



OTTAWA

# PC NEWS

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## ARTICLE

### Travel Tips – Providing Direction

by Alan German

The age of smartphones has brought many benefits to their users, not the least of which is providing highly portable resources when travelling. Of course, one of the issues with using smartphones, especially when travelling abroad, is the generally high costs associated with Canadian data plans. So, are there ways to make use of your phone’s capabilities without having to pay any additional fees?

One problem I have always had is trying to relate a hard copy Google map of the route between a train station and a hotel to the situation on the ground. Which is the right exit from the station? Which way does one turn along the street? And, where is the alley for that critical turn to reach the front door of the hotel?

One phone-based method that I adopted on a recent trip proved highly successful in providing very efficient navigation. Essentially, this involved Google Maps and Street View, screen capture software, a word processor, and a PDF reader.

The basic method was to use Google Maps to show the route between the train station and the hotel, and then use Street View to display snapshots of critical locations (landmarks, intersections, etc.) to provide a pictorial description of the journey. A number of screenshots from Street View were taken using screen capture software and the images pasted into a word processing file. The word processor allows explanatory comments to be added to the images (e.g. Head across the square and go down the left side of the church...), and for annotations to be added to the images themselves to provide additional instructions. Finally, the document is saved to a PDF file and transferred to the smartphone where it can be accessed using PDF reading software.

Now, when I arrive in a new city, I simply pull my phone out of my pocket, select the PDF file with the instructions, and view the details in the PDF reader. The series of images are carefully chosen so that a landmark of some type is shown at each stage

where a turn has to be made and, because the pictorial “map” directly corresponds to the actual streetscape in front of me, navigating to the desired destination is now a piece of cake.

Even better, because of the time and effort put into researching and developing the series of images to fully describe the journey, it turns out that these are now burned into the brain, so

*(Continued on page 6)*



Go along Corso Porta Nuova until the city walls come into view

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Next Meeting: **WEDNESDAY, April 13<sup>th</sup>, 2016**

# April Raffle

For the April raffle we have the **Delux Q12 Wireless Bluetooth Speaker** which provides superior sound quality to your Bluetooth connected phone, tablet or PC. Featuring a built-in lithium battery, the Q12 also doubles as a hands-free telephone when connected to your phone. Available in black or white.

Tickets are \$1 for one, \$2 for three or \$5 for ten.



## March Prize Winner

Our raffle prize was an iCan 15.6" Grey Nylon Laptop Trolley Case.

Congrats to winner **Jeff Dubois**.

# Coming Up...

→ Wednesday, April 13th, 2016

**Speaker:** Will Wegenast (Airborne Media Pros, Skyborne Systems) & Regie Alam (ASG Mapping Ltd.)

**Topic:** A Discussion on UAVs: Exploring Emergent Unmanned Vehicle Technologies & Real-World Applications.

This month's speakers will examine the growing market in UAV Technology for geographic information systems (GIS), photogrammetry, mapping and inspection. Other applications such as aerial imaging and drone sports as well as related issues such as how UAVs are influencing manned aircraft design and technology. Current legislation and regulations surrounding UAVs and Drones will be examined.

Airborne Media Pros was founded in 2012 to provide aerial media and imaging services using custom built Unmanned Aerial Vehicles (UAVs). In meeting the demands of an evolving marketplace, Airborne Media Pros developed a strategic alliance in the Geographic Information Systems (GIS) industry, by creating SKYBORNE Systems.

**Wednesday, May 11th, 2016**

**Speaker:** Dr. Marc Lamarre, B.Sc., DDS, EMBA  
**Topic:** Revolutionizing Dentistry Through Technology

**Cumulus Dental** is an Ottawa based company which develops software and devices for dentists and hygienists. Software currently under development is an **interactive, voice-activated 3D dental charting system** which has the ability to perform a complete oral examination in less than 1/3 the time of a conventional exam.

