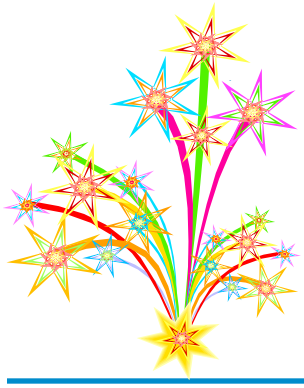


# OTTAWA PC NEWS

Happy New Year!

Volume 40, Number 1 January 2023


## ARTICLE

# Building a NAS System – Part 1: Installation

*by Alan German*

Some readers may recall my ill-fated effort to share USB drive storage through my router (https://opcug.ca/qa_recordings/20210519_PowerPoint.pdf) where the downfall was the inability of the router to support anything other than the obsolete and insecure SMB1 file-sharing protocol. Now, while I don't really need shared storage, having a USB drive available to any device on my Wi-Fi network would be useful on occasion. So, perhaps it's time to take another crack at the issue – this time by building a network attached storage (NAS) system.

Since I don't really know anything about NAS, nor networking in general, this will be a learning-by-doing exercise and will be heavily reliant on on-line videos and tutorials. If you opt to take this same route, be sure to check out a number of sources for information as authors/presenters can gloss over some important details.

For now, I'm not planning to spend anything other than time on the project. The hardware that will be used consists of an old, steam-powered, Acer Aspire One netbook, and the 64 GB nano-USB drive that was the subject of the previous abortive attempt at shared storage. There are several free software packages that provide NAS functionality. For the current exercise I selected *openmediavault* (OMV), a free, open-source product, based on Debian Linux, and reputed to run well on older hardware with limited RAM.

The Aspire certainly qualifies as older/limited hardware. The netbook dates from 2011, has an AMD dual-core C50 CPU, and has been upgraded to have a massive 2 GB of RAM! As a perhaps more familiar point of comparison, the CPU's performance is somewhat similar to that of Intel's Atom processor. So, while the Aspire is evidently no speed demon, it should be suitable for low-level file transfer over the network.

The trick in getting NAS to work is in the details of configuring the software once this is installed; however, there are also some idiosyncrasies in OMV's installer which need to be considered. Note also that, while there is lots of information on using OMV on the Internet, it is often a non-trivial task to find detailed instructions for specific operations in the NAS software. As a result, this series of articles will include detailed steps for each of the processes used where I believe such instructions to be appropriate.

I downloaded the OMV software, selecting the latest stable version, and used Yumi to add the ISO to a bootable USB drive that contains various test and production systems. I also opted to create a wired connection between the netbook and the router in order to avoid any issues with Wi-Fi connectivity. It should also be noted that using an Ethernet cable, providing greater reliability and security, is the preferred connection for NAS.

The installation process will be reasonably familiar to anyone who has previously installed a Linux distro, and is fairly straightforward for those new to Debian Linux. Regrettably, the installer doesn't run unattended to completion as there are three separate sets of user input required along the way.

The installer initially loads files from the distribution medium with various progress messages being displayed. However, there is a period of 2-3 minutes where the installer checks out the available hardware and only a plain blue screen is displayed. This is not a BSOD! So, be patient. Whenever there is a break in the action, the installer will eventually come back with more information. In particular, a number of subsequent prompts will request your input on options such as language (English) and time zone (Eastern). One of the choices that must be made is to use an Ethernet (wired) or Wi-Fi connection as the network interface. As noted earlier, select the Ethernet option.

*(continued on page 5)*

**Inside this issue:**



**Next Meeting: WEDNESDAY, January 11th, 2023**

# Next Meeting

**Wednesday, January 11, 2023**

### HOW TO BUY A PC

**Speakers:** Alan German and Chris Taylor, OPCUG

When buying a new PC, you face a bewildering array of choices including processor, amount of memory, storage technology & size, form factor, ports, network connectivity and more. Alan German and Chris Taylor will help you narrow the field so you can concentrate on makes and models that will give you the best bang for the buck…for the type of computing you want to do. Alan and Chris will cover a very wide range of capabilities from the most modest to power behemoths and budgets from tiny to the "sky's the limit".

