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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, March 8, 2016 7:00 PM

# How to Make Better Videos of **Yourself (or Another Person)**

**Location: Summit Place** 8505 Flying Cloud Drive **Eden Prairie, MN** 

. Interested in creating a YouTube video or a Video Blog online or capturing a one-to-one interview with someone you admire on video? At our March meeting, we will learn how to get started creating such videos using a DSLR camera or a smartphone or tablet. What's the best lighting set up, the types of cameras. microphones and recorders recommended? The presenter, Caleb W, has been working with clients for over 10 years. creating these types of videos as well as doing wedding photography and videos. He has some excellent suggestions for the newbie as well as the professional. This presentation is via video.

Tech Topics 6PM: Tech Topics Browsers. Why You Want More Than One. Wth Jack Ungerleider .

TC/PC is a Member of



# TC/PC Business Members

Friendship Village

Thank You!

## 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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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

## TC/PC 2015-2016 Board of Directors

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

Visit www.tcpc.com for meeting details.

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Meeting Coordinator -- Open Position --

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#### TC/PC Member Benefits

**Product previews** and demonstrations

Special Interest Groups Monthly Newsletter

Discounts on products and services

**Contests and prizes** 

# **Business Member Benefits**

All of the above PLUS:

FREE ½ page ad on payment of each renewal

20% discount on all ads Placed in the *Digital Viking* Newsletter

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

#### **Newsletter Staff**

**Editor Sharon Walbran** 

**Contributors:** 

Jeannine Sloan

#### **Upcoming Meetings**

Tuesday, April 12—Mirrorless Cameras. Presenter: National Camera Exchange, Edina Store, 7101 France Ave South Tuesday, June 14—Annual Meeting & Pizza Party.

#### Tech Topics SIG: Starting the new year right

The following is the current plan for the Tech Topics SIG in early 2016. Please note that all topics are subject to change.

March 2016 - Browsers: Why you want more than one March 2016 will be the six month anniversary of Google turning off support for NPAPI in Chrome. As a result there are some websites that won't work with Chrome anymore, or at least until they remove the need for NPAPI plugins like Java and Silverlight. Many of Google's apps work best with Chrome and may lose features in Internet Explorer. We will explore the strengths, weaknesses, and limitations of the major browsers.

## Interesting Internet Finds

By Steve Costello, BCRS Freeware SIG, Boca Raton Computer Society, FL

#### HOW TO TYPE FASTER ON AN ANDROID DEVICE

https://www.maketecheasier.com/type-faster-android/

You can type real fast with your PC keyboard, but do you know how to type faster on your Android? If no, check out this MakeTechEasier post for ways to speed it up.

#### HOW TO MANAGE YOUR PASSWORDS WITH LASTPASS

http://www.pcmech.com/article/manage-passwords-lastpass/

New to LastPass, or aren't sure about the new version? Check out this post from PCMech.

#### IMPROVE YOUR NETFLIX SEARCHES WITH THESE SECRET CODES

http://www.makeuseof.com/tag/improve-your-netflix-searches-with-these-secret-codes/

Are you a Netflix user? If so, check out this MakeUseOf post to learn how to search Netflix better.

#### WHY I AM LOSING MY FAITH IN FREEWARE

http://www.ghacks.net/2016/01/28/why-i-am-losing-my-faith-in-freeware/

Ghacks talks about freeware and the things that are making people rethink using freeware. There are a lot of arguments, but I still like freeware and will continue to, but I will be more careful in choosing it.

#### TRUECRYPT IS DEAD. LONG LIVE VERACRYPT!

http://www.techsupportalert.com/content/truecrypt-dead-long-live-veracrypt.htm

This gizmo's freeware post talks about the now shut down TrueCrypt, and the replacement VeraCrypt based on the TrueCrypt code, and still free.

#### HOW TO SHARE FILES AND PHOTOS WITH SKYPE ON YOUR MOBILE

http://www.thewindowsclub.com/share-files-and-photos-with-skype

Did you know you can share files and photos with Skype? Read this Windows Club post to find out how.

