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The Digital

Viking



Twin Cities

PC USER GROUP

NEWSLETTER

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TC/PC Exists to Facilitate and Encourage the Cooperative Exchange of PC Knowledge and Information Across All Levels of Experience

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General Meeting Tuesday, January 8, 2019 7:00 PM

Getting the Best Results out of Google Searches [Webinar]

**Summit Place
8505 Flying Cloud Drive
Eden Prairie, MN 55344**

Hewie Poplock from the Central Florida Computer Society user group gave this presentation at an APCUG Virtual Conference earlier last year. He does a good job of covering tips and tricks to make your Google searches be more selective and get you the results you want. Bring your own tips on refining searches to share at the meeting.



Tech Topics with Jack Ungerleider lead off our meeting at 6:00 PM. Always new stuff to learn. 

TC/PC is a Member of



24-Hour Information • www.tcpc.com
Application form inside back cover

The Digital Viking

The Digital Viking is the official monthly publication of the Twin Cities PC User Group, a 501(c)(3) organization and an all-volunteer organization dedicated to users of IBM-compatible computers. Subscriptions are included in membership. We welcome articles and reviews from members. The Digital Viking is a copyrighted publication and reproduction of any material is expressly prohibited without permission. Exception: other User Groups may use material if unaltered and credited.

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Full page (7½ x 9½)	\$100.00
Two-thirds page (7½ x 6)	80.00
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One-third page (7½ x 3)	50.00
Quarter page (3½ x 4¾)	40.00
Member Bus. Card (2 x 3½)	10.00

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Contact Sharon Walbran at: SQWalbran@yahoo.com

Deadline for ad placement is the 1st of the month prior to publication. All rates are per issue and for digital or camera-ready ads. Typesetting and other services are extra and must be requested in advance of submission deadlines.

Payment must accompany order unless other arrangements are made in advance. Place make checks payable to: Twin Cities PC User Group

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Meets once or twice per year. All members welcome to attend.

Visit www.tpc.com for meeting details.

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and demonstrations

Special Interest Groups
Monthly Newsletter

Discounts on products
and services

Contests and prizes

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Up to 5 newsletters mailed to
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(only a nominal cost for each
additional 5 mailed)

Newsletter Staff

Editor Sharon Walbran

Contributors:

Jeannine Sloan

Editor's Note: Sometimes I receive a long article that has good information that should be shared, even if it takes up most of the newsletter column space..

Exploring Android

By Dick Maybach, Member, Brookdale Computer Users' Group, NJ
November 2017 issue, BUG Bytes, www.bcug.com, n2nd (at) att.net

The most popular cell-phone operating system, Android, is more like a tool kit than an OS. Cell phone vendors readily change not only its included applications, but also its structure, to differentiate their products. As a result, there is more variation among devices than Windows users are accustomed to. (Windows on a Dell is almost identical to Windows on a Lenovo, but Android on a Samsung may differ substantially from Android on a Nexus.) This doesn't concern most cell-phone users, who have little interest about what goes on inside their devices, but computer enthusiasts are more curious. In this article, I'll use my own phone, a Motorola G⁴ using Android 7, as an example, but yours is most likely different. You should not study my results, but use the tools I describe to explore your own device.

Smart phones are far more powerful and complex than early PCs, and one area you will want to explore is its hardware; the app My Device by 3k Developers is useful for this. Figure 1 shows the areas you can learn about. (This is the screen on my phone; yours probably differs.)

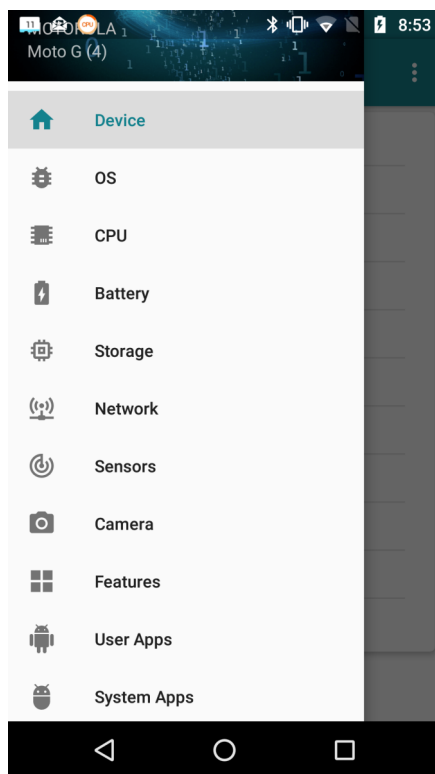


Figure 1. My Device Home Screen.

