





# **Vol 38 No 01** *15 January* 2023

Page	Article	Author	Position	Club
3	From the President's CPU	Keith Catts	President	<b>*</b>
5-9	Johns Jots	John Tacey	Q&A	<b>*</b>
10-19	APCUG Articles	Various	Various	APCUG

	Meeting Timetable	
Mitc	helton Library Helios Parade <i>N</i>	Nitchelton
9:30am	Q&A	John Tacey
11pm	.Do you need Windows?	Fred
1:00pm	Lunch Report to the Club	
2:00pm	Alternative to Windows.	Keith
If you have the meeting	e a question that may need a bit of a look up, l	et me know before
Presentatio	n can be done using Power Point and shared so	creens.



# **Significant Bits**

Journal of Brisbug PC User Group Inc.

# SIGNIFICANT BITS

the Journal of BRISBUG PC USER GROUP INC. A Computer Club for users of PC-type computers

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The Members' Web Page

# **Meeting Days**

15 January 2023 19 February 2023 19 March 2023 16 April 2023 21 May 2023

# Magazine

Editor Chris Haydock

Proof-reader John Tacey

# **Submission Deadline**

# Friday 3 February 2023

Please use e-mail if possible

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# Hi All,

Welcome to 2023 and another year of the fast changes in technology.

I advise of a correction to the financial report in the December magazine, I started to input and unfortunately when completing the data I did not update the finance. I corrected it and have uploaded the replaced the magazine on the web site. The total of the APCUG and Canteen costs was \$118.15.

We closed off the year asking the question: "Do You Need Windows" Fred posed this question and discussed an Excel spreadsheet he had constructed to help you answer that question.

We will revisit it to see what answers have come up. We will also do a question and answer to work through the sheet for those who want to participate.

You should consider the question even if you have no plans to change but it is sound knowledge to know if you could survive without Windows and what the alternative may be.

The most likely alternative is of course Linus which offers a total package of OS and consumer Apps that will do all we need for a base computer and internet access; and it is free and updates free.

The other advantage is that the package will run on existing hardware.

All for now See you at the meeting

Keith

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Reports	
lation and Education	

# **Presentation and Education**

Presentation: Do you need Window?

Morning 11am.

Afternoon 1pm: Alternative to Windows.

# Membership Report - Gary Woodforth

We had 10 members at the December meeting.

Fees for the year 2023 are waived, but we need you to formally renew your membership.

# Treasurer's Report

# December 2022

<b>Opening Balance at 1/12/22</b>	2822.35
Income	
Bank Interest	0.01
Total Income	0.00
	0.01
Expenses	
Canteen Xmas	40.12
APCUG Annual Subscription	78.03
Total Expenses	118.15
Month's Gain	0.01
Balance at 31/12/22	2704.21
Ross Shyring	
Treasurer	





### **Q&A - December meeting**

#### **Battery Powered Devices**

#### **Digital Multimeter**

This was a small unit which is, of course, battery powered.

There is no way to access the battery for replacement so total failure.

#### LED Decorative Light Dome

May be repairable, taken for assessment.

#### Power Consumption Meter

Remote Display unit for a device connected to the 240V supply.

Not working with new batteries. Failed.

It is likely that a new display will be NLA (No Longer Available).

If the facility is required a completely new device is required.

#### E-mail Phone to PC Send Fail

This required a hands on investigation with the devices, which took some time to sort out.

#### Keep Payment Details?

Online store request for ease of next purchase.

For security do not accede to this. Unfortunately, you cannot be sure that your response will be actioned.

Paranoia Pays.

#### Pay an Account by Credit/Debit Card

Online payment requires an account to be created.

Why? Data harvesting?

Pay by phone straight forward, does not require an account.

#### Streaming Buffering

Input is from a 4G MBB (Mobile Broad Band) modem, the connection to the displaying device may be wired or WiFi 802.11. ??

#### WiFi Protocols

# https://www.abiresearch.com/blogs/2022/10/05/wifiprotocols-explained/

Buffering is when a video keeps pausing or loading, interrupting play. It's usually due to a poor internet connection.

However there are various other causes.

#### Streaming+Buffering

https://www.wikihow.com/Stop-Buffering

#### https://www.purevpn.com/blog/how-to-stop-bufferingwhile-streaming/

## Internet and Home Phone Service Failed

Telco Answer - Buy MBB Modem (has proved unreliable).

Telco considers failure fixed.

Answer, advise the service provider that unless fixed properly will change to another telco.

#### Securing device documentation

Some documentation comes as a small piece of paper, sometimes with minuscule printing.

Information which came with the device, store in a display book/s.

Download as a PDF from manufacturer or supplier and store in Manuals folder on PC.

Scan the original to store in a Manuals folder on the PC.

#### Classes of Help Required

Those where an explanation or demonstration will suffice to answer.

Where access to the device is necessary to sort it out.

#### Problem presentation

Needs to be clear and concise.

Record the circumstances, symptoms and any messages in Chronological order.

If it helps bring this in printed form or on a USB drive to the meeting for examination.

Note: This record of the Q&A session topics relies on my biological volatile memory (a.k.a. the 'forgettory').

#### **Gleanings from e-newsletters and other sources.**

#### Reviews

#### The Best Security Suites for 2022

By Neil J. Rubenking Nov 15, 2022

What's the best security software for keeping your PC safe? We've tested, reviewed, and rated nearly 40 apps to help you choose the top security suite for protecting your devices and data.

https://au.pcmag.com/suites/9287/the-best-securitysuites

#### The Best Video Editing Software for 2022

By Michael Muchmore Nov 26, 2022

Whether you're a smartphone shooter posting on TikTok or a professional creator with your own media company, we've got a top tested video editor for you.