#### THE EASIEST PHOTO COLLAGE CREATOR FOR GREAT, QUICK RESULTS

http://www.techsupportalert.com/content/easiest-photo-collage-creator-great-quick-results.htm If you are like me and don't do much with photos, check out this post for a quick and easy web browser collage maker.

#### FIGHT SPAM WITH A DISPOSABLE EMAIL ADDRESS

http://askbobrankin.com/fight\_spam\_with\_a disposable\_email\_address.html

It has been a while since I thought about disposable email addresses, but Bob Rankin has brought the subject back to mind with this post.

# WATCH OUT: HOW TO BUY A USB TYPE-C CABLE THAT WON'T DAMAGE YOUR DEVICES

http://www.howtogeek.com/240777/watch-out-how-to-buy-a-usb-type-c-cable-that-wont-damage-your-devices/

I have no use for a USB Type-C cable yet, but when I do I will make sure to refer back to this HowToGeek post before purchasing.

#### 10 TIPS FOR TROUBLESHOOTING YOUR INTERNET CONNECTION

http://www.pcmag.com/article2/0,2817,2498672,00.asp

From time to time everyone has trouble with their internet connection. If it happens to you, keep this PC magazine post somewhere for some troubleshooting tips.

#### 4 WAYS TO SECURE YOUR GOOGLE ACCOUNT

https://www.maketecheasier.com/secure-google-account

Are you a Google user? If so, you should check out this MakeTechEasier post to make sure your account is secure. I followed what was posted, and have added to my calendar to review once a month.

#### GOING PAPERLESS 2.0: SEARCHING IN EVERNOTE, PART 1 OF 4: "WHO"?

http://www.jamierubin.net/2016/02/09/going-paperless-2-0-searching-in-evernote-part-1-of-4-who/ Jamie Rubin explains how he makes searching in Evernote easier. In this first of 4 parts the concentration is on who the note pertains to.

#### GOOD NEWS, SOURCEFORGE STOPS BUNDLING ADWARE WITH INSTALLERS

http://www.ghacks.net/2016/02/10/good-news-sourceforge-stops-bundling-adware-with-installers/
This ghacks.net post explains how Sourceforge may again become the go to resource for open source software

# OLDER KINDLES REQUIRE UPDATED SOFTWARE BY MARCH 22 TO DOWNLOAD BOOKS AND USE KINDLE SERVICES

http://blog.the-ebook-reader.com/2016/02/10/older-kindles-require-updated-software-by-march-22-to-download-books-and-use-kindle-services/

If you are like me and have an older Kindle, this is a must read post from The eBook Reader blog.

#### TECH LOLZ: A GUIDE FOR GEEKS WHO ARE SUPPORT FOR NON-TECH FRIENDS

http://www.digitalcitizen.life/tech-lolz-guide-geeks-who-are-support-their-non-tech-friends

A lot of you, like me, probably support non-tech friends. If that is the case, read this post for some things to keep in mind.

#### **GOOGLE WILL RETIRE PICASA ON MAY 1, 2016**

http://www.ghacks.net/2016/02/12/google-will-retire-picasa-on-may-1-2016/ If you use Picasa, you need to be aware of this.

#### GOING PAPERLESS 2.0: SEARCHING IN EVERNOTE, PART 2 OF 4: "WHAT?"

http://www.jamierubin.net/2016/02/16/going-paperless-2-0-searching-in-evernote-2-of-4-what/
This is the second part of Jamie's searching Evernote. In this one he describes finding notes based on what they are about.

#### HOW TO PRINT LABELS WITH MAIL MERGE IN MICROSOFT WORD AND EXCEL

http://www.makeuseof.com/tag/print-labels-mail-merge-microsoft-word-excel/

If you use Microsoft Word or Excel, you might not know how to print letters using mail merge. I knew it could be done, but never knew how until I ran across this post from MakeUseOf.

