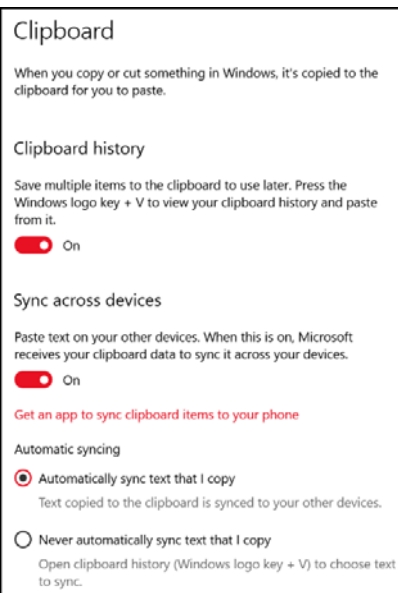# OTTAWA PC NEWS

## WINDOWS 10

# Clipboard in Windows 10   *by Chris Taylor*

Since the earliest days of Windows, you could use the *clipboard* to copy text or graphics to an area of memory and then paste it into another location. This saved re-entering things manually – a great time-saver. A big drawback was that the clipboard could only hold a single item; if you copied something new to the clipboard, it replaced anything already on the clipboard.

A small cottage industry grew up around clipboard managers that could store multiple items. Starting with the October 2018 Update to Windows 10, the ability to store multiple items on the clipboard is now available in native Windows. It just might be all you need.

Run *Settings* and search for *clipboard settings*. Make sure *Clipboard history* is turned on.

You still copy things to the clipboard as you always did (e.g. Ctrl-C). And you can still paste normally, (e.g. Ctrl-V) to paste the last item copied to the clipboard. But now if you press and hold the Windows key and V ( ⊞ + V ), clipboard history will display the last 25 items copied to the clipboard. Click on the item you want to paste. You can also use the arrow keys to choose an item and Enter to paste it.

The clipboard history is cleared when you reboot Windows. If there are items you want to paste frequently, click the 3 dots in the top-right corner of the item and choose *Pin*. Pinned items survive reboots.

Only items under 4 MB are copied to clipboard history.

If you have multiple computers and are logged onto each using the same Microsoft Account, you can even have clipboard items (text only) shared across your devices. In *clipboard settings*, turn on *Paste text on your other device* in the *Sync across devices* section. You can choose to *Automatically sync text that I copy* or *Never auto-*matically sync text that I copy. If you choose the latter, you can still force the sync of a text item; press Win-V, click the 3 dots for the item you want, and choose *Sync*. Copying text on one computer and pasting on another computer is pretty cool!

Some 3rd party clipboard managers have additional features, such as search, hotkeys to select items, encryption, ability to edit items, and even screen capture tools. I found a good list at https://thegeekpage.com/16-best-clipboard-manager-windows-10/

One of the things I really appreciate about the new clipboard capabilities in Windows 10 is simply that it is there on every Windows 10 computer I use with no need to install a 3rd party app.

♦♦♦

### Inside this issue:

## Next Meeting: WEDNESDAY, September 9th, 2020

# Next Meeting

Wednesday, September 9th, 2020

As COVID-19 safety guidelines continue, we will not be having our rescheduled Pizza Night. We hope to resume this annual event next June.

**AN INTRODUCTION TO THE RASPBERRY PI**

**Speaker**: Deid Reimer, Victoria Pi Makers (via video from Victoria, BC)

Why is the Raspberry Pi so popular? Just what is the Pi and what is required to make it truly useful? Deid Reimer will join us by video-conference from Victoria BC to provide a brief tour of some of the things that the Victoria Pi Makers have created with their Pi's. Throughout the presentation questions will be encouraged with respect to the Pi itself and the projects reviewed. A number of potential future projects will also be discussed. So, come along to our September meeting and discover everything you have always wanted to know about these neat little computers.

As has been the norm since the onset of COVID-19, this meeting will be via video teleconference.

At 7:20 pm, you can join the meeting at **https://tinyurl.com/opcug-meeting**.

Those using the Zoom client will need to enter the following:

Meeting ID: **924 9556 0898**.
Password: **opcug**

The regular Q&A session is immediately after the presentation, usually from 9:00 pm to 10:00 pm, on the same video conference call.

