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ARTICLE

Trading Up To Linux – Part 8 by Alan German

Now that we have Linux installed, updated, customized, and running smoothly, it's time to think about backup procedures so that we can easily recover our system and, in particular, our personal data files should any problems arise.

My backup strategy is a three-part process. I make regular full-disk image backups, usually on a monthly basis, that allow the entire system, to be restored in the event of a catastrophic disk failure. These also provides the ability to restore an individual partition, such as that holding the Linux operating system, without affecting other areas of the drive. A second process automatically creates incremental backups of my dedicated data partition each time the Linux system is booted, and retains multiple backups over an extended time period. Finally, I take a manual snapshot of the data partition after every working session so ensuring that fully up-to-date copies of all my data files are available at all times.

Foxclone

My current preference for a disk imaging solution is Foxclone. This is open-source software, based on a stripped-down version of Ubuntu, that runs as a live-USB. The bootable drive can be created by downloading the Foxclone ISO file and using Balena Etcher as we did when creating our boot disk for Linux Mint (see [Trading Up To Linux – Part 1](#)). Foxclone is a front end for partclone. It supports both MBR and GPT drives, and filesystems such as ext4 or NTFS.

The live-USB boots into a Linux desktop with Foxclone being available as an icon on the desktop. Running Foxclone brings up the main program window (Figure 1) on which the main options of current interest are the tabs for *Backup* and *Restore*.

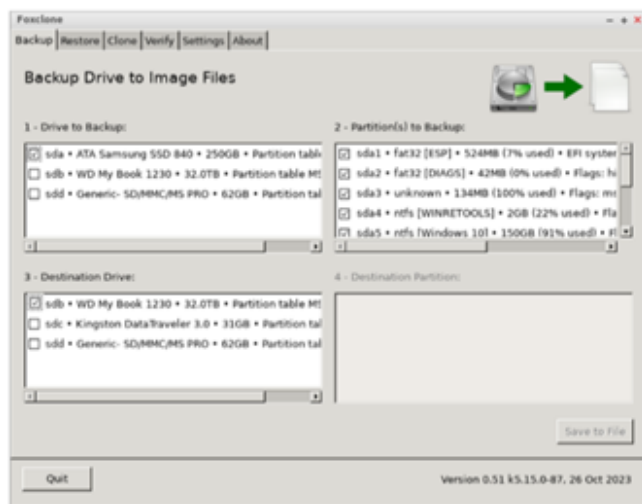


Figure 1. Foxclone's Main Screen with the Backup Tab Activated

The top two panels in the display for the *Backup* tab allow the source disk and partitions to be selected for backup. By default all available disk partitions are checked for inclusion in the backup process but any of these can be unchecked as desired. The lower-left panel is for the selection of the target drive on which the backup files will be stored. Once this has been selected, a file-manager window is displayed that allows the user to drill down into the file system and choose a backup folder and a baseline name for the backup files. The default name includes the current date, e.g. 20250321.backup, etc.

A final display screen allows the user to review the backup choices before the process is launched. Progress bars and time estimates indicate the degree of completion of the backup of the disk partition that is currently underway together with that for the backup process as a whole.

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Next Meeting: **WEDNESDAY, May 14th, 2025**

Next Meeting

Wednesday, May 14th

Computers to the Moon

Speaker: Mark Schulman, past president, Central Florida Computer Society

How did the United States manage to get to the moon in the 1960s at a time when PCs didn't exist and computers were the size of a small warehouse? Computers to the Moon tells the story of the monumental effort to create a computer capable of landing a spacecraft on the moon. Today we tend to believe that computers back then were primitive playthings, but it turns out that ingenious, driven engineers and software developers, even half a century ago, could accomplish amazing things. In Computers to the Moon, you'll learn what they created and how it worked.

Mark Schulman has spent his career as a computer instructor, software designer, and small business owner. He has taught a wide range of programming courses for major corporations and worked on large software development projects. He is currently the IT manager for a group of family practice physicians. His major geek interest these days is the computer technology that brought about the moon landings in the 1960s. He lives near Orlando, Florida.

This meeting will be via Zoom video conference.



Coming Up...

