THE
GIGABYTE
GAZETTE

**The Monthly Newsletter
of the**

SUN CITY SUMMERLIN
COMPUTER CLUB

https://www.scscc.club

December, 2023

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Tom Burt	*Gail Weiss*
Kathy Kirby	*David Kretchmar*
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President's Message

November News

by Jeff Wilkinson

As another successful year for your computer club draws to a close, we prepare for a board of directors' election and a Holiday Celebration at our December 7th monthly meeting. We continue to recover from the Covid years with meetings and classes held on Zoom, a very convenient venue for many, and in classroom hybrid sessions.

With exciting new offerings planned for 2024, your club continues to strive to support the special needs of our community. We are always open to your suggestions for new subject matter to explore and welcome your inputs.

2024 will bring a further emphasis on Windows 11, artificial intelligence, image and video editing, finance and investment, finance and investing, computer security, Microsoft Office, the Google suite of applications, and repair, upgrade and maintenance of your devices.

Have a Happy and Safe Holiday!

Jeff Wilkinson, President
(702) 527-4056 pres.scscc@gmail.com

General Membership Meeting

The club's General Meeting will be at **2 PM on Thursday December 7ᵗʰ** in Desert Vista Room 5. Final nominations will be accepted from the floor, after which the election of 2024 officers and directors will be held. Our program will be the club's annual holiday party. We'll have assorted types of pizza along with the usual coffee and cookies.

For Club information: go to www.scscc.club, contact Jeff Wilkinson, President at (702) 527-4056 or email him at pres.scscc@gmail.com.

SCSCC Board of Directors Actions

The Computer Club Board of Directors took the
following actions on November 8, 2023

Tom Burt made a motion that the **minutes of the October 11, 2023 Board Meeting be approved as submitted.** The motion was seconded by Neal Gronich and unanimously approved by the Board.

Jeff Wilkinson made a **motion** that the **meeting adjourn**. Tom Burt **seconded** the motion, and it was unanimously **approved** by the Board. The meeting was adjourned at 10:02 AM.

December 2023 Printable Calendars

To view this month's printable classroom and lab calendars, click the following hyperlink:

https://www.scscc.club/Calendars/scscc_calendar_2023-12Dec.pdf

Submissions Welcome

We are always looking for new information to share with our club members. If you have computer or technical information or tips you would like to share with members of the club, send your articles to editor **Tom Burt** at tomburt89134@cox.net. Thank you to everyone for your contributions.

Welcome New Members

The following new 2023 members have joined the Computer Club
from October 29 to November 28, 2023.

Preston Fray	**Kathleen Nicely**
Ronald Mazanka	**Katherine Weber**

As of November 30th, the club has 561 paid memberships for 2023 and 49 for 2024.

As of December 31st, 2022 the club had 570 paid memberships for 2022.

The Computer Club is now accepting new and renewed memberships for 2024. Annual dues are $10 per person, good for the remainder of 2023 and all of 2024.

Special Interest Groups and Kaffee Klatches

Special Interest Groups (SIGs) provide a forum for general discussion on a specific computer-related subject. Admission to all SIGs is on a first-come, first-seated basis and is subject to the maximum allowed by fire code regulations. <W>, <L>, <M> or <H> indicate whether a SIG would be of interest to a Windows, Linux, MacOS or Hand-held Device user.

Android Help <H> *Live in the Classroom*

Gene Koch
Third Thursday at 1 PM monthly
Next meeting: Thursday, December 21, 2023

This hands-on Q&A session offers one on one help to Android phone and tablet users.

Apple iPhone / iPad Help <H> *Live in the Classroom*

Zane Clark 702-332-5747
First Wednesday, 9 a.m. monthly
Next meeting: Wednesday, December 6, 2023

The help session offers one-on-one help with your questions and problems. Come anytime, leave anytime.

Internet Investing <W/M/H> *via Zoom*

Tom Burt (702-341-7095)
3rd Thursday, 10 a.m. monthly (regular time)
*Next meeting: **Wednesday, December 20, 2023 (this month only)***

The Internet Investing SIG provides a forum for members interested in using Internet resources for researching and managing investments. The group meets to discuss, and learn more about investing, finance, tax, estate planning and legal matters. The SIG's target audience is members with intermediate computer skills and investment experience, but all members are welcome.

Kaffee Klatch <W/M/H> *via Zoom*

Jeff Wilkinson (702-527-4056)
Every Tuesday at 8:30 a.m.

This Kaffee Klatch is an open, free-form discussion group for all users, from beginning to advanced. KK discussions are not restricted to any one subject, computer platform or computer-knowledge level but should be computer or technology related. We will try to answer your questions, help you keep your systems updated and provide some useful "tips and tricks."

