



January 2016

Visit our website at www.pcs4me.com

Ken Johnson, Newsletter Editor

CALENDAR

SIG = Special Interest Group

This Week's Schedule

January 23 - Saturday - 1:00-3:00 PM

[General Meeting](#) - Leader: Ray Carlson

Location: Prescott Public Library

First Hour: Windows and Internet Updates - Are Any Highly Rated Innovations Worth Their Cost?

Ray Carlson will summarize recent news related to Windows, viruses, and the technology innovations garnering a lot of attention at the Consumer Electronics Show in Las Vegas. In relation to the last topic, he will address some of the trends and encourage discussion as to their practicality. How soon are you planning to talk to your refrigerator or remotely lock your dead bolt when you hear someone trying to break in?

Second Hour: Phil Ball will continue his presentations on Tips and Tricks for Everyday Computing.

In addition to the presentations, the following are typical events which take place at our General meetings:

- 1) We hold an informal Flea Market in which you are encouraged to bring in your excess computer equipment or software and make them available for others to enjoy at no charge. Please deposit give-away items on the table in the back marked "Free Stuff." Any items left here at the end of the meeting are subject to disposal.*
- 2) If you have items that are just too good to give away, you may set up a separate table and hold your own sale.*
- 3) We conduct a raffle of gift cards at the end of the meeting, so make sure to get a pair of tickets from whoever is in charge and place one on the item you'd like to win.*
- 4) We will also accept your used ink and toner cartridges for recycling. They are turned in to Think4Inc for credits which PCS uses to purchase office supplies from them.*

Future Meetings

January 28 - Thursday - 6:00-8:00 PM

[Board of Directors](#) meeting - Prescott Public Library; Elsea Room

All PCS members are welcome to attend but you are asked to first [contact Ray Carlson](#) in order to ensure that there will be room available for you.

Future Meetings, continued:**January 30 - Saturday - 1:00-3:00 PM**[Special Topics SIG](#) - Leader: JB Burke

Location: Prescott Public Library

This month, JB will delve into topics related to computer hardware, software, the Internet and the World Wide Web. You are sure to find something educational and/or entertaining and/or interesting in this fast-paced enjoyable session. As always, questions and comments will be welcome. After all, JB has to be learning something from these sessions too!

February 6 - Saturday - 1:00-3:00 PM[Digital Photo SIG](#) - Leader: Phil Ball

Location: Prescott Public Library

Many aspects of digital photography will be discussed, including use of digital cameras and using Photoshop Elements to make your photos look their best.

February 13 - Saturday - 1:00-3:00 PM[General Meeting](#) - Leader: Ray Carlson

Location: Prescott Public Library

First Hour: Bob Gostischa of Avast will discuss computer security issues.

Second Hour: Phil Ball will present Tips and Tricks with insights into various topics that assist with regular computer activity.

*Note that these dates are correct at time of publication but are subject to change.
Up to date information can be found on our website, www.pcs4me.com*

*Unless otherwise noted, our meetings are usually held in the
Founder's Suite at the Prescott Public Library.*

Prescott Computer Society
Officers & Board of Directors
2015-2016

Officers:

President Ray Carlson
Vice Pres Phil Ball
Secretary JB Burke

General Directors:

Joan Baum Murray Smolens
John Carter Dick Mason
Ken Johnson

It's time to renew your dues

if you haven't already done so.