23 Apr

Hybrid Easter Q&A session (see [next page](#))

11 Jun

Annual Pizza Night (see [next page](#))

Britannia Park Trolley Station

10 Sep

Windows 10 End of Life – What Next?

Speaker: Alan German



Visit <https://opcug.ca/#upcoming> to see all scheduled events.

OPCUG Presentations at the OPL:

Thursday, 24 Apr, 6:00 pm - 7:30 pm

Quick tips: AI tools (Chris Taylor)

Rosemount Branch

Friday, 25 Apr, 2:00 pm - 4:00 pm

Keeping passwords safe (Chris Taylor)

Centennial Branch

Saturday, 26 Apr, 2:00 pm - 3:00 pm

Macro (close-up) Photography (Lynda Buske)

Elmvale Branch

Monday, 28 Apr, 2:00 pm - 4:00 pm

Is free software really free? (Alan German)

Video conference

Thursday, 01 May, 6:00 pm - 7:30 pm

Quick PC Tips: Enhancing Capabilities and Performance with Free Tools (Chris Taylor)

Alta Vista Branch

Saturday, 03 May, 2:00 pm - 4:00 pm

How to make a hard copy photo book

(Lynda Buske)

Cumberland Branch

Visit <https://opcug.ca/mec-category/opl-presentations/> for the full list of presentations with links to the OPL.

2025 CALENDAR

Event	Date	Time and Venue
Next Monthly Meeting	Wednesday, May 14 th	7:30 pm via Zoom video conference: https://tinyurl.com/opcug-meeting To see all scheduled events, visit https://opcug.ca/#upcoming
Next Q&A Session (hybrid at the OPL)	7 PM, Wednesday, April 23 rd	Until further notice, Q&A sessions are no longer held after regular monthly meetings. Join us on all other Wednesdays at 7:30 pm for weekly Q&A.
Next OPL Presentation	(see Upcoming Events)	Visit https://opcug.ca/mec-category/opl-presentations/ for the full list of presentations with links to the OPL.

SPECIAL EVENTS

Hybrid Easter Q&A Session (with Easter Egg Cookies & Easter Egg Treats)

Wednesday, April 23, 7 PM

Ottawa Public Library, [Emerald Plaza, 1547 Merivale Rd.](#), Traszha Macdowall Room

Our Q&A session on Wednesday, April 23rd falls close to Easter so we will mark the occasion by holding our second hybrid meeting where you are invited to attend either in person or, as usual, over Zoom. The in-person meeting will be held at the Emerald Plaza branch of the Ottawa Public Library (1547 Merivale Road). However, there is a second modification to our regular Q&A schedule. The library closes at 8:30 pm and we are required to leave ahead of this time. Consequently, **Wednesday's Q&A session will start at 7:00 pm, half an hour before our normal starting time, and will run through 8:00 pm.**

As a special Easter treat (regrettably only for those attending in person), the Easter Bunny is promising armfuls of Easter egg cookies and treats. So, there is a special incentive to attend this special Q&A event!

Another incentive is the opportunity to join the post-Q&A meeting of the club's *Wing SIG*. In the finest tradition of our in-person meetings, attendees at the library are invited to repair to the *Local Heroes Bar and Grill* in the [Bleeker Mall \(1400 Clyde Ave\)](#) to partake in beer and wings (or whatever you desire to purchase from the extensive pub-style menu.)

As always, your questions and shares are most welcome. As you know, we are interested in anything and everything that is related to computing. Please let us know your interests by sending an E-mail message to SuggestionBox@opcug.ca.

You are invited to attend **in person (or via Zoom)** at 7 PM at the Emerald Plaza branch in Nepean (address above).

You do not have to be an OPCUG or OPL member to attend. There is no charge. Everyone is welcome to join us and ask questions about their specific computer-related problems.



Annual Pizza Party

Wednesday, June 11, 6 PM

Britannia Park Trolley Station (see [event web page](#) for directions)

We are once again approaching the end of an OPCUG season and once again we'll celebrate with pizza, drinks and desserts. This event is free for OPCUG members and their guests.



The event will be on June 11 at 6 PM. It will be at the **Britannia Park Trolley Station** which is sheltered in case of rain and has free parking in an adjacent lot. Unfortunately, for those who like beer or wine with their pizza, **alcohol is not permitted** in the park. Pop and water will be provided.