Repair SIG <W/L/M> *Live in the Classroom*

Chuck Hagen (702-418-2614)
Every Tuesday, 12:30 p.m. to 3:00 p.m.

The Repair Lab provides **CLUB MEMBERS ONLY** with no-cost assistance for those having upgrades and / or hardware and software problems with their computers. Bring in only your PC tower, your Mac or your laptop and your problems. Our TECH team will give you our best effort. ***Be sure to mark your cables so you can re-connect when you get home***.

Windows 10/11 SIG *Live in the Classroom*

*Bill Wilkinson (702-233-4977)*
First and Third Saturdays at 9:30 a.m.
Next meetings: Saturday, December 2 and December 16, 2023

If you are a novice or near-beginner computer user, or if you just want some refresher information together with a refreshing cup of coffee, then jump-start or recharge your computing knowledge by attending these Windows 10/11 SIG / Q&A sessions. At each session, attendees will explore several topics of interest to beginners and near-beginners. The topics are always announced a couple of days in advance via e-mail to SCSCC members who have subscribed to the club's SCSCCNews mailing list. Each topic is presented in a step-by-step manner and is supported by "how to" notes that can be easily and conveniently downloaded from the SCSCCBKK.org web page. Following each "up front" presentation of one or more topics (approximately 60 minutes in duration), an informal open-ended Question and Answer period takes place for those who wish to participate, listen, reflect, or inquire.

Class and Q&A Offerings

The club's educational sessions are being conducted either as Zoom webcasts, live in-person or a hybrid of the two. Check the weekly calendar on the **club website** to see which mode the session is using. Unless explicitly stated, advance registration is not required for these sessions.
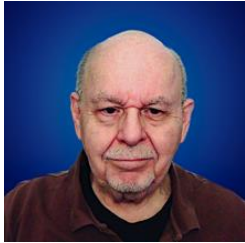
Image Editing with GIMP

Thursday, December 28th 10 – 11:30 AM *via Zoom*
Presenter: Tom Burt
Location: Zoom Webcast

One of the most popular **free** programs for advanced editing of images is the **G**NU **I**mage **M**anipulation **P**rogram (**GIMP**). GIMP is an open-source image editor with a rich and powerful set of features. It's available for Windows, MacOS, Linux and other "ix" platforms.

While we can't begin to cover the full scope of GIMP's capabilities, this 1½-hour seminar will demonstrate how to use GIMP in restoring and enhancing your photos to turn them from snapshots into photographic art. We'll first cover all of the common image edits. Then we'll reach beyond the basics, demonstrating layers and other advanced techniques you'll want to use in your "digital darkroom". We'll do this via a set of demonstration projects.

You can never have too many image editing tools – especially when the price is right ($0.00). So come check out GIMP and see if it belongs in your image editing tool kit.

The presentation notes will be available about December 24th at: http://www.scscc.club/smnr.

We will be recording this seminar and posting it to the club website.
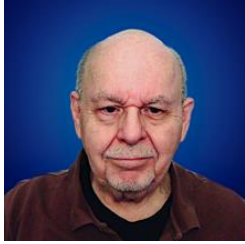
Tom's Tech-Notes

Desktop Linux Mint 21.2
Tom Burt, SCSCC Vice-President

Even though I'm predominantly a Windows 10/11 user, every 18 months or so, I teach a seminar on "What's New with Linux". As you might guess, it doesn't usually draw much of a crowd. My favorite "distro" (version) is Linux Mint because it's free (open source), it comes with a very nice graphical desktop (actually, a choice of three), it includes lots of bundled applications, it's well-supported and it performs great on old, low-end hardware. Also, because of its internal design, Linux is innately very secure. Support from Microsoft for Windows 7, 8 and 8.1 is long gone and Win 10 support is steadily fading. If you're now among the Windows orphans, you might want to consider installing Linux Mint to replace or run alongside Windows on your "well-seasoned" PC. Following is an overview of Linux Mint 21.2, the newest version released in November, 2023.

