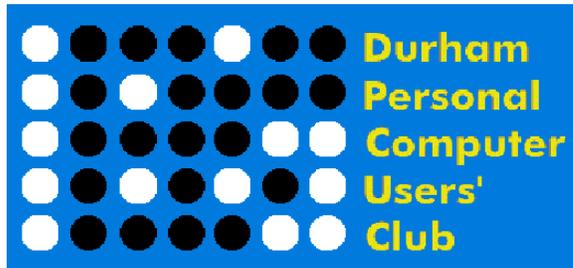


April 2018

PC MONITOR

Durham Personal Computer Users' Club Newsletter



March Prize List

John McRae	\$19.25	Brent Streeter	Coiled Aux Cable
Michael Lintner	\$10.00	Lloyd Lindsay	Magmetic Pick UP
		Edward Goudge	Xacto Knife
		John Alford	Blue Marker
		Glen Goslin	Micro USB Device

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

**VMedia
TV, Internet, Phone**

By Fred Fernbach

Faith United Church at 1778 Nash Road, Courtice

Thursday, April 12 2018 7:00PM

FYI

- By Dan Delong

Firefox – Facebook container extension

Most social media users know their clicks on Facebook are being followed and recorded, in order to deliver targeted ads. Unfortunately, political interests have also used Facebook, to locate and target those individuals most easily swayed by carefully prepared ‘messages’, many of which are out and out lies, thereby, warping the democratic process. A new Firefox ‘*container extension*’ deals with both problems by finding and deleting Facebook cookies, so that your next log-in will be free of old and new tracking efforts by Facebook. [NOTE: - *Clicking on a link found in a Facebook post that leads to a non-Facebook page, it will still load normally.*] However, if you are the manager/administrator of a group or page, you may not be able to carry out normal edits while inside the Firefox ‘**container tab**’. To do so, you’d need to go back to a regular login tab, either on the same computer or a different computer.



The **Electronic Frontier Foundation** [EFF](https://www.eff.org/) provides further advice regarding personal data protection for both [Windows](#) and [Android](#) users. <https://blog.mozilla.org/firefox/facebook-container-extension/>

Binary Tattoo will help you to both, discover, and control, your digital identity (for a price). – But also provides some free advice and cheat sheets. <http://www.binarytattoo.com/teachme/>

Battery Trouble

While trouble shooting a failed internal Acer Aspire laptop battery recently, I came across lots of good and bad advice for fixing, renewing, refreshing, recalibrating, monitoring and replacing it. My first assumption (and the safest) – **Replacement** – may have been a \$62 mistake, even though the battery icon indicated, “*Battery not installed*” (with a red **X**). The replacement battery charged to 89% and stopped. The computer ran on that charge for many hours, and turned itself off - nevermore to charge again. “*Try a BIOS update*”, suggested some, “*because this problem starts after a Win10 update*”. **No can do!** The battery must have a 30% charge, before any BIOS updater attempt is allowed. Little did I know, at the time, that a little pin-hole on the bottom of the computer was for causing a 4-5 second push to disconnect the battery (with power unplugged), followed by a 5 minute wait before re-inserting the power supply. That was supposed to somehow reset the charge cycle. **Again, no Luck!** (In any case, the battery had been removed and replaced, which is effectively the same operation.) Then, a trouble shooting site suggested the replacement battery had to be “**Acer certified**” **AND** contain certain leading numerals on the battery’s cover, matching exactly. *Well isn’t that special!* I’m stuck now, not wanting to risk even more money on this problem. Although I did learn about a built-in **Windows battery report generator**. It works for those who run it in the command line as admin (Windows key - x). This is the command: `[powercfg/batteryreport]`. The resultant report is a highly detailed log/history of all battery cycles – from inception to now. It stores as an **html file** in the user’s **system32 folder** – *battery-report.html*. This report indicated, once more, that no battery was installed. **And yet, it is installed!** I believe the battery safety software may have turned off any further use of this battery, once voltage had reached a [critical low level](#). This laptop now makes a fine desktop. <https://windowsreport.com/laptop-battery-health-windows-10/>



The Dell XPS 15 9570 is here



Left: DC power in, USB 3 Type-A, HDMI 2.0, Thunderbolt 3, and a 3.5 mm headphone jack.
(Source: Dell)



Right: SD card reader, USB 3 Type A, Battery level indicator, and Noble lock slot. (Source: Dell)

For those interested in the latest and greatest, 4K, gamer-capable laptop, here is an excellent review – starting price is \$1000 USD.

