



OTTAWA

PC NEWS

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PRODUCT REVIEW

Exploring Linux – Part 24 *by Alan German*

Over the years, I have struggled with the variety of digital image tools provided with default installations of Ubuntu. I never liked image viewers that wouldn't show me thumbnails of all the pictures in a given folder, or those that did not give me quick access to a simple editor in order to crop an image or make a slight change to its brightness. And, I simply hated photo managers that insisted on arranging my pictures chronologically, rather than having one folder hold all the pictures from a specific trip.

In fact, the only reason that I didn't undertake a systematic search for an appropriate alternative was that – horrors – Zoner Photo Studio Free (<http://opcug.ca/public/Reviews/zoner.htm>), in the (dual-boot) Windows' world, provided everything I needed. However, I recently came across gThumb, a Gnome-based image viewer, and found that this was my new Linux tool of choice.

Interestingly, this all came about after I read a glowing review of Mint 14 with the Cinnamon user interface. I downloaded Mint and installed it on a bootable USB memory stick. In trying out this distro, I discovered that Mint's default image viewer is gThumb. I liked my “preview” of this package so much I decided to install it on my production Ubuntu system.

The basic image viewer shows thumbnails of all the images in a selected folder, together with a tree directory of available folders in the left sidebar. The size of the thumbnails, and the information displayed alongside each (e.g. file name), are configurable. Similarly, double-clicking on a specific image can be set to display the image so as to fill program's window. Icons are available to show an extensive list of the image's properties, or to open an image editor in order to modify the actual image. While the available editing tools are not exhaustive, many useful items are provided, including brightness, contrast and colour adjustment; image cropping, resizing and rotation; and red-eye removal.

Images can be downloaded from a digital camera although, in my view, this process isn't perfect. While a folder can be specified to hold all of the downloaded images, the program still creates a sub-folder, named with the current date and time, and places all of the images inside this sub-folder. However, it's now a simple matter to transfer all of the downloaded files into a specific folder of the user's choice. This is certainly much easier than having to combine files from multiple “days” into a single, user-defined folder.

The program has a multitude of other features including the ability to create slideshows; to export photographs to social-media sites or web-based photo-albums; burn them to optical disks; or to print contact sheets. Many of these options are provided as plug-in extensions and additional features are available through this mechanism.

(see screenshot on page 6)

The program is highly configurable simply by editing a “preferences” menu. For example, one really useful feature, where screen real-estate is at a premium, is to change the location for the group of thumbnails that is displayed in the image viewer. By default, these thumbnails are shown across the bottom of the window; however, this severely restricts the height – and hence the overall size – at which the image selected is displayed.

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Next Meeting: **WEDNESDAY, April 9th, 2014**

April Raffle

For the April raffle, we have a **Belkin wireless keyboard**.

This quiet keyboard with comfort palm rests features 17 multi-media hot keys. It has a 2.4GHz USB nano receiver and will work up to 32 feet away from any PC or Mac with a USB port.

For details, see <http://belkinbusiness.com/products/f5k007>

Tickets are, as always, a good deal at \$1 for one, a great deal at \$2 for three or the unbelievable bargain of \$5 for ten!

March Prize Winner

Bob Bergquist was the lucky winner of the Ubislate Android Tablet offered as our raffle prize at the March meeting of the OPCUG.

Congrats Bob!

Coming Up...

►Wednesday, April 9, 2014

Topic: Business Intelligence, Big Data and Your Privacy

Speaker: Bob Walker, OPCUG

Business Intelligence, Big Data and Your Privacy: More and more companies and organizations are using more and more advanced techniques to find out more and more about YOU. Find out what they are up to.

Wednesday, May 14

GIS by Jason Barney, City of Ottawa, and Robert Giggey, City's Open Data initiative and Apps4Ottawa program.

Wednesday, June 11

Pizza Night + "Web Comics" by Mark Shainblum, creator of Northguard

More detail is available on the OPCUG website at <http://opcug.ca>. Just click on the MEETINGS button.

2014 CALENDAR

Meetings	Date	Time and Venue
OPCUG General Meeting	Wednesday, April 9 th	7:30 p.m. Auditorium of the Canada Science and Technology Museum , 1867 St. Laurent Blvd. http://www.sciencetech.technomuses.ca/english/index.cfm
Beginners' SIG	Wednesday, April 9 th	Immediately following the OPCUG General Meeting.
Linux / Open Source SIG	Wednesday, April 9 th	Immediately following the OPCUG General Meeting.
Beer BOF (Wing SIG East)	Wednesday, April 9 th	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).