#### Michael Muchmore

https://au.pcmag.com/video-editing/47051/the-bestvideo-editing-software

#### The Best Photo Editing Software for 2023

By Michael Muchmore Dec 22, 2022

Whether you're a casual selfie shooter or a professional photographer, photo editing apps let you get the most out of your images. The software included here is best in our testing.

#### https://au.pcmag.com/photo-editing/9461/the-bestphoto-editing-software

#### The Best Soundbars for 2023

By Will Greenwald Dec 22, 2022

Want better audio from your TV? These compact speaker systems can instantly amp up your home theatre experience, without (most of) the messy wires of a traditional setup. From our lab to your living room, here are the best soundbars we've tested.

https://au.pcmag.com/speakers/4113/the-bestsoundbars

# AirTag vs. Tile: Which Bluetooth Tracker Should You Choose?

By Steven Winkelman Dec 21, 2022

Whether you've lost your keys, phone, or wallet, an AirTag or Tile can help track them down. But which one is best for you? We tested Apple's AirTag and all four Tile trackers to help you decide.

https://au.pcmag.com/mobile-phoneaccessories/91116/airtag-vs-tile-which-bluetoothtracker-should-you-choose

The Best Cheap VPNs for 2022

By Max Eddy Dec 29, 2022

These top VPNs don't cost much. Better yet, they don't come with any of the restrictions common among free VPNs.

https://au.pcmag.com/vpn/86456/best-cheap-vpns-for-2021

#### New Releases

#### Avast Free Antivirus 22.12

License: Freeware

File name:	Avast_Free	_Antivirus_v	v22.12.exe
File Size:	0.26 MB	O/S:	Windows

Publisher: Avast Software s.r.o.

URL: <u>https://www.avast.com/antivirus</u>

#### Foxit Reader

License: Freeware

File Name:Glary\_Utilities\_v12.1.0.15250.exeFile Size:160MBO/S:WindowsPublisher:Foxit CorporationURL:<a href="http://www.foxitsoftware.com/">http://www.foxitsoftware.com/</a>

Glary Utilities 5

License: Freeware

File Name: Glary\_Utilities\_v5.199.0.228.exe

File Size: 19.69 MB

Platform: Windows 8, 7, 2000, XP, Vista. 32/64bit version.

Publisher: Glarysoft Ltd

Languages: 44 Languages [Help Translate]

URL: http://www.glaryutilities.com/

Glary Utilities is a freeware with registry and disk cleaning, privacy protection, performance accelerator and amazing multifunctional tools. It can fix dogged registry errors, wipe off clutters, optimize internet speed, safeguard confidential files and maintain maximum performance.

It is designed for both novice and professionals. Userfriendly interface shows clear & detailed directions. For novice, all work can be done with just 1 or 2 clicks, while for professionals, abundant options are available.

Key features:

Optimize, clean and boost the speed of your Windows.

Protect your privacy and security.

Block spyware, trojans, adware, etc.

Fix certain application errors.

Simple, fast and user friendly interface.

For private use only.

URL: http://www.glaryutilities.com/

#### Google Chrome (32bit) 108.0.5359.99

License: Freeware

File name: ChromeSetup.exe

Windows

Publisher: Google

File Size:

URL: <u>https://www.google.com/chrome/</u>

87.06 MB O/S:

Inkscape (32bit)

License: Freeware

File name: Inkscape\_(32bit)\_v1.2.2.msi

File Size: 137MB O/S: Windows

Publisher: inkscape.org

https://www.filepuma.com/download/inkscape\_32bit\_0.92.4-21328/download/

#### LibreOffice

#### License: Freeware

File name:LibreOffice\_7.4.3 \_Win\_x86.msiFile Size:319 MBO/S:WindowsPublisher:The Document FoundationComments:Contains the functions:-Writer

### PDF

Presentation

Spreadsheet

URL:https://mirror.freedif.org/TDF/libreoffice/stable/6 .2.0/win/x86/LibreOffice\_7.4.3\_Win\_x86.msi

#### Macrium Reflect Free(32bit)

License: Trial Version

File name: Macrium\_Reflect\_Free(32bit)\_ v8.0.7175 .exe

File Size: 175 MB O/S: Windows

Publisher: Paramount Software UK Ltd:

#### URL: <u>http://www.softpedia.com</u>

#### Mozilla Firefox

License: Freeware

File name: Mozilla\_Firefox\_(32bit)\_v108.0.1.exe Update

File Size: 52.72MB O/S: Windows 7 to 10

Publisher: Mozilla Corporation

Comments:-

To force a manual update:-

Menu Button > ? Button > 'About Firefox'

URL: <u>https://www.mozilla.org/en-US/firefox/new/</u>

#### Mozilla Thunderbird

License: Freeware

File name: Thunderbird Setup 102.6.1 (GB).exe

File Size: 51.5 MB O/S: Windows XP SP2 to 10

Publisher: Mozilla Corporation

URL: <u>http://www.mozilla.org/en-GB/thunderbird/</u> NotePad++ (32bit)

License: Freeware

File name: NotePad\_v8.4.8.exe

File Size: 4.19 MB O/S: Windows

Publisher: Notepad++

URL: https://notepad-plus-plus.org/

#### Video DownloadHelper 7.6.6 for Firefox

#### License: Freeware

Last updated 8 Dec. 2022

File Size: 830.53 KB

URL: https//addons.mozilla.org/en-US/firefox/addon/video-downloadhelper/

#### URL:

https//www.downloadhelper.net/update?browser=firef ox&from=7.6.0&to=7.6.6 Video DownloadHelper is the most complete tool for extracting videos and image files from websites and saving them to your hard drive.

Just surf the web as you normally do. When DownloadHelper detects embedded videos it can access for download, the toolbar icon highlights and a simple menu allows you to download files by simply clicking an item.