Instructions for using Zoom are provided at:
http://opcug.ca/wp-content/uploads/2020/06/Zoom-instructionsv2.pdf

*After the summer hiatus, we look forward to seeing you for a new season of presentations.*

***All scheduled events, including regular monthly meetings, weekly Q&A sessions, and OPL presentations, are posted on our website at*** *http://opcug.ca/.* ***Due to COVID-19, all events are via video conference until further notice.***

## Next weekly Q&A Session

Our next weekly Q&A session will be at 7:30 pm on Wednesday, **August 19th**. Everyone is welcome to attend Q&A sessions and to ask questions about their specific computer-related problems.

https://opcug.ca/qa/.

## June Prize Winner

The June door prize, a 10-computer perpetual license to GlassWire Elite, was won by **Linda Vervaeke**. Congratulations Linda!

Thank you to GlassWire for the generous prize. (https://www.glasswire.com/)

## 2020 CALENDAR

| Meetings | Date | Time and Venue |
|---|---|---|
| OPCUG General Meeting | Wednesday, September 9th | 7:30 pm via Zoom video conference: **https://tinyurl.com/opcug-meeting** For details visit https://opcug.ca/events/september-meeting/ |
| Regular Q&A Session | Wednesday, September 9th | Immediately following the OPCUG General Meeting. (approx. 9 pm) on the same teleconference call. |
| Beer BOF (Wing SIG East) | Wednesday, September 9th | COVID-19 dictates we enjoy a snack and a cold brew at home. |

# CLUB LIFE

# Alan German: Newsletter champ … and more!

*by Chris Taylor*

As Alan wrapped up the *OPCUG Free Software Guide* with part 100 in the June issue of the newsletter, I took a look back at Alan's contributions to the OPCUG and the newsletter in particular.

Alan joined the Group in April, 1993 and wrote his first article for the newsletter a month later (https://opcug.ca/Articles/9305.pdf) with a review of five screen-savers that could be downloaded from the software repository on the OPCUG server; *The PUB*.

Alan sporadically wrote for the newsletter in the first few years. In June, 2003, he hit his stride and wrote for most issues. In the 171 issues since then, he has had at least one article in 147 issues. In total, he has written 310 articles in 153 issues. A truly amazing feat!

### Alan's series

Over the years, Alan had two running series; *Exploring Linux* and *OPUC Free Software Guide*.

In May, 2006, (https://opcug.ca/Articles/0605.pdf) he began *Exploring Linux*, detailing his first foray into the world of Linux using live CDs. The next month, he jumped right in and described how he installed it to his hard drive. The series ran until January, 2014 (https://opcug.ca/Articles/1401.pdf), when he wrote in part 26 about moving from Ubuntu to Mint.

In December, 2008 (https://opcug.ca/Articles/0812.pdf) Alan began the *OPCUG Free Software Guide*, leading off with one of my favourites; IrfanView and listing a disk usage analyzer, a disk defragger, a virtual desktop manager, a firewall utility, a CD burner, an editor and a media player. Alan retired the series in June, 2020 (https://opcug.ca/Articles/2006NEWS.pdf). In part 100, Alan wrote about his favourite free applications; LibreOffice, Vivaldi, Thunderbird, and FreeFileSync. Alan thanked others who had contributed content to the Guide over its 12-year run.

### Alan's other contributions

Not only are Alan's articles clear and informative, but his wonderful sense of humour never fails to get me chuckling. Alan, thank you so much for that!

On top of his prolific writing for the newsletter, Alan has served the OPCUG in many ways. He joined the Board of Directors in 2004 and has served as Treasurer continuously since then.

He has given numerous presentations at general meetings and workshops, and has led special interest groups and the popular Q&A sessions.

Alan has been active in driving the evolution of the OPCUG and many of its services most notably our online presence with both dedicated systems and our use of hosted systems, having contributed many long hours to coding web pages.

In 2018, Alan was awarded the Ontario Volunteer Service Award for his more than 15 years of volunteer service in the OPCUG.