To help with planning, we're asking you to **register by email** at pizzaparty@opcug.ca. Tell us if you are bringing guests and how many, your pizza preference (e.g. combo, special, vegetarian, gluten free, etc.), and if you need a ride or can offer a ride. OPCUG members in attendance can win one of three flexible keyboards:

Pizza, Prizes, and Portable Keyboards!

Hey **Ottawa PC Users Group**—get ready to type in style (and maybe with a slice in hand)!

We're giving away **three ultra-durable, roll-up keyboards** at the party! **(to members only)**

- ☒ **109 keys**—because who wants a keyboard missing the important ones?
- ☒ **USB-A connection**—plug it in and start clacking!
- ☒ **Water & dust resistant**—because spills happen, especially around pizza.
- ☒ **Rolls up**—take it anywhere... even on those top-secret hacker missions.
-  type in the rain, the shower, or during your next kitchen disaster!
-  **Perfect for tablets, laptops, and computers**—or as a conversation starter with your tech-savvy friends.

Win one and become the proud owner of the most flexible keyboard in town (literally)!

We look forward to seeing you and your guests!

AGM MINUTES 2025

Annual General Meeting of the OPCUG 2024/2025

The Annual General Meeting (AGM) for 2024/2025 was held on February 12, 2025 at the beginning of the February OPCUG Monthly Meeting. Minutes were taken by the Secretary, Gail Eagen. The meeting was called to order at 7:30 PM.

1. Election Results

Chris Taylor, President, announced that there were eight nominations received by the deadline of December 31, 2024 and thus the Board was acclaimed with no election required. The newly elected Board for 2025/26 was announced as follows in order of first name:

Alan German
Bob Herres
Bob Walker
Brigitte Lord
Chris Taylor
Gail Eagen
Jocelyn Doire
Karen Wallace-Graner

Chris noted that the Board would be looking to appoint someone as the ninth Board position. Chris asked members interested in joining the Board to talk to any existing Board member.

Chris thanked Wayne Houston, former Privacy Chair, who stepped down from those duties.

2. President's Report

Chris said that his **President's Report** was published in the February 2025 Newsletter.

3. Treasurer's Report

Chris stated that the **Treasurer's Report** was published in the February 2025 Newsletter.

Alan German provided highlights of the report for the period January 1 to December 31, 2024, our fiscal year 2024.

The current Assets were \$13,795.64 so we were in good financial shape.

Income for 2024 was \$484.94 from bank interest including GIC income and \$480 in membership

income, even though we gave current members free membership for another year. Most of the new membership income was from people who had been to an OPL session presented by Chris or Lynda

Expenses were \$2062.12. Major Expenses were \$898 including Meeting expenses (Zoom expenses and speaker honorariums) and the Pizza Q at \$628.

Expenses exceeded Income by \$1097.18.

Alan indicated that the Board's financial plan was still to reduce our capital while providing service to our members and we were meeting our goal. Thus, this deficit was planned, as were those of the previous few years. The OPCUG was in a strong financial position.

Alan presented the financial position over the last 5 years showing the decline in income and assets. The main way we were doing this was in not requiring membership renewals.

Alan asked if anyone had any questions on the Treasurer's Report.

Alan reminded current members that their membership fees would be waived for the coming year so there was no need to renew their membership. New Members could join before March 31, 2025 and receive two years for the price of one.

Alan announced he had stepped down as Treasurer after 20 years.

Jocelyn thanked Alan for his work as Treasurer over the last 20 years.

4. Secretary's Report

Chris said that the Secretary's Report would be published in an upcoming Newsletter along with the minutes of the AGM.

5. Notes of Thanks

Chris thanked the following for their contributions:

Lynda Buske for again taking on the role of Election Chair and in addition stepping up to take over Membership duties;

Mark Cayer who carried out duties as Membership Chair for many years;

Richard Aylesworth who had reviewed the financial books for several years;

(Continued on next page)

AGM minutes *(Continued from previous page)*

Board members;
 Presenters both from within the Club
 (Alan German, Bob Herres, Carol
 Pearson, Lynda Buske and Tom
 Trottier) and from outside (Adam
 Hunt, Brett N. Martinsen, Mark
 Schulman, Sebastien Lemay);
 Newsletter contributors;
 Contributors to the weekly Question
 and Answer Sessions as well as the
 co-chairs, Chris and Alan;
 Members who participated and
 shared and asked questions in
 weekly Q&A's and in Monthly
 Meetings; and
 The membership for being a part of it
 all.