The good news: **again this year, dues are only \$24.** Please make checks payable to "PCS" and present them to any Board member (gold nametag) or mail your check to:

Treasurer
Prescott Computer Society

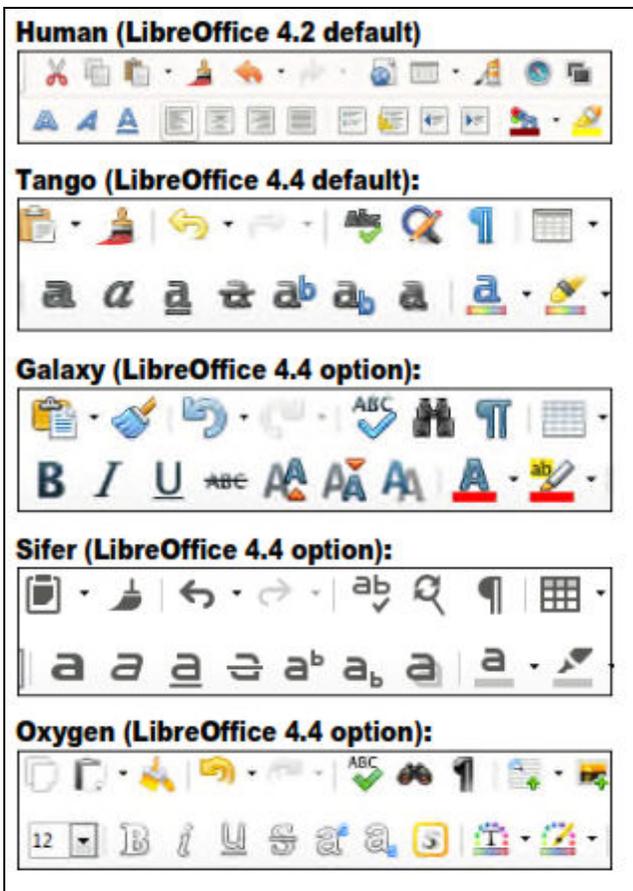
LibreOffice 4.4

By Cal Esneault, Former President of CCCC;
 leader of many Open Source Workshops & SIGs

April 2015 issue, CCCC Computer News

Newsletter (at) clickers.org www.clickers.org

After Oracle acquired the rights to *OpenOffice.org*, open-source developers forked it to *LibreOffice* in 2011. Although many code improvements were made, the user interface remained fairly constant. In the recent release of the ninth major version, *LibreOffice 4.4*, however, the toolbars for the user interface were significantly rearranged and a variety of new icon themes were included. Below I compare the default "Human" theme from version 4.2 to a few of the new themes from version 4.4 (these are partial views of the Standard and Formatting toolbars from the *LibreOffice Writer* word processor). Note: themes for 4.4 included and available from the *Options* menu under View.



tary and can't be used unless you are using the Windows operating system. To minimize issues, *LibreOffice* used defaults of Liberation and Liberation Sans, fonts which corresponded well to the overall size of the MS fonts Times New Roman and Arial (default fonts for *MS Office* 1997 - 2003). Starting with *MS Office* 2007, *MS Office* switched defaults to new fonts -- Cambria and Calibri. To address its own interpretation issues, Google sponsored development of new fonts, Caladea and Carlito, that matched the footprints of the new *MS Office* fonts. Below are examples of the newer fonts for *MS Office* and *LibreOffice*.

Caladea font from LibreOffice 4.4
Cambria font from MS Office
Carlito font from LibreOffice 4.4
Calibri from MS Office

If you are running a *Linux OS*, you can make *LibreOffice* automatically replace the *MS Fonts* with the new open-source fonts (under *Options*, go to *Fonts*, and define substitution rules -- (for example, Calibri / Carlito). This works well for reading the document, but have an original copy with the Microsoft font designations if you edit it and have to send it back to *MS Office* software.