**This meeting will be via Zoom video conference.**

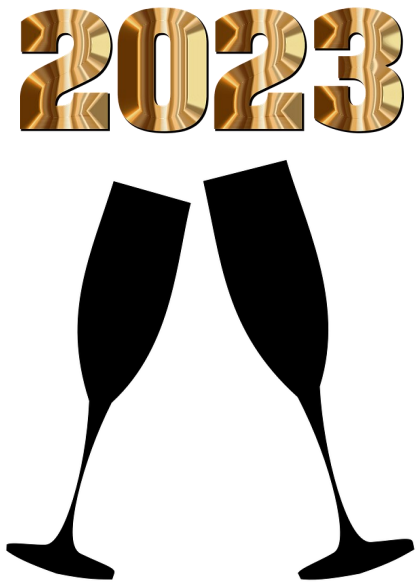
Join us at **https://tinyurl.com/opcug-meeting**. The Zoom link will be live at 7:15 pm. The meeting will begin at 7:30 pm.

The above link includes the meeting ID and password. However, if you are prompted for the information, use:

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

Instructions for using Zoom are provided here:
https://opcug.ca/wp-content/uploads/Zoom-instructionsv3.pdf

**Until further notice, Q&A sessions are no longer held after regular monthly meetings.** Hence, monthly meetings now end 1 hour earlier at 9 pm. Everyone is welcome to join us on all other Wednesdays for **weekly Q&A sessions**.




# Coming Up…

**February 8, 2023**

How to get paid software for free daily... totally legally!
**Speaker**: Serge-Érik Thériault (OPCUG)
*(details to follow)*

**March 8, 2023**

Members' Favourites Night *(tentative)*

**June 2023**

Annual Pizza Night
*(details to follow)*

*All scheduled regular monthly meetings, weekly Q&A sessions, and a link to OPCUG presentations at the OPL are posted on our website at https://opcug.ca/#upcoming. All events are via video conference until further notice.*

## 2023 CALENDAR

| Meetings | Date | Time and Venue |
|---|---|---|
| Regular Monthly Meeting | Wednesday, January 11th | 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 | Wednesday, December 28th | Until further notice, Q&A sessions are no longer held after regular monthly meetings. Join us on all other Wednesdays for weekly Q&A. |
| Beer BOF (Wing SIG East) | Wednesday, January 11th | Enjoy a cold brew or other beverage in the comfort of your home during the video conference. |

# 2022 PRESIDENT'S REPORT

In our pandemic world, the OPCUG continued operations with an online existence. Zoom has proven to be a robust and effective way for members to participate. Although there are currently no plans to return to in-person meetings, the board continues to evaluate the situation.

The OPCUG passed a major milestone in the spring. We began our 41st year of operation with a year-long celebration of the rich history fulfilling our motto *Users helping users*. Each month, the newsletter is highlighting topics from past OPCUG newsletters, thanks to Jocelyn Doire and Bob Walker.

Membership increased 14% in 2021. The majority of the increase happened during our "two years for the price of one" special in the spring. If you know anyone who could benefit from being a member of the OPCUG, the special has returned; new members who join before March 31, 2023 will get a two-year membership for their $20. Given our healthy bank balance, we are also able to extend all current membership expiry dates by another year at no additional cost for the 3rd year in a row.

In 2022, we had three outside presenters. Heather Oakley and Mike More from the Ottawa branch of the Ontario Genealogical Society helped budding genealogists with *Getting Started in Genealogical Research*. Gillian Villeneuve from the Macintosh User Group of Ottawa showed just how similar the Mac and PC are with her *Me and my Mac* presentation. Paul and Maria Middleveen from The Trailing Edge gave a great grounding presentation on *General Computer Hardware*.

Member presentations were given by Stéphane Richard (*Encryption 101* and *TCP/IP overview*), Lawrence Patterson (*Microsoft Teams - How Practical for Non-corporate Users?* and *Windows 11, it's here to stay*), Tom Trottier (*Foobar2000*), Alan German (*Spiders, Scrapers, Crawlers, and Bots*), Bob Herres (*Bitmoji for Windows*), Tom Hillock (*Genealogy*), Chris Taylor (*Photo restoration*), and a tag-team presentation by Alan and Chris (*Office smackdown*).