<https://www.notebookcheck.net/The-Dell-XPS-15-9570-is-here-and-is-more-powerful-than-ever.293972.0.html>

MACs - switching from Intel CPUs

In a few years, MACs will return to using custom Apple chips, not Intel. Many PC users switched to Macs equipped with Intel chips, in order to run both operating systems (Windows and/or Linux) on the same machine – using **Parallels** to hold a virtualized Windows/Linux OS. That was over ten years ago. Apple had been working on its own CPU long before the recent Intel vulnerability was found. These new chips will allow both MacOS and iOS to run the same apps.

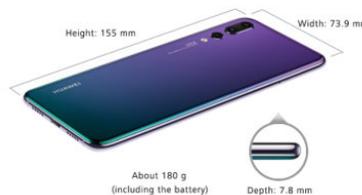
<https://9to5mac.com/2018/04/02/report-apple-to-begin-switch-from-intel-chips-in-macs-by-2020/>



Huawei – Is It A Phone or a Camera?



Width: 73.9 mm | Height: 155 mm | Depth: 7.8 mm | Weight: About 180 g



The camera capabilities of this triple-lens phone are so impressive; you can easily ignore the cell phone aspect. In fact, since Huawei is a mainland Chinese government controlled company; it might be a good idea for users to avoid the phone capabilities entirely. (*Concern over secret back doors and government spying prohibit many Western employees from using Huawei products at all, for work.*) Personally, if this device is cheap enough, I'd replace most of my camera and video equipment with the **P20 Pro**. Why? (And here are only a few reasons.) It can snap a rush photo (*pocket-to-shot*) in about one third of a second, with a double click on the volume button. Videos can record at a rate 960 frames per second, for shooting slow motion. It has tons of AI scene recognition scenarios, for those of us unwilling to learn specialized digi-cam options. Dark scenes are amazing, with an ISO of 51200. For portraiture, facial lighting can simulate many angles, for any desired 3D effect. Visit the link for more.

<https://petapixel.com/2018/03/27/huawei-p20-pro-leica-triple-camera-iso-102400-dxomark-score-of-106/>

AV1 – new video compression

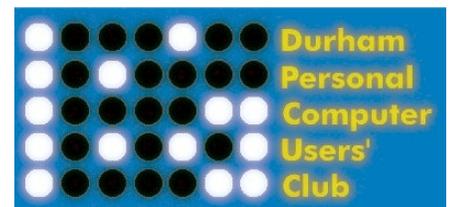


Anything that saves bandwidth, on phones in particular, is appreciated. But, today’s online HD videos use a lot of data, even with current compression algorithms. Yet, **AV1** needs 30 to 40 percent less bandwidth, while maintaining excellent moving picture quality. Not only is AV1 faster, it is open source; therefore, free (according to the Alliance for Open Media). Patents on other methods of compression have hampered universal acceptance. Although currently in beta usage in some Firefox versions, AV1 needs to migrate to apps closely connected to processor circuitry (e.g.; - smart TVs) in order to reach true universality. HEVC (High Efficiency Video Coding), or H.265, the most recent paid for compression algorithm, will likely be replaced with the free AV1 by year 2020 (and also Google’s free VP9 algorithm).

<https://www.cnet.com/news/netflix-youtube-streaming-video-is-about-to-get-a-lot-faster-av1-compression/>

Our Club

A recently circulated message from our president, John Silvestervich, points out an approaching problem with continued smooth operation of our little ‘gem’ of a club – **our once every month opportunity for like-minded technophiles to socialize in real time, and in person.** Although John has most capably kept things running for many years, his ability to donate time to presidential tasks has shrunk considerably, due to his pressing duties at home. If John sticks to his guns, we will soon be rudderless, and at sea. He has already trimmed his duties, as president, to the bare minimum – i.e.; - sending out the executive meeting agenda, chairing/hosting executive meetings once each month, and signing a few cheques. He’s even tried having a remote meeting. Although lacking the face-to-face, social aspect, (and Al’s donuts) this online meeting required only one hour for the main business portion. As long as each person has a connection to the Internet, a computer, a camera, and a microphone (all three are in most laptops and cell phones), participation is possible. *(We found that a set of headphones prevented risk of feedback.)* On an ad-hoc basis, John plans to remain as ‘executive member at large’, and show up when possible. Consider taking on this role, as neither Anne, nor Dan, will be jumping in. *(We can still set up equipment and emcee the monthly general meetings, with the help of other members.)*