How to Get and Install Linux Mint 21.2

Browse to: https://linuxmint.com/. Click the Download button. Click one of the buttons to choose which desktop version (Cinnamon, Mate, Xfce or "Edge") to download. A page of information, including download links, will appear. Click one of the "USA" download links to download a 64-bit "ISO" (DVD) image file to a folder on your PC's hard drive.
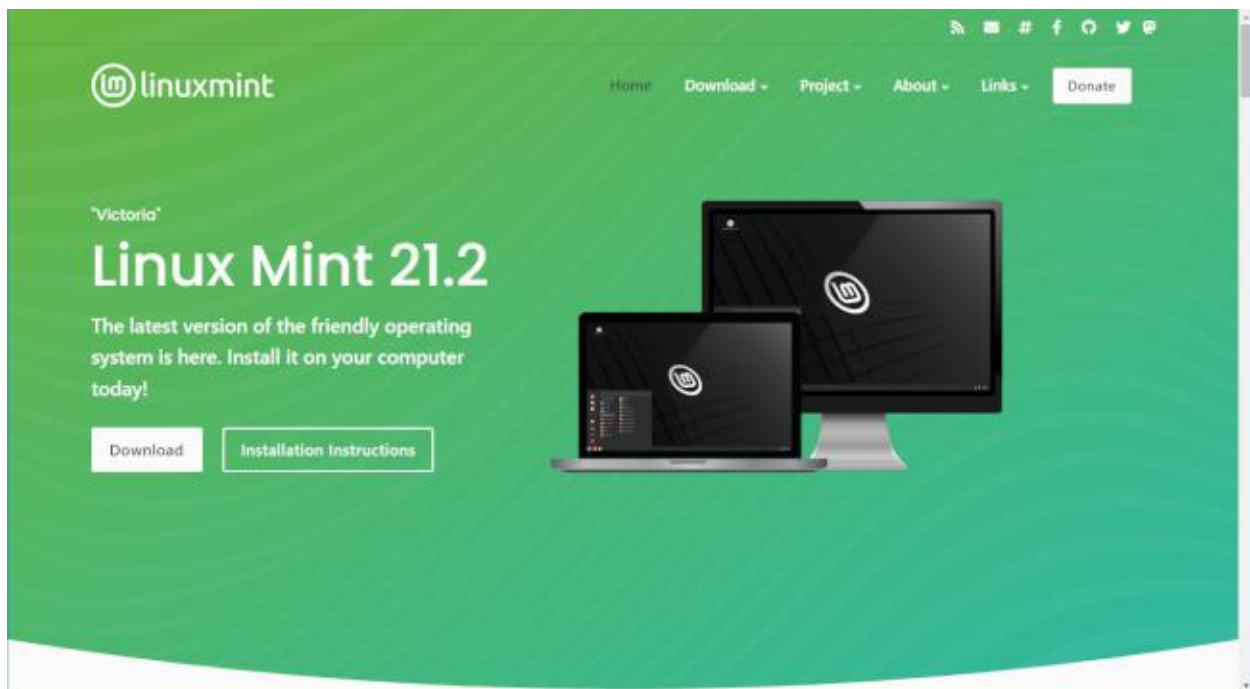
LinuxMint.org Home Page

It's also a good idea to click the links for "New Features" and "Release Notes". Once the Linux Mint ISO download is complete, you can burn the ISO image to a DVD to make a bootable setup DVD. Or you can download and use a free program called **balena Etcher** (https://www.balena.io/etcher/) to convert the bootable ISO image to a bootable USB flash drive.

To get a feel for Linux Mint, you can simply boot and run Linux Mint from the boot media without installing it. This is called a "live session". The live session desktop includes an "Install Linux" icon that will let you install Linux. In the installer, you can choose to replace the current operating system, or you can install Linux Mint alongside the current operating system. This will configure your PC to dual-boot Linux and Windows. The 64-bit Linux Mint configuration defaults are fine, and the installer will automatically handle secure boot and UEFI issues.

For comprehensive Linux Mint installation instructions, see: https://linuxmint-installation-guide.readthedocs.io/en/latest/index.html