We had great attendance at monthly meetings running from 44 to 57. I would like to extend my thanks, on behalf of all members, to all presenters. I hope everyone found value in the presentations. If you missed any meetings, material from past meetings is archived at https://opcug.ca/past-presentations/.

Weekly Q&A sessions continue to be very popular, with attendance between 29 and 46 in 2022. We covered a wide range of topics from basic to advanced. Another milestone: On June 1st we hosted the 100th Q&A session over Zoom. As of this writing on December 19th, we are up to 122 Q&A Zoom sessions covering 866 topics with 4,267 participants! Thanks to all who contributed to our collective knowledge at Q&A. Don't forget that everyone knows less than some and more than others. *Everyone* can both learn from and help others.

Thanks to presenters Alan, Lawrence, Lynda, and Chris, we hosted a successful *Tech Talks* series in the spring. Forty-one people attended *Spring clean-up*, 17 attended *Basic Photo Editing*, 20 attended *Scam avoidance and trust*, and 24 attended *Wireless security*.

We had no new contributors to the newsletter this year. I would like to thank Alan, Lynda, Tristan, Lawrence, and Jocelyn for their contributions and Brigitte for her excellent production. I encourage all to consider writing for the newsletter.

In December, Lawrence stepped down as Program Chair in order to devote his spare time to pursue other hobbies. Lawrence joined the OPCUG just 4 years ago, in the fall of 2018. He attended his first board meeting in October of that year and accepted an appointment to the board to fill an open position. Lawrence's contributions to the smooth running of the OPUCG have been considerable. In addition to the significant effort in getting presentations lined up, Lawrence gave many presentations at main meetings and Q&A, took care of coffee and Timbits back in ancient times when we met in person, gave presentations at the Ottawa Public Library, wrote articles for the newsletter, helped manage our transition to web hosting at Rebel, managed the *Fraud Watch* page on our website, and more.

I would like to thank all members of the Board of Directors, Mark Cayer (membership), Richard Aylesworth (financial review), Bob Herres (election chair), all who keep the OPCUG humming. And finally, thanks to all members, without whom there would be no reason for the OPCUG's existence!

*Chris Taylor*

## Free Membership Renewal and Two-for-one New Memberships


Once again, the club's use of on-line meeting technology has considerably reduced our historical level of annual expenses and the Board of Directors has voted to extend the membership of all members in good standing as of March 31, 2023 by an additional year at no charge. So, if you are a current OPCUG member, please do not send in a membership renewal payment; your membership will be renewed automatically.

This policy also means that anyone new joining the club before March 31st, and paying the regular fee of $20, will actually receive two-years of paid-up membership – our now famous two-for-one membership deal!

So, if you have friends, relatives, or colleagues who are interested in any aspect of personal computing, and wish to expand their knowledge and skills in the world of technology, let them know that they can obtain two years of OPCUG membership for the price of one by signing up at https://opcug.ca/join-or-renew/ before March 31, 2023.

# ARTICLE

## Re-authentication when resuming

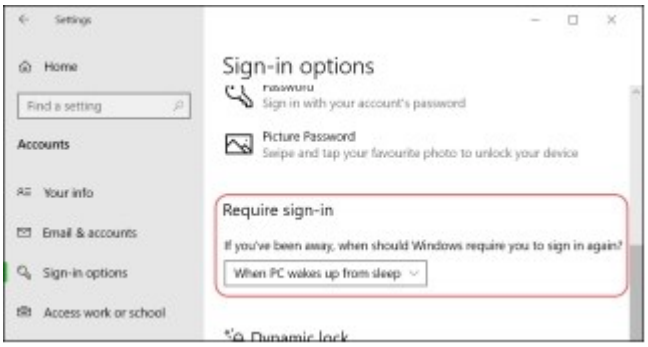
*by Chris Taylor*

In the December issue of the newsletter (https://opcug.ca/Articles/2212NEWS.pdf) I showed how to disable automatic sign-in to Windows and make sure all user accounts have passwords. There are other areas where you might want to consider ensuring authentication is required to maximize security and help ensure your information, privacy, and identity are protected.