6. Questions and Answers

Chris asked if anyone had any questions or comments.

Tom Trottier asked how many members we have and if we had demographic information. Lynda responded that we had 201 members. She said that we did not collect age information but she could do some analysis of the data we had from time to time. Someone asked about location information. She mentioned that we do have a BC member and one US member but a map of membership would be interesting. She said she would produce that at some point.

Bill Bradwin thanked Alan for his 20 years of contributions as Treasurer.

Carol Pearson thanked people who did the one-on-one support. Chris mentioned that we had six volunteers who provide this one-on-one support. He said that anyone else interested in providing this type of support could let him know.

7. Meeting Adjournment

Chris adjourned the meeting at 7:43 PM. There were 67 participants.

Submitted by
Gail Eagen,
Secretary, OPCUG

Quick Tip 73: Disabling Notepad autosave

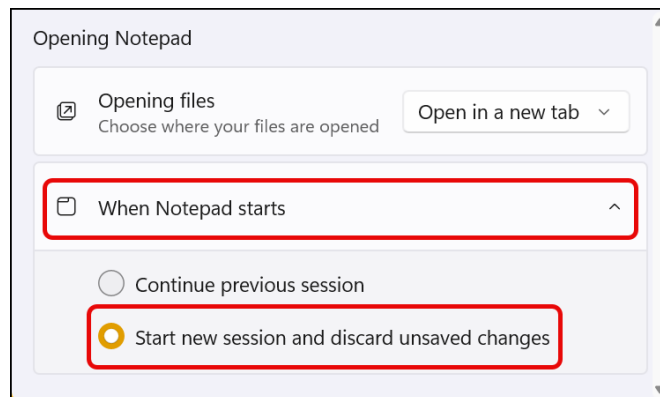
by Chris Taylor

In the fall of 2023, Microsoft added an autosave function to Notepad. When editing one or more documents, when you quit the program, you are not prompted to save changed documents. Instead, Notepad automatically—and silently—saves the current state of all open documents...somewhere! When you reopen Notepad, the previous documents are reopened to the state they were in when you quit Notepad.

It is worth noting that when you quit Notepad, any changes to your open documents are not actually saved to the original disk files. You must explicitly save any documents for the changes to be committed to the files on disk. This can be problematic. Let's say you open a document in Notepad, make changes, and exit Notepad. You then copy the document for a friend or other purpose. The changes you made are not in the file you copy!

If you don't like Notepad's autosave behaviour, it can be disabled.

In Notepad, click on the gear icon (⚙️) in the top-right. Under *Opening Notepad*, click on *When Notepad starts* and choose the poorly worded *Start new session and discard unsaved changes*.



From then on, Notepad will start with a blank window. As well, if you exit Notepad with unsaved changes, you will be prompted with the normal *Save* and *Don't save* options. Just as God intended editing programs to work.



SECRETARY'S REPORT 2025

Secretary's Report for the period February 2024 to February 2025

2023 Election

Bob Herres was the Election Chair for the 2023 Election. Calls for nominations were done in the newsletter and at OPCUG monthly meetings throughout the fall. Eight nominations were received by the due date of December 31, 2023. Since there were only eight nominations, no election was required.

2024/2025 Board Members

The Board of Directors for 2024/2025 was acclaimed on February 14, 2024 at the Annual General Meeting. The Board selected positions at their next Board meeting on February 19, 2024 resulting in the following slate of officers:

Chris Taylor, President and Systems Administrator
 Jocelyn Doire, Special Events
 Gail Eagen, Secretary
 Alan German, Treasurer
 Wayne Houston, Privacy
 Brigitte Lord, Webmaster and Newsletter
 Bob Walker, Facilities
 Karen Wallace-Graner, Board Member without Portfolio

The Board agreed to search for a ninth Board member. Later in February 2024, Bob Herres agreed to be the ninth Board member and took on the role of Board Member without Portfolio.