Dr. Marc Lamarre will introduce the innovative systems and discuss Cumulus' plan to technologically revolutionize dentistry.

**Wednesday June 8th, 2016**

Annual Pizza Night and eWaste event

**Speaker:** Chris Taylor, OPCUG President and Microsoft MVP  
**Topic:** Windows 10: One Year Out

For details on these and other meetings, visit <http://opcug.ca> and click on the **MEETINGS** button.

## 2016 CALENDAR

Meetings	Date	Time and Venue
OPCUG General Meeting	Wednesday, April 13 <sup>th</sup>	7:30 p.m. <b>Bush Theatre</b> of the <b>Canada Aviation and Space Museum</b> , 11 Aviation Parkway. <a href="http://casmuseum.techno-science.ca/en/index.php">http://casmuseum.techno-science.ca/en/index.php</a>
Linux / Open Source SIG	Wednesday, April 13 <sup>th</sup>	Immediately following the OPCUG General Meeting.
Beer BOF (Wing SIG East)	Wednesday, April 13 <sup>th</sup>	10:00 p.m. (after all other SIGs) at Liam Maguire's, St. Laurent Blvd. at Innes Rd.

Please note that unless otherwise noted, SIGs meet at 9:00 p.m. (immediately following the OPCUG General Meeting).

# PRODUCT REVIEW

## Airnef by Chris Taylor

If you own a Nikon camera with built-in or plug-in WiFi, you may be somewhat disappointed with the level of WiFi support. Nikon has a somewhat anemic *Wireless Mobile Utility* that allows limited remote control for taking photos and transferring them from the camera to Android or iOS devices.

But what if you have a laptop computer and want to transfer your photos from the camera to the laptop? Or a Windows tablet? Or a Linux computer? Nikon's utility won't help you.

There are a few ways to transfer files from the camera to the computer. The best option is to pop the camera's memory card into the card slot on your laptop.

But my Surface Pro 2 only has a micro-SD card slot and my camera uses full-sized SD cards. The second option is to plug an external card reader into the USB port on the computer.

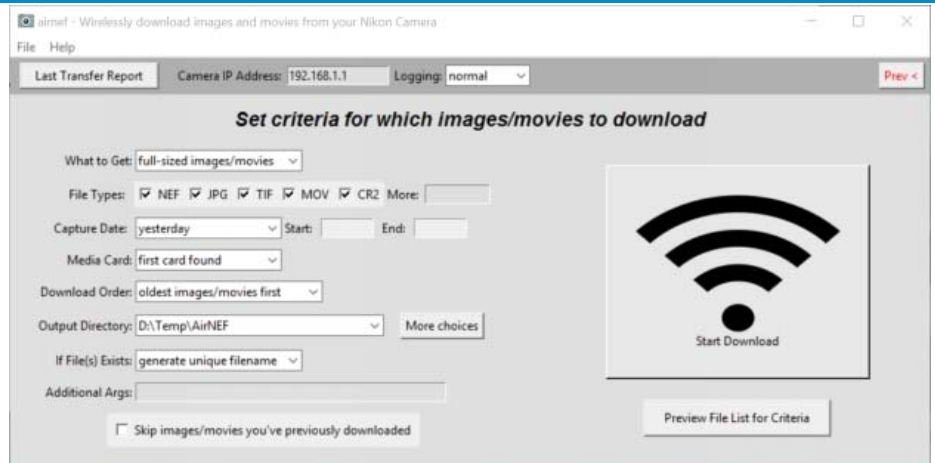
If you don't happen to have an external card reader, a third choice is to plug the camera into the computer using a USB cable.

There may be some circumstances where none of those options work for you.

Airnef is a free, open-source utility for Windows, Linux and Mac OS. It allows you to connect to your camera and transfer photos and videos over a WiFi connection.

Before you proceed, make sure you look back at my recommendations above for transferring photos. If any of these can work for you, they provide simpler and *much* faster methods.