I encourage everyone to reach out and thank Alan. Without his extensive contributions, the OPCUG would be a shadow of what it is. Indeed, I wonder if it would still exist.

*"His wonderful sense of humour never fails to get me chuckling. Alan, thank you so much for that!"*

# ARTICLE

# The Windows Sandbox    *by Andrew Petrovic*

The Windows Sandbox is a welcome recent addition to the Windows 10 client operating system and the more I use it the more useful I am finding it.

The term 'sandbox' within the IT environment usually refers to a virtual environment that can be used for testing software code, though in the Windows 10 home-use case it is more likely used for installing and testing downloaded applications that you may be suspicious of or are not sure how exactly they will react inside of your regular Windows environment. Also, you can access web sites safely without worrying if you might contaminate your system somehow. I cannot consider it a foolproof protection against malware, as you cannot always tell what is happening under the hood.

The sandbox is created in Windows 10 and it sets up an isolated environment that is based on your operating system but is independent from it. Whatever happens in the sandbox will not affect your host Windows operating system. The sandbox will appear as a window on your desktop and operates as another 'computer-within-your-computer'. It is basically a lightweight virtual machine. If you have worked with Hyper-V before on your Windows system then many of the components are the same, but there are still some differences. It installs certain Hyper-V virtualization components, so other virtual environments you may have set up, such as VMware or VirtualBox, cannot run. You would need to uninstall the sandbox to use those other tools again.

The most significant thing about the sandbox is that when it is run and you have done your testing, then when you shut down the sandbox it will revert to its default starting state. That means any modifications you make to the sandbox environment, such as changes to Windows; software installs; etc. will be completely eliminated and the next time you start the sandbox it will be a clean installation exactly as it was the first time you ran it.

There are certain prerequisites to setting up the sandbox, and the most important of these is that it is not designed to run in the Home edition of Windows 10. You must be running the Professional edition or the Enterprise or the Education edition. There are web articles existing that can make the sandbox work on the Home version, but the procedure is not so straightforward.

Further than that, you must be running a certain build of the OS. For the Professional edition, the sandbox was introduced in the 1903 build in May 2019, so you need at least that version.
If you run the WinVer command from a command prompt or the Run field, you can see the Windows edition and build number.

Next, you need to check if your hardware can handle running the sandbox. The easiest way to do this is to go to a command prompt and run the command: System-Info
It may take a few seconds to complete its check. Now scroll down to the last part of the resultant display and check the section where it says Hyper-V Requirements: and you will see four entries within that section. All four of these must say Yes. If any one of them says No then you cannot run the sandbox. If only the Virtualization Enabled In Firmware: says No and the others say Yes then you will need to enable the virtualization function in the computer BIOS (see your computer's user guide). If any of the other entries say No then it is unlikely your current hardware will work. Make sure you have a CPU with at least 2 cores; a minimum 4 GB of RAM; 1GB or more of disk space.



```
Hyper-V Requirements:        VM Monitor Mode Extensions: Yes
                             Virtualization Enabled In Firmware: No
                             Second Level Address Translation: Yes
                             Data Execution Prevention Available: Yes
```

So once you have met all the requirements to run the sandbox, you now have to enable it in Windows. Go to the Control Panel and in Programs and Features select Turn Windows features on or off (or run the OptionalFeatures command to get there faster) and in the list of features check Windows Sandbox, then OK. It installs what it requires, and in a few minutes it will prompt you to restart your PC. You are now set up to use the Windows sandbox.

To start the sandbox, find it in your Windows Start menu. It is listed in the Apps as Windows Sandbox. You could also press the WIN key and type in the word sandbox and find it that way. Select it and a new window will pop up on your desktop. This is the sandbox environment.

To test an application, you find the install file on your host Windows and copy and paste it to the sandbox desktop (there is no drag-and-drop function, unfortunately). Then install the program in the sandbox the same as you would normally in Windows. There is also an Edge browser in the sandbox window that you can use to download applications or use as a browser to access any web sites you want.
One limitation to be aware of is that when installing some older programs, they may require a restart of the computer they are being installed on as part of the installation procedure, and with this type of program you cannot install it on the sandbox because once you restart the sandbox it will revert to its clean state and no trace of your program under test will exist anymore.

