



OTTAWA

PC NEWS

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September 2022

PRODUCT REVIEW

Exploring Linux – Part 27: New Life for 32-bit Machines

by Alan German

When I wrote the previous part to this series I had just switched from using Ubuntu Linux to Linux Mint. That was back in the stone ages – January, 2014. Since that date Mint has been my Linux distro of choice and it has functioned extremely well. But, recently, the developers of many distros, Mint included, have decided to drop support for their 32-bit versions. No doubt this leaves some users disappointed, perhaps even angry, with the inability to upgrade to the latest – secure – version of their favourite operating system. However, for Mint users specifically, all is not lost.

Linux Mint Version 19.3 (Tricia) is a long-term support (LTS) version but, even so, the package will reach end-of-life status in April, 2023. As noted above, while newer versions of Mint are available, the problem for 32-bit machines is that mainstream Linux Mint dropped support for such processors as of

Version 20 (Ulyana). However, recently, Mint's developers announced the Linux Mint Debian Edition (LMDE 5), codenamed Elsie, that offers a new lease on life for older computer hardware.

Previous versions of Mint have all been based on Ubuntu Linux; however, as the name indicates, LMDE has Debian as its base. The release notes for the package indicate that the intention is essentially to have a backup system should Ubuntu ever cease to be available. The benefits of this strategy for users of previous versions of Mint are that Mint is based on Ubuntu, and Ubuntu is itself based on Debian. In consequence, the basic features of the LMDE distro and many of its embedded applications will be familiar to Mint users.

While Mint's web site doesn't appear to provide an end-of-life date for LMDE 5, the Debian 11 (Bullseye) base system will be supported until June, 2026 so it seems reasonable to assume that this date will also apply to Elsie.

The desktop environment supplied with LMDE 5 is Cinnamon (Figure 1) which is my preferred version of Mint. An added advantage for those with older hardware is that both 32- and 64-bit versions of LMDE 5 are available.

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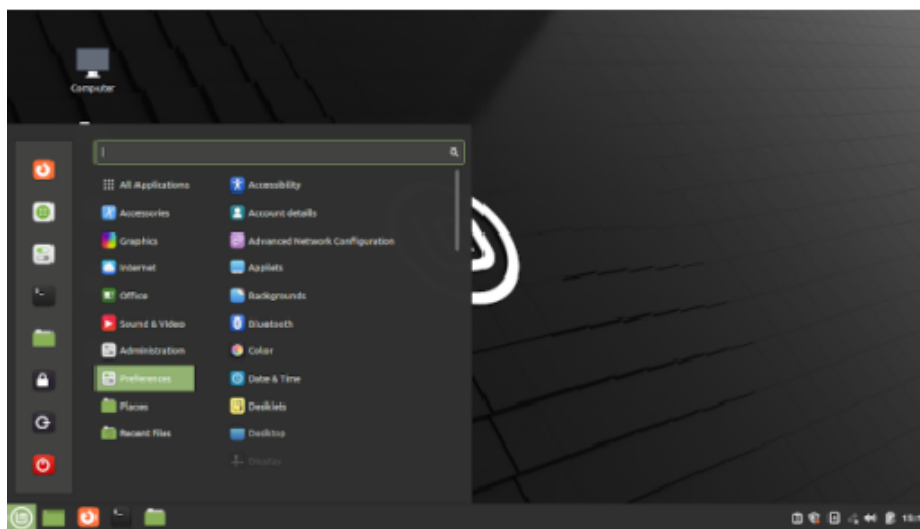


Figure 1 LMDE 5 (Elsie) Cinnamon Edition

Next Meeting: **WEDNESDAY, September 14th, 2022**

Next Meeting

Wednesday, September 14th

Members' Favourites Night

Have you noticed that presentations at Members' Favourites nights are almost exclusively given by Board members? We have scheduled a Members' Favourites night for September 14th and are looking for speakers. All presenters will receive a gift honorarium. (See article next page.)

If you want to give a presentation, send an email to:
SuggestionBox@opcug.ca.

Consider your topic of choice, sharpen your thesis on the issues involved, and start creating your presentation today.