**Sleep**

If you have your computer sleep after a period of time, it is a good practice to require authentication when the computer wakes up.

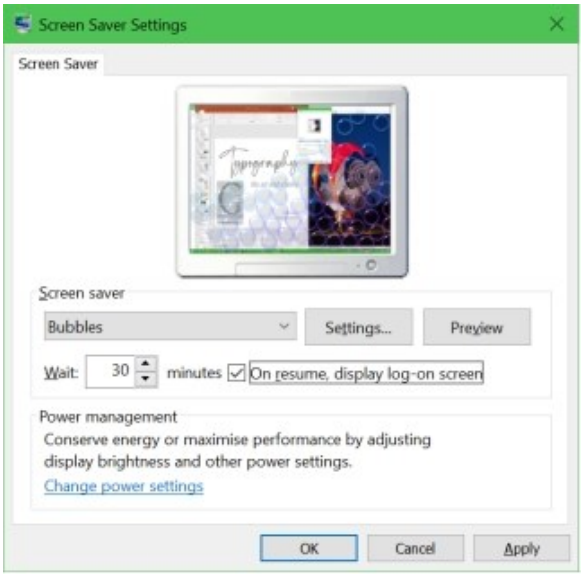
Go to ***Settings*** | ***Accounts*** | ***Sign-in options***. In the section ***Require sign-in*** set ***If you've been away, when should Windows require you to sign in again*** to ***When PC wakes from sleep***. In Windows 11, the section is titled ***Additional settings.***




**Screen savers**

Screen savers get their name from old-style monitors that were highly susceptible to "burn in" (https://en.wikipedia.org/wiki/Screen_burn-in) if left with the same contents on the screen for a long period of time, resulting in a ghost image permanently etched in. While modern monitors are not (as) susceptible, some people still use screen savers. If you sometimes step away from your computer while a screen saver is active, a good practice is to have re-authentication required when you start using the computer again.

Microsoft has still not migrated the configuration of screen savers to the 10-year-old ***Settings*** app! Go to ***Settings*** | ***Personalization*** | ***Lock screen***, and click the link to ***Screen saver settings*** to open the Control Panel applet for ***Screen Saver Settings***.




Put a checkmark in the box ***On resume, display log-on screen***.

**Immediately lock the computer**

If you are going to step away from your computer, it is a good practice to lock the computer. The simplest way is to press  (Windows key+L) to lock the computer. You will have to re-authenticate to access the computer again.

**When Windows turns off the display**

There is one other area of concern—when Windows is set to turn off the display after a period of inactivity. It is surprisingly difficult to add the requirement to re-authenticate when you bring the display back to life. I will cover that next month.

### Quick Tip 49: Empty Google Drive's bin

by Chris Taylor

Does anyone else remember when a 100MB hard drive was so big you couldn't possibly fill it?

Google gives you 15 GB of free cloud storage which seems to evaporate on a regular basis. One of the features of Google Drive is the ***Bin***. Any file you delete from Drive go to the Bin and is recoverable for 30 days. However, files in the Bin count against your 15 GB quota.

If you are running short on space, browse to https://drive.google.com and click on ***Bin*** in the left panel. Right-click on any file you're sure you don't need to recover and choose ***Delete forever***. You can also click on ***Empty bin*** at the top of the list of files to permanently delete all files in the Bin.

From the normal Drive screens, you can't sort files in the Bin by size, hampering the ability to concentrate on the biggest files. Browse to https://one.google.com/storage/management and scroll down to ***Deleted files*** in the ***Discarded items*** section. Click ***Review and clear*** to open a view of items in the Bin sorted by size. Click the circle in the top left of the pictures of files to select them for permanent deletion. Click the trash can with an X on it at the top.