Board Meetings

The Board met 11 times on Feb 19, Mar 18, April 15, May 13, Jun 17, Aug 17, Sep 16, Oct 14, Nov 18 and Dec 16 in 2024 and Jan 13 in 2025.

Most of the discussion at meetings related to

- creating the program for the meetings,
- ensuring articles for the newsletter,
- monitoring the financial situation,
- maintaining the web site,
- maintain OPCUG Google Services, and
- publicizing club meetings and events using Facebook, Twitter, the OPCUG web site and press releases to targeted audiences.

There were discussions about resuming in-person meetings or having a mix of in-person and video-conferencing Monthly OPCUG meetings. The Board continued online

video-conferencing of the Board and Monthly meetings using Zoom. Weekly Question and Answer sessions were continued through Zoom. A hybrid Q&A session was successfully carried out on December 16, 2024 at the North Gloucester Library with 12 attendees in person and 36 attendees online,

Major discussions, decisions made and actions taken:

- To accept Richard Aylesworth's comments and recommendations on the review of the Treasurer's financial records for 2023
- To continue investing funds in the TD bank account into staggered GICs
- To ensure provincial Business Registry records were up to date according to the latest Provincial guidelines
- To hold the June 2024 Pizza-Q outside at Britannia Park, renting a covered location
- To require registration for the Pizza-Q to determine the amount of food and drinks to be ordered
- To select an Election Chair to run the nomination and election process for 2025/26 (Lynda Buske agreed to be Election Chair.)
- To offer presentations at the Ottawa Public Library and include them in the calendar of events on the OPCUG web site
- To reimburse Lynda Buske in the amount of \$100 to partially cover gas to OPL locations for OPL presentations for the period of September 1, 2024 through August 31, 2025
- To update the membership information system from Microsoft Access to Excel and streamline the information and reporting
- To ask Richard Aylesworth to review the Treasurer's financial records for 2024
- To offer virtual one-on-one assistance to OPCUG Members upon request
- To extend free membership for one year to members of good standing as of March 31, 2025 and offer new memberships between January 1, 2025 and March 31, 2025 2 years for the price of one
- To continue membership of the APCUG, "an International Association of Technology and Computer User Groups" and continue benefiting from their services including publishing their newsletter articles, sharing OPCUG Newsletter articles, soliciting speakers from their Speaker's Bureau, presenting to various APCUG user groups, participating on their Advisory Board and participating in their contests.

Submitted by
Gail Eagen,
Secretary, OPCUG

Linux *(Continued from page 1)*

The backup that is produced essentially consists of file pairs, one pair for each disk partition in the backup, such as the compressed image file, 20250321.sda1.img.gz, and the backup information file, 20250321.sda1-log.txt.

Restoring a backup image for an entire drive, or for one or more partitions, is essentially the reverse of the above process. However, if an individual disk partition(s) is to be restored, prior to invoking the *Restore* tab, it is necessary to use the *Settings* tab and check the box labelled *Enable partition selection* since this is disabled by default.

The *Foxclone User Guide* can be downloaded as a PDF file. The guide provides excellent documentation for the software and includes annotated screenshots of the program's operations.

Back In Time

This open-source software package is available through GitHub but, for Linux Mint, it can be installed simply by using the Software Manager. Back In Time is a front end for the *rsync* utility and provides a convenient way to schedule automatic backups of files and folders. Due to the use of hard links, once an initial backup set has been created, subsequent backups are incremental, saving both storage space and the time required to make backups.

The first time the program is run, a backup profile is established with the user specifying the storage location for the backup snapshots, an optional schedule for the backup process, the files and folders to be included or excluded from the backups, and an optional retention scheme for historical backups.

Other options include enabling notifications, disabling snapshots for a laptop running on battery power, and continuing a backup in the event of errors. A final set of "Expert Options" is headed by a cautionary note to *Change these options only if you really know what you are doing*. Good advice!

My preference is to run Back In Time at every boot/reboot. All snapshots made in the last three days are retained, together with one snapshot per day for 7 days, one snapshot per week for 4 weeks, and one snapshot per month for 24 months. This strategy provides a series of historical backups that are displayed (Figure 2) each time Back In Time is run manually.