Speakers:

1) **Tom Trottier:** Using Foobar200 for locally stored music and audiobooks

(more speakers to provide details)

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:

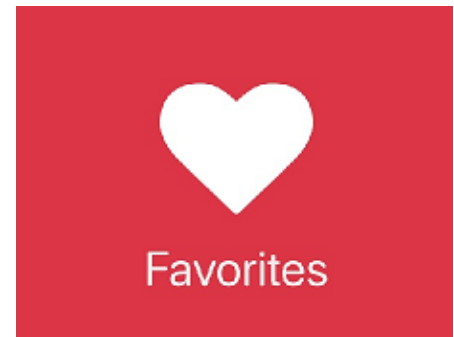
Meeting ID: **924 9556 0898**

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**.

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.



Coming Up...

August 24, 7:30-8:30

Weekly Q&A Session

October 12

GENERAL COMPUTER HARDWARE

Speakers: Paul and Maria Middleveen of **The Trailing Edge** computer store

"What do all these number and letter combinations mean when I'm shopping for a computer?"

November 9

WINDOWS 11: IT'S HERE TO STAY

Speaker: Lawrence Patterson, OPCUG

(details to follow)

December 14

Transmission Control Protocol/Internet Protocol (TCP/IP) Overview

Speaker: Stéphane Richard

This presentation provides an overview of the protocols that power the internet

2022 CALENDAR

Meetings	Date	Time and Venue
Regular Monthly Meeting	Wednesday, September 14 th	7:30 pm via Zoom video conference: https://tinyurl.com/opcug-meeting To see all scheduled events, visit https://opcug.ca/#upcoming
Next Q&A Session	Wednesday August 24th	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, September 14 th	Enjoy a cold brew or other beverage in the comfort of your home during the video conference.

CLUB LIFE

A centennial celebration

by Chris Taylor

Perhaps nothing exemplifies the OPCUG motto *Users helping users* better than Q&A. As the Announcements list messages publicising Q&A sessions say, *At Q&A: users help users; we ask & answer questions; we share nifty things we've come across; we demo programs & techniques; we opine about the best way to accomplish tasks.*



Due to the COVID-19 lockdown in the spring of 2020, the OPCUG transitioned to using Zoom videoconferencing for meetings. Q&A sessions had previously been held after our regular monthly meetings but Alan German recognized the opportunity afforded by online Zoom sessions to move Q&A to a weekly format.

To be honest, I wondered if we could sustain a weekly pace. Would we have enough material? Would we have enough interest? Alan had more faith than I did. Weekly Q&A sessions were announced in the [May 2020 issue of the newsletter](#) (published April 20) and began April 29, 2020.

Our 100th Q&A session was held June 1, 2022. For those saying the arithmetic doesn't add up, in the fall of 2021, we stopped having Q&A sessions on regular meeting nights.

Through those 100 sessions, we had a whopping 3,423 participants. We covered an amazing 726 topics; from A to Z: *Accent colour in Windows, through golf apps and Wordle alternatives to Zoom tips*. To help make Q&A useful to as wide a range of participants as possible, we now have *Computer Basics* and *Smartphone Basics* in addition to *Shares, Questions, and Answers*.

A PDF of the presentation material, a text file of the Zoom Chat window and an audio recording of the session for Q&A sessions can be found at <https://opcug.ca/qa-topics/>. Thanks to Alan for his hard work at maintaining that content.

I would like to extend my thanks to all involved—Alan as the main driving force and my co-conspirator at running Q&A, those who share their knowledge, those who ask questions, those who provide answers (or even potential answers) to questions, and those who attend to learn more or simply be supportive. Without all of you, Q&A—and indeed the entire OPCUG—would not exist.

Thank
You

Users Helping Users—above and beyond

A big thanks to **Bob Herres and Debbie Begin**. For the last couple of years, they have contributed dozens of delicious, home-made cupcakes for the June pizza party. Not only did they contribute their time and effort, but they also refused to accept any money to cover their expenses.

In addition, Bob has always been quick to step up to the plate to help out with the running of the OPCUG. He has been the Election Chair, has given presentations, and has always been willing to help out with ad-hoc tasks at meetings.

And every year, Bob and Debbie open up their cottage to the Board for its August meeting. It's a beautiful day in the countryside with delicious food and fresh air.