Windows XP migration tool by Chris Taylor

So your trusty computer has been running Windows XP for many years, but faced with the end-of-life of Windows XP, you decided to buy a shiny new Windows 7 or (perhaps more likely) Windows 8 PC. Now you are faced with the somewhat daunting task of getting all your data files, programs and settings over to the new computer.

Microsoft has partnered with Laplink to provide a free migration tool called *PCmover Express for Windows XP*, which can take care of 2 of those three items; data files and settings. Unfortunately, you still have to re-install all your programs on the new computer.

For details, see the Windows Experience Blog at <http://bit.ly/1hY22bj>

Kudos to Microsoft and Laplink for providing this tool for free.

For those willing to shell out a few dollars, Laplink has *PCmover Professional for XP Users*, which in addition to data files and settings, can transfer your programs! It is available for US\$23.95 – a 60% discount. See <http://bit.ly/1cauUip>

Programming Tip by Chris Taylor

I was reading some articles on TechRepublic and came across a title that intrigued me –
“The greatest programming tip ever written”

Although I really don't program any more, it is always interesting to pick up tidbits and this sounded like a good one.

I read the article and the tip was “Always code as if the person who will maintain your code is a maniac serial killer that knows where you live.”

It reminded me of Microsoft's WSYP (We Share Your Pain) program. If you have not seen the video, check it out.

<http://www.youtube.com/watch?v=D28FkfJiauk>

Who says Microsoft doesn't have a sense of humour?

OUTSIDE ARTICLE

Schneier on Security

A blog covering security and security technology.

March 3, 2014

Choosing Secure Passwords

https://www.schneier.com/blog/archives/2014/03/choosing_secure_1.html

As insecure as passwords generally are, they're not going away anytime soon. Every year you have more and more passwords to deal with, and every year they get easier and easier to break. You need a strategy.

The best way to explain how to choose a good password is to explain how they're broken. The general attack model is what's known as an offline password-guessing attack. In this scenario, the attacker gets a file of encrypted passwords from somewhere people want to authenticate to. His goal is to turn that encrypted file into unencrypted passwords he can use to authenticate himself. He does this by guessing passwords, and then seeing if they're correct. He can try guesses as fast as his computer will process them -- and he can parallelize the attack -- and gets immediate confirmation if he guesses correctly. Yes, there are ways to foil this attack, and that's why we can still have four-digit PINs on ATM cards, but it's the correct model for breaking passwords.

There are commercial programs that do password cracking, sold primarily to police departments. There are also hacker tools that do the same thing. And they're *really* good.

The efficiency of password cracking depends on two largely independent things: power and efficiency.

Power is simply computing power. As computers have become faster, they're able to test more passwords per second; one program advertises eight million per second. These crackers might run for days, on many machines simultaneously. For a high-profile police case, they might run for months.

Efficiency is the ability to guess passwords cleverly. It doesn't make sense to run through every eight-letter combination from "aaaaaaaa" to "zzzzzzzz" in order. That's 200 billion possible passwords, most of them very unlikely. Password crackers try the most common passwords first.

A typical password consists of a root plus an appendage. The root isn't necessarily a dictionary word, but it's usually something pronounceable. An appendage is either a suffix (90% of the time) or a prefix (10% of the time). One cracking program I saw started with a dictionary of about 1,000 common passwords, things like "letmein," "temp," "123456," and so

on. Then it tested them each with about 100 common suffix appendages: "1," "4u," "69," "abc," "!", and so on. It recovered about a quarter of all passwords with just these 100,000 combinations.

Crackers use different dictionaries: English words, names, foreign words, phonetic patterns and so on for roots; two digits, dates, single symbols and so on for appendages. They run the dictionaries with various capitalizations and common substitutions: "\$" for "s", "@" for "a," "1" for "l" and so on. This guessing strategy quickly breaks about two-thirds of all passwords.

Modern password crackers combine different words from their dictionaries:

What was remarkable about all three cracking sessions were the types of plains that got revealed. They included passcodes such as "k1araj0hns0n," "Sh1alabe0uf," "Apr!1221973," "Qbesancon321," "DG091101%," "@Yourmom69," "ilovetofunot," "windermere2313," "tmdmmj17," and "BandGeek2014." Also included in the list: "all of the lights" (yes, spaces are allowed on many sites), "i hate hackers," "allineedislove," "ilovemySister31," "iloveyousomuch," "Philippians4:13," "Philippians4:6-7," and "qeadzcxwrsfxv1331." "gonefishing1125" was another password Steube saw appear on his computer screen. Seconds after it was cracked, he noted, "You won't ever find it using brute force."