The left panel shows the set of past snapshots that have been stored. Any of these snapshots can be selected in order to restore a file. The screenshot shows that the snapshot for 2025-02-28 has been selected. The right panel is used to browse for a specific folder and a file

within that folder. In the screenshot, the file *HoodHeight.py* has been selected in the root folder of */media/DataDisk*.

A pop-up dialogue box asks for confirmation that the selected file is to be restored and provides an optional checkbox to create a backup copy of the file on the hard drive with the current date in the filename. For example, if the Python script file, *HoodHeight.py*, is being restored to the hard drive on 2025-03-04, then the current file on the hard that is being replaced will be renamed by adding *.backup.20250304* to the filename. In this case, once the restoration process is complete, the file from the 2025-02-28 backup will have been copied to the hard drive as *HoodHeight.py* and the file that was replaced on the hard drive will still be present as *HoodHeight.py.backup.20250304*.

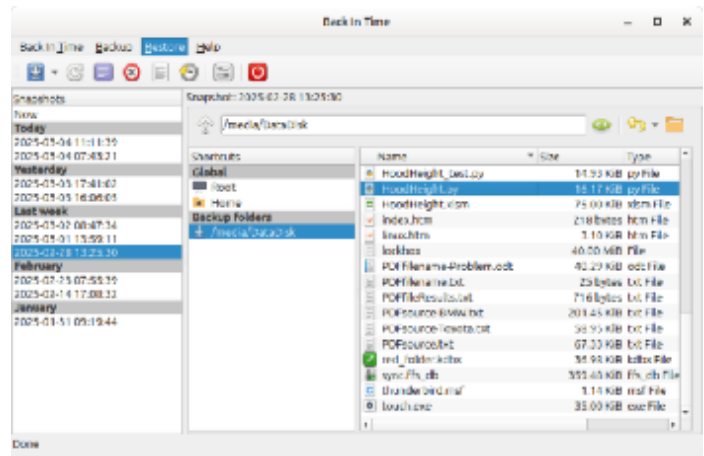


Figure 2. Restoring a File from Back In Time's Main Screen

FreeFileSync

FreeFileSync is an open-source, cross-platform, file and folder synchronization utility that can be downloaded from the developer's website (<https://freefilesync.org>). The download for Linux is a zipped archive file (.tar/.gz) the contents of which are extracted to produce an executable file (.run). To install the software, we open the Terminal, change to the Downloads directory using *cd/Downloads*, and use the command *./FreeFileSync_14.3_Install.run*.

The default installation parameters are to install for all users, use */opt/FreeFileSync* as the installation directory, and not create desktop shortcuts. These can be modified using menu items if required. Otherwise, just pressing the Enter key, and typing the sudo password, results in FreeFileSync being installed. An entry for *FreeFileSync* is automatically created in the *Accessories* category of the main menu that then allows the program to be started.

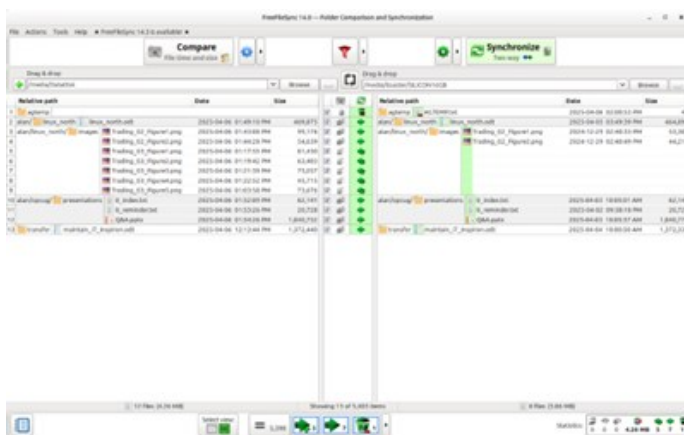
(Continued on next page)

Linux *(Continued from previous page)*

I use a simplified window layout by removing the default *Configuration* and *Overview* tabs. I then set the source folder, in the left panel, as my dedicated data partition (/media/DataDisk) and the target folder, in the right panel, as my backup flash drive (media/toaster/SILICON16GB). (Figure 3)

Additional configuration options can be selected using the gear icons adjacent to the Compare and Synchronize buttons. The comparison method can be left at the default of file time and size while comparison by file content is an available option. The latter process can be selected if there is a need to ensure that the backup files are bit-for-bit copies of the originals. Most users will likely select mirror as the synchronization method to make the backup on the target drive an exact copy of the source drive. In this case, new or modified files will be copied from the source drive to the target, and files that have been deleted from the source will be deleted on the target. The alternatives are two-way where the newest file on either drive will be copied to the other drive, and files deleted on one drive will be deleted from the other drive, or update where new or modified files are copied from the source drive to the target but no files are ever deleted from the target drive.