**NAS** *(continued from page 1)*

Other options of note are perhaps best answered by selecting the defaults, e.g. Hostname = openmediavault, and Domain name = local. One important response to note is your entry for the root password. Should it be necessary to log into the openmediavault server, the credentials will be username = root and password = xxx (i.e. the root password you have chosen here).

An "interesting" feature of the installer is that it brings up a disk partitioner, but there are no options to partition the system disk! However, it is necessary to specify which disk is to be used for the installation of the system. The partitioner identified both the 250 GB hard drive in the Aspire and the 8 GB bootable USB installation disk so it was necessary to select the hard drive as the system disk. Furthermore, OMV uses all of the available storage on the system disk, with no option to create a data partition. Consequently, the only "option" is to write the changes to the disk. Make sure that you change the default *No* option to *Yes* before pressing the *Continue* button.

Another, potentially confusing option is the selection of a software mirror for the package manager. I didn't recognize any of the Canadian mirrors and so opted to retain the US mirror at deb.debian.org and subsequently left the proxy option blank (for none). The mirror selected is inconsequential since it is only specifying the source to be used for software updates.

The installation on my Aspire took just under 30 minutes. The instructions were then to remove the installation USB drive and allow the computer to reboot. The next screen might prove to be confusing. The text displayed says:

```
To manage the system visit the openmediavault web control panel:

enp6s0:  192.168.2.36
enp6s0:  fe80::1e75:8ff:feb7:34be

By default the web control panel administrator account has the
username 'admin' and password 'openmediavault'
It is recommended that you change the password for this account
within the web control panel or using the 'omv-firstaid' CLI
command,

openmediavault login:
```

While Linux users may consider that they should login to Debian at the *openmediavault login:* prompt, what is actually being suggested is to go to another computer on the network, load a web browser, and type 192.168.2.36 into the browser's address bar. This loads the OMV splash screen with a dialogue box requesting a *User name* and *Password*. This is the web control panel that uses *admin* and *openmediavault* as the default login credentials (i.e. not the credentials for root).

Note that once OMV has been installed and has booted normally, the host machine can simply be left in this state. All further configuration can be accomplished using a browser on another computer to access the web control panel over the network. This makes eminent sense when one considers that the normal practice is to run a NAS server (frequently a single-board computer such as a Raspberry Pi) headlessly, i.e. without a keyboard, mouse and display, and just have the CPU chugging away quietly in the background.

Also, for any Linux users reading this article, I think what is happening here is that OMV has installed a cut-down version of Debian and there is probably no installed desktop GUI environment. Indeed, many of the video tutorials show users logging into Linux (using the root credentials) and issuing commands at the Linux prompt. So, unless you are able to efficiently use the Linux command line, the obvious course of action is to fire up your browser!

Linux users also know that after installing a distro it's good practice to update the operating system. The current installation of Debian is no different in this respect so, after logging into the system through the browser, we should navigate to *System – Update Manager – Updates*. A list of packages to be updated is displayed in the window and scrolling to the bottom of the list tells us that there are 113 updates. Click on the down-arrow icon (*Install Updates*) located in the menu bar at the top of the window to start the updating process. A string of Linux commands will be displayed in the window as the various packages are processed. Experience suggests that this is the time to go and make a coffee. Updating 113 packages may take a while!

When I returned to the computer, OMV had logged me out. Logging back in and checking on updates identified that there were four packages in the queue. The installation process for these updates ran very quickly however the following warning message was displayed:

```
The following packages have been kept back:
   linux-image-amd64 openmediavault
0 upgraded, 0 newly installed, 0 to remove and 2 not upgraded.
```

Another attempt at updating the four packages ended with the same message. Nevertheless, the update process seemed to have completed with some degree of success as END OF LINE was displayed which meant I could click on *Close* to return to the main menu.

For now, the reason why the updates are not completing fully remains unresolved. However, OMV seems to be working correctly so we may well be clear to proceed.

We will change the default password in order to make the system more secure, and make a number of configuration changes, at a later date. However, for now, we just want to establish and access a shared folder to ensure that the NAS is working as desired, and that will be Part 2 of the series!