Figure 2 lists the CPU characteristics; it's eight cores and 2 Gbytes of RAM far exceed the resources available to desktop PCs of just a few years ago. This hints at the potential hidden in the small device you carry in your pocket.

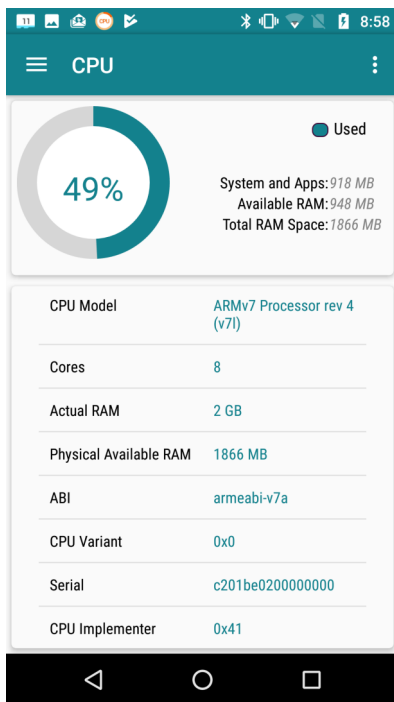


Figure 2. CPU Characteristics.

The camera is another interesting device, as phone cameras probably take far more pictures than dedicated ones. Figure 3 shows what Motorola included. Here too, the front camera's 13-Megapixel resolution is higher than most digital cameras of just a few years ago.

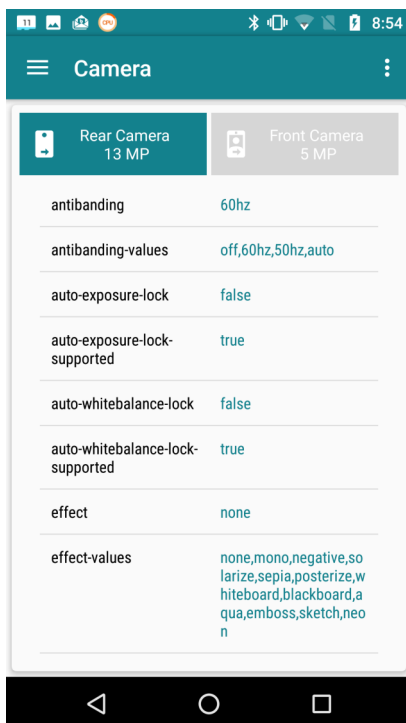


Figure 3. Camera Characteristics.

As you can see, the My-Device app provides much information about the capabilities of your phone's hardware and, although I haven't shown it, its software.

It's important to properly configure your phone, especially the resources that each app can access. Motorola included

the Settings app for this, and although your vendor may have given it a different name, you have something similar. While My Device gives you detailed information on your phone, Settings lets you configure it. Figure shows a portion of its home screen. Taking the time to explore the entries will not only tell you about your phone's features, but will let you configure it to your liking, rather than to what its manufacturer might prefer.

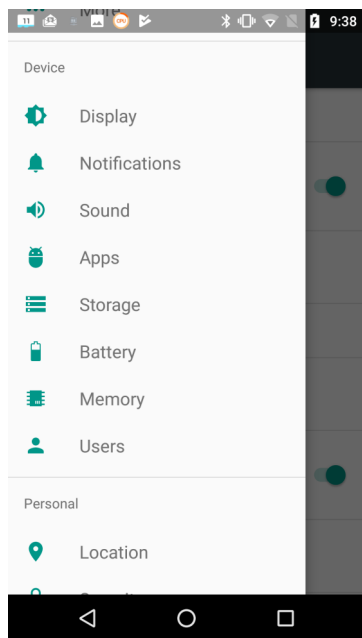


Figure 4. Settings Home Screen.

Exploring the Apps item is especially useful. For example, Figure 5 shows a portion of the email app BlueMail. As you can see, it can access my calendar, contacts, phone, and storage, but I've silenced its notifications. (I prefer that my personal devices speak only when spoken to; I don't want them breaking into my life at their convenience. As a result, I've silenced almost all notifications.) Some apps by default can access far more than what they need, and it's important when you install a new one to review what information they ask for and to disable what is not appropriate. As in the case of My Device, there is far more to explore in Settings than I have space to discuss here.

