-units/>] For folks like us, there is the Iron Wolf Pro 16 for NAS boxes, with a 250MB/sec data rate. I could not find a retailer in Canada with such drives in stock, but the 12TB version is available for \$600 to \$700, depending on the retailer chosen.



<https://blog.seagate.com/enterprises/seagate-ships-worlds-first-16tb-hdd-for-datacenters-and-raises-bar-for-nas-drives/>

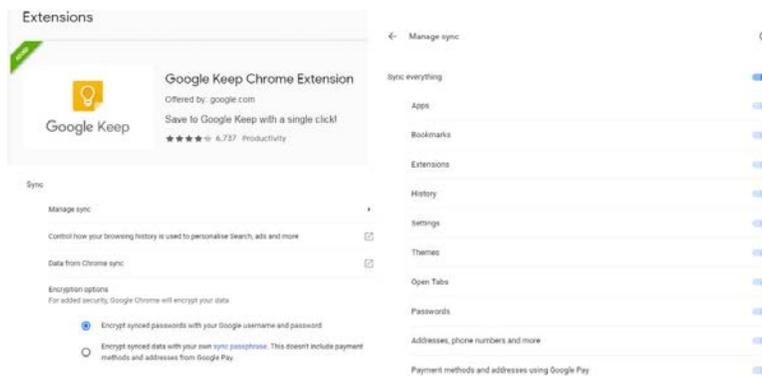
Broadcom – too invasive?

If it's wireless, it is likely "*Broadcom Inside*". Chips from Broadcom, originally a Singapore business, are now in so many devices that the FTC, and others, have become concerned, as with worries about Huawei, i.e.; - concerned about the company's independence from the Chinese, and the possible installation of malware by the Chinese government. To make matters worse, Broadcom has put forth an offer to be bought by Qualcomm. That would be the nail in the coffin, breaking our trust any wireless device on the market, by basically leaving only one supplier of such circuitry. This purchase could end badly for consumers and governments, eventually allowing the migration of malware into ALL devices. Maybe Marshall McLuhan was right, in long ago predicting that the next war would be fought with technology. [*I could not find the exact quotation online, or in comments about his book, "War and Peace in the Global Village"*]



<https://gizmodo.com/broadcoms-tech-is-in-nearly-all-your-gadgets-heres-why-1835938208>

Google Keep

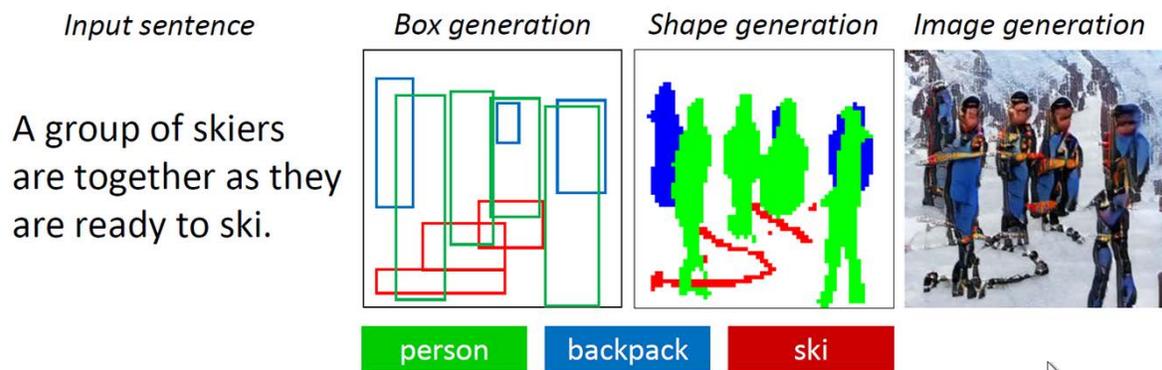


While reading an article concerning the advantages of "**dark mode**" – mainly battery saving for my phone – I came across mention of this feature now being enabled in **Google Keep**. I had not yet installed Keep, but decided to do so, based on recommendations and a review of its features. When I installed Keep on my Android 7 phone, all went well, including a refresh that automatically turned on dark mode. **Keep** can be used for so many things – notes (typed or spoken), camera shots, web/screen shots, snippets, text grabs, access to all photos, and more. When Keep is also installed on a computer, (using the Chrome browser and logged in with your same account on all devices, such as the aforementioned phone), Keep can synchronize content with any other apps you've given permission to. Just be careful here; maybe go through all the [custom settings](#) before letting Chrome use its defaults for [syncing](#) and sharing.