When you have finished your testing, then any of the normal options to shut down, log off, disconnect, etc. of sandbox Windows will result in the sandbox closing

**Sandbox** *(Continued from page 4)*

completely and as mentioned any configuration or programs you added will be wiped clean. It should also be clear that you cannot change many of the personalization settings in Windows without activating the operating system first, and there would be little point in activating a version that will reset back to its starting state at the next usage.

The above should be enough to get going with the sandbox and help you test some applications or browse some websites that you might feel less comfortable doing on your main Windows environment. We can go a stage further and create a startup file that runs as the sandbox starts and this file contains some commands that when it is used in the future to start the sandbox, then those settings will be consistent. You can still have the option of starting the sandbox from the Start menu as normal for a more basic setup. You can even have unique startup files to start the sandbox with different startup scenarios.

To set up such a start file, you create what is basically a XML file. This is easy to do and the process is to create a simple text file using Notepad or similar and save it to any location. The desktop is as good as anywhere, and a convenient place. Initially, make a file with the usual .txt extension. The filename can be called anything you want, but the extension must then be changed to .wsb (which stands for Windows sandbox). You can still edit the file as a regular text file. The contents of the file in its most basic form consists of these lines:

```
<Configuration>

</Configuration>
```

Now if you double-click that file containing the above lines, then the sandbox will start up and run the same as if it had used no startup file. It is the instructions that we put between these two configuration commands that determine the startup behaviour of the sandbox.
Here are three examples of the commands you could use inside the file:

`<vGPU>Disable</vGPU>` Disables the virtual GPU (it is enabled by default).

`<Networking>Disable</Networking>` Disables networking (it is enabled by default).

`<ClipboardRedirection>Disable</ClipboardRedirection>` Disable clipboard sharing with the host.

So a typical file might look like this:

```
<Configuration>
<vGPU>Disable</vGPU>
<Networking>Disable</Networking>
<ClipboardRedirection>Disable</ClipboardRedirection>
</Configuration>
```

Other options for the startup file can be made, but may lessen the security and isolation of the sandbox environment. For example, you can map a folder on the host computer to the sandbox and set it up as read or read & write. You can also add logon commands to the file.
The options available for the startup file are still a work in progress by Microsoft and I expect more options with the progressing Windows builds. You can check the configuration options here:
https://docs.microsoft.com/en-us/windows/security/threat-protection/windows-sandbox/windows-sandbox-configure-using-wsb-file

There is also a Windows Sandbox Editor that you may want to experiment with. It will build a basic configuration file for you. Find it here:
https://gallery.technet.microsoft.com/Windows-Sandbox-Configurati-f2c863dc

It does not contain all the options and in reality it may be as easy to create the file manually, though this utility can start you off if you're not sure how to create the configuration file when learning the sandbox operations.

♦♦♦

# PRODUCT REVIEW

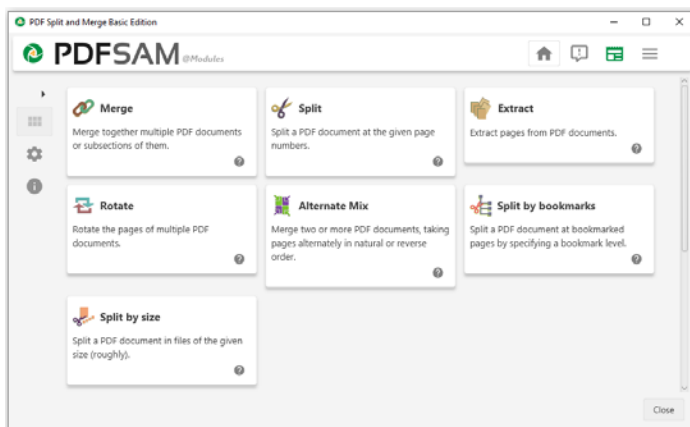# PDF Document Management Revisited
*by Alan German*

Recently, I received a single PDF file that contained 1647 pages as a combination of 30 separate documents. Normally, I would use the PDFTK Builder utility (see Modifying PDF Documents) to split up the original file into its constituent pages, and to then combine relevant sets of pages to form the individual documents as stand-alone PDF files. However, not so normal was the behaviour of PDFTK Builder when operating on the subject file. The split function did indeed break out 1647 individual pages, but it also managed to garble the order of the pages such that re-combining the pages for any given document proved to be next to impossible.