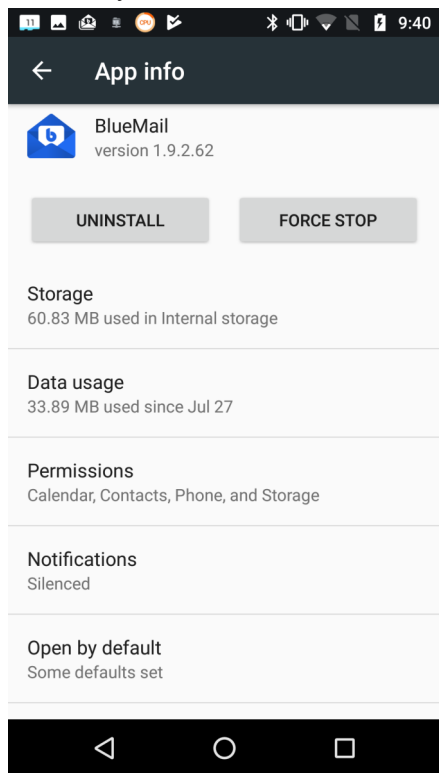


Figure 5. BlueMail App Information.

Unlike in the case of a personal computer, much of the Android file system is not available to users; instead you are limited to exploring your home directory, where your data are stored. (To access the system area, you must do what's called "rooting," but unless you are an experienced Android developer, little but mischief will result.) Of course, you'll use a file manager for this exploration. If your vendor didn't include one, try the ES File Explorer File Manager from ES Global. The directory screen-shots below are from this app. Figure 6 shows my home directory.

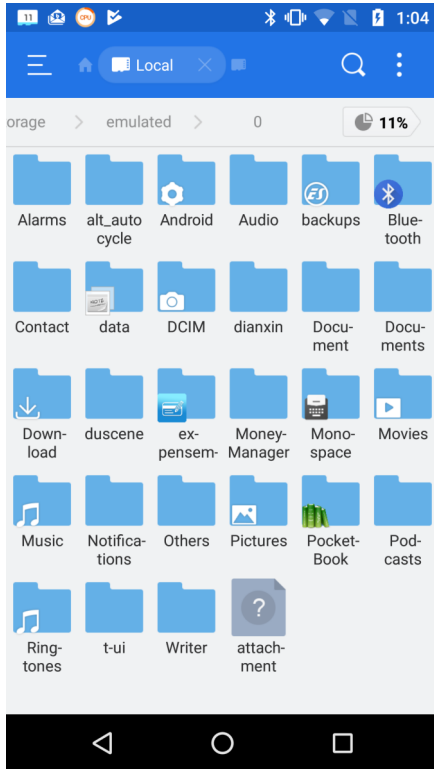


Figure 6. Android Home Directory

On a typical PC, most of the directories in the home directory are created by its user, but this isn't the case for Android, where typically the directories are created either by apps or Android itself. A worthwhile directory to explore is Android, which has two subdirectories, data and media. Figure 7 shows a portion of data's contents.

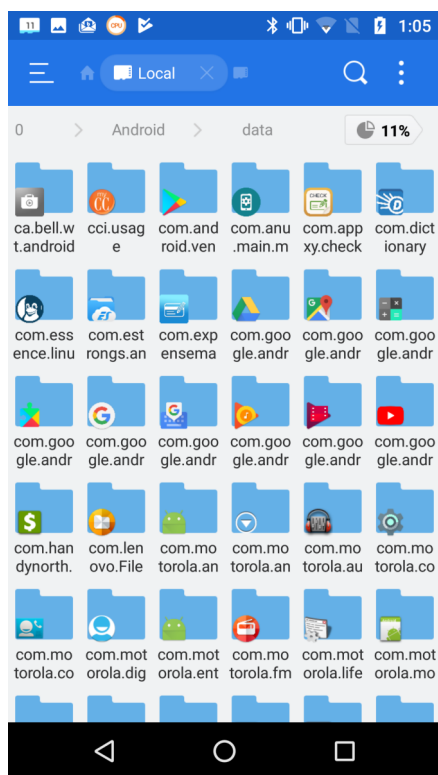


Figure 7. Contents of Android/data.