This is why the oft-cited XKCD scheme for generating passwords -- string together individual words like "correcthorsebatterystaple" -- is no longer good advice. The password crackers are on to this trick.

The attacker will feed any personal information he has access to about the password creator into the password crackers. A good password cracker will test names and addresses from the address book, meaningful dates, and any other personal information it has. Postal codes are common appendages. If it can, the guesser will index the target hard drive and create a dictionary that includes every printable string, including deleted files. If you ever saved an e-mail with your password, or kept it in an obscure file somewhere, or if your program ever stored it in memory, this process will grab it. And it will speed the process of recovering your password.

Last year, Ars Technica gave three experts a 16,000-entry encrypted password file, and asked them to break as many as possible. The winner got 90% of them, the loser 62% -- in a few hours. It's the same sort of thing we saw in 2012, 2007, and

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Choosing Secure Passwords *(Continued from page 4)*

earlier. If there's any new news, it's that this kind of thing is getting easier faster than people think.

Pretty much anything that can be remembered can be cracked.

There's still one scheme that works. Back in 2008, I described the "Schneier scheme":

So if you want your password to be hard to guess, you should choose something that this process will miss. My advice is to take a sentence and turn it into a password. Something like "This little piggy went to market" might become "tlpWENT2m". That nine-character password won't be in anyone's dictionary. Of course, don't use this one, because I've written about it. Choose your own sentence -- something personal.

Here are some examples:

- Wlw7,mstmsritt... = When I was seven, my sister threw my stuffed rabbit in the toilet.
- Wow...doestcst = Wow, does that couch smell terrible.
- Ltime@go-inag~faaa! = Long time ago in a galaxy not far away at all.
- uTVM,TPw55:utvm,tpwstillsecure = Until this very moment, these passwords were still secure.

You get the idea. Combine a personally memorable sentence with some personally memorable tricks to modify that sentence into a password to create a lengthy password. Of course, the site has to accept all of those non-alpha-numeric characters and an arbitrarily long password. Otherwise, it's much harder.

Even better is to use random unmemorable alphanumeric passwords (with symbols, if the site will allow them), and a password manager like Password Safe to create and store them. Password Safe includes a random password generation function. Tell it how many characters you want -- twelve is my default -- and it'll give you passwords like y.)v_.7)7Bl, B3h4_[%}kgv), and QG6,Fn4nFAm_. The program supports cut and paste, so you're not actually typing those characters very much. I'm recommending Password Safe for Windows because I wrote the first version, know the person currently in charge of the code, and trust its security. There are ports of Password Safe to other OSs, but I had nothing to do with those. There are also other password managers out there, if you want to shop around.

There's more to passwords than simply choosing a good one:

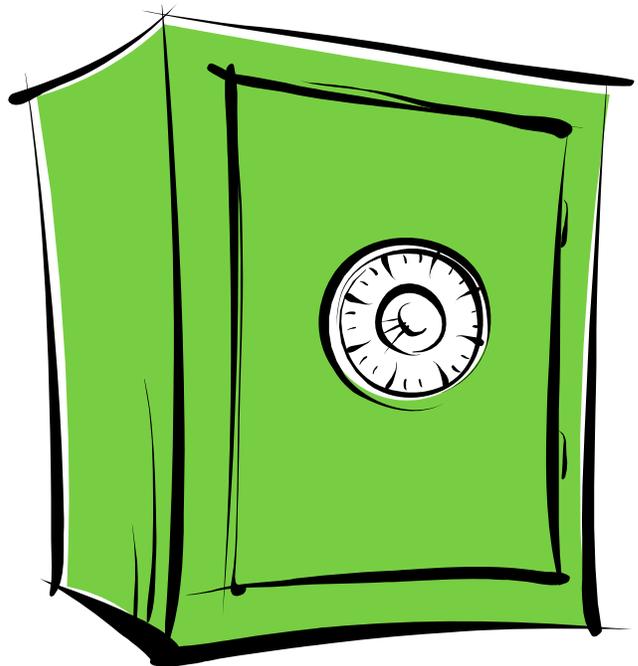
1. Never reuse a password you care about. Even if you choose a secure password, the site it's for could leak it because of its own incompetence. You don't want someone who gets your password for one application or site to be able to use it for another.
2. Don't bother updating your password regularly. Sites that require 90-day -- or whatever -- password upgrades do more harm than good. Unless you think your password might be compromised, don't change it.
3. Beware the "secret question." You don't want a backup system for when you forget your password to be easier to break than your password. Really, it's smart to use a password manager. Or to write your passwords down on a piece of paper and *secure that piece of paper*.
4. One more piece of advice: if a site offers two-factor authentication, seriously consider using it. It's almost certainly a security improvement.