For example, the pages were named in sequential order, using the name of the original file and a _00x.pdf suffix (where x is the page number). The problem was that while pages _001 to _003 were indeed pages 1 to 3 of the first document, page _004 was a page from the middle of a different document altogether! Life is too short to spend time trying to manually correlate 1647 numbered pages into meaningful sequences, so a different solution was required.

Since PDFTK Builder is freeware, nothing is really lost by abandoning this program and seeking a similar utility. This is always my preferred course of action when things go south with a piece of software. In the present instance, the new program that I identified was named PDFsam Basic, where "sam" is short for split-and-merge, and "Basic" denotes the free (and open-source) version of the software package.

PDFsam Basic contains individual modules to perform merge, split, extract, and rotate operations on the pages of PDF files. Furthermore, the split function can be invoked by page numbers, size, and bookmarks. Another feature, named mix, is applied to two or more PDF files, taking pages alternately from the input files, a process designed to accommodate single-page scans of double-sided documents.
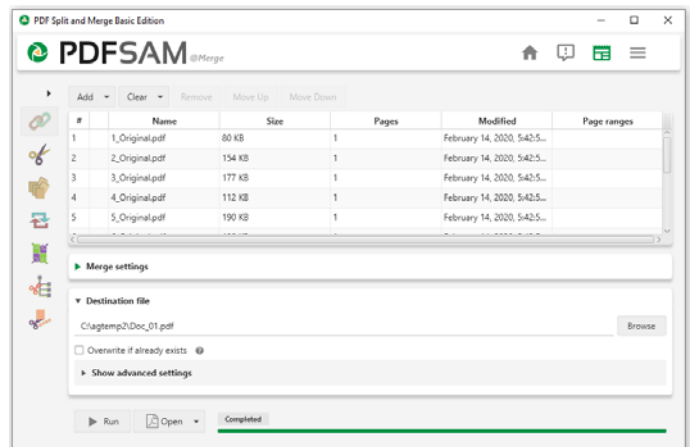


The first two of the available modules, Split and Merge, were eminently suitable for my purposes, these being the same procedures available previously with PDFTK Builder. PDFsam's split module extracted the 1647 pages as individual PDF files. By default the file names are in the form x_PDFsam_ and the original file name (where x is the page number). Some customization of the file names is allowed so, even though I was only using these on a temporary basis, I opted to modify the output files using an x_Original.pdf name format.

Once the progress bar had reached its end, and *Completed* was displayed, I checked that the numbered pages were those from the original file – and that they were in the correct sequence!

Selecting the *Home* icon then took me back to the main menu, from which I could select the Merge module. Now, it was a simple matter of using *Add* to select the pages I required for the first document, changing the name of the output file from PDFsam_merge.pdf to something more meaningful, and pressing *Run*. This process could then be repeated for subsequent documents by using *Clear*, and then *Add*, to create a new list of pages to be merged into other documents.



While split and merge can be used as indicated, PDFsam has another tool in its arsenal – the extract module – which is applicable to the current task. In effect, extract allows specific pages to be selected, as comma-separated numbers and/or page ranges, which are then copied from the original PDF file and written out to a new PDF file. The end result is the same as using split and merge, but extract is a more efficient means of performing this particular task.

As noted, PDFsam Basic has a number of other features. In addition, the program can be further customized through a variety of settings. The availability of the extract module in this utility, the fact that the program appears to work correctly with large PDF files, and its genesis as open-source makes this one a keeper!

**Bottom Line**

PDFsam Basic (Open-Source)
Andrea Vacondio
Version 4.1.1
https://pdfsam.org

## Lawrence's Thoughts — GOOGLE HOME: WHAT NOT & WHAT TO DO TO MAKE IT SUCCESSFUL

By Lawrence Patterson
lawrence@opcug.ca

Always felt it was important to have technology be part of my personal life as much as my professional doings, and though I'm not "all in or nothing" type of person, I believe that where it's affordable and useful, I'm in. This has been my take in deciding to go with the Google Home / Assistant infrastructure, mainly because I can use Google professionally as well as personally.