DPCUC
durhampc-usersclub.on.ca/

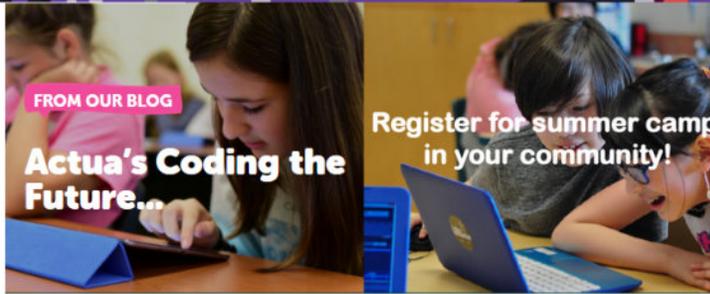
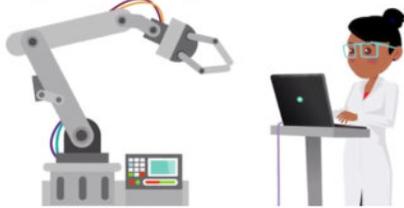
CanCODE for Schools

Our government will teach almost one million kids to code through **CanCODE**

To get the jobs of the future, our kids need to learn **digital skills like coding.**



providing them with the skills and tools they'll need for a **bright future!**



FROM OUR BLOG

Actua's Coding the Future...

Register for summer camp in your community!

CanCODE is a 50 million dollar initiative by the Federal government, to enlist the help of not-for-profits, in order to enhance the learning of programming (coding). Such training would start at Kindergarten and extend to Grade 12, over years 2017-2018; therefore, over half of the money has likely been spent. One example, integrated with universities, is **Actua**, although there are many more...

iPad 9.7 inch – new for 2018



12.9-inch iPad Pro
From \$1049



10.5-inch iPad Pro
From \$869



iPad
From \$429



iPad mini 4
From \$529



Apple claims to have combined services and apps with this latest iPad, which will compete with Chromebooks in schools. Educators pay less, but consumers must pay \$430 CDN for the basic 32 GB iPad (\$600 if with cellular), and \$550 for the 128 GB version (\$719 with cellular). The Apple Pencil will cost another \$130 CDN. Apple is offering impressive administrative management tools for teachers, along with a flow of new learning apps, including a lot of augmented reality lessons.

<https://www.apple.com/ca/shop/buy-ipad/ipad-9-7>

Android Excellence Apps

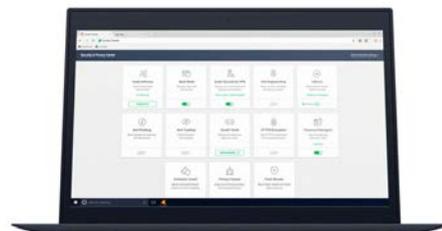


Every few months, some staff members at Google release a list of apps determined (by them) to be of best quality - in the sense that they work flawlessly on the Android platform; they offer fun or utility; and they are free (as far as I can tell). This release has over a dozen new apps and almost as many new games. All are in the Play Store for download.

<https://android-developers.googleblog.com/2018/04/introducing-new-android-excellence-apps.html>

SafeZone Browser is now Avast

This fast and secure, Chromium based browser, claims great speed, security, and privacy, with an additional setting for even more secure banking. Ad blocking allows for faster page loads. Further, each individual security feature can be turned on/off (except for the Antivirus component): - *Bank Mode, Ad block, HTTPS Encryption, Flash Block, Password Mangers, Anti-Phishing, Extension Guard, Secure VPN, Anti-Tracking and Anti-Fingerprinting, Privacy Cleaner, and Stealth Mode.* It seems a video downloader is also included, able to record screen action and audio.