As you can see, it's full of subdirectories, most associated with a particular app, which is where the app will keep its data. If you can't find something in your home directory, this is a good place to look.

However, there is a better way to find where a particular app keeps its files. Use it to create a test file, then use the File Analyzer tool in ES File Manager (accessible when you touch the vertical line of three dots in its menu bar). Scroll down on the result to the Recently Created Files area and select Details to see a list of new files (Figure 8).

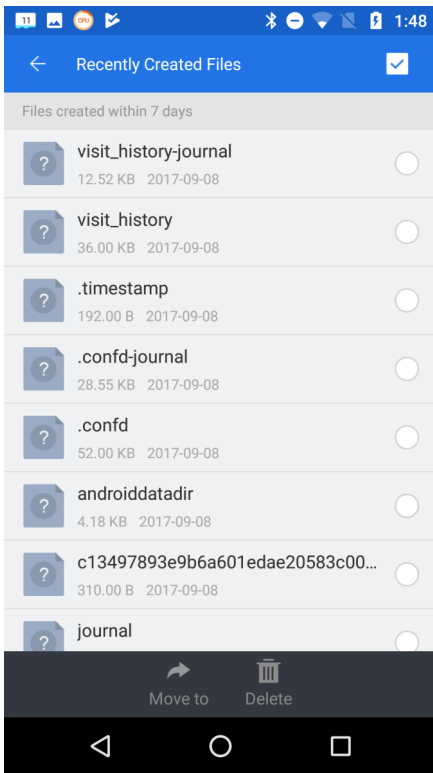


Figure 8. Recently Created Files.

When I selected androiddatadir, I obtained Figure 9.

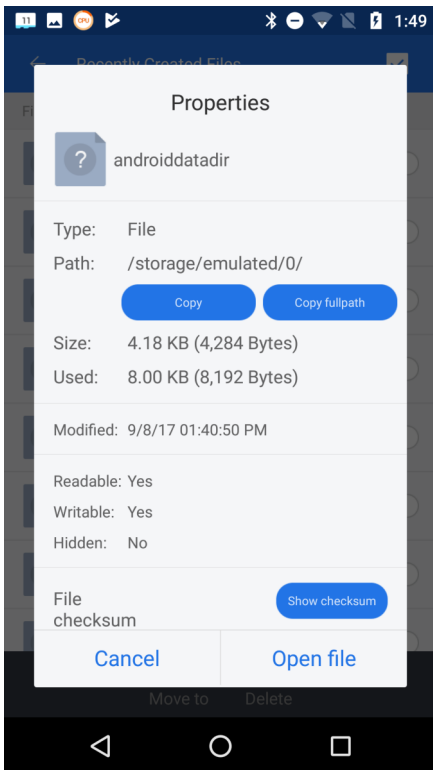


Figure 9. Details on a New File.

The storage/emulated/0/ may be confusing, but it's just the location of the home directory. In this case, since the file we were searching for was in the root directory, finding it by brute force would have been easy. The directory structure on

your device will be different of course. (You may have noticed that this file doesn't appear in the listing of Figure 6; I had deleted it before I made that screen-shot.)

For our last expeditions we'll either (depending on your attitude) return to computing's roots or its dark age; yes, we'll be using the command line. You'll first need to install a terminal app, and I use T-UI from Everyone. (Starting T-UI and using the command "tutorial", will take you to a website with a lot more help than you probably want. The command "help" will show commands that have help pages; for example, "help time" will show you what the time command does.) Figure 10 shows a screen-shot with the command `pwd` (print working directory), which is the complete path to the home directory. It also shows the result of "`echo $PATH`", which displays the directories where Android looks for commands, in this case `/sbin`, `/vendor/bin`, `/system/bin`, and `/system/sbin`. None of these directories listed by `$PATH` are accessible with a file manager, unless the device has been rooted.