Having a personal GSuite account from back in 2011 (when I thought Google could knock off Microsoft's office crown) it was, I thought, a natural step to implement the Google Home infrastructure. Over the past couple of years I gradually implemented a couple of Philips Hue Bulbs (great for hands free control & outdoor sensor – flood lights), Google Home – speaker & Nest Mini (has replaced using the radio, though I still use it to listen to radio stations along with YouTube music) Nest Doorbell, 2 Nest Hubs – small display for family pictures & speaker, along with a newly purchase Lenovo 10" Smart Display that provides music and photographs, we are a, NOW, happy Google family.

Ok you may have noticed the "NOW" shout out, as it was not that way a month ago and before.

Here's the thing, that GSuite account that dutifully covers my personalized domain and family email, along with the variety of GSuite tools that takes care of the electronic data part of the household happenings, isn't at all a good experience when it comes to Google Home / Assistant. Here's a couple of things that make me go nuts, with Google's ho hum attempts at fixing the experience:
- Can't share / invite other accounts, not even your own GSuite assigned domain accounts;
- Nest Doorbell cannot be used with a GSuite account;
- The Nest Doorbell and Philips Hue creepily hooked up with each other, automatically turning on the outdoor front light anytime the doorbell camera detected someone at the door (which is great, only thing, it was on two separate accounts that supposedly couldn't talk to each other);
- And the constant cannot-do-this-or-that with Google Assistant + GSuite account (cameras can't be setup on Nest hub).

The NOT, with Google Home / Assistant, is to use it with GSuite. It is not worth the hassles nor do I foresee it getting fixed.

The TO DO is to setup Google Home / Assistant with an ordinary Gmail account. Believe me, I know how strange it is to state this, but since I transferred my Home over, all is Google bliss and the new Home / Assistant features work.

This next part is the lessons learned from transitioning to the Google bliss / ordinary Gmail account setup, which are as follows:

1. Setup the ordinary Gmail account with all of the security advice / options turned on and share its use with your significant other (this worked for us, may not work with every household / couple), noting that your credit card will be assigned to it (you can use Google Play Store cards to keep a balance going if the credit card isn't something you want to have stored);
2. Note that Google Assistant / Home is a powerful program, BUT, it follows very simple rules in the setup and there's no flexibility / all of the steps have to be followed exactly;
3. Remove all of the devices and rooms from your GSuite Assistant / Home account;
   a. Didn't have to reset the devices or retrain the voice, though I was prepared to do so;
   b. Any unique room names, I found, must be changed as Google remembers when you don't want it to (for example "Mom Room" has to be deleted and replaced with "Princess Room").
4. An Android phone or tablet, setup with your ordinary Gmail account as the primary, should be utilized as your main Home interface (you can use your other devices, by adding the additional ordinary Gmail account to the Home app);
   a. Interestingly, though my Chromebook was up to most of the tasks, Google assistant isn't compatible (or at least the one in the "Google Play Store" that Home wants to download to complete some functions, isn't).
5. If you have a device already on the ordinary Gmail account, and your home is labelled as "HOME" you may not be able to change it;
   a. Nest Doorbell tripped me up, it had "HOME" as its original location on the ordinary Gmail acount, and wouldn't allow me to change it to LEPHOME as an example.

Add in all of your devices on the Android device registered with the ordinary Gmail account.

There was / are other steps, but the above made it happen and now we are happy with the overall experience, as advertised.

Take care.