Video overview on how to use Video DownloadHelper:-

https://www.youtube.com/watch?v=mZT8yI60k\_4

#### VLC Media Player (32bit)

License: Freeware

Filename:VLC\_Media\_Player\_(32bit)\_v3.0.18.exe

File Size: 40.7 MB

O/S: Windows XP SP3 to the last version Windows 10.

Publisher: VideoLAN Project

URL: <u>https://get.videolan.org/vlc/3.0.3/win32/vlc-3.0.7.1-win32.exe</u>

#### Tips etc.

Is Your Password Manager Lying to You?

By Neil J. Rubenking Dec 15, 2022

Password management companies swear that they have zero access to your master password, which you enter every time you log in. How is this even possible?

https://au.pcmag.com/password-managers/97796/arepassword-managers-lying-about-not-knowing-yourmaster-password

#### Got a New PC? 11 Things to Do Right Away

By Eric Griffith Sep 22, 2022

Windows PCs need some adjustment before they're ready for everyday use. Here's what to install, what to delete, and how to make sure your new investment is safe and secure.

https://au.pcmag.com/laptops/83516/got-a-new-pc-11things-to-do-right-away

Better Safe Than Sorry: How to Secure Your Windows PC With Dynamic Lock

By Lance Whitney Dec 24, 2022

If your Windows 10 or 11 PC detects that you've walked away with your smartphone, Dynamic Lock secures your computer. Here's how to turn it on.

https://au.pcmag.com/migrated-15175-windows-10/48498/better-safe-than-sorry-how-to-secure-yourwindows-pc-with-dynamic-lock

10 Tips to Boost Your Android Phone's Battery Life By Jason Cohen Dec 04, 2022 Today's Android phones pack big, bright screens and high-end features that suck plenty of power. Here's how to squeeze the most juice out of your battery.

https://au.pcmag.com/batteries-power/10949/9-tips-toboost-your-android-phones-battery-life

No More Monthly Fees: How to Build Your Own Home Security System

By John R. Delaney Nov 15, 2022

Don't want to pay for professional installation or recurring monitoring fees? You don't need to spend a ton of money or stick to a single brand of products to protect your home if you go the DIY route.

https://au.pcmag.com/smart-home/92886/no-moremonthly-fees-how-to-build-your-own-home-securitysystem

What to Expect When You Have an EV Charger Installed in Your Home

By Emily Dreibelbis Nov 30, 2022

We spent the day with an electrician who walked us through the EV charger home installation process. Here's what to expect and how much it'll cost you.

https://au.pcmag.com/cars-auto/97520/ev-chargerinstallation-ride-along-step-by-step-instructions-foryour-home

LastPass Hack Gets Worse: Culprit Stole Customers' Encrypted Password Vaults

By Michael Kan Dec 23, 2022

LastPass is warning the hacker could gain access to the encrypted password vaults by trying to find ways to uncover customers' master passwords.

https://au.pcmag.com/security/97962/lastpass-hackgets-worse-culprit-stole-customers-encryptedpassword-vaults

Android Malware 'Godfather' Targets Users of 400 Banks, Crypto Exchanges

By Marco Marcelline Dec 23, 2022

The malware generates fake login screens that appear on top of legitimate banking and crypto exchange apps' login forms, stealing victims' passwords.

https://au.pcmag.com/security/97957/androidmalware-godfather-targets-users-of-400-banks-cryptoexchanges

Gone But Not Forgotten (Yet): The Tech That Died in 2022

By Chloe Albanesius Dec 22, 2022

Nothing lasts forever. From Amazon Glow and CNN+ to Google Stadia and Lego Mindstorms, here are the products and services that took a bow in 2022.

https://au.pcmag.com/news/97920/gone-but-notforgotten-yet-the-tech-that-died-in-2022 Apple Watch's Blood Oxygen Sensor Has a 'Racial Bias,' Lawsuit Claims

By Stephanie Mlot Dec 29, 2022

The wearable's blood oxygen sensor allegedly fails to accurately register dark skin tones.

https://au.pcmag.com/smartwatches/97992/apple-

watchs-blood-oxygen-sensor-has-a-racial-bias-lawsuitclaims

US House Tells Lawmakers, Staff to Delete TikTok From Their Phones

By Stephanie Mlot Dec 29, 2022

As part of a ban included in the omnibus spending bill, those who have TikTok on House-issued phones will be asked to remove it and future downloads will be blocked.

https://au.pcmag.com/social-media/97995/us-housetells-lawmakers-staff-to-delete-tiktok-from-theirphones

Yes, It Was Down: The Top 10 Internet Outages of 2022

By Chandra Steele Dec 21, 2022

Downdetector has the scoop on which site failures drove the internet wild with worry this year.

https://au.pcmag.com/the-why-axis-serie/97896/yes-itwas-down-the-top-10-internet-outages-of-2022

Customizing Windows 11: How to Change Default Apps

By Michael Muchmore Apr 11, 2022

Microsoft has made it harder to choose which apps handle standard file types of documents, music, photos, and videos, though browsers get a reprieve from this system. Follow these steps to set default apps for all your file types.

https://au.pcmag.com/operating-

systems/90150/customizing-windows-11-how-tochange-default-apps

Still On Windows 10? How to Remove the Most Annoying Ads

By Whitson Gordon Dec 17, 2022

Microsoft likes to promote its own services in Windows 10. To remove these annoying tips, suggestions, and pop-ups, make these tweaks in the settings menu.

https://au.pcmag.com/migrated-15175-windows-10/86575/how-to-remove-the-most-annoying-ads-inwindows-10