This essay previously appeared on BoingBoing.

Tags: cracking, essays, passwords, security awareness, usability

Posted on March 3, 2014 at 7:48 AM

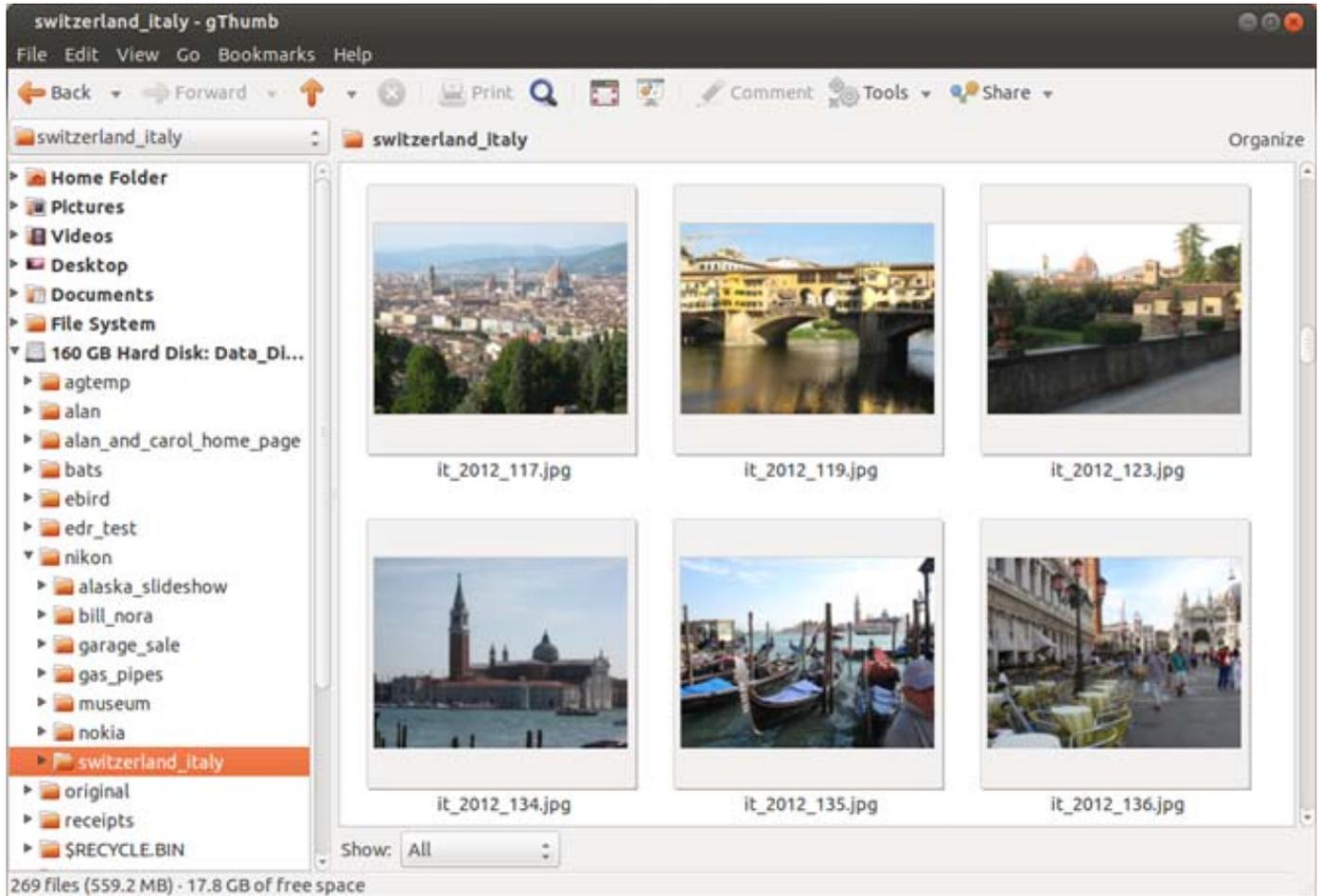
Reprinted with permission.