<https://blog.avast.com/take-back-control-of-your-privacy-with-avast-secure-browser-avast>

Smart TVs hacked

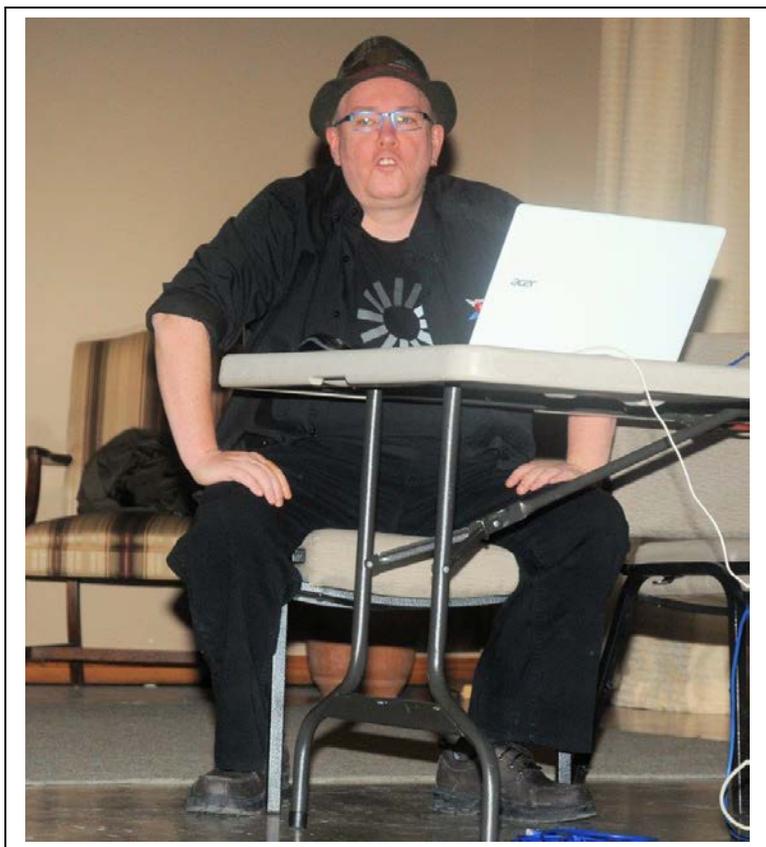


Consumer Reports shows how many smart TVs can get hacked, rather easily, to cause mischief with their operation. The link also shows how to reset the TV to prevent manufacturers from collecting your viewing habits.

<https://www.consumerreports.org/video/view/electronics/news/5727627651001/consumer-reports-finds-tv-security-flaw/>

Presentation Photos

by Farny Le Gresley



Les Shaw



Dan and Les



Sudoku

April 2018

by Alex Morrison



A Tougher Puzzle this month

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

Sudoku

The game board on the left was 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 puzzle send an email to me and I will send you the solution.

Have fun! Alex

Linux in the News

by Alex Morrison



From: <http://laxer.com/> & <http://www.linuxtoday.com/> & <http://www.linuxinsider.com/>
<http://www.topix.com/tech/linux>

[Bluestar Gives Arch Linux a Celestial Glow](#)

April 5, 2018

Using most any Arch Linux distro usually involves balancing the desire for hands-on control of the operating system from scratch against the attraction of convenient installation and maintenance processes. Bluestar Linux is one of the few Arch distros that gets the balancing act right. Bluestar Linux is a GNU/Linux distribution that features up-to-date packages, an impressive range of desktop and multimedia software in the default installation, and a live desktop DVD. The live session capability is one of Bluestar's more enticing qualities. [\[More...\]](#)

[Neptune 5: A Practically Perfect Plasma-Based Distro](#)

ZevenOS' Neptune 5.0, released earlier this month, offers a refreshing take on a classic KDE-based Linux distro. Neptune 5 Refresh replaces version 4.5 and closes a dormant period that had produced no new releases for more than two years. The wait may be worth it for Linux fans who are devoted to the KDE Plasma desktop. Neptune 5 sports an easy-to-use USB installer tool. [\[More...\]](#)

Embedded kiosk systems offer a choice of Kaby Lake, Skylake, and Braswell

Nexcom has launched a line of Linux-ready “Intelligent Kiosk IKS Series” embedded PCs based on Intel 6th Gen, 7th Gen, and Braswell chips with a modular design that offers mini-PCIe and M.2 expansion.

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

Creating Virtual Disks Using Linux Command Line

Linux is indeed a great system with excellent tools at our disposal. There are lots of things that can be achieved using the terminal. One such activity is creating virtual hard drives. Your Linux system should already have the tools required to do this without the need for virtual machine software.

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

Valve Says It's Committed to Make Linux and SteamOS a Great Place for Gaming

Valve has addressed the exaggerated disappearance of the Steam Machines section from the Steam Store that some users noticed last week, confirming Steam Machines, nor SteamOS and Linux support.