The next time you see Bob or Debbie—Bob is always at Q&A and I suspect Debbie is not far—be sure to pass on your appreciation for everything they do for the OPCUG!

My favourite whatchamacallit

The fall season of our regular monthly meetings will begin on Wednesday, September 14, 2022. The topic will be **Members' Favourites** and the speakers will be - you! Well, the speakers will be you - if you offer to provide a brief presentation on a computer-related topic of your choice. Anything goes. In the past, members have outlined the features in a particular computer program, waxed lyrical over an awesome piece of hardware, or have described the twists and turns of a useful tweak to an operating system. What would you like to share with the group? Send a brief description of your topic to SuggestionBox@opcug.ca and we will reserve your presentation slot on September 14th.



Exploring Linux *(Continued from page 1)*

Downloading the 32-bit version of LMDE 5, burning it to a USB drive, and booting from this drive so as to activate the installer, are standard operations; however, the installation process itself differs slightly from that used for Ubuntu-based versions of the operating system. In particular, the options for disk partitioning are different from those used by the mainstream installer and Mint's installation guide has not been updated to reflect this.

Initially a screen asks where LMDE is to be installed and provides options for *Automated installation* and *Manual Partitioning*. In my case, the manual partitioning option was preferable as I wished to overwrite the existing Mint partition with the new version. The next screen (Figure 2) displayed all of the hard drive's partitions and, while it was obvious that the partition to be used for my installation was /dev/sda6, there was no indication of how this should be achieved.

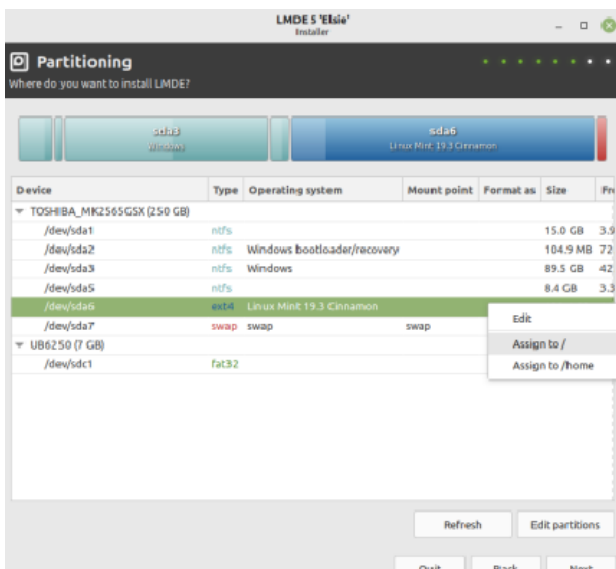


Figure 2 Right-click to select the installation partition

The method appears to be to right-click the mouse on the desired partition. This displays a pop-up context menu with one of the options being *Assign to /*. This allows the selection of the partition as root for the installation process.

The rest of the installation is familiar with a subsequent reboot providing the dual-boot GRUB menu and LMDE 5 being loaded by default. As suspected, many of the expected applications, such as Firefox, Thunderbird, and LibreOffice, are indeed present out-of-the-box making Elsie a welcome and very capable update for 32-bit hardware.



Bottom Line

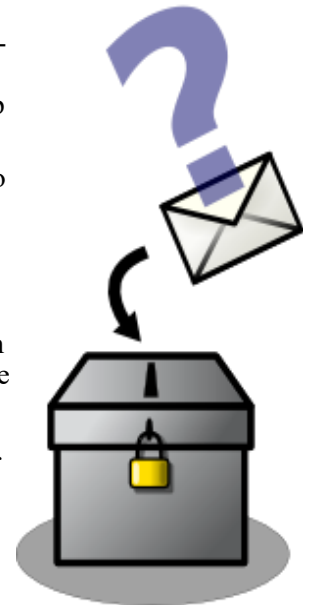
Linux Mint Debian Edition (Open-source)
Version LMDE 5 (Elsie)
https://linuxmint.com/download_lmde.php

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

Quick Tip 46: Adding text boxes in PowerPoint by Chris Taylor

Credit to Lynda Buske for telling me about this one.