Okay, you really, *really* need to transfer photos from your camera over WiFi.



Head over to <http://www.testcams.com/airnef/> and download the appropriate version of Airnef.

When you start Airnef, you are given two transfer options. If you choose the first, you select the images to transfer directly on the camera. You then specify a folder on your computer to store the copies and how you want name conflicts handled. This method works really well if you have just a few images or videos you want to transfer.

If you want more of a bulk transfer, the second Airnef option is a better choice – using the desktop application to select which files to transfer. With this method, you have many options;

- Full images, small or large thumbnails;
- Choose from 5 predefined file types or specify a custom file extension;
- Choose a subset by date taken, including choices like *today*, *yesterday*, *past week* or a date range;
- Choose a card slot (for cameras with multiple card slots)
- Choose the directory to store the copies;
- Specify how *File exists* conditions are handled;
- Option to skip images you have already downloaded;
- Preview what will be downloaded with the chosen options.

Airnef has built-in fault tolerance. If the connection drops unexpectedly, once you re-establish the connection, it picks up where it left off, even if that's in the middle of a file. This is a nice feature, especially if a transfer of a 2GB video file is interrupted at 1.9GB!

Earlier in the article I mentioned how just about any other method for transferring photos and videos is preferred. The reason is speed. It is not the fault of Airnef – file transfers over WiFi are *slooooooowww*.

I transferred 158 files totalling 3.4 GB using Airnef. It took over 24 minutes for an average transfer rate of 2.34 MB/sec. Using the card reader on my computer took just 6 minutes – less than one quarter the time. And it didn't chew through the battery on my camera for 24 minutes!

A video on YouTube does a good job of highlighting how to use Airnef – <https://www.youtube.com/watch?v=Lro2sSHqP68>

Airnef also works with WiFi enabled Canon cameras. Although Canon's EOS utility can transfer photos to a Windows computer, you may find the additional options in Airnef useful.

### Bottom line:

Product name: Airnef v1.0  
Free and open source for Windows, Linux, Mac OS  
<http://www.testcams.com/airnef/>

## PRODUCT REVIEW

# PDF-XChange Viewer, a further review Part 1, How to Search an Image PDF

by Micheline Johnson

*PDF-XChange Viewer (PDFXCXV) has already been reviewed by Alan German. This review looks at PDFXCXV from a somewhat different viewpoint.*

PDFXCXV stops the execution of nefarious scripts from Virus's/trojans etc. with a feature called **Data Execution Prevention (DEP)**.

Installation of PDFXCXV also installs Tracker Updater, pinned to the Start menu.

In the PDF security section of the **Secunia 2015 Vulnerability Review**, <http://secunia.com/resources/vulnerability-review/pdf-security/>, subtitled: "A look at vulnerabilities in the 5 most popular PDF readers - Adobe Reader, Foxit Reader, PDFXChange Viewer, Sumatra PDF and Nitro PDF Reader," Secunia noted that

There were 43 known vulnerabilities in Adobe Reader, and that 32% of users left these unpatched.

There was 1 vulnerability in Foxit Reader.

There were no vulnerabilities in each of PDFXChange Viewer, Nitro PDF Reader and SumatraPDF.

Support comes in the form of

a 209pp manual, available from the Download Now box or directly from <http://www.tracker-software.com/PDFVManual.pdf>.

an online manual at <http://help.tracker-software.com/EUM/default.aspx>.

support forums at <http://www.tracker-software.com/forum3/>.