The above are just two examples of what is a very polished release of *LibreOffice*. If you need the new version and are a user of long-term support releases of an *Ubuntu* flavor or a distro based on the *Ubuntu* code base (such as *Linux Mint*), you will have to use your search engine to find the appropriate PPA archive and add it your source list for repositories. If you run *LibreOffice* under a *Windows OS*, I suggest you remove the current version of *LibreOffice*, download the new *Windows* compatible files from the *LibreOffice* site, and then do a fresh install of the suite to avoid conflicts.Ω

BitTorrent

By Dick Maybach, Member, Brookdale Computer Users' Group, NJ
 January 2015 issue, BUG Bytes
 www.bcug.com
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BitTorrent, <http://www.bittorrent.org/>, is a peer-to-peer file sharing protocol for transferring files over the Internet. The conventional way of transferring

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data is for one site to act as a file server, which stores the files and transmits them on demand. If many people want the file, this requires a high bandwidth connection to avoid long download times. In the BitTorrent scheme, the central site is called an indexer, and it functions as a file director rather than a file server. (Actually, the situation is somewhat more complex. There are also sites called trackers that work with and assist indexers. Most people blur this distinction and use the term tracker for both indexers and trackers, and I'll do the same for the rest of this article.) When a user requests a file from a tracker, he or she receives a Torrent Descriptor File that contains a list of sites, called seeders, that currently are making the file available for transfer. On the user's computer a program called a BitTorrent Client uses information in the descriptor file to request pieces of the desired file from the seeders. Since each of the many seeders supply only a few pieces of the file, their upload volumes and rates are low. The descriptor file also contains a checksum for each piece of the file and the client uses these to ensure that the downloaded file has no errors. BitTorrent allows individuals to share files with many others without requiring the use of expensive facilities. By spreading the distribution task among many servers, BitTorrent reduces traffic congestion on the Internet thus speeds up data rates for everyone, including those that aren't using peer-to-peer sharing. Peer-to-peer file sharing is so widely used that by some estimates it accounts for half or more of all Internet traffic. As of January 2012, there were 150 million active BitTorrent Users.

Some people use peer-to-peer file sharing to distribute illegal material. ***Don't do this.*** Media corporations have convinced some courts to make examples of individuals who illegally obtain copyrighted work, and the resulting fines have been truly punitive. The same corporations actively monitor Internet peer-to-peer sharing activity. The risks far outweighs the rewards of watching a movie or listening to music that you don't think is worth paying for. In addition, the sites that distribute such material are dishonest and won't hesitate to infect your computer with malware.

I use BitTorrent to download Linux distributions, which are often occupy several Gbytes. When a new distribution is first released, the official sites are often overloaded, and this of course is when I'm most interested in obtaining it. Many sites anticipate this, and make it convenient to use BitTorrent as an alternate to a direct download.

Security

The BitTorrent client software resides on your PC, and you should take the same precautions installing it as with any other program. In addition to the usual worries about malware, you depend on this program to upload only the files you designate and only at those times you allow. Windows users should obtain it from a reliable source and check it for malware before using it. Linux and OS X users have fewer concerns since they use the client *Transmission*, which is in the official repositories. Regardless of your confidence in the package, do not install it on a corporate machine, as most businesses prohibit file sharing. The Windows client *µTorrent*, available at www.utorrent.com/downloads/win?us is a safe choice. Unfortunately, it changes your default search engine to *Ask.com* and installs the *Ask.com* toolbar in your browser. You will want to undo this, as a search using *Ask.com* produces mostly marketing sites having little or no relation to your search. An alternative Windows client is available at <http://www.bittorrent.com/>, but the free version displays advertising; a deluxe version without advertising is available for \$20. Before using BitTorrent, install and configure a software firewall, such as *ZoneAlarm*, www.zonealarm.com/, for Windows. This will limit the access to your PC and will help ensure that only what you intend is uploaded.

Be careful choosing a tracker, as many specialize in downloading illegal material. [You could consider Jamendo \(www.jamendo.com/en/welcome\)](http://www.jamendo.com/en/welcome), which distributes Creative Commons licensed albums and *Linux Tracker* (linuxtracker.org/), which distributes Linux distributions. An Internet search will show many other trackers, but again be careful. The BitTorrent Descriptor File that the tracker sends you contains checksums for each piece you obtain from individual seeders, which guarantees the integrity of the pieces. Thus you aren't dependent on the nature of the seeders.