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

[New Firefox Extension Builds a Wall Around Facebook](#)

Mozilla has announced Facebook Container, a Firefox browser extension that is designed to segregate users' activity on Facebook from their other Web activity, limiting Facebook's ability to track them and gather personal data. The extension is the culmination of more than two years of research into developing a more private browsing experience, Mozilla said. [\[More...\]](#)

I know a few people who will ignore this month's column as the command line scares some of the readers.

Here is a listing of a few commands and a brief description of how they work.

SOURCE → <https://beebom.com/essential-linux-commands/> [40 commands listed]

Linux Commands For File System Management

1. ls

By default, list the contents of the current directory. If you provide it a path, it will list the contents of that. Useful options to know are `-l` and `-a`, a long list format with more information and show hidden (dot) files, respectively.

2. cat

If given a single file, `cat` prints its contents to the standard output. If you give it more than one file, it will concatenate them, and you can then redirect the output into a new file. Potentially useful is the `-n` option, which numbers the lines.

3. cd

Allows you to go from current directory to specified directory. Calling it without arguments returns you to your home directory. Calling it with two dots (`cd ..`) returns you to a directory "above" the current one, while calling it with a dash (`cd -`) returns you to the previous directory, regardless of where it's located relative to the current one.

4. pwd

Prints your current directory. Useful if your prompt doesn't contain this information, and especially useful in BASH programming for obtaining a reference to the directory in which you're executing the code.

5. mkdir

Create new directories. A handy switch is `-p`, which creates the entire specified structure if it doesn't exist already.

6. file

Tells you the type of a file. Since files in Linux aren't under obligation to have extensions for the system to work (not that having extensions always helps), sometimes it's hard for the user to know what type of file something is, and this little utility solves that problem.

7. cp

Copies files and directories. Since it doesn't copy directories recursively by default, remember to use `-r` or `-a`. The latter preserves mode, ownership and time stamp info in addition to recursively copying.

8. mv

Moves or renames files and directories. Essentially, moving and renaming is one operation – renaming is just "moving" a single file to the same place under a different name.

9. rm

Delete files and directories. Certainly a very useful command to know, as you cannot remove clutter without it. However, beware when using it. Although nowadays you'd really have to work on it to cause some damage to the system, you can still damage yourself – rm doesn't remove files to some imaginary wastebasket from which you can fish them out later when you realize you've made a horrible mistake, and "rm ate my homework" isn't going to convince anyone. Deleting directories requires recursive operation, so once again we have the -r switch.

10. ln

Creates hard or symbolic links between files. Symbolic or soft links are sort of like Windows shortcuts, they provide a convenient way of accessing a particular file, though the analogy doesn't quite hold – symlinks can point to anything, but do not feature any metadata. You aren't very likely to ever use hard links, but knowing they're aliases to files – as opposed to symlinks, which are aliases to file names – can't hurt.

11. chmod

Change user permissions. This refers to viewing, writing and executing files. A normal user may change permissions for files he owns.

12. chown

Change file ownership. Only the root user may change the owner of a file. To recursively change the owner for all the files in a directory, use it with -R.

13. find

Search the filesystem for files or directories. Find is a very versatile and powerful command, not only because of its searching capabilities, but also because it allows you to execute arbitrary commands on matching (or non-matching, even) files.

14. locate

Unlike find, locate searches the updatedb database for file name patterns. This database contains a snapshot of the filesystem. This makes locate very fast, but also unreliable – it cannot tell whether anything changed since the last snapshot.

15. du

Show file or directory size. Among the more useful options are -h, which converts the reported sizes into a more human-friendly format, -s which gives only a summary instead of the whole listing, and -d which controls the depth of directory recursion.

16. df

Show disk usage. The default output is good enough – it lists every filesystem, reports its size and the amount of used and available space – but you might want to tack on -h, which once again provides a more human-friendly report.

17. mount / umount

This pair takes care of mounting and unmounting filesystems. This can range from USB sticks to ISO images. Usually only root has mounting privileges.

18. dd

Convert and copy a file, according to its manpage. Not exactly the clearest or most useful description around, and yet, that's all dd does. You give it a source and a destination, and optionally some other commands, and it copies from one to the other. Its power comes from the flexibility – you can tell it the exact block size, it can copy around corrupted data, and it isn't picky about devices – if you want to overwrite your hard drive with zeroes straight from /dev/zero, you're welcome to do it. It's also commonly used for creating live USB sticks from hybrid ISO images.