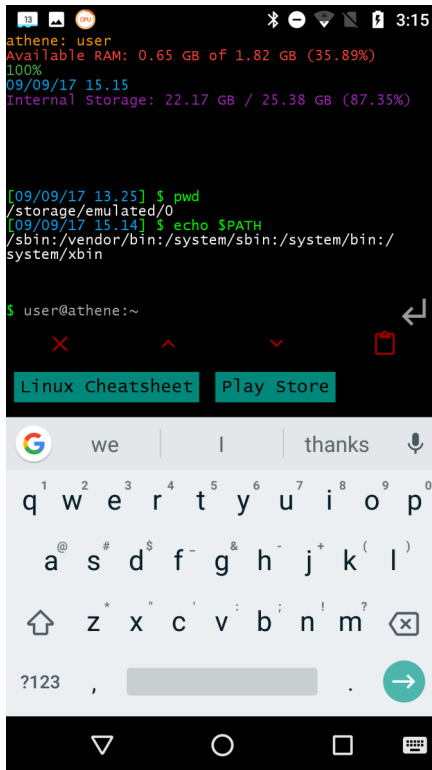


Figure 10. T-UI Screen.


The command "`cat proc/partitions`" shows all the partitions that exist. (I'm going to skip the explanation of exactly what this command means; the object here is to learn about Android, not become proficient in using the command line.) I won't show the output, as yours will be different. Each line of result (after the header) is a different partition; the first number (major) is the device, the second (minor) the partition on that device, the third the number of blocks in it, and the last its name. Mine had three different major numbers, showing three separate storage devices, one with a single partition, one with 17, and one with 35. You are probably surprised at these numbers; just because Android devices are small doesn't mean they are simple. However, many of these partitions are not used in normal operation, but only during start-up and recovery.

We obtain a better sense of the storage environment with the "`df -h`" command, which shows the free space on each partition. (The `-h` option makes the numbers more readable.) I've formatted the result into the table of Figure 11, where we see that of the 53 defined partitions, only 13 are in use.

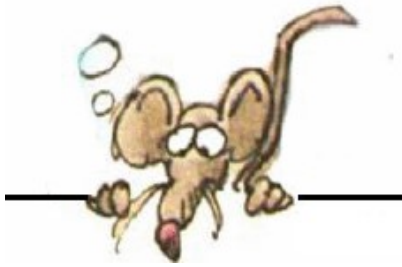
File System	Size	Used	Avail	Use%	Mounted on
tmpfs	923M	692K	923M	1%	/dev
tmpfs	923M	0	923M	0%	/mnt
/dev/block/bootdevice/by-name/system	2.3G	1.7G	617M	75%	/system
/dev/block/bootdevice/by-name/userdata	25G	2.8G	22G	12%	/data
/dev/block/bootdevice/by-name/cache	248M	1.6M	241M	1%	/cache
/dev/block/bootdevice/by-name/dsp	12M	3.6M	7.7M	32%	/dsp
/dev/block/bootdevice/by-name/modem	94M	70M	23M	76%	/firmware
/dev/block/bootdevice/by-name/fsg	1.9M	1.9M	0	100%	/fsg
/dev/block/bootdevice/by-name/oem	635M	96M	527M	16%	/oem
tmpfs	923M	0	923M	0%	/storage
/data/media	25G	2.8G	22G	12%	/storage/ emulated
/mnt/media_rw/F549-17EF	30G	818M	29G	3%	/storage/ F549-17EF
tmpfs	923M	0	923M	0%	/storage/self

Figure 11. Output of the mount command.

Note the data/media file system, which is mounted at /storage/emulated, which we saw in Figure 10 is our home directory. From other explorations, I know that F549-17EF designates my SD card.

Using such readily-available tools as these, you can explore your Android device to learn about it and to make you more efficient while using it. 

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NIBBLERS

By Jeannine Sloan

Completely Ridding Your Pc of Viruses And Other Malware

Once a PC is infected, ridding it of every scrap of malware can be extremely difficult. But it can be done. This post explains how, step-by-step.

<https://www.ricksdailytips.com/how-to-rid-your-pc-of-malware>

Amazon's PartFinder

Amazon has begun rolling out a special tool that helps DIY computer part buyers check the compatibility of their PCs with components sold by the online store. The Amazon PartFinder tool is in its infancy...

<https://www.anandtech.com/show/13657/amazon-launches-pc-hardware-compatibility-checker>

Explaining the Plummeting Cost of Solar Power

The dramatic drop in the cost of solar photovoltaic (PV) modules, which has fallen by 99 percent over the last four decades, is often touted as a major success story for renewable energy technology. But one question has never been fully addressed: What exactly accounts for that stunning drop?