If you have text on the clipboard that you want in a text box in PowerPoint, you don't have to click the **Insert** tab on the ribbon, click **Text box** in the **Text** group, drag a box out on your slide and finally press **Ctrl-v** (or click the **Paste** button on the ribbon) to paste the text.

Just click on your slide and press **Ctrl-v** (or click the **Paste** button on the ribbon). PowerPoint will create the text box and paste the information from the clipboard.

This works in LibreOffice Impress as well.

THROUGH THE LENS

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

What to do with all those travel photos?

by Lynda Buske

Many of us were fortunate enough to travel this summer, even if not all of us are ready yet to venture outside our lovely country. Certainly, summer offers lots of photo opportunities even in your own backyard! It's the time of year when people dig out their cameras and click away with gay abandon.

After a 10-day trip to the East Coast this summer, I came home with 2,000 photos. I have never regretted taking lots of photos, maybe trying a different angle or aperture setting or even returning to the same site on a different day with different weather. I have, however, regretted the opposite when I wished I had taken one more to replace the out of focus one I did capture. Even though it is simple to review digital photos after taking them (and zooming in for greater detail), it is not always easy to determine if all areas are in sharp focus due to a low-resolution screen, bright day, lack of reading glasses, etc. Once you view it on your big monitor at home and see that it is out of focus, it is too late to retake the shot.

While travelling, I make daily backups onto my laptop so if my camera is stolen or lost, I will not lose all my photographic souvenirs. I often do some editing while on vacation during the evening or a rainy afternoon. My Microsoft Surface laptop is perfect for this since it is powerful enough to run my photo editing software and light enough for lugging (especially if I bring my sherpa, Chris!).

So, what happens after I take the 2,000 pics once I get home? Already existing on my desktop, is a folder under Pictures directory called *Originals* and another called *Working Area*. I then create a new subfolder within *Originals* called *2022-06-20 East Coast* and upload my pics to it directly from the camera. I then create a new subfolder under *Working Area* called *2022-06-20 East Coast edited*. I make an exact copy of all the pics in the *Originals/2022-06-20 East Coast* folder and copy them here. Since I'm going to be using this folder on a daily basis, I set up subfolders for the various dates and places I have visited e.g., *Yarmouth*, *Lunenburg*, *Cavendish*, etc.

If I have done some editing while on vacation, I can either overwrite the photos with the edited ones or I can give them a different name (e.g., IMG ## version 2.jpg). Because I never touch the photos in the *Originals* folder, I always have an original to recopy if I delete one by mistake in the working area or if I wish to start afresh with my editing. If I have copied both RAW and JPG versions into the *Originals* folder, I may just copy the JPEGs into the *Working Area* for a start. I simply don't need the extended editability of the raw version for many of my quickly grabbed travel pics.



Once you have edited and selected the photos you wish to share with others, make sure you are not including five shots of basically the same object. Unless it is something iconic that warrants a few images (Eiffel tower, Peggy's Cove Lighthouse, London Bridge) stick to one or maybe two shots of a subject and move on. When posting on line, I suggest using a free site like Shutterfly (Shutterfly.com) where you can share a link to your photos, rather than emailing

them to others. (<https://opcug.ca/Photography/SharingYourPicturesOnTheInternet.pdf>). You can also rearrange the photos to tell your story in a better way. It allows you to mix in detail shots to break up the monotony of multiple panoramic shots. Also, you may have returned to the location of your first shot for an extra image so a strict chronological order might not make the most sense. I try to take images that require little captioning but instead speak for themselves. My hope is each image tells its own story. If people have specific questions (e.g., church name) they can contact me for details. Of course, any pics taken with a cell phone or a camera with a built in GPS will have automatic geo tagging to indicate where you captured it.

People who are perhaps not as invested in your photos as you are may not want to spend a long time viewing them. I would recommend posting no more than 100 photos at a time. Any more than this and folk think they need to set aside a good chunk of time and perhaps never get back to it. Or worse, they bail partway through and don't see some of your best images. I feel 100 images can be viewed in about 5 mins. That's three seconds per photo which is probably plenty. Folk may spend one second on the more mundane photos and longer on your stellar ones. If they are interested in photography and want to spend double the time, it is still only 10 minutes.