Linux Commands For Process Management

19. kill / xkill / pkill / killall

All of these serve to “kill” a process, ie terminate it. The difference is what they accept as input. Kill wants the process ID, xkill allows you to click a window to close it, while killall and pkill accept the name of a process, but have somewhat different options and subtly different behavior. Note these do not belong to the same package, and xkill especially is not likely to be installed by default. We advise you to rectify that for your own convenience.

20. ps / pgrep

As mentioned, kill needs the process ID. One way to obtain this is by using ps, which prints information about the currently active processes. The default output is not hugely useful, so stick an -e there to see information about every process on the system. This is only a snapshot, it will not update, see top for that. The pgrep command works in the following manner: you give it a process name, it gives you the process ID. Partial matches count, so be careful.

21. top / htop

These two are similar, both display processes, and can be thought of as console system monitors. We recommend you install htop the first chance you get if your distribution doesn't ship it by default, as it's a much improved version of top. For starters, it's not merely a viewer – it allows you to control processes via its user-friendly console GUI interface.

22. time

Time a process. Think of it as a stopwatch for program execution. Useful if you're curious how much slower is your homework implementation of a sorting algorithm compared to the built-in one. Contrary to what you might expect based on the name, it doesn't tell you the time. See date for that.

Linux Commands For BASH and User Environment

23. su / sudo

Su and sudo are two ways of accomplishing the same thing – running a command as another user. Depending on what your distribution is, you've likely seen only one or the other, but both are serviceable. The difference is that su switches you to a different user, while sudo only runs the command with another user's privileges.

24. uname

Outputs some basic system information. By itself, it won't give you anything very useful (“Linux”), but call it with -a, and it will provide kernel information, as well as tell you the hostname and processor architecture.

25. uptime

Tells you how long has the system been running. Not exactly essential information, but good for bragging rights and the occasional compute-things-relative-to-how-long-I've-been-at-the-computer situation.

26. sleep

You might be wondering why or how would this ever be useful, but even outside BASH scripts, it has its uses: for example, if you'd like to shutdown the computer after a certain period of time, or even as a makeshift alarm.

Linux Commands For User Management

27. useradd, userdel, usermod

These commands allow you do add, delete and modify user accounts. It's not very likely you'll be using these often, especially if you're the sole user of your system, and even if not, you might opt for doing this via a GUI, but it's good to know what they do and that they're there in case you suddenly need them.

28. passwd

This command enables you to change your user account password. As root, you can reset normal user passwords, though you cannot view them. It's a good security practice to change your password every so often.

Linux Commands Fro Help / Documentation

29. man / whatis

The man command brings up the manual for a particular command. Most command line applications come with a man page. Whatis provides a one line summary lifted from the relevant sections of the manual. What are sections of the manual? See for yourself with "man man".

30. whereis

Tells you where an executable binary files lives, provided it's in your path. It can also find its manual page and source code, provided they are present.

Linux Commands For Network

31. ip

If the list of network related commands seems awfully short, you're probably not acquainted with ip. In short, the net-utils package which contains ipconfig, netstat and others has been deprecated in favor of the iproute2 package. It provides the ip command, which replaces ipconfig, netstat, route, etc. You could view it as a Swiss Army knife of networking, or a unwanted mess, but either way, it's the future.

32. ping

Pings are ICMP ECHO_REQUEST datagrams, but that's not important. The important thing is that the ping utility is a useful diagnostic tool. It allows you to quickly test if you're connected to your router or the Internet, and gives some indication of the quality of that connection.

If you want the complete listing go the website at top of article.

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

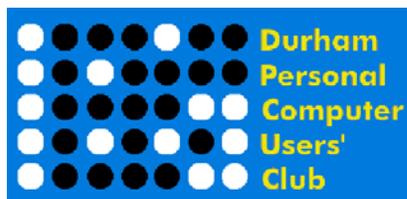
Co-ordinator: Ed Goudge
Location: Call for Location
Telephone: 905-926-9003
Date: 3rd Thursday of month 7:00 PM

LINUX Durham Linux User Group

Co-ordinator: Ed Goudge
Location: Call for Location
Telephone: 905-926-9003
Date: 1st Thursday of month 7:30 PM

Digital Camera Group

Co-ordinator: Ed Goudge
Location: Call for Location
Telephone: 905-926-9003
Date: 4th Thursday of each month at 7:30PM



DPCUC EXECUTIVE

2017-2018

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

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
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.