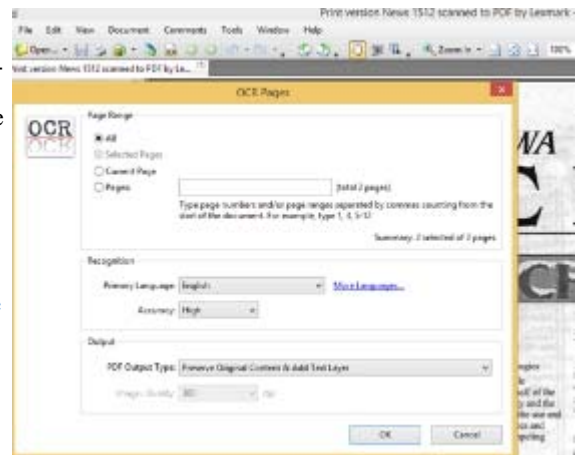
Adobe Reader download (v 2015.010.20056) is currently 81.57 MB. Foxit Reader download (v7.2.8.1124) is 38.2 MB. Tracker PDF-XChange Viewer download (v2.5.313.1) is 17.2 MB. Installed sizes of each are correspondingly larger.

An **IFilter** is a plugin that allows Microsoft's search engines to index various file formats (such as documents, email attachments, database records, audio metadata etc.) so that they become searchable. Without an appropriate IFilter, contents of a file cannot be parsed and indexed by the search engine. iFilters are included in products such as Adobe Reader, PDFXCXV, LibreOffice, Microsoft Office and OpenOffice. Tracker Software claim that their super-fast IFilter, (supplied **FREE** with all PDF-XChange Viewer installs) extracts and searches text from pages, document info (title, authors, subject etc.), comments, and bookmarks etc - faster than any competing IFilter product available!

PDFXCXV has another great searchability feature, that which adds a text layer to an image PDF, by means of built-in OCR code, allowing an image based PDF to be searched, and the text to be extracted. Originally PDFs were generated from text documents, and were therefore searchable. Today, many if not most PDFs are just a collection of images, particularly those generated from copiers or scanners, and are therefore not searchable. Image based PDFs can be made searchable by means of the built-in OCR in PDFXCXV.

The graphic at right, shows the OCR dialogue, which allows you to

- Select which pages of the open image PDF to OCR.
- Indicate what the primary language is. Built-in languages are English, French, German and Spanish. Other languages can be downloaded, see [OCR Language Extensions](#).
- Choose the OCR accuracy (low, medium, high).
- Choose output type:
  - Preserve Original Content & Add Text Layer, or
  - Convert Page Content to Image only – Add Text as Layer.



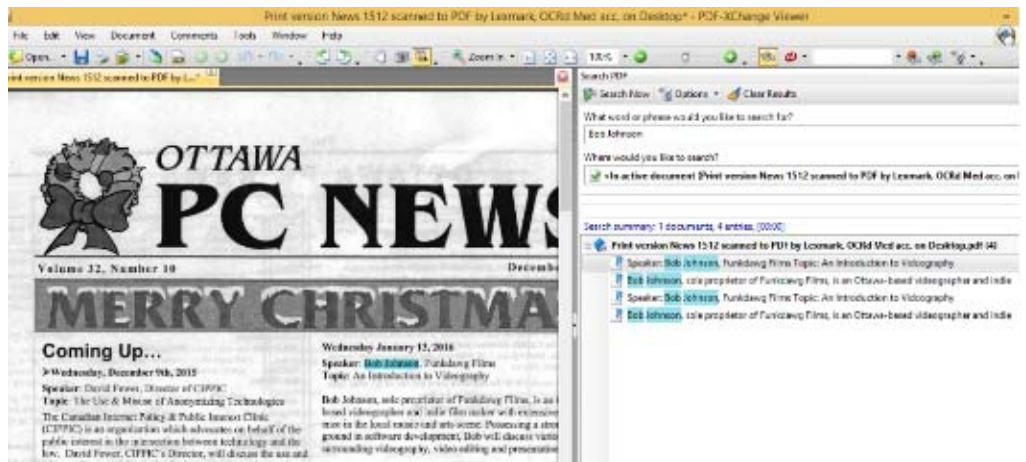
A test document was made by scanning to PDF the print version of the December 2015 issue of the OPCUG newsletter (News 1512), using a Lexmark Genesis S815 scanner, thus producing an image PDF. This test document was opened in PDFXCXV and then OCR'd on two computers: a cheap Celeron N2805 based Netbook running Windows 8.1, and a 1<sup>st</sup> generation Core i-7 desktop running Windows 7, each at low, medium and high recognition accuracy. After OCRing this test image PDF, text became selectable and searchable. Search had no problem finding key words such as "Bob Johnson", as shown above.