Limit which files and directories you share by setting the preferences in your BitTorrent client. In my case, I allow sharing only from my Downloads directory and only those files I've obtained using BitTorrent, which are the defaults in the Linux client. Some clients by default allow sharing everything on your PC, and you must change this before beginning a download. After the

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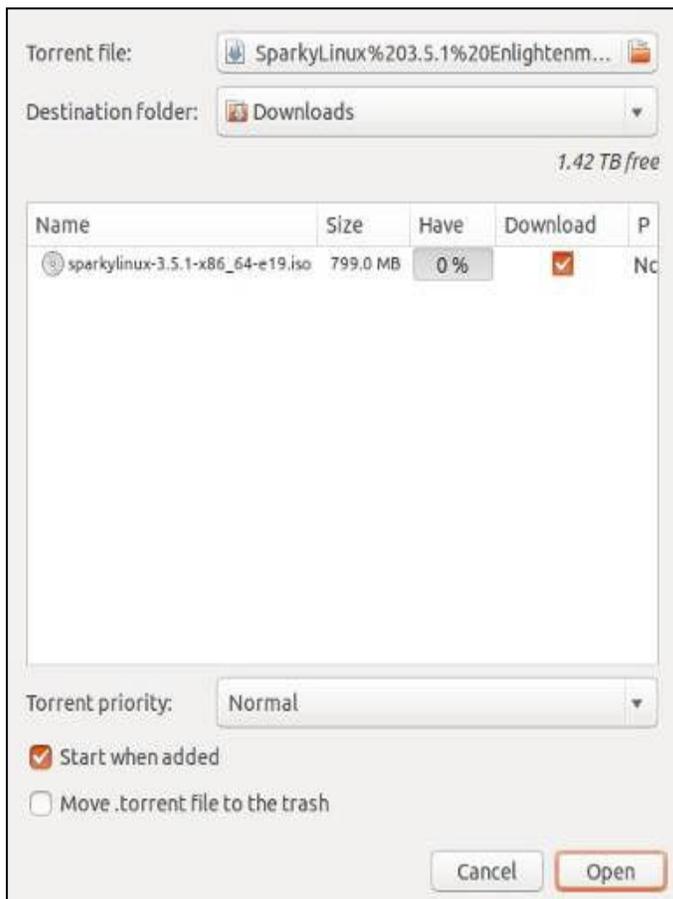
download is complete, scan it with an anti-virus program as you would with any software, regardless of the means by which you obtain it. Many Linux software providers provide MD5 checksums that you can use to be sure every bit in the file is correct. Unfortunately, this is rare in the Windows world.

Process

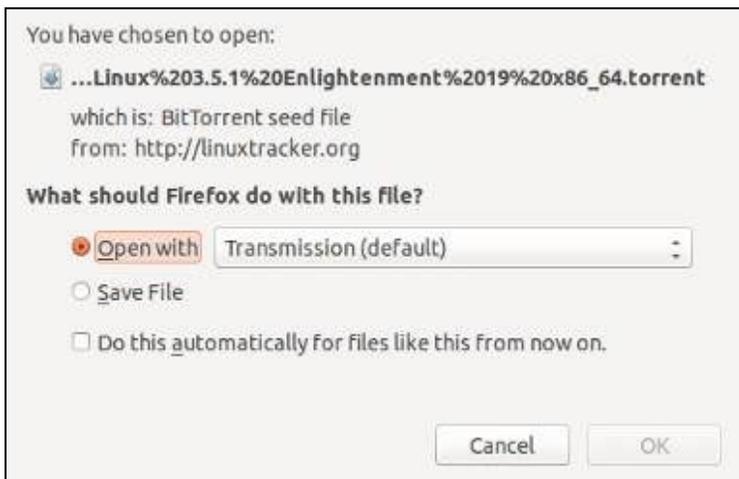
To obtain a file, go to the tracker's Website and select the desired BitTorrent descriptor file, which will have the extension .torrent, and will have a size of 30 Kbytes or so. How you get this to the BitTorrent client program on your PC depends on how you have set things up. You may accomplish it just by double-clicking on the file name on the Website; in the worst case, you will download the file to your PC and open it with the client. The client should start and within a few seconds you should see both the file you want coming in and some of the files you've decided to share going out. It's considered good manners to send at least as much data as you receive, in fact some trackers insist on it to the extent that they will limit your downloads if your upload volume isn't sufficient. Because the upload rate is much less than that of the download, you will have to let the client run long after the download is complete to satisfy this.