<https://android.gadgethacks.com/how-to/enable-dark-mode-google-keep-0199611/>

[NOTE: I seldom use Chrome, but during this operation I noticed a message, "Managed by your organization". This Chrome browser automatically logs into an account I use for the Computer Club, but I think the organization referred to here must be Google itself. For when I typed "**chrome://policy**" into the search bar, the screen showed a whole bunch of banned cookie URLs and JavaScript blocks. It didn't matter if I switched to a personal account.]

Drawing Bots – Duke it Out!



A picture is worth a thousand words; that’s why we use them. And, computers can now handle them so well. But, how can you ‘tell’ a computer to draw a scene, or create related scenes (like panels in a comic book), and do so by inputting far fewer than one thousand words into the computer? Microsoft Research is getting there. The results, while less than perfect, are impressive. This success came about by pitting two artificial intelligences against on another. One A.I. is tasked with making the images, while the other is tasked with judging whether or not those attempts are ‘good enough’. If not good enough, this second A.I. sends it back, with a ‘request’ for a redo. I believe the redo might also allow modifications to the original instructions, like the names of objects, their colours and positions in the composition, as well as further modifiers to enhance realism. Here’s the original idea for drawing this group of skiers (above): - “a group of skiers, standing together, as they get ready to ski”. Added to this were ideas for backpacks, blue clothing, skis on feet, pink scarves, and a white background with rocks showing. Okay, it’s a work in progress! Eventually, the recipe for a perfectly realistic drawing may be found. Here is a story example (below): -

Story Visualization



<https://www.microsoft.com/en-us/research/blog/a-picture-from-a-dozen-words-a-drawing-bot-for-realizing-everyday-scenes-and-even-stories/>

Facebook – how it tracks

You may feel that Facebook has an ear on your spoken words when it shows an uncanny ability to target personalized ads to you in almost real time. But no, Facebook is not listening to your speech. Instead, it watches everything else you do... where you go, what you text, what you like, your friends, your group interactions, your location, your payments, your log-ins, your Instagram activity, your photos... This is why the ads served up are so immediate and so targeted to your activities, and to activities of those close to us, who may have similar interests and purchasing habits. But, what if Facebook tracks your involvement with a medical specialist, or an alcohol or drug rehab facility? Will you become victim of unscrupulous product sellers? The article also mentions a new service coming out in the US next month that prevents most such tracking (for \$10 USD/mnth).



<https://www.thestar.com/business/technology/2019/06/27/facebook-isnt-listening-to-you-but-through-tracking-what-you-do-it-can-serve-up-ads-like-it-is.html>