How to Connect Your Android Phone to Your Windows 11 PC

By Michael Muchmore Jun 15, 2022

Connecting the two lets you send text messages, see notifications, instantly grab photos, and even run apps

from your Android on your Windows 11 PC. We show you how to get started.

https://au.pcmag.com/operating-systems/92826/howto-connect-your-android-phone-to-your-windows-11pc

Something Look Off on Your Monitor? Tweak These Windows Screen Settings

By Lance Whitney May 24, 2022

In Windows 10 or Windows 11, you can adjust the brightness, change the resolution, calibrate the color, and more on your computer monitor.

https://au.pcmag.com/migrated-15175-windows-10/47705/how-to-customize-and-enhance-yourwindows-10-display

Stay on Task: How to Silence Notifications in Windows With Focus Assist

By Lance Whitney Jul 20, 2022

Whether you're hard at work or relaxing with a game after hours, notifications for emails, texts, and more can be distracting. Here's how to tell Windows to leave you alone when you're busy.

https://au.pcmag.com/migrated-15175-windows-10/88560/how-to-silence-notifications-with-windows-10s-focus-assist

How to Unsubscribe From Unwanted Email

By Eric Griffith Nov 02, 2022

If you want off a mailing list, deleting messages won't be enough. Here's how to force unsolicited-but-legit email to stop bothering you.

https://au.pcmag.com/how-to/49568/how-tounsubscribe-from-unwanted-email

NortonLifeLock Merges With Avast to Form New Company Called 'Gen'

By Michael Kan Nov 08, 2022

The merged company will maintain the Norton, Lifelock, Avast, and Avira brands, though.

https://au.pcmag.com/security/97193/nortonlifelockmerges-with-avast-to-form-new-company-called-gen

Knowledge Workers Think They Have Great Password Habits—But Do They?

By Chandra Steele Nov 03, 2022

Half wouldn't even change their passwords after a breach.

https://au.pcmag.com/passwordmanagers/97102/knowledge-workers-think-they-havegreat-password-habits-but-do-they

2023 Could Be a Security Nightmare. Here's Why.

By Kim Key Dec 21, 2022

From ransomware's rise to malicious AI, I spoke to industry leaders about the online security trends we may see next year.

https://au.pcmag.com/security/97885/2023-could-be-asecurity-nightmare-heres-why

Here Endeth John's Jots

# **APCUG ARTICLES**

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#### Windows 11 OneDrive and a Microsoft Account An Offer You Can't Refuse?

David Kretchmar, Hardware Technician, Sun City Summerlin Computer Club <u>https://www.scscc.club</u> dkretch@gmail.com

OneDrive is cloud storage that is built into the Windows 11 operating system. Microsoft has integrated OneDrive more closely into Windows 11 than Windows 10, presumably to get more users onboard with what OneDrive offers. In this article, I'm not going to get into the "nuts and bolts" of the operation of OneDrive in Windows 11 but discuss some advantages of using



OneDrive, and hopefully convince users who have not taken advantage of this feature to consider it.

# What is OneDrive, and why do I need it?

OneDrive is the Microsoft cloud service that allows you to access your files from any device connected to the internet. OneDrive enables you to store and protect your files, share them with others, and get to them from anywhere on any device. OneDrive can be used on many operating systems, including iOS or Android.

# What's in It for Microsoft?



OneDrive and Microsoft Office 365 can provide Microsoft with "recurring" or "subscription" revenue, which is much more valuable than a onetime purchase of an operating system or a version of Microsoft Office. This explains why Microsoft appears eager to get users to have a Microsoft account as a first step toward using Microsoft subscription offerings.

# **OneDrive Promoted to the System Folder**

OneDrive now has a prominent place in the **System folder** in Windows 11:



Click on the OneDrive icon shown at the top of the system folder, and you will see the folders on your system are backed up (synced) on OneDrive:



# **Microsoft Account**

OneDrive requires a Microsoft Account. You already have a Microsoft account if you use other Microsoft features, such as Skype or the Microsoft Store. Microsoft strongly encourages Windows users to create a Microsoft account if they don't already have one, starting when a Windows 11 system is first configured. If a user does not have a Microsoft account, one can be created anytime at the Microsoft website.

# Levels of OneDrive storage

Different storage levels and other features are available for a Microsoft account. The basic free program provides a minimum of 5GB OneDrive storage. Individuals qualify for additional free storage based on the length of time they have had a Microsoft account or on the length of time they have used a Microsoft email address (Outlook, Hotmail, or Live.com). For example, I have had a Hotmail account for many years and get 15 GB of free OneDrive storage due to "loyalty bonuses."

For \$1.99 per month, you can get 100GB of storage. Microsoft 365 Personal subscriptions (\$6.99/month, \$69.99 a year) provide a massive1TB (1024 GB) of OneDrive online storage. Microsoft 365 Family subscriptions are \$99.99 per year and \$9.99 per month. They provide 1TB of OneDrive space for up to six users.

# Do I really need a Microsoft account?

A Microsoft account is required to install and activate Office versions 2013 or later and Microsoft 365 for home use. You might already have a Microsoft account if you use a service like Outlook.com, OneDrive, Xbox Live, or Skype; or if you purchased Office from the online Microsoft Store. If you have no interest in OneDrive, Skype, Microsoft mail, or any of the many applications available from the Microsoft Store, you don't *need* a Microsoft account.

# **Conclusions and Recommendations**

Microsoft has evolved OneDrive into a reliable and useful service that gives you a minimum of 5GB of cloud storage for free. Over time free OneDrive cloud will grow to 15GB. Users should strongly consider using at least the free storage furnished by Microsoft to back up vital documents and pictures or any files they might need to access from any device on any internet connection in the world.

# Wi-Fi Hotspot and USB Tether

If you use a smartphone Wi-Fi hotspot to provide an internet connection to a single computer, the tether option may provide advantages.