Figure 3. FreeFileSync Comparison of Two Folders



Pressing the *Compare* button causes FreeFileSync to analyze the files contained in both the source and target folders, and their sub-folders, and to display a preview of the changes that will be made when the *Synchronize* button is pressed. For the files displayed, the trash can icon indicates a file that is to be deleted, the green right-arrow represents a file that has been modified on the source drive and is to be copied to the target, while the green right-arrow with the plus sign indicates a new file on the target that is to be copied to the target.

While FreeFileSync is easy to set up and use for simple file and folder synchronization as noted above, the software has many additional and much more powerful fea-

tures. These include the ability to establish multiple filters to include or exclude certain items from processing, scheduling batch jobs, synchronization with SFTP and FTP servers, and file versioning.

Summary

The combination of Foxclone, Back In Time, and FreeFileSync, when used in a regular manner, provide a robust backup solution for the operating system, the installed applications, and user data files. Each of the programs is easy to set up, is highly configurable, and offers an efficient backup process.

Bottom Line

Foxclone (Open Source)
Andy Hardwick
Version 53
<https://foxclone.org>



Back In Time (Open Source)
Version 1.5.4
<https://github.com/bit-team/backintime>



FreeFileSync (Open Source)
Zenju
Version 14.3
<https://freefilesync.org>



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APCUG

Clean Your Dirty Laptop

David Kretchmar, Hardware Technician
Sun City Summerlin Computer Club
<https://www.scscc.club>

After being used regularly for months or years, our laptops accumulate dust, grime, skin oils, sneezes, and who knows what else. Your laptop is most likely due for a cleaning, and I'm going to pass along some suggestions for how to do it effectively without harming this delicate piece of equipment.

You know your laptop is filthy. You can see the dirt and grime on your screen and keyboard. You might also be able to see grime accumulated on your trackpad. So, it's time for a cleaning.

A shining, newly cleaned laptop should be a joy to use; the keys are clean, and the screen is free of smudges and splatters. These cleaning suggestions might also be helpful if you buy a used laptop since the previous owner doesn't always leave it in pristine condition.

Your Supplies

You don't need much to clean a computer: rubbing alcohol, a mild dish detergent, soft lint-free cloths (microfiber cloths are ideal), Q-tips, and canned air. Ninety percent or higher isopropyl alcohol is what you want since it won't damage the internal components. And if you have some particularly embedded dirt, a Mr. Clean Magic Eraser (or other melamine sponge) can also work wonders. However, it should be an absolute last resort since it's abrasive and can leave permanent scratches.

Don't waste your money on specialty cleaners you see at Amazon or big box electronics stores like Best Buy. They work just fine but no better than what you already have at home.

Start With the Inside

Starting with that dirt on the keyboard and screen might be tempting, but you should start with the internals. Canned air will blow dust and dirt everywhere, so if you start cleaning the screen, you'll have to clean it again after you've used canned air. Start by blowing out the dust, then move on to the outside.

You shouldn't have to open your laptop to clean the inside. Turn off the laptop, unplug the power cable, and remove the battery if it pops out (removable batteries are becoming a thing of the past). Give it a quick burst away from the laptop to eliminate condensation, and then start blowing air into any cracks and crevices: the keyboard, the vents, and even the USB and other ports. Blow in short bursts since longer sprays can cause moisture to accumulate inside your computer. You can also damage the fans by making them spin too fast.

You probably won't see a significant change after doing this. The goal is to prevent dust buildup over time, which can cause your laptop to overheat and possibly spontaneously shut down. If you can see dust bunnies in the vents, you've let it go too long without a cleaning. If you see dust stuck behind the vent that you can't dislodge by blasting it with compressed air, consult your user manual to open the case.