*(Continued on page 5)*

**PDFXCVCV** (Continued from page 4)

PDFXCVCV took 100s, 85s and 153s on Low, Medium and High Accuracy settings respectively to OCR this test PDF on the Netbook. It took 30s, 22s and 40s on Low, Medium and High Accuracy settings respectively to OCR it on the Desktop. It seems that Medium Accuracy has been optimized in that this setting was faster than that for Low Accuracy, on both the netbook and on the i-7 desktop.

Extracted text included typical OCR errors, but in spite of this, accuracy is sufficient for search to work in nearly all instances. To get a measure of the accuracy of the OCR engine, I selected all the text on page 1 of the OCR'd test PDF, copied and pasted it into Word (which shows suspect words underlined in red), and counted the suspect words. I counted 115, 20 and 60 OCR errors respectively for Low, Medium and High Accuracy settings, out of a total of about 700 words. Again, the performance of Medium Accuracy is better than that of High Accuracy, which suggests that more work on improving the Medium Accuracy setting has been done than on the other two accuracy settings. It is therefore recommended that you use the Medium Accuracy setting.



PDFXCVCV includes its own screen capture tool (as does Windows), see Snapshot Tool icon on the top toolbar. But a screen capture image is limited in resolution to that of your monitor. For example, when using the Windows snipping tool to capture page 40 of the manual, the image size was 666x954 pixels (93 kB). When p40 was exported using PDFXCVCV Export to Image, at 300 dpi, the image size was 2480x3508 pixels (601 kB).

Thus if you want higher resolution, you can export the original image(s) of any or all pages in the PDF to almost any image format, by going to

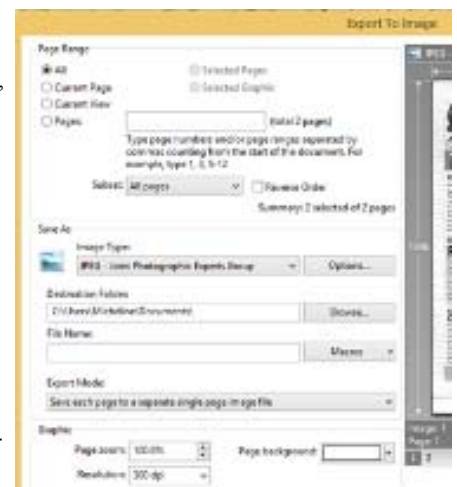
File | Export | Export to Image

The Export to Image dialog is shown at right.

Images from any or all of the PDF pages can be selected to be exported.

The choice of image types these images are to be saved as, can be selected from BMP, PNG, GIF, PBM, PGM, PPM, JBIG2, JPEG2000, JPEG, WBMP, JNG, PCX, DCX, TGA, TIFF. Image resolution can be chosen from 72, 96, 100, 150, 300, 400, 600, 1200, and 2400 dpi.

PDF-XChange Viewer now includes a Windows shell extension to display thumbnails of PDF files in Windows Explorer. When using thumbnail mode view in Windows Explorer, thumbnails of the first page in a document are shown instead of standard PDF document icons when the folder is set to view small, medium, large, or extra-large icons. In small and medium icon mode, these thumbnails are very low resolution. In large and extra-large icon modes, these thumbnails appear as shown at the right. The download file contains two installation files – one for the viewer itself and one for the Shell Extension for viewing thumbnails in Windows Explorer. Installation of this extension is optional, but you might miss it if you don't know it is there.