#### PICASA IS DEAD. LONG LIVE PICASA!

http://picasageeks.com/2016/02/picasa-is-dead-long-live-picasa/

In this post, Chris Guld explains what the retirement of Picasa will affect you if you use either the Picasa3 desktop software, or Picasa Web Albums, so you can be prepared.

Also, there will be a live webcast with discussion of the Picasa announcement Sunday February 21, 2016 at 2PM Eastern on the *What Does This Button Do?* Hangout On Air#71 – Picasa is Retiring. Should I Switch to Google Photos?, or the YouTube recording at https://youtu.be/RNMayP-t5u8

# HOW TO MEASURE THE SIZE OF IMAGES/ELEMENTS WITH THESE 2 USEFUL PC TOOLS

http://www.guidingtech.com/56532/measure-size-of-images-pixels-pc/

If you run a blog, or website, and need to measure image/element sizes, GuidingTech tells you about two PC tools that can help.

#### HOW TO DISABLE THE WEBCAM ON A MAC OS X OR WINDOWS PC

http://trendblog.net/how-disable-webcam-on-mac-or-windows/

This post tells you how to disable the webcam with the operating system. I don't do this myself, as I just put a post it over the lens unless I want to use the webcam.

#### HOW TO CHOOSE THE BEST USB CHARGING STATION FOR ALL YOUR GADGETS

http://www.howtogeek.com/242766/how-to-choose-the-best-usb-charging-station-for-all-yourgadgets/

Have a lot of different devices that use a USB charger? If that is the case, and you are looking for a charging station instead, check out this post from HowToGeek.

#### WHAT INTERNET SPEED DO YOU REALLY NEED?

http://www.geekersmagazine.com/What+Internet+Speed+Do+You+Really+Need
Geeker Magazine explains why you don't need to spend money on the fastest internet out there. It all depends on what is best for you. Yes, it is nice to have things download really fast, but it is it worth it to you?

#### GOING PAPERLESS 2.0: SEARCHING IN EVERNOTE, PART 3 OF 4: "WHEN?"

http://www.jamierubin.net/2016/02/23/going-paperless-2-0-searching-in-evernote-part-3-of-4-when/

Jamie explains how to search your notes by date.

#### SAY GOODBYE TO GOOGLE: 14 ALTERNATIVE SEARCH ENGINES

https://searchenginewatch.com/2016/02/25/say-goodbye-to-google-14-alternative-searchengines/

Tired of Google Search, or want to limit tracking? If so, check out this post for some alternatives. (I have gone back to using Ixquick more often to limit ads.)







By Jeannine Sloan

#### What Is NCCIC

It stands for National Cybersecurity and Communications Integration Center. (Don'cha love these acronyms?) The NCCIC vision is a secure and resilient cyber and communications infrastructure that supports homeland security, a vibrant economy, and the health and safety of the American people.

http://www.dhs.gov/national-cybersecurity-and-communications-integration-center

# **How Does the Google Cardboard Headset Work?**

Google has a VR headset made of cardboard for sale for \$10. How does that work? <a href="https://www.youtube.com/watch?v=SxAj2lyX4oU">https://www.youtube.com/watch?v=SxAj2lyX4oU</a>

## Dilbert's One-Page Guide to Everything Financial:

- 1. Make a will.
- 2. Pay off your credit cards.
- 3. Get term life insurance if you have a family to support.
- 4. Fund your 401k to the maximum.
- 5. Fund your IRA to the maximum.
- 6. Buy a house if you want to live in a house and can afford it.
- 7. Put six months worth of expenses in a money-market account.
- 8. Take whatever money is left over and invest 70% in a stock index fund and 30% in a bond fund through any discount broker and never touch it until retirement.
- 9. If any of this confuses you, or you have something special going on (retirement, college planning, tax issues), hire a fee-based financial planner, not one who charges a percentage of your portfolio.

http://www.mymoneyblog.com/dilberts-one-page-guide-to-everything-financial.html

# Skier Takes a Video While Spinning an Iphone Around His Head

This is fascinating to watch. What impressed me is how much he trusts his skiing capabilities <a href="http://www.cnet.com/news/this-is-what-happens-when-you-swing-an-iphone-around-your-head-while-skiing/#ftag=CAD590a51e">http://www.cnet.com/news/this-is-what-happens-when-you-swing-an-iphone-around-your-head-while-skiing/#ftag=CAD590a51e</a>

#### What is TOR?

**Tor** is short for The Onion Router, and it gets its name from how it works.

Think of it like putting a postcard into multiple envelopes, one after the other, with a different address on each envelope, and then posting the whole package.