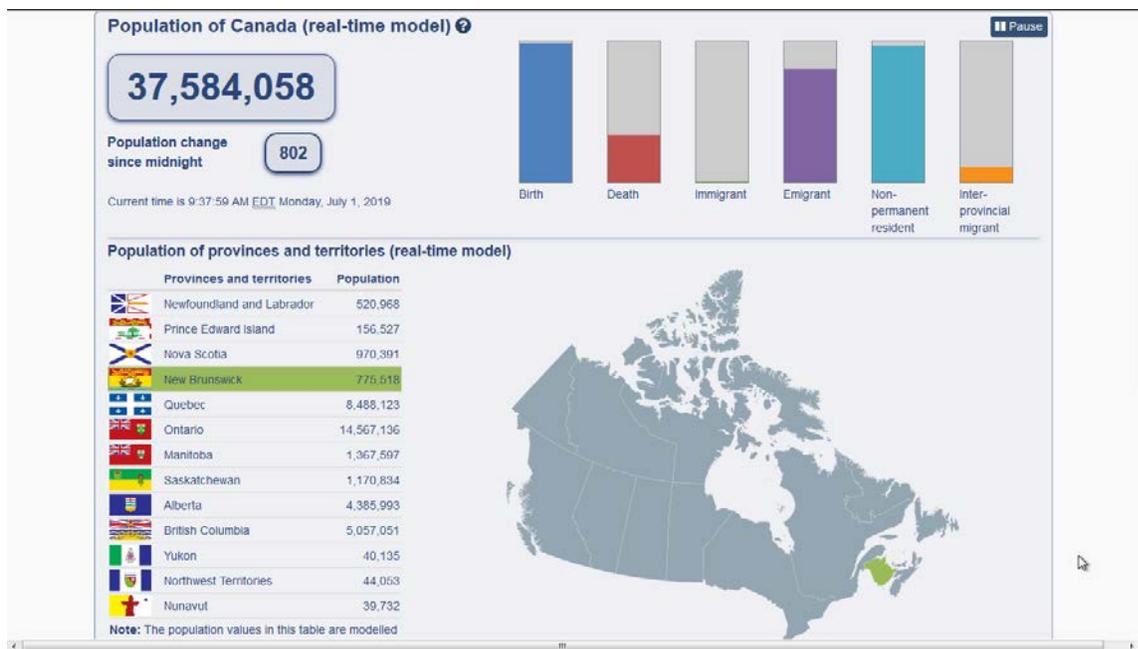
Digital Tip Jar

Musicians are having a hard time making a living. Many talented and deserving people simply cannot make a go of it, whether busking, placing tracks online, or being paid enough by bar owners. Austin, Texas is almost a Mecca for musician, where the competition for a liveable wage is fierce. To help increase revenue, Austin has created a digital payment method, **“Tip the Band”**. I’m not clear on how much would be deducted from a credit or debit card slipped into this device – maybe it varies. Another report refers to a different method for tipping with PayPal and a phone. The artists display a personalized Q code, which is scanned by the tipper, who is then sent to a web page, to make a donation.

<https://austintexas.gov/news/city-austin-launch-digital-tipping-grant-program-local-musicians>



Canada- Live Population Visualization



Our tax dollars are at work here. For about the last year, Statistics Canada has displayed a close estimate of our changing population: - births, deaths, immigrants, emigrants, non-permanent residents, and inter-provincial migrants. This screen shot was captured in the morning of Canada Day 2019. The highlighted green (on New Brunswick) indicates a new immigrant to that province. A moment later the graph lit up to indicate a death in both Alberta and Quebec. Since such actions are based on statistically accurate predictions, the algorithm must be recalibrated every 3 months.

<https://www150.statcan.gc.ca/n1/pub/71-607-x/71-607-x2018005-eng.htm>

Sudoku

May 2019

by Alex Morrison



A Trio of Puzzles again this month – Enjoy

EASY

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

Sudoku

The game boards on this page were produced using **Sudokuki** on PCLinuxOS 64 Bit running KDE 5 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

MEDIUM

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

HARD

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

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>

Linux in the News

by Alex Morrison



From: <http://lxe.com/> & <http://www.linuxtoday.com/> & <http://www.linuxinsider.com/>
<http://www.topix.com/tech/linux> <https://fossbytes.com/>

[Escuelas Linux Is Much More Than an Enlightened Linux Retread](#)

June 28, 2019

Escuelas Linux caught me by surprise. This Linux distro is a prime example of how a programmer can take an open source operating system that matches his own developmental strategy and turn it into a much different product with an identical look and feel. What makes the surprise so appealing is how effectively one distro becomes another while both continue to coexist equally. Developer Alejandro Díaz integrated his own features to create a new distro without rebranding what he borrowed. Linux distros share a lot of give and take. [\[More...\]](#)

11 Reasons You Should Learn to Use Linux

- Make Tech Easier; By Alexander Fox (Posted by [damien](#) on Jul 2, 2019 3:18 PM EDT)
- Groups: [Linux](#); Story Type: [News Story](#)

You have probably heard of Linux. What makes Linux so great? Here are the 11 things that make Linux an important tool for serious computer users.