By John Krout, Presenter and Newsletter Contributor

# Introduction

Many environments do not provide either reliable Wi-Fi or high-speed Wi-Fi. In those environments, some find that the only way to provide internet access for a computer is to enable a smartphone to provide a Wi-Fi hotspot. From the viewpoint of the computer user, that hotspot is just like any Wi-Fi service. The hotspot shows up in the computer's list of available Wi-Fi services. Connection to the hotspot usually requires a password; you can find that password on the smartphone's screen.

Any Wi-Fi hotspot does face issues affecting its performance.

First, the Wi-Fi hotspot drains the smartphone battery at an increased rate, more rapidly than when the smartphone hotspot is disabled.

Second, the smartphone's Wi-Fi hotspot offers no competition for a Wi-Fi router. A router typically has two or more antennae and supplies much greater Wi-Fi signal power than a smartphone Wi-Fi hotspot.

Since a smartphone's Wi-Fi signal is weaker than a router's signal, the distance between the smartphone hotspot and the computer is critical. Put the phone as close as possible to the computer. Move the smartphone a bit farther away, and the speed of the Wi-Fi connection available to the computer declines.

Third, due to the weak Wi-Fi signal from a smartphone, the Wi-Fi signal strength and, therefore, the internet speeds may vary because of intermittent nearby interference beyond anyone's control.

In short, tether options overcome those three issues.

If your smartphone already enables you to create a Wi-Fi Hotspot, then your smartphone likely provides one or more options to use a tether.

# **Bluetooth tether**

Both recent iPhones and recent Android phones also include Bluetooth tethering capability. However, since Bluetooth involves no cable, the capability is better described as a Bluetooth hotspot.

Again, like Wi-Fi hotspots, your carrier contract may or may not allow your use of Bluetooth tethering. Also, like Wi-Fi hotspots, Bluetooth has disadvantages. For example, Bluetooth usage accelerates smartphone battery drainage. Also, Bluetooth range for useful internet data rates is quite limited and degrades over distance.

# **USB** Tether advantages

USB tether simply means that the smartphone provides internet service to the computer through a USB cable. The Windows 10 and 11 operating systems automatically recognize that the USB tether provides an internet connection.

The USB cable connection provides power from the computer to the smartphone, reducing battery drainage. In addition, USB cable communication requires less power than Wi-Fi or Bluetooth, reducing battery drainage.

## How to enable an Android phone's USB Tether

First, attach the smartphone to a USB cable, then connect that USB cable to a USB-A socket on a computer. Most recent smartphones support USB3, so plug that cable into a USB3 socket on the computer.

After that, you use Settings on your smartphone to enable the USB Tether behavior.

Here I will show you how to enable USB Tethering behavior on my Samsung Galaxy S10 smartphone running Android 12. The main Settings app screen, shown in **illustration 1**, is the place to start. Then, on that screen, tap **Connections**, which is circled in the illustration.

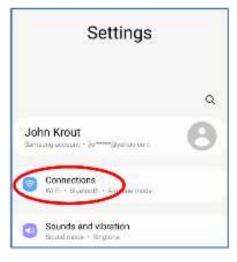


Illustration 1

In **illustration 2**, you can see the Connections screen. On that screen, tap **Mobile Hotspot and Tethering** is circled in the illustration.

< Mobile Hotspot and Tetheri	ng
Mabile Hotspot	
Bluetooth tethering Shara you phare's name: connection using Station h.	0
USB tethoning No VID dones Constant	0
Ethernet tethering	CIII

Illustration 2

In **Illustration 3**, you can see the Mobile Hotspot and Tethering screen. As shown, the USB Tethering switch is disabled. However, if a USB cable connects your smartphone and the computer, that USB Tethering switch will be enabled, like the Mobile Hotspot switch in the illustration.

< Connections	Q
Wi-Fi stwh	
Wi-Fi Calling	3
Bluetooth	
NFC and contactless payments	30
Airplane mode	0
Mobile networks	
Data usage	
Mobile Hotspot and Tethering	
More connection settings	

Illustration 3

After connecting the USB cable to the smartphone and the computer, tap the enabled USB Tethering switch to turn it on.

When you do so, the computer should recognize the available internet connection via the connected USB cable within a few seconds.

### How to enable an iPhone's USB Tether

On my iPhone X, the equivalent Settings screen sequence to turn on a hotspot are **Settings** $\rightarrow$ **Cellular** $\rightarrow$ **Personal Hotspot**. Unfortunately, my iPhone is not currently on a carrier contract. Therefore, Cellular is ghosted (disabled) in Settings, so I cannot enable and test an iPhone personal hotspot. The iPhone user's manual ebook on my iPhone does not document a USB tether capability. However, USB tether documentation on this iPhone support web page seems to indicate that a USB tether connecting an iPhone running iOS 15 to a computer can be accomplished without turning on any Settings switch: support.apple.com/en-us/HT204023

# **Ethernet tether**

You might think: my smartphone cannot connect to an Ethernet cable! On the contrary, perhaps it can, but you must spend some money to make it happen.

As you can see in illustration 3, my Samsung Galaxy S10 phone supports an Ethernet tether. To use that Ethernet tether, a smartphone must support On-The-Go (OTG) capability. The existence of that Settings Ethernet Tether switch may indicate that OTG is, in fact, supported. I happen to know by testing my S10 phone that the phone does support OTG. To use OTG with Ethernet, you must obtain a 3-way OTG adapter and a USB-to-Ethernet adapter. With the OTG connected to the phone to power, the USB side of the USB to Ethernet adapter, and an Ethernet cable connected to the Ethernet adapter and to a computer, the Ethernet Tether switch will be enabled.