**Bottom Line**

openmediavault
(Open source)
Volker Theile
Version 6.0.24
https://www.openmediavault.org

# THROUGH THE LENS

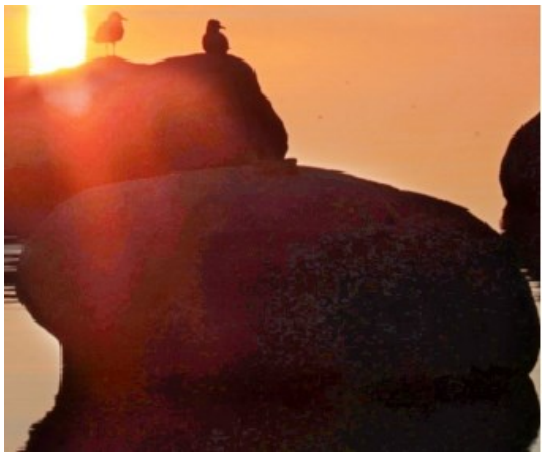
*A guide to digital photography for computer enthusiasts. After the click of your camera, you're only half done!*

## RAW versus JPeg – Pros and Cons

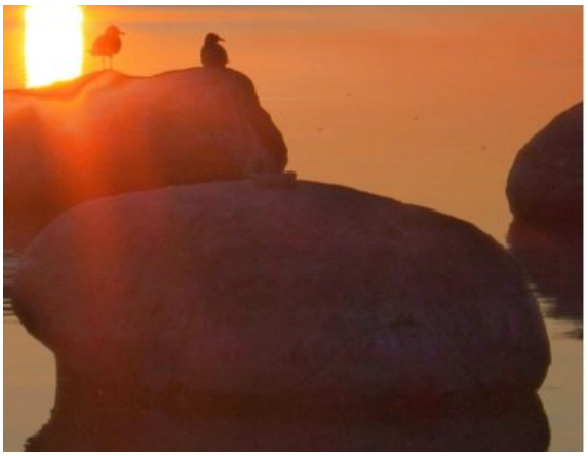
*by Lynda Buske*

Many cameras (even cell phones) have the option of shooting in either RAW or JPeg format. RAW is the "raw" or unprocessed data that comes off the sensor so it allows for the maximum amount of post processing (i.e. photo editing) to achieve a final image. JPeg is processed in the camera. The camera manufacturer chooses certain modifications including things like sharpening and colour temperature and "bakes" them into the JPeg. While you can later adjust from what the manufacturer chose, usually the latitude is less than what can be done with the "raw" data.

The ability to recover blown highlights and especially shadows can be dramatically higher with RAW files than JPegs. However, RAW photos must be post-processed. You can't post a RAW file to the web or have it printed. On the plus side, the RAW file includes information about what the camera would have done had you told it to produce a JPeg and your RAW photo editor may start with that.



Colour/tonal banding is unnatural looking with JPeg



Smoother gradations in colour/tones with RAW

An advantage of JPeg files is that they are smaller than RAW files which can easily exceed 20MB in size. Some photo editors take a long time to open raw files which can slow you down if you are just trying to straighten and crop a few hundred travel photos.

If you want to photograph in B&W, set the camera to B&W but record in RAW. You then see things on the LCD display (or electronic viewfinder) in B&W to help you visualize while shooting, but you have all the colour data available to you if you change your mind during post-processing.

Not all photo editors can edit RAW files. As well, how each software publisher interprets the RAW data can differ. As new cameras come out, often it can take weeks or even months before your photo editor is updated to handle a new RAW format. You are not in a total lurch as each camera that can produce RAW files will include software to deal with their files, but it is not ideal to have to use it and then switch to your favourite editing software for final editing.

Some free editors, such as PhotoScape X will allow you to work with a raw file but forces you to save your edited image as a JPeg file thus preventing you from accidentally modifying the original RAW file.

If you use an editor such as Adobe Lightroom and ON1 Photo RAW, information related to your RAW image edits are saved in a database or a "sidecar" file. This means you can go back and re-edit to change any aspect of what you have edited: lighting, cropping, masking, layers, etc. This is known as non-destructive editing. And you can always get back to the original, unedited form of the image - the RAW file itself. Jumping back and forth when editing JPegs can be trickier; you often have to redo your later adjustments. Not so with a RAW photo editor. You can go back and change things you edited early in the process without undoing later changes.