Another alternative, which I use, is to set up Linux Mint in a virtual machine. For this I use **Oracle Virtual Box** (https://virtualbox.org). After an empty virtual machine has been set up, with the ISO file as the virtual DVD drive, boot the VM from the Linux Mint ISO and install Linux Mint to the VMs virtual hard drive. To learn more, see my **Virtual Machine seminar** at: https://www.scscc.club/smnr/Virtual_Machine_Primer.pdf.
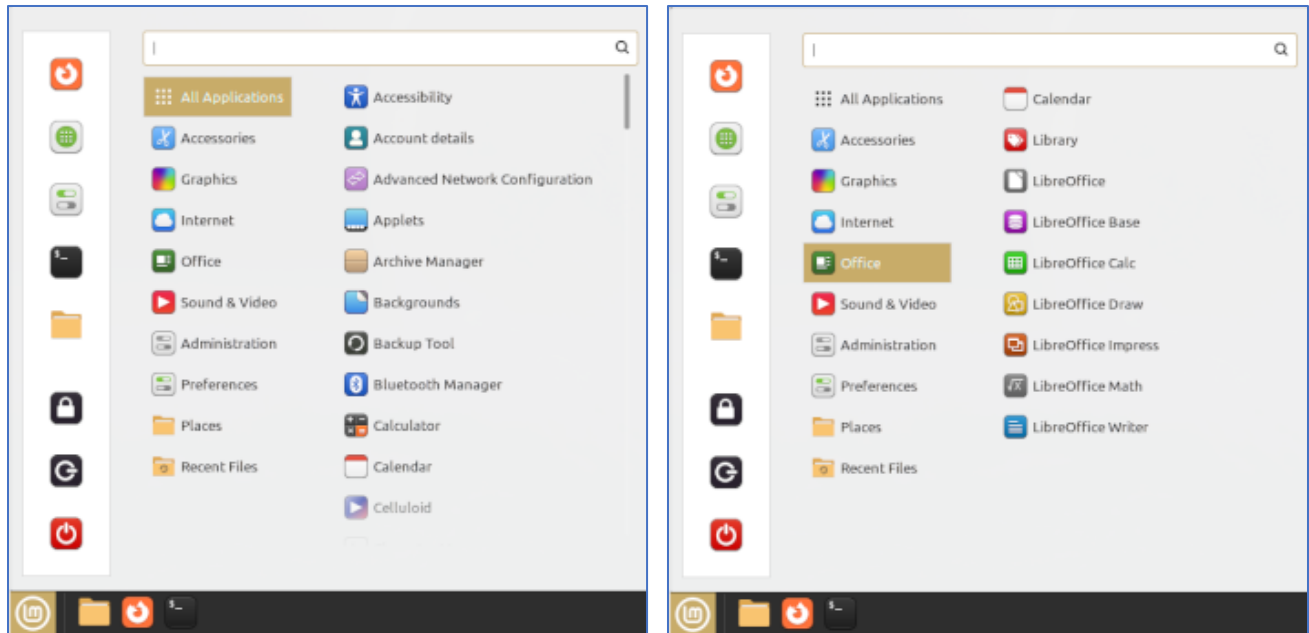
Exploring Linux Mint Cinnamon

Linux Mint with Cinnamon Desktop

Linux Mint is a Windows 7 work-alike, so it's relatively easy for a Windows user to get going with it. The above screen shot of the desktop shows desktop icons, a Task Bar with a Start button, "quick launch" icons and a tray area and a customizable desktop background.

You open the Start Menu by clicking the ⬤ button in the lower left corner. The Start Menu has a pane at the left for launching key applications and functions, a search window at the top, a column of application categories and, for a selected category, a list of the applications in that category. A scroll bar appears at the right edge when needed.


Linux Mint Cinnamon Start Menu Screen Shots

Among the bundled applications in Mint 21.2 are **Libre Office**, which includes a spreadsheet, word processor, presentation graphics, drawing and flowcharting, and several others. Libre Office is able to open and save in MS Office file formats. The Firefox web browser and the Thunderbird email program are also bundled. Mint 21.2 features a new video player named Celluloid and a music player named Rhythmbox. Accessories include a calendar, calculator, file viewer, a password manager and a note-taking tool.

The **Preferences** settings tool allows you to customize the look and feel of Linux Mint as well as a vast collection of other system settings. It's the equivalent of the Windows Control Panel. The look and feel settings include choosing your desktop background (pictures, solid colors, gradients), icon types and colors for the task bar, folders, window title bars and much more.

The **Update Manager** handles checking for and installing updates to Linux Mint and its applications. The Update Manager alerts when new updates are available via its tray icon, but YOU decide when to actually download and install them. To launch it, click its icon on the tray. You can select any or all of the available updates. Generally, you will want to install all of them.
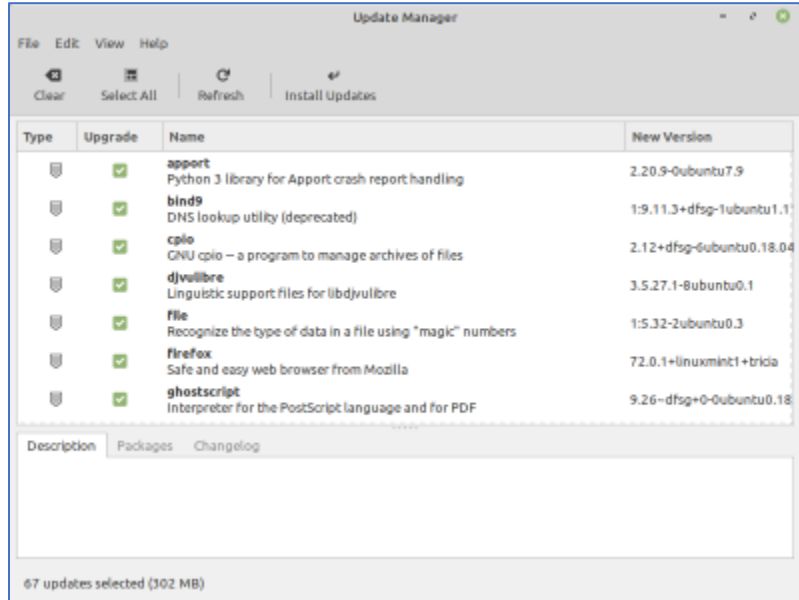
The **Software Manager** allows you to access Mint's online repository which claims over 60,000 free, open-source applications and install whichever ones you desire. Launch the Software Manager from Start Menu > Administration > Software Manager. When you click the link for an item, it opens a details page to help you decide whether the program is what you're looking for.