Most of us already have the USB cable for a USB tether, so the USB Tether method is essentially more straightforward and cost-free than Ethernet Tether. Therefore, I suspect that the USB Tether method will be preferable for all readers of this article.

# **Final Notes**

A smartphone hotspot or tether will **never be any faster than the available speed provided by the nearest cell tower**. The very nature of cell towers means that factors beyond the control of any one person will cause the download and upload speed to vary. I have measured the 4G download speed from the cell tower about two blocks away from my suburban home a few times. The speed has been as high as 12 megabits per second and as low as 1.8 megabits per second.

Carrier companies claim that 5G will improve the speeds, but there are still caveats: 5G runs at a rate greater than 4G only if you are close to a 5G-compatible cell tower. Also, for maximum speed,

cell tower must not be overloaded. the Unfortunately, that condition is beyond the control of anyone other than the carrier company. Nevertheless, carrier companies are marketing 5G hotspots to businesses to use as an alternative to wired Internet connections. If that marketing succeeds. then 5G-compatible cell tower overloading may become the new 5G normal in cell towers serving residential and commercial customers.

ABOUT THE AUTHOR: John Krout has been writing about the creative uses of personal computers since the early 1980s and now writes about the creative uses of smartphones, tablets, and digital cameras. He is a retired software engineer who spent his career collecting requirements, developing designs, coding in C and C++, and writing documentation for systems large and small used by Federal government agencies. He lives in Arlington, VA, and is a member of the APCUG Speaker's Bureau.

## What Makes a Great Organization Great?

## YOU DO!

By Jim Cerny, Education Chair & Forums Coordinator. Sarasota Technology Users Group

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Most "non-profit" organizations exist to help others. They help in the community and have a mission and goals. Although I am writing this article for the members of our organization, the Sarasota Technical Users Group, I hope this article will benefit many members of other organizations and yours too. It has to do with making things better - to help more people in more ways. And we are NOT talking about money here! People make an organization work so it can do some good. If other organizations are like ours, you will see that only a handful of people do almost all the work. They serve on boards, and committees, make phone calls, send out communications, and more. Wouldn't it be a big help if someone volunteered to help, at only one or two hours a MONTH?! Yes, it would!

Let's take an example; we'll call him Joe. Joe likes to help others and enjoys it very much. He serves on the board, communicates, and answers emails about the organization. A big help for Joe would be if someone would volunteer to send out one or two monthly emails. Or make a couple of phone calls to verify membership. Or send out an email survey. This frees Joe up to do a better job in other ways, not to mention to give him a break.

Why do people not volunteer to help? I've heard many reasons over the years, and here are the main ones -

**1. I don't have the time**. Yes, you do. This is not a full-time job, and you will not be bothered by many phone calls or emails. There are plenty of needs for people like YOU, anyone, to give just an hour or two a month.

**2. I don't have the skills or knowledge**. You don't need ANY skills or knowledge to help. Of course, if you DO have some skills that could be useful, that's great. But we need people to help; first, many areas need your help, and no skills are required! Besides, we offer free training too!

**3. I'm taking care of a sick relative**. Wow, that's important, and no one wants you to neglect taking care of someone who needs you daily. But if you have the time to make phone calls to your friends, can you not make a few calls for your organization? Or send an email? A phone call to a member is a great personal touch that makes the organization more meaningful to them. Keeping in touch with members is a huge step to making a good organization a great organization.

Here are some things our organization would like to do to help our members, but we need volunteers to help: What type of help does your group need

**A) Offer more classes** – our instructors could use some help (no, you do not have to teach).

**B)** More contact with our members to understand how our organization helps them and what they would need or like in the future.

**C)** Conduct a survey to help us do more and better things.

**D) Improve communications** with our members – news articles, email, and phone calls.

**E) More recognition of others**, especially our volunteers, organizing a gift or luncheon.

# F) Asking other members to help too!

There are many benefits to helping, too – you will make new friends, learn something new, have more fun in your life, and have something to talk about (which makes you a more interesting person). So what's NOT to like? Organizations would always like to improve and do more for their members. Every such organization needs everyone to contribute a little to provide more. Will you donate an hour or two a month? Contact ANYONE in your organization to find out how.

I thank you in advance for your kind help.



# Ventoy

By Dick Maybach, Brookdale Computer User Group. <u>www.bcug.com</u> n2nd @att.net

Some years ago, Linux live CD-ROMs appeared. When these were mounted on a PC, it would boot directly from them and not require access to the hard disk. Later we saw live DVDs and then live USB memory sticks and SD cards. A limitation was that each distribution used an entire storage device. Ventoy, https://www.ventoy.net/en/index.html, which is available for Windows and Linux, removes this restriction. In this article, I'll cover what Ventoy does, how to set it up, and how you can use it.

Figure 1 shows the screen you see after booting from a Ventoy memory stick that contains three

Linux distributions, the general-purpose Knoppix, the repair tool PartedMagic, and the high-security Tails Linux. You then select the one you want to run.



Figure 1. Ventoy Boot Menu.

Begin by downloading a program to format storage devices from the Ventoy website. It's in the form of an archive; just unpack it and go to the resulting directory. Once there, mount the memory device, and run the program Ventoy2Disk.exe (in Windows) or VentoyGUI.x86\_64 (in Linux) to see the screen in Figure 2. (There are alternate versions for special situations; visit the Ventoy website.) Next, you select a device and then choose either Install (to create a new Ventoy device) or Update (to update an existing one). However, you will have more versatility if, before you click Install, you select the Option button at the top left of Figure 2, then select Partition Configuration, then Preserve some space at the end of the disk, and finally enter the amount. (For a 32-Gbyte medium, I choose 1 Gbyte; see below for the reason. You, of course, may prefer a different configuration.)