Since there are benefits to both RAW and JPeg, I tend to set my camera so I'm shooting in both formats. That way, I have the choice later during photo editing. You may wish to get a make sure you have a large capacity memory card such as a 128GB which costs between $20-$30. To save time, I usually download just the JPegs off my camera until I see if I need the RAW images.

♦♦♦

*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/).*

BLAST FROM THE PAST

OTTAWA PC NEWS

Volume 26, Number 8 October 2009

## PRODUCT REVIEW

# Ubuntu Kung Fu

*by Alan German*

So, I'm scanning across the library shelves of computer manuals - you know the ones full of books like "Computers for Dummies" by Idiots (or was that "Computers for Idiots" by Dummies?) - when a cute kitten waves at me from the front cover of "Ubuntu Kung Fu". Now, with Ubuntu in the title, and "Tips, Tricks, Hints and Hacks" as the sub-title, this is an eminently more promising tome than any of the computers-for-morons series. So, haul this one home and leaf through the pages...

You may recognize the author - Keir Thomas - as a Linux blogger for PC World's Linux Line. His book is an unstructured list of 315 tips for Ubuntu Linux (using Version 8.04) although, for those requiring some semblance of order, there is a version of the table of contents with the tips loosely categorized by topic.

Some of the items are very promising, like Tip No.8 - Optimise Startup for Faster Boot Times. This offered to shave 20 seconds off a one minute bootup sequence by a simple edit on the init.d/rc file. Unfortunately, the change made absolutely no difference to the bootup time for my Ubuntu 9.04 setup. But, to be fair to the author, Canonical were supposed to have tweaked the new version of Ubuntu in order to improve bootup times, so perhaps the suggested change is now redundant. I didn't go any further but, if you want to explore your system's boot sequence in detail, the next offering, Tip No. 9 - Graph the System Bootup Performance - suggests using the Bootchart utility to provide a graphical display of the boot process with time.

Playing videos in Linux has historically been fraught with difficulties, not the least of which have been the need to use multiple, proprietary codecs. Tip No. 65 - Install all the Multimedia Playback Codecs You'll Ever Need - promises to solve this problem once and for all! Although, there is a link to information on some of the "issues" involved with certain software! Along the same lines, music (MP3) aficionados may find Tip No. 279 - Use a "Legal" MP3 Codec - to be of interest.

Legal issues also seem as though they might be a concern for Tip No. 170 - Steal the Windows (or Mac OS) fonts. One option is to use the freely-available msttcorefonts package; however, there are also instructions for "Importing Fonts from Microsoft Windows" that don't sound too Redmond-friendly! But, as usual, the open-source movement can provide viable alternatives, such as Tip No. 101 - Install 465 Open Source Fonts, and Tip No. 280 - Use Look-a-Likes of the Microsoft Fonts.

Not all of the tips are serious. How about Tip No. 245 - Have a Cow Talk to You, or Tip No. 304 - Turn Your Computer into a Egg Timer? And, Tip No. 114 - Play Emacs Games - must have been specially written for Don Chiasson. (It must be so - he's the only user of Emacs that I know!)

But, there are also many very useful items in the book's pages. For example, have you ever wanted to rename a whole set of digital photographs with file names like IMG_1048.JPG, IMG_1049.JPG, etc.? If your directory contains tens - or hundreds - of files, this can be quite a chore to complete manually. And, who knows the complex sequence of terminal commands to automate the process? So, Tip No. 230 - Rename Many Files at Once (aka Bulk Rename) - to the rescue! The Purrr (yup, that's three r's) utility will allow you to specify a name template, and include a sequential counter, so that your file names can be rather more descriptive of their actual content than what is provided by your camera's naming process.

Some other intriguing options are Tip No. 194 - Do Math at the Command Line, Tip No. 220 - Use a Macintosh OS X-like Dock, and Tip. No. 256 - See the Size of Files/Folders on the Desktop.