The person listed on the outermost envelope can tell that the postcard came from you, and work out where to send it next, but they can't read the postcard, and they can't tell where it will end up. Read the easily understood article here:

https://blogs.sophos.com/what-is/tor/

#### **PUPs**

If you're downloading software onto your computer, chances are you're unknowingly cluttering your machine with PUPs, or Potentially Unwanted Programs. Here's what you need to know about PUPs, including how they get on your computer, what they do, and how to protect against them. Here from Malware Bytes is a good article about PUPs:

http://tinyurl.com/jtxkalz

# **Create Beautiful Photo Collages And Cards Online With Fotojet**

If you're looking for a great and reliable online photo collage maker and graphic editor, you better not miss this one! Read a review at

http://dottech.org/193113/web-fotojet-review/#Jqxzx9TxpBdaql7U.99

FotoJet website: <a href="http://www.fotojet.com/">http://www.fotojet.com/</a>

# Tips and Myths About Extending Smartphone Battery Life

We (The New York Times) teamed up with the Wirecutter, a product recommendations website, to run an array of tests to determine best and worst practices for preserving battery life on smartphones.

The results showed that some conventional beliefs about extending battery life — like turning off Wi -Fi or shutting down all your phone's apps — produced negligible or even harmful results. The Wirecutter also found plenty of helpful practices to get more use out of your battery, like playing music stored directly on the device (instead of streaming it) or tweaking email configurations. The article lists 8 good tips and 7 myths. Read it here: http://tinyurl.com/zdo7eqf

# Flying Snail

Yes, there is such a thing. Watch it here: http://www.nytimes.com/video/science/100000004222105/

## **Best Meta Search Engines**

Search engines index blogs/websites and grab information from them. Meta search engines grab information from those search engines. The Windows Club has reviews here: http://tinyurl.com/zcvhogv

# Google's Plans to Fight Extremist Propaganda

There are programs being tested by Google to make sure the positive messages are seen by people seeking out extremist content: one to make sure the "good" kind of videos are easily found on YouTube; and another to display positive messages when people search for extremist-related terms. Read the article at Sophos:

http://tinyurl.com/jofwpzg

YouTube; and another to display positive messages when people search for extremist-related terms. Read the article at Sophos:

http://tinyurl.com/jofwpzg

# Change Default Search Provider in Internet Explorer 10 and 11:

- 1. Click the gear icon in the top right corner of the browser window.
- Select Manage add-ons.
- 3. Select Search Providers.
- 4. In the bottom left corner of your screen, click Find more search providers.
- Select Google.
- Click the Add to Internet Explorer button.
- 7. When the window appears, check the box next to Make this my default search provider.
- 8. Click Add.

## Free Online Ebook Collection Launches for All Minnesotans

Ebooks MN is a collection featuring content from Minnesota's independent publishers. The opening-day collection includes about 2,500 titles, and we plan to add more soon. "Biblioboard" Reader is available from iTunes, Google Play, and Kindle. Minitex will manage access to Ebooks MN. No digital rights management (DRM) is required. We have permanent access to these titles, there is no limit to the number that can be checked out at a time, and readers can keep them as long as they wish. As with ELM, there is no additional cost for libraries to use the collection. http://cmle.org/2016/02/05/ebooks-mn-now-available-in-preview-mode/

## Windows 10 Symbols, Emojis, and Other Special Characters

Entering special characters, including foreign currency symbols, fractions, and emoji, is a cumbersome task on most physical keyboards. Use this hidden Windows 10 option to open an onscreen keyboard that puts all those options at your fingertips.