- [Full story](#)
- [Read more](#)
- [0 threads and 0 posts](#)

It's prime, it's magic, and it's memorable - Mageia 7's out

- Mageia.org; By Donald Stewart (Posted by [schultz](#) on Jul 2, 2019 4:09 AM EDT)
- Groups: [Community](#), [Mageia](#)

Everyone at Mageia is very happy to announce the release of Mageia 7. We all hope that the release works as well for you as it has during our testing and development. There are lots of new features, exciting updates, and new versions of your favorite programs, as well as support for very recent hardware.

- [Full story](#)
- [Read more](#)
- [0 threads and 0 posts](#)

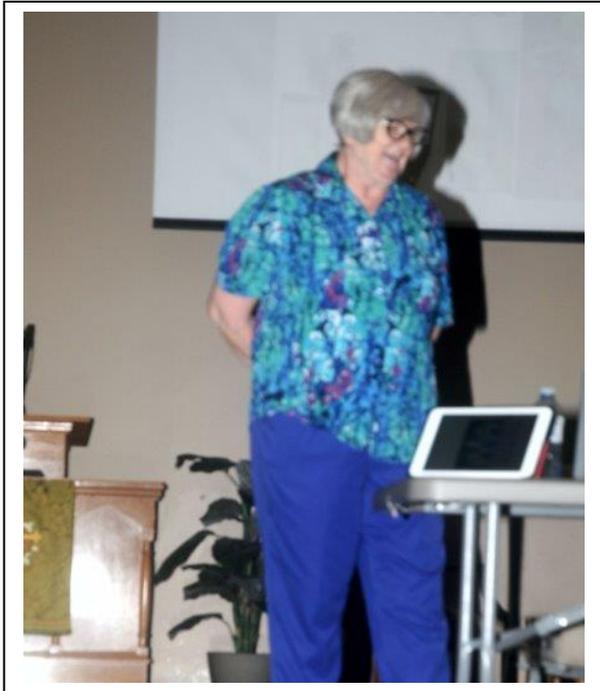
[How to Find My DNS Server IP Address in Linux](#)

(Jul 01, 2019, 05:00) ([0 talkbacks](#))

Do you know what your DNS address is?

Presentation Photos

by Farny LeGresley



In June we had an excellent presentation by Nancy Trimble aided by Dan DeLong [When he arrived!]

The Topic

Genealogy and Modern Technology

Linux – A Free VPN

by Alex Morrison



What is a VPN?

A VPN is a Virtual Private Network.

A Microsoft employee named Gurdeep Sing-Paul invented PPTP [a point to point tunnelling protocol] in 1996. PPTP was a way to connect home PC's securely to the work environment. This was an important step leading to modern VPN's.

VPN's allow us to securely connect to the office environment and to browse the internet securely and anonymously. VPN's help combat censorship, government surveillance and tracking by your own ISP.

The best paid services in Canada are listed here

<https://www.top10vpn.com/best-vpn-for-canada/>

Enough history!

Now I will show you how to set up a free VPN connection on your home PC using OpenVPN and VPNBook.

This quote is from the vpnbook website

"VPNBook is a Free VPN (Virtual Private Network) server designed with the latest technologies and most advanced cryptographic techniques to keep you safe on the internet from prying eyes and hackers. The VPN securely routes all your internet traffic through an encrypted tunnel to bypass government censorship, defeat corporate surveillance and monitoring by your ISP. VPNBook strives to keep the internet a safe and free place by providing free and secure PPTP and OpenVPN service access for everyone."

This set of steps is how to install VPN on PCLinux. [Very similar on other Linux systems and Windows]

1: First we need to install openvpn using synaptic [or the package manager on your system]. Windows users can google search how to install on Windows.

2: Open your browser and go to <http://www.vpnbook.com/freevpn>

3: Download one of their certificate bundles. I will pick something to browse the web so I will select the US OpenVPN Certificate Bundle ->

<http://www.vpnbook.com/free-openvpn-account/VPNBook.com-OpenVPN-US1.zip>

4: Now I need to unzip/extract the files. I open my file manager and unzip/extract the zip file "VPNBook.com-OpenVPN-US1.zip" in my Downloads folder.

5: 4 files appear after unzipping/extracting the zip file. I will use one of the extracted files 'vpnbook-us1-tcp80.ovpn'.