*(Continued on page 6)*

**Inside this issue:**



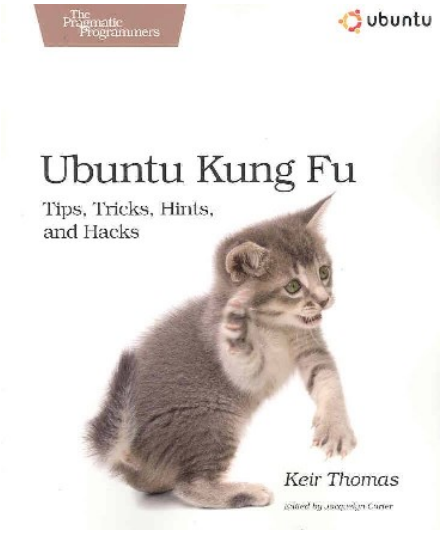
**Next Meeting: WEDNESDAY, October 14th, 2009**

# 2009 RETROSPECTIVE

## Retrospective: Ubuntu Kung Fu - Tips, Tricks, Hints and Hacks

In the October 2009 issue of the OPCUG Newsletter (Volume 26, No. 8), Alan German reviewed the book 'Ubuntu Kung Fu - Tips, Tricks, Hints and Hacks' by Keir Thomas. As Alan pointed out, the "book is an unstructured list of 315 tips for Ubuntu Linux (using Version 8.04) although, for those requiring some semblance of order, there is a version of the table of contents with the tips loosely categorized by topic". Alan went on to point out some of his favorite tips, tricks and hacks from the book, and gave the book his thumbs up, including the cute kitten on the cover.

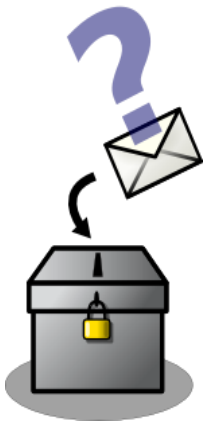
In the same issue of the newsletter was another article by Alan 'Exploring Linux - Part 13' about running Windows' applications in Linux. Alan is OPCUG's resident Linux Jedi Master and overall Linux Guru, giving us alternatives to, in his own words, the "Evil Empire". To top it off, Alan has become our Android go-to guy too. Thanks Alan for all the work you do for OPCUG!




## Club History - 2009 *(taken from https://opcug.ca/history/)*

**May 2009** Howie Macumber finds a one-page mock-up of the long missing Nov 1989 newsletter that was distributed at the November 1989 meeting by Bonnie Carter.

## Nominations for OPCUG Board for 2023



Once a year, the OPCUG holds elections for the 9-member Board of Directors. We are once again coming up to this annual event.

We encourage all members to consider running for a board position or getting involved in some other manner in the operations of the OPCUG.

If you want more information about what is involved, please talk to me or any current or past Board member. Names are listed on the back page of this newsletter and on the web site at https://opcug.ca/executives/.

Nominations can be submitted by sending an email to nominations@opcug.ca .

Nominations must be received by midnight, December 31, 2022.

Please get involved. Please help the OPCUG continue in its role of *Users helping users* !

*Bob Herres*
*Election Chair, 2023*

**EXTRA! EXTRA! As mentioned by our President in his report on p. 3, Lawrence Patterson has stepped down from the BOD as Meeting Coordinator. This position is vital for the recruitment of outside speakers for our regular monthly meetings. If you enjoy club presentations, please consider joining the Board in this capacity. For information on what is involved in being Meeting Coordinator for the OPCUG, contact any member of the BOD listed on the back page of every newsletter and on our website. Thank you!**

# 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 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: 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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| Meeting Coordinator | | |
| **Vacant** | **meetings@opcug.ca** | |
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| **(Mr.) Jocelyn Doire** | **jocelyn.doire@opcug.ca** | |
| Director w/o Portfolio | | |
| **Karen Wallace-Graner** | **karenwg@opcug.ca** | |




## Q&A HAS GONE ON-LINE! WEEKLY!

Because of the pandemic, the OPCUG is 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**).