Right-click any empty space on the taskbar to open the taskbar customization menu and then click the "Show touch keyboard button" option. The "on-screen keyboard" icon is now available in the notification area. Click it to activate the keyboard. Read instructions at this zdnet site: http://tinyurl.com/gwdsbqf

# **Security Debate**

"we must decide the balance between our personal right to privacy and digital liberties, and the authority of the government to seek out information in the name of national security." <a href="http://www.nytimes.com/2016/02/28/technology/farhad-and-mike-hash-out-the-weeks-big-topic-apple.html?emc=edit">http://www.nytimes.com/2016/02/28/technology/farhad-and-mike-hash-out-the-weeks-big-topic-apple.html?emc=edit</a> th 20160228&nl=todaysheadlines&nlid=67799023



# **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.tcpc.com

#### **Board of Directors\***

All members are welcome! Check www.tcpc.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.

First 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 Kuhlmey 952/934-8492 skuhlmey@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 Kuhlmey 952/934-8492 skuhlmey@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.tcpc.com

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

April

SUN	Mon	TUES	WED	Тни	Fri	SAT
		1	2	3	4	5 Linux and Open Source on Saturdays 9:00—Noon
6	7	8 Gen Mtg 7:00 PM Better Videos of Your- self or Others 6PM Tech Topics	9	10	11	12
13	14	15	16	17	18	19 Windows & MS Office (including Access) 9:00-Noon
20	21	22	23	24	25	26
27	28	29	30	31	1	2 Linux and Open Source on Saturdays 9:00—Noon
3	4	5	6	7	8	9
10	11	12 Gen Mtg 7:00 PM Mirror- less Cameras- National Camera Exchange-Edina 6PM Tech Topics	13	14	15	16 Windows & MS Office (including Access) 9:00-Noon
17	18	19	20	21	22	23
24	25	26	27	28	29	30

# Many Devices Utilize New Charging and Data Transfer USB-C Cables by Ira Wilsker, iwilsker(at)gmail.com

#### WEBSITES:

http://www.cnet.com/news/usb-type-c-connections-better-soon-confusion-first/

https://en.wikipedia.org/wiki/USB\_Type-C

https://en.wikipedia.org/wiki/USB

http://fortune.com/2015/11/05/usbc-google-amazon-reviews/

http://www.cnet.com/news/usb-type-c-one-cable-to-connect-them-all/

http://www.cnet.com/news/meet-the-new-reversible-usb/

http://www.pcmag.com/article2/0,2817,2478121,00.asp

https://plus.google.com/u/0/+BensonLeung/posts

https://forums.oneplus.net/threads/in-response-to-the-type-c-cable-discussions.412344/

http://au.pcmag.com/oneplus-2/40241/news/oneplus-offers-usb-c-cable-adapter-refunds

http://www.pcworld.com/article/3009658/hardware/oneplus-offers-a-refund-for-its-potentially-damaging-usb-c-cable-and-adapter.html

http://www.usatoday.com/story/tech/2015/12/01/iphone-7-headphone-jack-rumor-report/76591864/

http://www.androidheadlines.com/2015/11/checkr-app-tests-usb-type-c-for-nexus-5x-6p-compatibility.html

https://play.google.com/store/apps/details?id=net.mderezynski.checkr

http://www.amazon.com/gp/pdp/profile/A25GROL6KJV3QG (Benson Leung reviews)

Recent purchasers of smart devices, including many new phones, laptops, Apple devices, and other new high tech electronics probably noticed that the USB cable used to charge the device and transfer data between devices is the same on the "big" end, but slightly different on the "small" end. The traditional "Micro-B" (the "small") end of the USB cable that has been widely used for several years to connect chargers and data devices to billions of smart devices is a somewhat asymmetric shape resembling a flattened trapezoid. Because of its shape, the common micro USB cable can only be inserted in one direction, which countless users have found as an inconvenience, but engineers intentionally designed so as to assure that the tiny conductors in the plug could only mate with appropriate matching connectors within the device. Likewise, millions of Apple device users have been using the popular, but somewhat fragile "Lightening" connector connected to an otherwise somewhat identical USB cable to charge their devices and to connect to external devices.