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 - 1991

THE DOS ENVIRONMENT

By Robert Parkinson

PATCHING COMMAND.COM

Instead of using the /E:nnnn switch in the SHELL command or using a plethora of dummy variables, I personally prefer to increase the default DOS environment space by patching the working copy of COMMAND.COM. Not for the faint of heart, but very effective!

This solution not only automatically increases the size of the Master Environment Block, but also increases the size of any active copy. This patch was originally published in PC Magazine to allow their readers to expand the overly-constrained environment in the earlier versions of DOS.

Memory-resident Programs and the Environment

I won't go into detail about what a memory-resident program is or how it differs internally from a normal program. In general terms, a memory-resident program, when called, executes some initialization actions and then terminates, leaving a piece of its code behind to perform some action in specific circumstances. You might think of COMMAND.COM itself as nothing more than a special form of memory-resident program.

I will call these programs TSRs (Terminate-and-Stay-Resident). There are three types of TSRs and the differences between them are mostly of concern to programmers.

When you load a TSR, for example from your AUTOEXEC.BAT file, COMMAND.COM tells the DOS kernel to take this action. This action is quite automatic, whether or not the TSR will make the slightest use of the environment.

The only possible use that a TSR can make of this copy of the environment is during its initial loading, as the copy will not necessarily be valid after that.

Most TSRs do not require this environment information, but there are exceptions which I'll mention later on. This copy of the environment takes up valuable RAM space, over and above the actual space required by the TSR code itself. A well-written TSR program will, after its initialization, free the space used by its own internal initialization code and, since that space will be at the top of the block of memory allocated to the program, it

immediately becomes usable again by DOS.

It is quite easy for a TSR to de-allocate the space used by its environment copy as well and many of the better TSRs do this. As an aside, one consequence of this is that, prior to DOS 4.0, most of the programs that examine your memory will be unable to determine the name of this obliging TSR, as the only place where the name is located is in the associated environment block which is now gone.

Going back to my main point, since this small piece of newly-freed space is located in memory below the program code, it is not contiguous with the main block of free memory. It may well not be usable by DOS and will remain an orphan. But if you examine your memory map, you will find that this is not always the case.

If the next block of memory required by DOS, for either a program or its environment, is equal or smaller in size to this small block of free memory, DOS may well use it. In fact, DOS may reuse this space time after time for successive temporary programs. Its location makes no difference at all to the owner programs.

As a point of interest, even Microsoft is starting to try to save unnecessary use of RAM, though you might not think so when you look at the large growth in DOS system files. Some of the external DOS 4.0 TSR programs (e.g. APPEND, GRAPHICS and MODE) now free up their environment block space after loading.

If you check your memory usage with programs like those I mentioned earlier, you will find that your TSRs are each being given from 200 to 500 bytes of environment space. The actual amount depends, of course, on how complex your environment was at the moment the TSR was loaded. Well if you are like me and have a fairly complex environment set and about 10 to 15 TSRs at any given time, few of which free up their environment space, you could have 4000 or more bytes of RAM tied up, unavailable to any other program and of absolutely no use to the TSRs.

So, how can you get this RAM back? The simple answer is that you can't. However, you can avoid losing most of this memory in the first place. But you can't reduce the loss to zero.

You avoid losing this memory by carefully controlling the order of your entries in your AUTOEXEC.BAT file. First, do the initial housekeeping chores,

such as setting the system clock (if necessary), copying files to your RAM drive, etc. Then load all of your TSRs. As you haven't set your PATH yet, you will have to specify the full path/filename for each. Then put in all of the appropriate environmental variables with SET, COMSPEC, PROMPT, APPEND, etc.

Lastly, set your PATH. Use one of the memory-checking programs mentioned above before you change your AUTOEXEC.BAT and then again after. You will probably find that you have saved thousands of bytes of memory.

At the present time, my own system automatically loads 12 TSRs. Excluding the 1024-byte Master Environment Block, I am currently using a total of about 384 bytes of RAM for the 12 useless environment copies, instead of the former 4500 plus bytes.

Unfortunately, this does not apply to all TSRs. For example, some expect to have a copy of the PATH permanently available to them. If you use the Logitech mouse programs, you will find that CLICK.EXE falls into this category. The MOUSE.COM driver and LOGIMENU.COM don't use the PATH.