6: Note that the username and password at time of writing this article are shown on the website below the bundle info. Currently username = vpnbook, password = sEN6DC9

7: Open a konsole and type su and press enter, the type your root password and press enter

8 Now type openvpn - - config vpnbook-us1-tcp80.ovpn

You will be asked to type the username [see step 6] and press enter. Then type the password [see step 6] and press enter again.

You are connected as long as the Konsole stays open.

Close your browser if it is open and restart it to be sure you are browsing securely.

To close the VPN service when you are finished press CTRL+c in the Konsole and then close the Konsole.

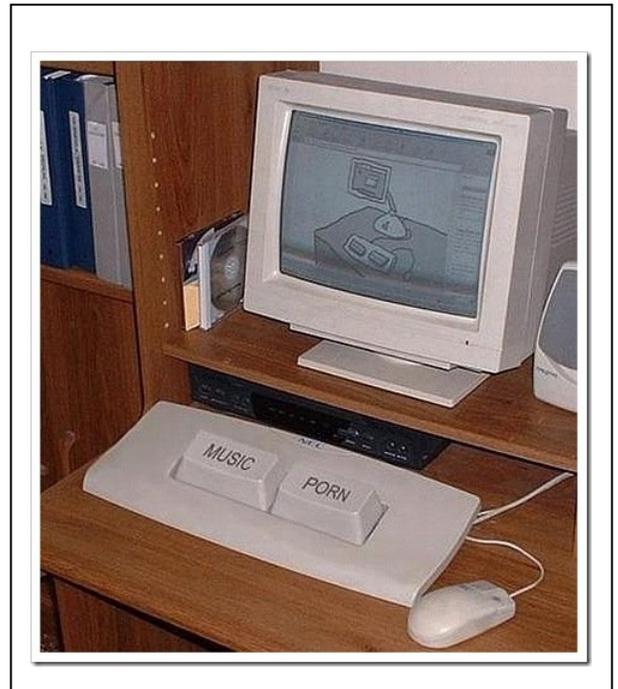
I explained this simple method to connect to a VPN to browse securely. Hope you all find this article interesting.

If you have any questions about VPN's ask at our next Linux meeting.

Private 'Paid' VPN services offer graphical programs for Windows and sometimes for Linux that may be used to connect to a VPN.

Also some routers offer setup for a router connection to a VPN and using that method allows anyone using the router Wired or wirelessly to connect to the VPN just by browsing. No local PC setup is needed.

Computer 'Humour'



Our Computer club needs a little assistance. Our executive is short one member.
The position that is still open is perhaps the easiest to fill. "Publicity/Advertising Director"

You will contact various newspapers or online sites to mention upcoming meetings of the DPCUC. The sites may or may not use the info. Also you can hand out supplied pamphlets about our club to Libraries, Senior Center, or anywhere you think might be interested. Please consider volunteering!

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

Details

BEGINNER

Co-ordinator: Ed Goudge
Location: Call for Location
Telephone: 905-926-9003
Date: 3rd Thursday of month 7:00 PM

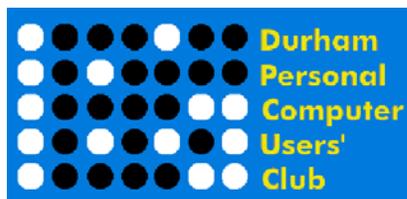
LINUX

Durham Linux User Group

Co-ordinator: Ed Goudge
Location: OSCC 43 John St W
Telephone: 905-926-9003
Date: 1st Thursday of month 7:00 PM

Digital Camera Group

Co-ordinator: Ed Goudge
Location: Call for Location
Telephone: 905-926-9003
Date: 4th Thursday of each month at 7:00PM



**DPCUC
EXECUTIVE**

2019-2020

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

**Newsletter
Information**

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 PMB # 110, 27-1300 King St East,
 Oshawa, ON L1H8J4.
 The PC Monitor cannot be responsible for errors or inaccuracies in the content, although efforts will be made to publish information accurately.

The deadline for articles and information is 10 days following the monthly meeting. Late submissions may not be published due to tight schedules. Submit articles by email to the editor at alexmor@teksavvy.com
 Articles should be submitted in Word Format using Times New Roman as the preferred Font.