Final Thoughts

I set up Linux Mint 21.2 in a Virtual Box virtual machine to get the screen shots for this article. I booted the virtual machine from the downloaded Mint 21.2 64-bit ISO image and then double-clicked the "Install" icon on the desktop. Other than that, I made a few clicks to select language, keyboard and time zone and entered my account credentials. The entire setup was done in about 15 minutes. I chose a desktop background, set up some theme and color preferences and was ready to go. My virtual machine boots to the Linux desktop in about 15 seconds. What could be easier?

That's about all I can cover in my allotted space. Check out my Linux seminar handout at: https://www.scscc.club/smnr/Desktop_Linux_Mint.pdf.
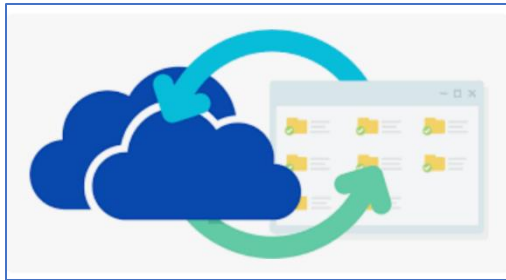
Kretchmar's Korner

Windows 11 OneDrive
Are You Missing out??

David Kretchmar, Hardware Technician

OneDrive is the 5GB of free cloud storage built into the Windows 11 operating system. Microsoft has integrated OneDrive more closely into Windows 11 than with Windows 10, presumably to get more users onboard with what OneDrive has to offer. In this article I'm going to get into the "nuts and bolts" of the operation of OneDrive in Windows 11 and discuss some advantages of using OneDrive, and hopefully convince some users who have not taken advantage of this feature to consider it. Even if you're experienced with OneDrive, you might learn something about OneDrive's newer features.

Either using or losing (deleting) OneDrive are the least used options for this tool. Most users simply ignore OneDrive. It is unfortunate that more users are not using OneDrive; they're missing an opportunity to utilize some valuable features, especially secure storage of important documents and pictures.

Microsoft has built OneDrive into a solid, reliable, useful service that gives you a minimum of 5GB of cloud storage for free. Over time my free OneDrive cloud has grown, first to 15GB as the result of "loyalty bonuses". Then last year I finally paid $99.99 and got a Microsoft 365 account which includes the Office Professional suite and a terabyte of online storage, for up to 6 computers.

OneDrive Settings

Several of the features I will describe require making changes to your OneDrive Settings. To get to OneDrive Settings, click the OneDrive icon (the cloud) in the notification area on the right side of your Taskbar, then click on the gear icon and click Settings.