# THROUGH THE LENS

*A guide to digital photography for computer enthusiasts. After the click of your camera, you're only half done!*

## Sharing your pictures on the Internet
*by Lynda Buske*

There are numerous free sites for sharing photos on the web. Some, like Flickr, have been around a long time while others, like Snapchat, are more recent phenomena. Some (including Flickr) limit the number of photos you can post before needing a paid account. Instagram is popular but it doesn't allow you to nicely customize a personal website. Snapchat only posts your pic for 24hrs and uploads have to be from an Android or iOS device. A site called 500px, designed for your best photos, buries your pictures unless you get a certain number of "likes" within a short period of time. Sites like SmugMug have a monthly fee but they do include functionality that allows you to sell your photos. Facebook is of course very popular for posting quickly but I find it frustrating to find an old set of pictures, especially if I have to scroll through baby goat videos I have posted in the meantime!
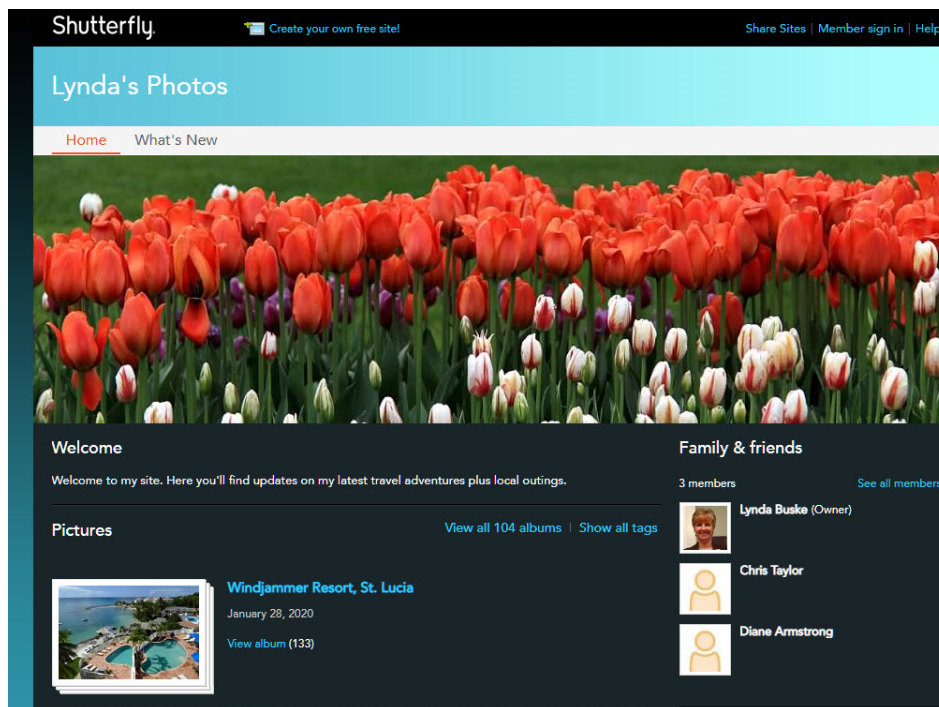
I have used Shutterfly.com for many years to share my travel photos (see screenshot). Once you have created a free account, you simply click on "share sites" to get started. You choose a unique personal URL and select a template. You have free unlimited space (I have posted close to 10,000 pics) and ads do not appear on your home page. When you are viewing an album, some static ads appear off to the side but can be avoided by viewing pics in slide show mode. Shutterfly does not require you to drive people to your site; they make their money by selling you personalized products containing your photos such as photo books, mugs, playing cards, etc. Their home page details all the available customizable merchandise.

When creating an album, you can upload photos from your computer, Instagram, FB or Google photos. You can add extra photos to existing albums or rearrange photos within the album. You can also rearrange albums on the site or change the "look" at any time.

Anyone can post a general comment on your home page but people who want to comment on individual pictures need to register with Shutterfly. You can keep your page completely private to invited friends only, but the downside to that is everyone must sign up with Shutterfly to view your photos. I prefer to keep mine public so I can easily flip my link to anyone via email or post on Facebook after a trip. The worse that could happen is someone downloads one of my pics and uses it for their own purposes. Much as I'm proud of some of my photos, I don't consider this very likely!

For anyone who is interested in setting up a shared site, I have posted some step-by-step screen shots at: https://tinyurl.com/lbuske-shutterfly or feel free to contact me at lbuske@sympatico.ca.



*Lynda regularly gives presentations for the OPCUG at the **Ottawa Public Library** (https://opcug.ca/opl-presentations/). This article is also in PDF format on the OPCUG website (https://opcug.ca/digital-photography/).*

# CHRIS TAYLOR'S QUICK TIPS

### Quick Tip 04: Pin scripts to the taskbar

In Quick Tip 2, I showed how to launch programs efficiently by pinning them to the taskbar. At the March general meeting, I showed how scripts can make computing more efficient. Why not add a script to the taskbar so you can launch it with a single click?