**Bottom Line**

Tracker Software (incorporated in 1997) has its headquarters in Vancouver Island. The current version (2.5.0312.1) was released 2015-02-09. PDFXCVCV free downloads are available from the Download Now box at the top-right of its web page at <http://www.tracker-software.com/product/pdf-xchange-viewer>, including

- ZIP installer (32/64 bit), 17 MB (includes EXE installer, plus XML file for the Shell Extension for viewing thumbnails in Windows Explorer.)
- Viewer Manual (PDF), 7 MB
- EXE installer (32/64 bit), 17 MB
- Portable version (ZIP), 8 MB
- and more

*Part 2 of this article will appear next month in Ottawa PC News.*

*For a more detailed version of this article, read it online at:*

[http://web.ncf.ca/fm120/Software/Reviews/PDF\\_XChange\\_Viewer\\_a\\_further\\_review\\_update\\_2016-02-01.pdf](http://web.ncf.ca/fm120/Software/Reviews/PDF_XChange_Viewer_a_further_review_update_2016-02-01.pdf).

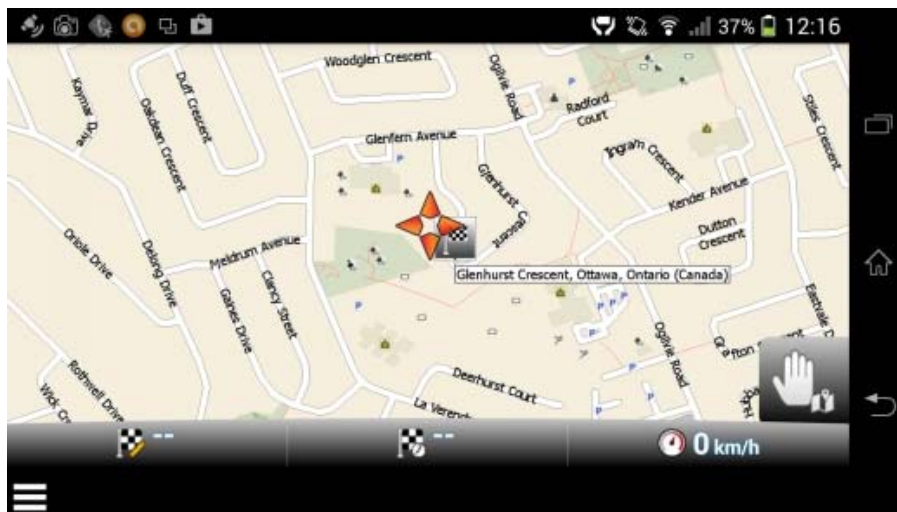
## Travel Tips *(Continued from page 1)*

it is hardly necessary to refer to the PDF file on the phone. Alternatively, for those of us who need a little reminder now and again, it's easy to review the PDF file as the train approaches the destination station. This almost guarantees that there will be no need to further consult the electronic "map".

Of course, this method only applies to pre-defined routes. What if you are lost in the narrow alleys and tiny bridges over Venice's series of canals and wall-to-wall buildings. Wouldn't it be nice if you could pull out your smartphone, load a map, and have the phone display your precise location?

But, doesn't this require an Internet connection to show Google Maps while you are in the middle of nowhere, and the need to rack up multiple tens of dollars in international data charges? Well, no, it doesn't. What you need (for an Android phone) is an app such as MapFactor Navigator (<https://play.google.com/store/apps/details?id=com.mapfactor.navigator&hl=en>) and an OpenStreetMap (<https://www.openstreetmap.org>) of the country you are visiting.

Both the Navigator app and the OSM map are free to download. And, once these are installed on your smartphone, it's simply a matter of turning on the phone's GPS feature and your location will be displayed in the centre of the street map. Now, you can zoom in and out on the display and decide which way to go to reach your next destination.