Set up Your Local Sync Folder

When you go into OneDrive Settings, you get a chance to choose the folder where any files you choose to sync from the cloud will be stored. The default location is a folder called OneDrive in your user profile. That location is usually fine, but you can choose a different location if you have a secondary drive (formatted using NTFS) if you need more storage than your system drive.
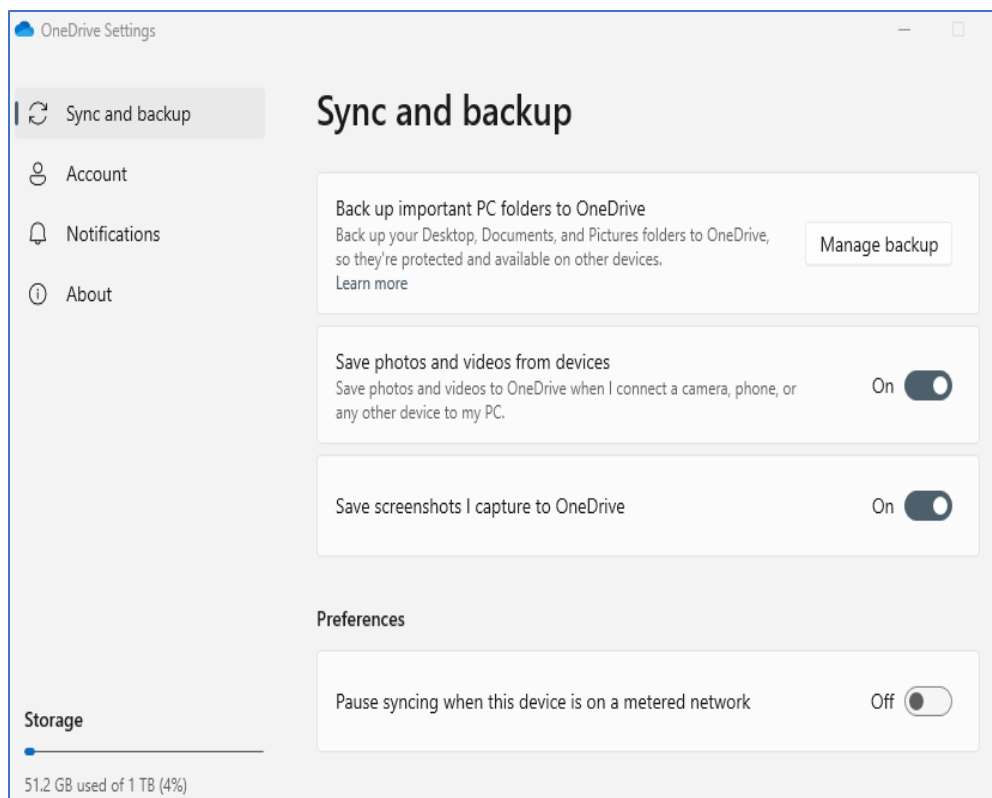
Next, under **Account**, choose which folders you want to make available locally. Open OneDrive Settings, click the Account tab, and then click Choose Folders.

That "Make all files available" box near the top doesn't sync the files themselves; it just makes them available to you in File Explorer.

The default is to make all your files available; even if you have hundreds of gigabytes of files in the cloud and limited local storage. This is still the right option, because of a feature called "Files on Demand."

Setup Files on Demand

Files on Demand is a feature of OneDrive in Windows that gives you the ability to browse through your entire collection of OneDrive files using File Explorer even if those files are not synced to your PC.

If you open a file in the cloud, OneDrive downloads it immediately (that's the "on demand" part). You can also mark files to be available even if you're not connected to the internet. To use this feature, right-click any file or folder and then click "Always keep on this device". A solid green checkmark icon in the Status column shows which files are available offline.
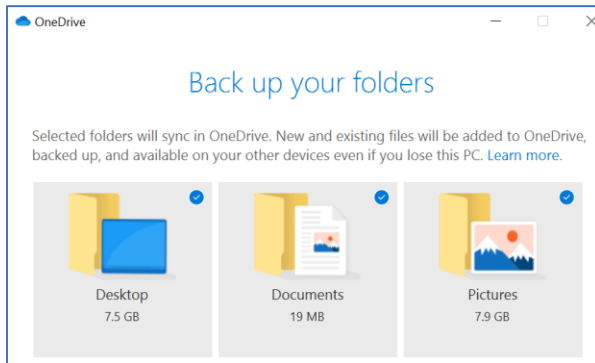
If you no longer need to keep those offline copies, right-click the file or folder and then click "Free up space" to remove the local copies. (They remain available in the cloud and on demand.)

Note that, if you do not designate a file to be available when you are not connected to the internet, you cannot access that file if you do not have an internet connection. I had not paid much attention to this feature until last year when my internet was down for 5 days. Since I

had not designated any files to be accessible offline, I could not access any of the files I had saved for years since they were all synced to OneDrive!

Sync Your Folders

This feature appeared in 2018 with little fanfare and is very useful. You have the option to redirect any or all of three system folders that are part of your user profile to the cloud instead. The effect is the same as if you had changed the default location of the Desktop, Documents, or Pictures folder to a folder with matching names in your OneDrive folder.

To make this change, open OneDrive Settings, click the Backup tab, and choose the option you prefer for each of the three folders.

Keeping these system folders synced to the cloud is an effective way of backing them up.