Well, here you have two choices. The easiest way is to load CLICK.EXE after you have set your PATH. The other choice, and the one I prefer, is to load only MOUSE.COM in the AUTOEXEC.BAT file before I set the PATH.

The other two programs take up almost 20KB of RAM, including their copies of the environment, so I don't really want them as TSRs. I don't use CLICK.EXE at all. Rather, I invoke LOGIMENU.COM for each appropriate application program in the batch file that calls up the program.

(To be continued)

BEGINNERS' GROUP

Immediately prior to monthly OPCUG meetings, special sessions are held where beginners can ask questions and discuss problems. The next session will be on Tuesday, March 26th, at Rideau High School at 7:00 p.m. Time permitting, there is usually a special topic for discussion. For more information, phone Eric Clyde at 749-2387.

HISTORY

Retrospective: The DOS Environment by Bob Walker

In the March 1991 issue of the OPCUG Newsletter (Volume 8, No. 3), there was an article by Robert Parkinson titled 'The DOS Environment'. (see article previous page) The article shows just how far we have come since the days of DOS, and to a certain extent shows how far we have yet to go.

Robert's article goes into some of the finer points of editing the AUTOEXEC.BAT and CONFIG.SYS files to maximize the system's performance and to conserve precious memory resources (CONFIG.SYS and AUTOEXEC.BAT are text files run on startup that tell DOS how the computer is to be initially set up (configured) and to run programs that should be executed on startup). Any DOS user worth their salt became at least nominally proficient at editing these two files to get the most out of their computer.

In particular in his article, Robert is concerned with TSR's (Terminate and Stay Resident programs). These are programs that are loaded on startup and then stop (terminate), but then remain in the computer's memory so that they are quickly accessible later. TSR programs included calculators, clocks, notepads and utilities, or drivers for hardware like mice that weren't otherwise supported by DOS. TSR's partially overcame DOS's limitation of executing only one program or task at a time. They aren't needed in multitasking systems such as Windows, but were a big deal in the days of DOS. Robert gave some tips on editing the AUTOEXEC.BAT and CONFIG.SYS files so you could get the most out of your TSR's.

With Windows, we no longer have AUTOEXEC.BAT, CONFIG.SYS or TSR's and all their underlying complexities to worry about. However, while setting up Windows 10 is more a matter of ticking off check boxes or making the appropriate choices instead of 'programming', we still need to know what choices can be made, should be made or must be made, where they are hidden, and what can go wrong. Windows, like DOS before it, still needs users with knowledge and expertise to get the most out of it.



Club History – 1991 (taken from <https://opcug.ca/history/>)

- Nov 1991** The swap meeting had a good turnout.
- Oct 1991** The computer fair was well attended. We need more promotional material, will do a club sign for the next time.
- Sep 1991** Chris Taylor will resign as the software librarian in January. The job takes 8+15 hours/months. There are 600 disks left, 6 months stock. Norm Dafoe takes over the position in November.
The BBS is moved again, for the third time this year. The newsletter editor gets the club's 386SX + HP IIP printer.
- Aug 1991** The BOD agrees to a proposition from "Ontario Computer Fair" to include a \$1 off coupon with the newsletter in exchange for its mailing cost and a booth in October at the Nepean Sportsplex (manned by Chris Taylor and Norm Dafoe).
The BBS is moved successfully, but there is a lot of discussion on how to lower the cost by using "hunt-group", "metered service" or with a multiplexer.
Paul Green finalizes the arrangements to have the club's meeting at the Sir Robert Borden High School.
- Jun 1991** The newsletter gets published on time and is renamed to "Ottawa PC News", with the subtitle "Published by the Ottawa PC Users Group".
- May 1991** Doug Poulter proposes Lynda Simons to be the newsletter editor, which is approved as interim and one month later as permanent.
- Apr 1991** The newsletter editor and the sysop resign for reasons beyond their control, which forces the BBS to move and creates many logistical problems.
- Feb 1991** Due to the 75th anniversary of the NRC, the meetings are relocated to the Rideau High School, from Feb to May and Aug, and McArthur High School for June.

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
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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**).

OPCUG



Users helping users
for over 40 years