Exploring Linux Part 24 *(Continued from page 1)*

Switching the location to be “on the side” easily resolves this issue.

So, for my way of working with digital images, gThumb is certainly a keeper!



Bottom Line



gThumb (Open-source)
Version 2.14.3
Author: Paolo Bacchilega
<https://live.gnome.org/gthumb>

OPCUG Free Software Guide – Part 47

Compiled by
Alan German

This 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.

Screamer Radio

There are literally thousands of radio stations on the Internet for you to enjoy. Trouble is they can be a little hard to find. Screamer Radio tries to fix this by collecting many of them in one place.

Web Site: <http://www.screamer-radio.com/>



CutePDF Writer

CutePDF Writer installs itself as a "printer subsystem" and enables virtually any Windows application to create professional-quality PDF documents. Free for commercial and non-commercial use, with no watermarks, and no pop-up web ads!

Current Release: Version 3.0

Web Site: <http://preview.tinyurl.com/2scjk>

File Renamer Basic

With this program, you can rename entire directories and subdirectories of files at once with a powerful preview tool. File Renamer is perfect for renaming digital photos. Select the pictures you want to rename, choose and apply the new file name scheme, and you are done! It's that easy!

Current Release: Version 6.0.3

Web Site: <http://preview.tinyurl.com/zravr>

EaseUS Partition Master Free

This free disk management utility allows you to easily create and extend partitions on MBR and GUID partition table (GPT) disks. Supports Windows 8/7/Vista/XP/2000. Partition Master can also change labels, defragment disk and partitions, check partitions, and create bootable CDs.

Current Release: Version 9.3

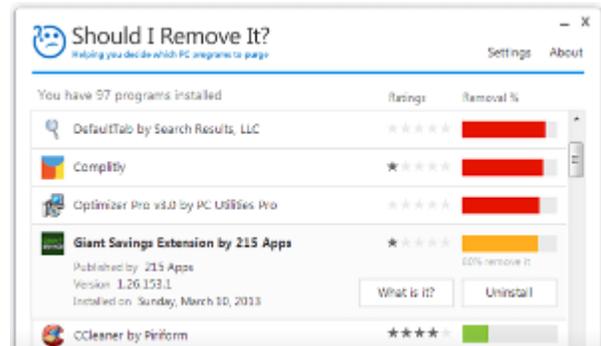
Web Site: <http://preview.tinyurl.com/nkc3avh>

Should I remove it?

This utility shows the programs installed on your computer and lets you quickly determine which can be safely removed. Specific programs are ranked according to the degree that other users have uninstalled them.

Current Release: Version 1.0.4.27527

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



RocketDock

Add an OS X-like dock to your desktop. RocketDock lets you add icons to run applications from the dock. You can also add minimized windows - with real-time previews of running movies!

Current Release: Version 1.3.0

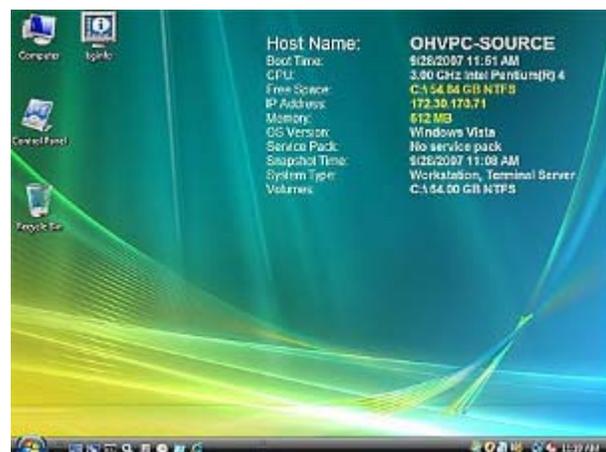
Web Site: <http://rocketdock.com/>

BgInfo

This utility automatically displays relevant information about a Windows computer on the desktop's background. The information can include the computer name, IP address, service pack version, and more. You can edit any field as well as the font and background colors.

Current Release: Version 4.20

Web Site: <http://preview.tinyurl.com/2nbxmd>



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, at the Canada Science and Technology Museum, 1867 St. Laurent Blvd, Ottawa. Meetings are 7:30–9:00 p.m. and Special Interest Groups (SIGs) go until 10 p.m.

OPCUG Membership Fees:	\$25 per year	
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Linux / Open-Source SIG (vacant)		

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Reduce, Reuse, Recycle

Bring 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 of less than two years old.

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.