After you make the change, OneDrive moves files from the current folder in your local profile to that same-named folder in OneDrive and merges any existing files from the cloud-based folder. Any changes you make to the files in the OneDrive folder on any device will be synced to all your devices. Remember to designate the files and folders you want available offline.
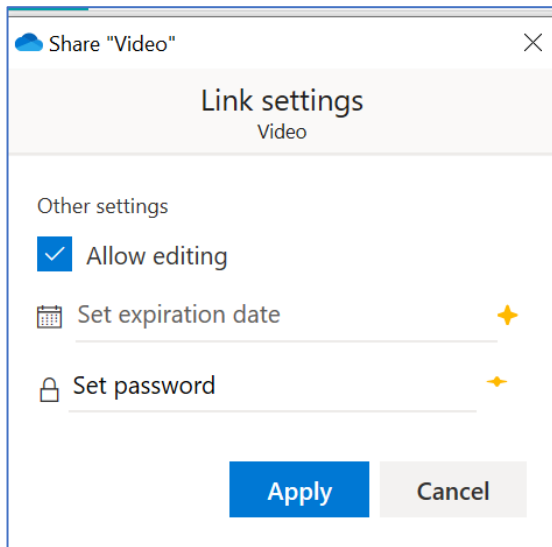
Share a File
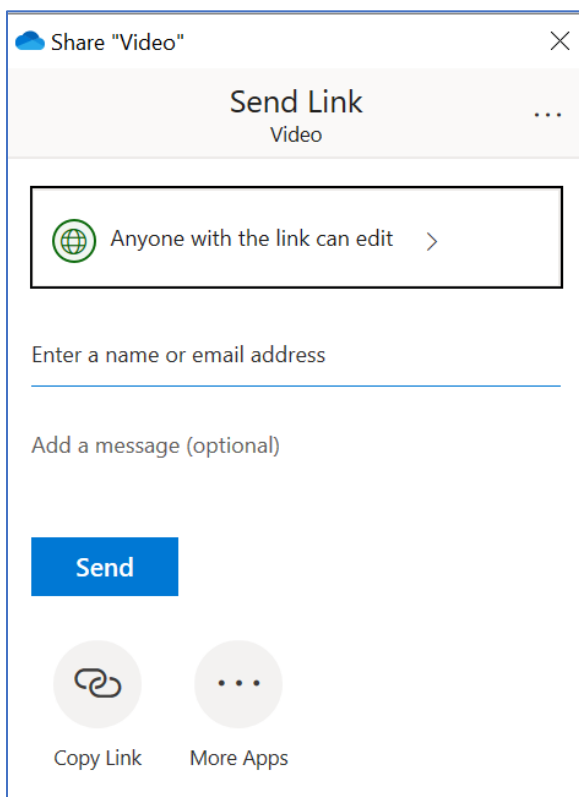
If you have a file stored in OneDrive and you want to share it with someone else, there's an easy way to accomplish that. Right-click the file in File Explorer and then click Share. OneDrive generates a short link and copies it to the Clipboard, ready for you to paste it into an email message or a chat window.

The default is that anyone who has that link can open and edit the file, so use this option only when you're sending a file to a trusted friend or colleague. You can change the access mode from Edit to View by clicking the ">" next to "Anyone with the link can edit".

Share Files with Extra Security

Quick links are convenient, but you might want a little more control when sharing a file or folder from OneDrive. For example, you might not want the addressee to be able to make changes to the file, or you might want the link to expire so it can't be reused if someone finds it in an old email. Or maybe you want to protect the shared link with a password.

You can do any or all of those things by right clicking a file or folder in File Explorer and then choosing More OneDrive sharing options. That opens OneDrive in your web browser with the Share dialog box open for the object you selected, as shown here.

Set an expiration date of just one or two days to prevent links from being reused later.

Conclusions

This is a discussion of what I consider the most important aspects of Microsoft OneDrive. As a minimum, you should use free cloud storage as a backup for files you cannot afford to lose.

Remember to make those files available offline so they will be available if you lose your internet connection.

APCUG Guest Article

Internet Security – Once over easy, with Hash

By Phil Sorrentino, Secretary, and APCUG Rep
Sun City Center Computer Club, FL
https://www.scccomputerclub.org/ philsorr (at) yahoo.com

The Internet is essential to so many things we do, like shopping, investing, and banking, that you may have wondered how secure the Internet is. And additionally, how secure is my private information during an Internet transaction? And now that we're thinking about it, how is the Internet made secure? If knowing a little about how the Internet is kept secure is interesting, read on; if not, jump to the next article.

The Internet provides essential communications between tens of millions of people and has become an essential tool for commerce; therefore, security has become a tremendously important issue. Internet security has many facets, ranging from keeping communications private to protecting passwords and guaranteeing secure commerce transactions and payments.

Computers are an integral part of the Internet, and when it comes to computers, security is a concern on many different levels. There is physical security that keeps your computer hardware from being stolen. There is software security that keeps people out of our private files. There is "malware" security that keeps your computer software from being infected with viruses, spyware, worms, and the like. And finally, there is "network" security that keeps private data protected as it goes from one computer (or client) to another computer (or server) on the Internet. These security concerns are important, but the subject here is network security. Network Security is implemented by applying cryptography to messages sent on the Internet.