<https://www.sciencedaily.com/releases/2018/11/181120073818.htm>

Turn on Smart Phone Dark Mode If It's Available

Dark Mode may be more than just an aesthetic preference. According to Google, turning it on saves battery life compared to using a default white theme. <https://www.techtimes.com/articles/235460>

Rumor Has It: Microsoft is throwing in the towel on Edge

Microsoft is throwing in the towel with EdgeHTML and is instead building a new web browser powered by Chromium, a rendering engine first popularized by Google's Chrome browser. Codenamed Anaheim, this new web browser for Windows 10 will replace Edge as the default browser on the platform.

From Woody

Mouse potato

To be addicted to computer surfing.

Paywall



This is what you see if you are running an ad blocker and go to a site that wants you to replace advertising income in order to visit their site; called a Paywall.

Your Apps Know Where You Were Last Night

The app developers can make money by directly selling their data, or by sharing it for location-based ads, which command a premium. Location data companies pay half a cent to two cents per user per month, according to offer letters to app makers reviewed by The Times. Targeted advertising is by far the most common use of the information. The app developers can make money by directly selling their data, or by sharing it for location-based ads, which command a premium. Location data companies pay half a cent to two cents per user per month, according to offer letters to app makers reviewed by The Times.

Targeted advertising is by far the most common use of the information.

What you can do: If this all sounds terrifying, don't panic. A solution is within reach. You'll need to carefully comb your phone's settings and permissions. The NYT provides a handy guide here, but if you want a simple rule of thumb: delete free apps.

Which Web Browser Should You Get?

It depends on which browser ecosystem works best for you. I use a lot of Google programs, so it's Chrome for me. Are you wedded to Windows? Use Edge then. Do you like what Firefox has been doing? Then go ahead and use it. Want something a bit different? Use Opera. Just don't buy the hype that one or the other kicks the other's rump when it comes to raw speed. They don't.

<https://www.zdnet.com/article/whats-really-the-fastest-windows-10-web-browser-today/>

Evelyn Berezin, a Computer Pioneer

"Without Ms. Berezin," he added enthusiastically, "there would be no Bill Gates, no Steve Jobs, no internet, no word processors, no spreadsheets; nothing that remotely connects business with the 21st century." Read why in this NYTimes article

<https://tinyurl.com/y9clgsne>

A very merry Christmas / And a happy New Year /
Let's hope it's a good one /
Without any fear

- John Lennon, Happy Xmas (War Is Over)

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Special Interest Groups (SIGs)

w Work phone h Home phone c Cell phone
* Meets at an alternate location

Most SIGs will meet at Edina Executive Plaza, Conference Room #102, 5200 Willson Road, Edina, MN

Confirm with a SIG group if they meet elsewhere.
For more info contact the SIG Leader(s) listed here.

Get SIG announcements!
Link from www.tpc.com

Board of Directors*

All members are welcome! Check www.tpc.com for location.

Selected Saturday mornings

Linux on Saturday

This is for the Linux newbie and those trying to come over from Microsoft to a different operating system.

Second Saturday @ 9 AM-Noon

Note: No Meetings June-August

Jack Ungerleider 612/418-3494 c
jack@jacku.com

Tech Topics

Technical presentation/discussion on various technical topics from the following areas:

- Web/Internet
- Mobile Devices and Apps
- Playing with Programming
- DIY (3D Printing, R-Pi, other hobby electronics, etc.)

Second Tuesday @ 6:00-7:00 PM

Every month

Right before the general meeting.

Jack Ungerleider 612/418-3494 c
jack@jacku.com

Microsoft Access

All levels. Presentations by expert developers within the group and by MS reps.

Third Saturday 9:00 AM—Noon

Note: No Meetings June-August

Steve Kuhlmeier 952/934-8492
skuhlmeier@hotmail.com

Microsoft Office

Addresses the use, integration, and nuances of the Microsoft Office applications.

Combined with Systems on Saturday

Third Saturday of the Month

9:00 AM—Noon

Note: No Meetings June-August

Steve Kuhlmeier 952/934-8492
skuhlmeier@hotmail.com

Directions to Summit Place for General Meetings:

Proceed to Eden Prairie Center Flying Cloud Drive . [Flying Cloud Drive runs along the West side of the Eden Prairie Center.] Once you have driven past Eden Prairie Center (on the left) along Flying Cloud Drive you will come to a stop light at Prairie Center Drive. The next intersection with a stop light and left turn lane is Fountain Place. Turn left at Fountain Place and go straight into the parking lot. Turn left again to the first covered entry way of Summit Place. There is plenty of parking in the large parking lot in front of the first Summit Place covered entry way. When you enter the door at the first covered entry way, ask to be directed to the Performance Room for the TC/PC meeting. For a map of more detailed directions and *info on Web SIG and Board meeting*, check the TC/PC website.