Be sure you remember which screws went where for the re-assembly. Snap a picture or two of your laptop for reference before opening the case, and be super-organized with the screws as you remove them.

Smokers and pet owners should take special care to clean the inside often since you'll likely experience a much quicker buildup of dust, smoke, hair, and other dirt. Computers exposed to smokers can have their useful life cut by as much as half.

Wipe Down the Outside

Remember, when cleaning a laptop (or desktop) computer, apply the cleaning product to the tool you're using to clean, NEVER directly onto the computer. So, grab your microfiber cloth, pour a little alcohol onto it, wring it out so it isn't dripping wet, and wipe down the surface. Cotton swabs and alcohol are helpful for the keyboard keys and the small spaces between them. (If there are marks that won't come off, you can try rubbing them with a Mr. Clean Magic Eraser or other cleaner very lightly, but again, they're mildly abrasive, which can alter the surface's finish.)

It may take a few passes to get all that grime off, but you should notice a dramatic difference once you do. If your laptop is particularly old, you may not be able to get rid of the shine on the keys; some of us may have worn down the top layer of plastic and even the letters on the keys. There's not much you can do about that.

You should be able to wipe fingerprints off your screen with a dry microfiber or soft terry cloth. If you need more cleaning power, a slightly damp cloth that has been thoroughly wrung out first can help. Some manufacturers, including Dell and Lenovo, even say you can use a 50:50 mixture of isopropyl alcohol and water to remove tough dirt. Avoid household cleaners with harsher chemicals like ammonia or Windex on the screen.

Get Rid of Bad Smells

Let's say you have a particularly terrible case of a gross laptop, and even after the above steps, your laptop still carries the essence of whatever it has been exposed to. I've seen many laptops that smelled like smoke, and getting rid of that is challenging or impossible. Cleaning the surface can help, but many of those smells may also be inside the computer. For that, you can turn to a natural deodorizer: charcoal. Don't go digging through your grill for briquettes! Cooking charcoal is different from activated charcoal. Activated charcoal is made with much more (micro) surface area to be more absorbent.

Another common household item is kitty litter. It's a great odor eliminator because most kitty litter formulas have activated charcoal to neutralize litter box smells.

Seal the laptop in a bag or closable bin with a cup or so of the activated charcoal or litter and leave it for at least 24 to 48 hours. If you don't have a cat, people also had good luck with diaper pail deodorizers, which are neat little packets of charcoal you can throw away when you're done. The longer you leave the computer in the bin, the better.



OTTAWA PC NEWS

Ottawa PC News is the newsletter of the Ottawa PC Users' Group (OPCUG), and is published monthly except in July and August. The opinions expressed in this newsletter may not necessarily represent the views of the club or its members.

Member participation is encouraged. If you would like to contribute an article to Ottawa PC News, please submit it to the newsletter editor (contact info below).

To receive the monthly newsletter by email, send an email to:
opcug-newsletter+subscribe@googlegroups.com (leave subject and body fields blank)

You do **not** need to create a Gmail or Google Groups account.

To subscribe to other OPCUG Google Groups member services, go to:
<https://opcug.ca/google-groups-how-to/>.

Group Meetings

OPCUG meets on the second Wednesday in the month, except July and August, at the Riverside United Church, 3191 Riverside Drive, Ottawa. Parking is free at the church. OCTranspo bus #90 stops nearby. Details at <https://opcug.ca/venue/>.

NOTE: Until further notice, all our events are via video conference. Details at <https://opcug.ca/venue/>.

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Q&A IS ON-LINE! Weekly!

Since the pandemic, the OPCUG has been holding weekly Q&A sessions in Zoom video-conferences.

Join us every Wednesday (except on regular monthly meeting nights) at 7:30 pm to discuss computer issues. Questions (and answers) on any computer-related issue are welcome. Or, do you have a favourite computer program or topic that you would like to share with the group? Send your questions, answers, or the details of what you would like to share to:

SuggestionBox@opcug.ca

Everyone is welcome to attend Q&A sessions and to ask questions about their specific computer-related problems. Join us at: <https://tinyurl.com/opcug-meeting> (if you use the Zoom client, the meeting ID is **924 9556 0898** and the password is **opcug**).

OPCUG



Users helping users
for over 40 years