The following example uses Linux to download a file using BitTorrent. The process is the same for OS X and Windows, although the screens will be different. The first step is to go to a tracker Website and click on the file you want, which will produce the window below, giving you the usual choice of opening the file with Transmission (the BitTorrent client for both Linux and OS X) or downloading it to your PC. Note that this is a small BitTorrent descriptor file, not the large one you want to download. Usually, you'll choose the first option.

Assuming you choose the *Open with* option, the next screen will show the file to be downloaded and give you an opportunity to change the destination folder from the default (in this case Downloads). If you had aborted an earlier download of the same file, the *Have* amount would not be 0 %, and you would have only to download the pieces you didn't already have.



The screen on the next page shows BitTorrent downloading the sparkylinux file. You can see that I've previously obtained eight other files using BitTorrent, that ubuntu-mate is being uploaded, and that although two peers are interested in wheezy-raspbian the upload rate is zero. At the time of the screen-shot, nobody connected to this tracker wanted the other files.



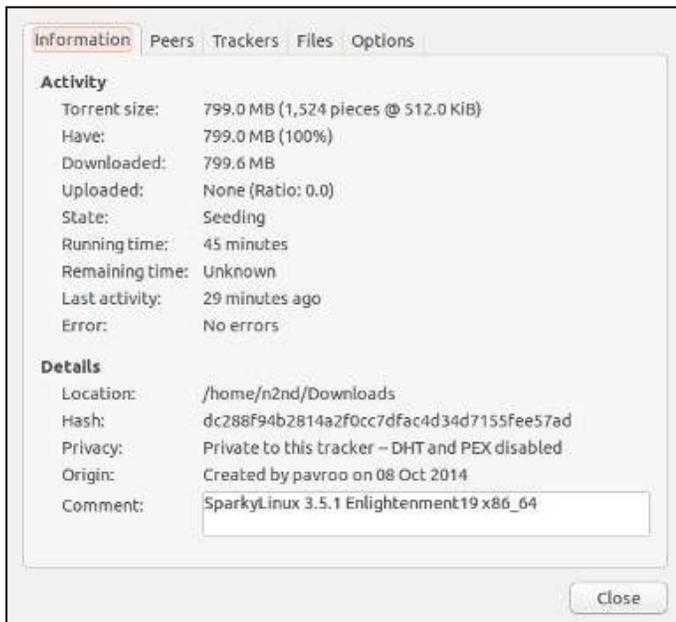
Prescott Computer Society
Where you share what you know, and learn what you don't.

The complex block contains the Prescott Computer Society logo and tagline. To the right is a stylized icon of two people, one standing and one sitting at a computer, representing sharing and learning.

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Right-clicking on the sparky-linux item on the download screen after the download was complete and selecting properties shows the next screen. We can see that the 799 Mbyte file was downloaded as 1524 pieces of 512 Kbytes each and there were no errors.



Should you use BitTorrent? I've found that it takes a fraction of the time to download large files as direct transfer, especially if the file server is busy, which seems to be the

usual case for the files I want. Also, some files are available only by peer-to-peer transfer. You do have to be careful to obtain a BitTorrent client you can trust, to set up your firewall properly, to use reliable trackers, and to check the download for malware. These precautions are similar to what you would do with any new file regardless of how you obtained it. Ultimately, the choice is yours; if BitTorrent makes you uneasy, don't use it.Ω