MapFactor Navigator display on an Android smartphone

So, there you have it – two easy ways to simplify your life, and improve your navigation skills, when travelling in unfamiliar territory – and all at zero additional cost while making use of your smartphone.

## Upcoming Workshop

### Understanding E-mail (Everything you need to know - and some things you don't!)

In this upcoming half-day workshop scheduled for April 23rd, two members of the Ottawa PC Users' group will explain the basics of how email works. The differences between using webmail and an email clients, the features of POP and IMAP mail systems, and their suitability for multiple devices (notably smartphones and tablets), will be explored. Today's email systems are constantly under threat from hackers, so we will take a look at some vulnerabilities and see how best to protect personal mail systems. We will see how managing email can be achieved efficiently and automatically using a combination of folders and filters. The basic processes for moving between webmail and email clients by transferring address books and messages will be outlined. And, for those who wish to have the personal touch for their mail system (or who don't want to be locked in to a specific service provider's email systems) we will examine how to create and use portable email addresses.

The workshop will be held on Saturday, April 23rd, 2016 (12:30 – 16:30) at the Alta Vista branch of the Ottawa Public Library

The cost to attend the afternoon workshop is only \$10.00 and will include coffee, donuts and the chance to win a one-year OPCUG membership (\$25.00 value) certificate. Space is limited to the first 40 registrants. Click on the WORKSHOP button at <http://opcug.ca> to register online.

# OPCUG Free Software Guide—Part 63

Compiled by Alan German,  
Jeff Dubois and Chris Taylor

**T**his guide features an annotated list of free computer programs. The software mentioned has not been reviewed (except where noted) nor have any tests necessarily been conducted. Consequently, no guarantees are provided that the individual programs will perform as described. Rather the list of available software is provided for the information of our members who may find one or more of the programs useful.

## PassMark DiskCheckup

Monitor the SMART (Self-Monitoring Analysis and Reporting Technology) attributes of a particular hard disk. PassMark monitors elements of possible long term drive failure, such as spin-up time, the number of start/stops, the number of hours powered on, and the disk's temperature.

Current Release: Version 3.3

Web Site: <http://tinyurl.com/beonk>



## DiskCheckup

## Optical Info

When looking at the front of a computer which is not your own it is often difficult to tell the type of installed optical drive (e.g. CD/DVD ROM, CD/DVD Writer, etc.) This utility will detect an optical drive's read/write capabilities.

Current Release: Version 1.04

Web Site: <http://www.alexnolan.net/software/opticalinfo.htm>

## CrashPlan

This cloud provider offers two free methods for reliable backup – use your own external USB drive or a hard drive on a second computer, or similar drives owned by a friend or relative. Automatic backup occurs once daily, with options for incremental or differential processing, and 128-bit encryption.

Web Site: <http://www.code42.com/crashplan/>

## MyPublicWiFi

Turn your laptop/PC into a shared Wi-Fi wireless access point. This is an ideal solution for setting up a temporary Internet connection in a hotel room, meeting room, etc.

Current Release: Version 5.1

Web Site: <http://www.mypublicwifi.com>

## Dev Eject

When trying to eject a USB drive, you might get a message indicating that the device is in use. Dev Eject can tell you what has a lock on the device, allow you to kill the process, and let you safely remove the device. For Windows XP/Vista/7/8 (it does not appear to work in Windows 10.)

Current Release: Version 1.0.29 beta

Web Site: <http://deveject.com/>

## Avery Wizard for Microsoft Office

Use this software to format and print Avery labels, business cards, dividers, name badges and more. Works with Word and Excel. Use professionally designed templates to get you started with your design, or choose a blank template to add your own graphics or logo to all your Avery projects.

Web Site: <http://tinyurl.com/cauksm>



## Tor Browser

This software protects you by bouncing your communications around a distributed network of relays run by volunteers all around the world. It prevents anyone learning what sites you visit or even knowing your physical location. And, it lets you access sites which are blocked.