E: [326B] Kingston DataTray	/elez 3.0 👻 🔞
Ventoy In Package	Ventoy In Device
Status - READY	

Figure 2. Ventoy2Disk Window.

You're not entirely done. The device now has two partitions, a large empty one with an exFAT format (labeled "Ventoy") and a small one with a fat16 format (labeled "VTOYEFI") that contains the Ventoy boot program. There is also (if you took the advice above) unformatted space at the end. Reformat the Ventoy partition to NTFS and format the space at the end to NTFS with the label "Persist" (more about this later). You'll copy the live ISO files into the Ventoy partition. Since both Windows and Linux can access NTFS, the device will be usable on both. The result is Figure 3, and the memory stick or SD card is ready to use.

				/dev/sid - GPa	rted		- 0
CParted Ed	it vi	ew De	vice Partit	ian Help			
0	34	12	- 約二	24		Ades/sdd	(28.05 Gill)
				/dev/sdd1 27.64 GiB			
Partition	File S	ystem	Label	Size	Used	Unused	Flags
/dev/sdd1		oth	Verbay	27.84 GiB	7.45 GIB	20.19 G/B	3006
/dev/add2		fat16	VTOYER	32.00 Mill	23.81 MiB	8.19 Mill a	90
/dev/setd3		otts	Persist	1000.00 Mill	10,70 MiB	389.30 Mill	

Figure 3. USB Memory Stick After Ventoy Is Installed.

When you mount the device as a memory stick (that is, you don't boot from it), you'll see either two or three partitions. (Linux hides the middle one; Windows shows it.) As you can see, a 32-Gbyte stick with the three Linux distributions of Figure 1 has over 20 Gbytes available for transferring files. Figure 4 shows the files in the Ventoy partition that resulted in Figure 1. I created the Scratch directory to separate files transferred from the ISO images.

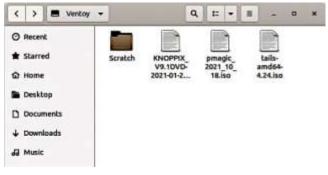


Figure 4. Files on a Ventoy USB Stick.

When you boot from the stick, neither the Ventoy partition nor VTOYEFI is available, but the live distributions can use partition three. This is because software booted from a live medium normally has only RAM for storage and forgets everything when it's shut down. However, if you create a third partition mentioned above, you can copy data that will persist after a shut-down, hence a label. This partition appears as a separate drive on the file manager when running a live distribution. It is also accessible when the medium is mounted on a PC, so you can transfer data to and from it.

Old PCs (those booting using a BIOS) will boot from a USB memory stick without complaining. However, if yours has a UEFI, you will probably have to change some BIOS settings. See https://www.digitalcitizen.life/boot-yourwindows-10-pc-usb-flash-drive/ or my article UEFI Configuration for Booting Live Media in the March 2020 BCUG Bytes, available at http://www.bcug.com/.

How might you use the result? I carry a 32-GByte USB memory stick in my key case for transferring files. I've installed Ventoy on it with the three operating systems shown in Figure 1:

- Knoppix, http://knoppix.net/ a generalpurpose Linux distribution optimized for use on live USBs,
- PartedMagic, https://partedmagic.com/ a PC repair tool, and
- Tails Linux, https://tails.boum.org/ an enhanced-security Linux distribution.

Knoppix lets me use my preferred OS, Linux, on almost any PC, regardless of whether the software on its hard disk is damaged or infected with malware. PartedMagic will help me repair a PC. And Tails will let me safely communicate with my bank or credit card company from anywhere. None makes any changes to data on the PC's hard disk unless I specifically do that. Figures 5, 6, and 7 show the home pages of these quite different distributions.

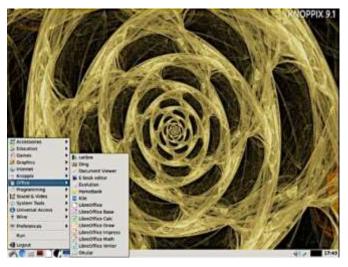


Figure 5. Knoppix Home Screen, Showing Its Office Application Menu.



Figure 6. PartedMagic Home Screen.

Aphalian Palat		Par Har 31 10-39	. o 0 A
Taxable 1	() To Season		
Accesses -	1 Performenten		
and a second a	· Collars provider untere		
(Mile David Take	() Tes termine		
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Annes Deersen	E fan		
			11111

Figure 7. Tails Home Page, Showing Its Favorites Menu.

All three distributions (Knoppix, PartedMagic, and Tails) have the program KeePassXC, https://keepassxc.org/, which I use to store sensitive data, such as user names, passwords, and PINs, in an encrypted database. I keep this in the Persist partition, which makes the data available if I need it and keeps it secure. I also exported my contact list to a spreadsheet stored in Persist. All distributions include LibreOffice, three https://www.libreoffice.org/, which can access this spreadsheet. Finally, all three have the encryption program GNU Privacy Guard, https://gnupg.org/, so I can safely store sensitive data on the medium. As you can see in Figure 8, the same key case also has a real Swiss Army Knife; as a result, I'm prepared for anything from disk crashes to wilderness survival.



Figure 8. Keycase with Ventoy USB.

I have another Ventoy stick with a dozen or so PC repair tools, and since it has over 16 Gbytes free in its Ventoy partition, I could add more. Although I often use PartedMagic for PC rescue, it doesn't do everything. Having all my tools on one stick means I have only one to take with me for troubleshooting a PC.