For the past several months a newly standardized connector of about the same dimensions as the older Micro-B plug, and with the moniker "USB-C" has started to appear on recently assembled smart devices produced by several of the major manufacturers, including LG, Samsung, Apple, Microsoft, HP, Nexus (the Google brand made by LG, Huawei, and others), OnePlus, and other cutting edge brands. This new USB-C connector is more symmetric, in a flattened rectangular shape with rounded corners, is reversible, and can be inserted with either wide side up, easing the ability to perform the simple task of connecting the charging cable or transferring data. In terms of data transfer speed, the new USB-C cables, with its 24 connecting pins, can easily transfer data with speeds somewhat similar to the USB 3.0 standard, which is a potential of 4 GB per second throughput, and possibly even transfer at the screaming USB 3.1 speed of 10 GB per second, but many of the currently available devices with the USB-C connector can only receive data at something resembling effective USB 2.0 transfer speeds of a respectable 280 MB per second. In addition to being a reversible plug and offering generally faster data connection speeds, the USB-C standard also allows the USB cable to transfer more charging capacity than most earlier USB 2.0 cables, with the USB-C cable and connector easily able to handle from 1.5 amps to 3 amps at 5 volts, allowing for the faster charging of connected devices as well as providing more power to other compatible USB powered devices, such as external hard drives. For those USB powered devices that demand even greater power, the new USB-C cable can handle up to 20 amps at 5 volts, for 100 watts of power. Computer notebook designers are considering replacing the existing power point on newly manufactured laptops with a USB-C port, as newly made laptops now only require about 60 watts of power, and some USB-C cables can handle up to 100 watts. While in technical competition with the unusually shaped USB 3.0 and USB 3.1 cable and plugs, USB-C has recently had greater industry acceptance than its competing standards apparently because of its greater capabilities than the more traditional USB cables and connectors.

In addition to the traditional functions of charging devices, and transferring data, the new USB-C cables can do much more. Through a single port and a compatible cable, rather than multiple ports requiring different cables, USB-C can also handle video and audio. This makes it more convenient (and more cost effective) to provide connectivity to video devices such as a TV or monitor as well as audio devices, such as an amplifier or speakers, all from a single port on the device, using a single cable for all of the functions. It has recently been reported in the media that the upcoming iPhone 7, due later in 2016, will be doing away with the traditional 3.5mm headphone jack, and instead connecting the headphone to a traditional (and reversible) Lightning power port, but some leaked images of the iPhone 7 show what appears to be a USB-C style port, which by design can handle headphones as well. Some of the new MacBooks are using the USB-C cable instead of a Lightning cable. (usatoday.com/story/tech/2015/12/01/iphone-7-headphone-jack-rumor-report/76591864)

While the USB-C standard was finally approved and adopted during the summer of 2015, what has happened with the early adoption of other technical standards, has happened to USB-C; that is some of the hardware with USB-C ports and many of the newly manufactured USB-C cables fail to meet the new standards, which can create sometimes serious incompatibility problems. Following complaints from users of new model Google Chromebooks (such as the Pixel 2 model) and newer model Google Nexus phones (Nexus 5X and 6P) that require USB-C cables, a well respected engineer working for Google, Benson Leung, intentionally purchased a variety of cables advertised as USB-C compatible on Amazon, and found that many of them were very problematic. Posted on his Google+ blog, Benson Leung found that, "You may not just get weird behavior from your devices with these bad cables... What some these vendors are doing is downright dangerous." As quoted in Fortune Magazine (fortune.com/2015/11/05/usbc-google-amazon-reviews), Benson Leung was reported to have said, "Some cables with a type C connector on one end and a legacy connector on the other end do not connect the correct resistor to pin A5 of the type C connector, causing a device connected to the cable to incorrectly determine the amount of power it is permitted to draw from the