Current Release: Version 4.5.3

Web Site: <http://tinyurl.com/3esme2n>

## Perch

Turn an old smartphone or tablet into a live home monitoring service. Then visit [getperch.com](http://getperch.com) to see what's going on, review historical video, or set up motion alerts. Perch also lets you turn on lights and control appliances using your home automation system. Requires Android 4.0 or higher



Current Release: Version 1.1.8 (beta)

Web Site: <https://getperch.com/>

## Anno Online

This free-to-play city-builder game lets you develop big magnificent metropolises in the medieval times. Get ready to set sail, discover new islands, build impressive cities, trade with your neighbors...

Web Site: <http://en.anno-online.com>



## TheFolderSpy

Monitor any number of folders in real-time. Any change will create an alert or execute a specified program.

Current Release: Version 2.1.1.1

Web Site: <http://tinyurl.com/jk6ag2s>

# 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.

## Group Meetings

OPCUG meets on the second Wednesday in the month, except July and August, in the **Bush Theatre** of the **Canada Aviation and Space Museum**, 11 Aviation Parkway, Ottawa. <http://casmuseum.techno-science.ca/en/index.php>

Meetings are 7:30–9:00 p.m. and Special Interest Groups (SIGs) go until 10 p.m.

Parking is available at the museum for a flat fee of \$3 after 5pm. Limited street parking is available for free. Details at <http://opcug.ca/public/regmtg.htm>

**OPCUG Membership Fees:** \$25 per year  
**Mailing Address:** 3 Thatcher St., Nepean, Ontario, K2G 1S6  
**Web address:** <http://opcug.ca>  
**Bulletin board—The PUB (BBS)** <http://opcug.ca/default.htm>  
**Follow us on Facebook:** <https://www.facebook.com/opcug>  
**Follow us on Twitter:** <https://www.twitter.com/opcug>

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Meeting Coordinator		
<b>Jeff Dubois</b>	<a href="mailto:jeff.dubois@opcug.ca">jeff.dubois@opcug.ca</a>	
Meeting Coordinator Co-chair		
<b>Mike Pereira</b>	<a href="mailto:mike.pereira@opcug.ca">mike.pereira@opcug.ca</a>	
Treasurer		
<b>Alan German</b>	<a href="mailto:alan.german@opcug.ca">alan.german@opcug.ca</a>	
Secretary		
<b>Gail Eagen</b>	<a href="mailto:gail.eagen@opcug.ca">gail.eagen@opcug.ca</a>	
Membership Chairman		
<b>Mark Cayer</b>	<a href="mailto:mark.cayer@opcug.ca">mark.cayer@opcug.ca</a>	613-823-0354
Newsletter		
<b>Brigitte Lord</b> (editor/layout)	<a href="mailto:brigitte.lord@opcug.ca">brigitte.lord@opcug.ca</a>	
<b>(Mr.) Jocelyn Doire</b> (e-mail distribution)	<a href="mailto:jocelyn.doire@opcug.ca">jocelyn.doire@opcug.ca</a>	
Public Relations		
<b>Jeff Dubois</b>	<a href="mailto:PR@opcug.ca">PR@opcug.ca</a>	613-366-7936
Facilities		
<b>Bob Walker</b>		613-489-2084
Webmaster		
<b>Brigitte Lord</b>	<a href="mailto:opcug-webmaster2@opcug.ca">opcug-webmaster2@opcug.ca</a>	
Privacy Director		
<b>Wayne Houston</b>	<a href="mailto:privacy2@opcug.ca">privacy2@opcug.ca</a>	
Special Events Coordinator		
<b>(Mr.) Jocelyn Doire</b>	<a href="mailto:jocelyn.doire@opcug.ca">jocelyn.doire@opcug.ca</a>	
Linux / Open-Source SIG (vacant)		

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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.