Ventoy also makes it easy to experiment with various Linux distributions. You need only download the ISO file and copy it to a Ventoy stick to try a new one. When you are through, reboot to return to the menu of Figure 1, where you can select another. Of course, there are limitations with this approach; you can't install additional software on the distributions, and a memory stick is slower than a hard disk. Neither is particularly important when you're just trying out a distribution to see if it's compatible with your PC or if you like its interface. Of course, running it on a virtual machine or as a dual boot is far more preferable if you regularly use a distribution

# **Timeshift Rescue**

By Cal Esneault, Past President and leader of many Open-Source Workshops & SIGs

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Any software update involving a PC operating system (OS) has the possibility of causing serious



issues. Therefore, Linux Mint added a default OS backup application called "Timeshift." In 2019, Mint started assuming you were using this program so that it could release updates without

previous complicated warning messages. After installing Mint 20.3, I set the weeklyTimeshift backup schedule with retention of only the latest three images to save disk space. A review of the Timeshift log at the time of an incident is shown below.

					Timeshift
Create	S Restore	O Delete	Browse	<b>%</b> Settings	<b>S</b> Wizard
Snapshot			System		Tags
2021-1	2-29 15:39	:39	LinuxMint 2	0.2 (uma)	OD
2022-0	1-06 12:00	:01	LinuxMint 2	0.2 (uma)	w
2022-0	1-13 13:00	:07	LinuxMint 20	0.2 (uma)	w
2022-0	1-20 13:00	:02	LinuxMint 20	0.3 (una)	W

Trouble started when I went to the update manager to get the latest updates. I did not get the normal authentification dialog box, and the updates did not respond. I tried to change the repository mirror in case of an issue with the Mint end, but it would not give me the authentification dialog either. Also, clicking the Timeshift icon would not launch the backup program (same issue, not authentication access). Searching the internet, I tried suggestions to clear the apt-cache, but this did not resolve the problem.

Next, I went to the terminal and launched Timeshift via the command line. Below is a partial response. It listed the correct commands to check my backups and pick one to restore from (see below).

cal@cal-Latitude-3450:~\$ sudo timeshift [sudo] password for cal: Examples: timeshift --list timeshift --restore I proceeded with the restore (choosing the latest) about a week before the issue appeared (see below).

cal@cal-Latitude-3450:~\$ sudo timeshiftrestore			
/dev/sda2 is mounted at: /run/timeshift/backup			
Select snapshot: Num Name	Tags Description		
0 > 2021-12-29_15-3 1 > 2022-01-06_12-0 2 > 2022-01-13_13-0 3 > 2022-01-20_13-0 Enter snapshot number	00-01 W 00-02 W		

After rebooting, the system was restored, and I could update again without any issues. I guess that some GUI quirk had occurred. This was the first time I had to use Timeshift for a real problem. Although previously skeptical, I am now a true believer. This is a program every Linux Mint or Ubuntu user should activate.

Note that Timeshift enables the user to split the OS backup with installed applications separately from user files (for example, data stored in the /home directory; I routinely back up data files using a different method). The alternative to this dual approach is to make a "mirror" image of the entire disk. I find the dual approach a more straightforward and faster method.

# TECH-NO-PHOBIA – are YOU a VICTIM YET?

By Jim Cerny, Education Chair & Forums Coordinator. Sarasota Technology Users Group

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How did all this happen so quickly? Some days I feel like I am left in the dust behind the high-speed train technology. Yes, I am glad technology is progressing. We all benefit from the advances in health care, safety, entertainment, and portability. But there is a downside too. What do you find overwhelming about technology? Let's compare some everyday things from the past to today's latest internet-connected mega-optioned computer-controlled devices.

There were no real "couch potatoes" watching TV in the old days; we got our exercise by having to get up OFF the couch to change the channel or adjust the volume. Today in my living room, I have four device controllers for the TV (the TV itself, the internet TV box, an old DVD player, Apple TV, and a few more I can't identify) – and all of them have dozens of buttons to push. My daily challenge is to figure out which one I should use before I even try to guess which button. Unfortunately, I usually guess wrong the first two times.

The big thing for young kids in the past was being able to read the comics in the Sunday newspaper. Remember Sunday comics in color? My parents would encourage me to read them, and I would pretend I could -- but my mom and dad were so proud I was learning to read at the age of 7 or 8. Today parents shove an iPad or iPhone into their kid's hands to amuse them at one-and-a-half. By age two, the child knows more about the phone than their parents. And by age four, they are answering tech hotline questions.

Learning to drive when I was a teenager was a real adventure. I learned the gas, brake, clutch pedals, gear shift, and the two-gauge dashboard (speedometer and fuel). Radio was a luxury. Today cars have several computers to monitor all the "systems" on the vehicle and, hopefully, keep you safe. And don't forget the ever-bigger TV screen on the dashboard -- it gives you access to thousands of options and a nice view when you back up your car. In a few years, there will be no need for car windows (see predictions later in this article).

Going grocery shopping was fun years ago; there were different stores for different things. You would walk to the downtown or shopping street (before malls) and get meat at the butcher's, bread at the bakery, can goods and cereals at the market, and you had to hope fruits and veggies were available in season somewhere. Today it is all online, even fresh fruit and veggies. The downside is that you get what they deliver. Somehow, I find no enjoyment in ordering food online, where I see only a picture of what I may get.

So, what do you think the future will hold for our children or grandchildren with technology? Will you allow me to make some predictions?

All windows will be replaced with high-resolution TV screens (sort of like Disney's Star Wars hotel). So, you will see what you want or want someone else to see. Food will be ordered based on your eating history and automatically delivered to you when you need it – even placed into your kitchen pantry or fridge by personalized food delivery services.

There will be no need for germ-spreading handshakes, touching, or personal contact.

All entertainment will be provided for you, including images for your sight, ears, nose, and nerve sensations by technology directly to your brain.

And shortly after all this, computers and robots will take over the world, and we will no longer be needed. So, I recommend we enjoy the technology we have while we can.