Windows won't let you. Only *programs* can be pinned to the taskbar.

There is a workaround. The secret lies in the fact that scripts are run by a program. For *.cmd* and *.bat* script files, they can be run by the Windows Command Processor – *cmd.exe*.

Start by creating a shortcut to your script. For example, you can right-click on your script and drag it to the desktop. Choose *Create shortcuts here* from the pop-up menu. Right-click the shortcut and choose *Properties*. At the start of the *Target* edit field, insert `cmd /c` and a space. Click the *OK* button. You can then drag and drop the shortcut onto the taskbar. You can delete the shortcut on the desktop.

### Quick Tip 05: Drag & drop: copy, move, or create shortcut?

When doing file maintenance in Windows, if you drag and drop a file, what happens depends on context;

- drag & drop between locations on the same drive: a move operation

- drag & drop between locations on different drives: a copy operation

As you drag the file, its icon shows a little tooltip of the operation to be performed.

You can force overrides to these defaults; Ctrl-drag will force a copy, Shift-drag will force a move, and Alt-drag will create a shortcut.

I have better things with which to fill my weak memory. Right-click files and drag them to the destination. When you release the mouse button, a pop-up menu lets you choose whether to *Copy here*, *Move here*, or *Create shortcuts here*.

### Quick Tip 06: Mouse pointers in Windows 10

Options for changing the size and colour of the mouse pointer expanded quite dramatically beginning with the May 2019 Update to Windows 10.

Press and hold the *Windows* key (⊞) and press *i* to run the *Settings* app. Type *pointer* in the search box and choose either *Change* mouse *pointer colour* or *Change mouse pointer size*. In the *Cursor & pointer* dialogue box, drag the *Change pointer size* slider to choose any of 15 sizes.

*Change pointer colour* lets you choose white, black, inverted, or colour. Try the colour option! There are 7 *suggested pointer colours*. If you don't like any of them, *Pick a custom pointer colour* lets you choose the precise colour you want.

# Q&A HAS GONE ON-LINE!

Due to the restrictions on group meetings, OPCUG is holding weekly Q&A sessions in Zoom video-conferences (see "Q&A and DYOB" in the May issue of the newsletter).

Questions on any computer-related issue are welcome, as are your answers on any of the questions asked. Also, we all find programs, add-ons, and utilities that make life easier. While you are not the only person to have discovered them, there are probably lots who haven't. How about giving a brief presentation about, or simply just mention, your favourite software? To give us a heads-up on your issue, send the details in an E-mail message to SuggestionBox@opcug.ca.

Our next Q&A session will be at 7:30 pm on Wednesday, August 19th. 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**)

# 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). Deadline for submissions is three Sundays before the next General Meeting.

**To receive the monthly newsletter by email, send an email to:**
opcug-newsletter+subscribe@googlegroups.com  (leave subject and body blank)
You do **not** need to create a Gmail or Google Groups account.

To subscribe to other OPCUG Google Groups member services, read our instructions at:
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: Due to COVID-19 safety guidelines, all our events are via video conference until further notice. Details at https://opcug.ca/venue/)**

Meetings are 7:30–9:00 p.m. followed by a Q&A Session until 10 p.m.

| | |
|---|---|
| **OPCUG Membership Fees:** | $20 per year |
| **Mailing Address:** | 3 Thatcher St., Nepean, Ontario, K2G 1S6 |
| **Web address:** | **https://opcug.ca** |
| **Follow us on Facebook:** | **https://www.facebook.com/opcug** |
| **Follow us on Twitter:** | **https://www.twitter.com/opcug** |

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# Reduce, Reuse, Recycle

**B**ring your old computer books, software, hardware, and paraphernalia you want to GIVE AWAY to the General Meetings, and leave them at the table near the auditorium's entrance. Please limit magazines to publication dates under two years.

You may TAKE AWAY any items of use to you.

Any items left over at the end of the meeting have to be taken back home by those who brought them in.