cable. Cables with this issue may not work properly with certain products, including Apple and Google products, and may even damage power sources such as chargers, hubs, or PC USB ports." Fortune goes on to say, "Leung has taken to calling out bad cable vendors in Amazon reviews under the username LaughingMan. So far, he's reviewed 10 different cords and adapters and has found seven of them severely lacking. The biggest issue he's found is that the cords won't charge the Chromebook Pixel properly. Although some of the deficient cables will transfer data and power, they do it incorrectly, which could end up damaging your device in the long run." Some of these deficient USB-C cables sold for as little as \$8.99 on Amazon. The Fortune article mentioned that Benson Leung did find a few of the third party made USB-C cables that he purchased on Amazon did work as well as the more expensive name brand cables made by Apple, Google for their own devices. Leung tested a \$19 cable made by iOrange-E (currently priced at \$12.99 on Amazon), and found that it did indeed work well on Google devices, for which he gave it a 5-Star rating on Amazon. Leung also found that the \$20 USB-C cable made by Belkin was "good as the ones that Apple and Google provide with and sell on their stores as accessories" and also awarded it five stars.

Some smart phone makers have also fallen into the trap of providing incompatible and potentially damaging USB-C cables and chargers for use with their newly produced phones. One such example is the recently released OnePlus branded charger and USB-C cable sold on the OnePlus factory website; the chargers and USB-C cables were manufactured by third party suppliers. Because these chargers and cables allegedly do not meet the USB-C standard, and are similar to the problematic USB-C cables discovered on Amazon by Benson Leung, OnePlus has offered anyone who purchased these questionable chargers and USB-C cables from their website a full refund. According to OnePlus, only the "standalone" chargers and USB-C cables purchased on their website will be refunded, but the USB-C cables and chargers bundled with new phones, such as the OnePlus 2, are not eligible for that refund.

Many of the media pundits are referring to USB-C as the primary "go to" cable and connector of the future. It is fast, can carry more electrical power, and can drive a variety of other devices. One cable manufacturer, Monoprice, is already offering connectors and converters for USB-C that can take a signal directly from the smart device, and output the data to HDMI (HD TV video input), gigabit Ethernet (high speed networked data), and other devices. I did a search on Amazon and other websites for USB-C cables, carefully reading the published reviews and ratings (which I know are not always accurate and truthful), finding that many of the listings have changed their wording since Leung and Fortune did their expose' on substandard USB-C cables. Some of those which were problematic now only state that they are capable of USB 2.0 data speeds, but nothing about the alleged electrical deficiencies. Some, such as the \$20 Belkin cable cited positively by Leung, now display a statement that they are certified as compatible by USB-IF, the organization that finalized the USB-C standard and conducts compliance testing.

If considering purchasing a USB-C cable, be sure to read the reviews (acknowledging their sometimes unreliability), and check to see if it is certified by the USB-IF. There is no need to waste money and possibly damage your devices by buying inferior cables. For users of some Nexus devices, specifically the Nexus 5X and Nexus 6P phones, there is a free app available in the Google Play Store called CheckR that can test USB-C cables for proper functionality; at present this app will not yet work on other devices, but a version for the Chromebook Pixel will be available in the future. Also check to see if the transfer speed of the cable is appropriate for your devices, as most are now labeled as compatible with the USB 2.0 480 MB per second transfer rate, but a few that are much more expensive are listed as USB 3.1 compatible with transfer speeds up to 10 GB per second. If your device is listed as USB 2.0, then there is no need to waste your money on a cable with a greater speed potential than that which can be handled by your device.



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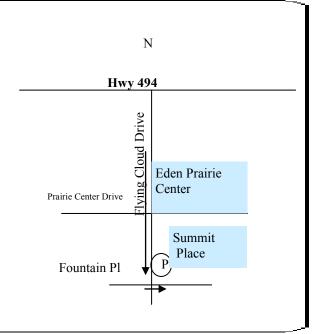
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