Remember the "s" in "https://" and the little lock icon on the browser when you go to a "secure" website? Well, cryptography is behind all that security. Cryptography is used to secure telephone, Internet, and email communications (as well as to protect software and other digital property). Cryptography is nearly as old as written language itself. It was invented to address the age-old question: How can I communicate with my friend so that no one else listening will know what was shared?

Cryptography becomes necessary when communicating private information over a public or "un-trusted" medium, such as the Internet. Typically, you can be sure that the message you send over the Internet will get to the destination you expect, but you cannot guarantee that intermediaries (computers along the way) will not be able to see and/or read your message if it is not protected. With a collection of not-so-expensive equipment and a good deal of knowledge, a message on the Internet can be intercepted (sniffed), and if it is "plain text," it can be read. For mundane email messages, this is not much of a concern; for messages that contain

private information, such as personal information, financial account numbers or social security numbers, this could be an invitation for Identity Theft.

To get a bit technical here (here's the once over, with hash), we need to address the following four security concerns to guarantee messages are secure on the Internet.

1) *Privacy:* Ensuring that no one can read the message except the intended receiver.
2) *Integrity:* Assuring the receiving party that the received message has not been altered from the original.
3) *Authentication:* The process of proving one's identity.
4) *Non-repudiation:* A mechanism to prove that the expected sender sent this message.

There are, in general, three types of cryptographic schemes typically used to accomplish these goals: Secret-key cryptography, Public-key cryptography, and Hash functions. Each of these can be researched in great detail by doing a Google search on the subject and settling in for some rigorous mathematics and explanations. However, here is a brief summary.

Secret-key Cryptography
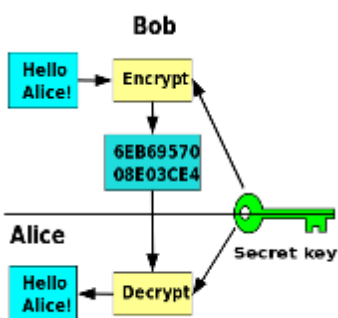
Secret-key cryptography, sometimes called symmetric cryptography because the sender and receiver use the same key, is the more traditional form of cryptography where the (same) key is used to encrypt and decrypt a message.

Public-key Cryptography

On the other hand, public-key cryptography uses algorithms to create two asymmetric keys, a public, and a private key. (Unlike secret-key cryptography, it does not require a secure initial exchange of secret keys to both sender and receiver.) The asymmetric keys are a mathematically related key pair: a secret private key and a published public key. These keys protect a message by creating an encrypted message using the public key, which can be decrypted only by using the private key, providing "privacy," the first security concern.

Hash Functions

Hash functions are mathematical transformations used to irreversibly create a "digest" (check-sum) of data, meaning that the Hash results cannot be reversed to recover the original message. Hash functions are well-suited for ensuring data "integrity," the second security concern, because any change made to the contents of a message will result in the receiver calculating a different hash value than the one sent by the sender. Since it is doubtful that two

different messages will yield the same hash value, data *integrity* is ensured to a high degree of confidence.

"Authentication," the third security concern, is accomplished in nearly all modern computer systems using passwords that authenticate users attempting to access computer resources. For security reasons, passwords are not typically kept on a server in plaintext. Hash functions are commonly used to convert passwords to an irreversible data pattern. When you type in your password, a Hash function converts it to a data pattern and compares it to the data pattern previously stored for your password. Your password is never stored on your machine or your server's machine; only the hash function results are stored. There is no way of going backward from the Hash function data pattern to the password (remember, the Hash function is irreversible). So now you know how the passwords are protected and why when you forget a password, the server can't tell you what it was; they can only reset it to a new password.

Digital Signature

The fourth security concern, "non-repudiation, " ensures the message was sent from the expected sender. This is accomplished by a digital signature which ensures that the sender cannot deny the authenticity of its signature or later deny sending the message. A digital signature is created using the private key of an asymmetric key pair. The signature can be verified by the corresponding public key of the asymmetric key pair, thus proving that the document was "electronically signed" by the private key owner, thus guaranteeing the message's source.

So, with all of these four concerns met, my take is that it looks like the Internet is pretty secure.

Lab Monitor Schedule

The Open Lab session is held once per week: 9 am to noon on Saturdays.

December	Monitor Schedule
Jeff Southwell	Saturday 12/2/2023
Linda Muench Fred Cohen	Saturday 12/9/2023
Marilyn Gramms Frances Sasaki	Saturday 12/16/2023
Linda Muench Frances Sasaki	Saturday 12/23/2023
Linda Muench Linda McMullin	Saturday 12/30/2023