Directions to **Edina Executive Plaza** for **Systems on Saturday, Access, Word and Picture Perfect SIGs**: Take Highway 100 to the 50th Street/Vernon exit. [If you have come from the north, cross back over Highway 100 to the east side.] Take the first right and go past Perkins [The golf course will be on your left.] and continue on the east frontage road (Willson Road) to the next building—5200 . There is ample parking in the building's lot. Conference Room #102 is on 1st floor.

Help yourself by helping others!

Join the team & share your knowledge with others.

Contact TC/PC at www.tpc.com

Meetings start at 7:00 PM (9:00 AM on Saturday) unless otherwise noted. *Meets at Edina Executive Plaza.

January
February

SUN	MON	TUES	WED	THU	FRI	SAT
		1	2	3	4	5
6	7	8 General Meeting Google Search Webinar 6PM Tech Topics	9	10	11	12 Linux on Saturday 9 AM—Noon
13	14	15	16	17	18	19 MS Office (including Access) 9 AM—Noon
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9 Linux on Saturday 9 AM—Noon
10	11	12 General Meeting TBA 6PM Tech Topics	13	14	15	16 MS Office (including Access) 9 AM—Noon
17	18	19	20	21	22	23
24	25	26	27	28		

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You have just read an issue of The Digital Viking.

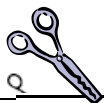
Would you like to receive this delivered directly to your email or business each month?

As a member of TC/PC, the Twin Cities Personal Computer Group, one of the benefits is reading this monthly publication at www.tcpc.com.

As a member of TC/PC, you may attend any or all of the monthly Special Interest Group (SIG) meetings and be eligible for software drawings. The small membership fee also includes access to real-live people with answers via our helplines, discounts, and various other perks.

Does membership in this group sound like a good way to increase your computer knowledge?

It's easy to do! Simply fill in the form below and mail it to the address shown.
(If you use the form in this issue, you will receive an extra month for joining now.)



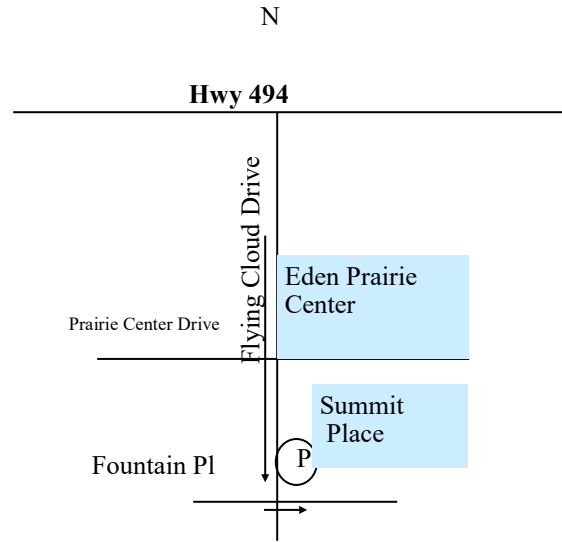
Here's the info for my TC/PC Membership:	1/19
Full name _____	I'm signing up for:
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Address _____	<input type="radio"/> Business Membership (\$100)
City _____ State _____ Zip _____	If an existing member your # _____
<input type="radio"/> Home <input type="radio"/> Business <input type="radio"/> Change address: <input type="radio"/> Perm. <input type="radio"/> Temp. 'til _____	Make checks payable to:
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Online address(es) _____	http://www.tcpc.com
Where did you hear about TC/PC? _____	<input type="radio"/> Check # _____ <input type="radio"/> Bill me <input type="radio"/> New member <input type="radio"/> Renewal <input type="radio"/> Prior member
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<input type="radio"/> I DO NOT want to receive any mailings	<input type="radio"/> Training classes <input type="radio"/> Volunteering <input type="radio"/> Special Interest Groups: New User, Access, etc.
Administrative Use Only Rec'd _____ Chk# _____	List here:

January 8, 2018
General Meeting 7:00 PM

Getting the Best Results
out of Google Searches
[Webinar]

Summit Place
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Eden Prairie, MN 55344

More info and map: www.tcpc.com



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