



PRODUCT REVIEW

Reflections on Disk Imaging Software by Alan German

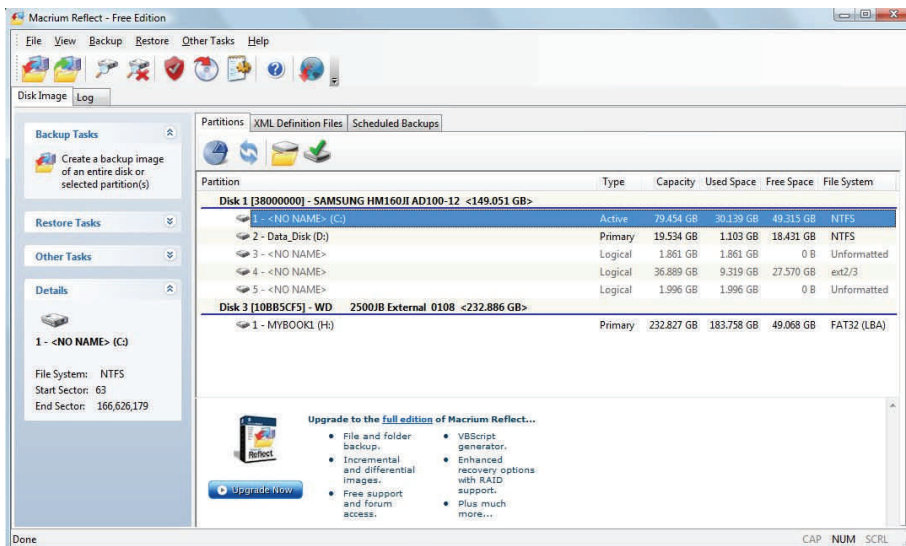
As OPCUG members will know, I'm a real fan of disk imaging software for backup purposes. I have had many successes with such programs, but I have also had my share of heartaches. In particular, I found that I really couldn't get along with the user interface in the most recent incarnation of Acronis True Image Home 2011...

My first foray, with HDClone 4, was pretty much a disaster. The free version of this program proved to be severely crippled and essentially useless. Then I tried Paragon Backup & Recovery 2011...

Finally, I came across the free edition of Macrium Reflect which seems to do everything that I want. As with many such programs, the basic operations of backup and recovery are handled by means of wizards that make it very easy to run either process.

The main task any disk imaging program has to accomplish is to backup a hard drive and Macrium Reflect makes this process exceptionally easy. In the left column of the main screen is a list of frequently used tasks. The first item on this list is "Create a backup image of an entire disk or selected partition(s)".

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September Raffle

Thanks to the folks at Diskeeper, we have two copies of **Diskeeper 2011 Pro Premier** to raffle off. Diskeeper 2011 performance software gives your home and home office PCs maximum speed and reliability by eliminating the majority of the fragmentation that causes PC slows and then invisibly eliminates the rest - automatically.

Diskeeper Pro Premier is valued at \$100. We will draw two tickets at the September meeting.

Because of the way Diskeeper does its promotional copies, winners will have to supply a valid email address which will be passed to Diskeeper. Winners will then receive an email from Diskeeper with a download link and a license key.

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

Coming Up...

September 14, 2011

Speaker: Roger Lanthier

Topic: Personal Computers & Audio Recording

Roger Lanthier has been a professional, and now semi-professional, freelance musician since the early 1980's. Through the years, he has accumulated significant experience by working with both analog and digital recording studios.

Roger's presentation will cover how and why personal computers have become invaluable tools in audio recording. It will first provide a brief history on the subject, including definitions and descriptive examples, before extending on slightly more technical details.

Roger will be bringing some instruments and audio equipment along so you can see (and hear) how it all comes together.

For anyone with an interest in music, this promises to be an fun and informative evening. Don't miss it!

June Prize Winners

Our three raffle prize winners from the June 8th meeting will each receive a copy of the Diskeeper 2011 Pro Premier Edition software.

They were:

Tim Hillock, H.J. McClemens, and Jocelyne Doire.

Many thanks to Diskeeper for the prizes.

2011 CALENDAR

| Meetings | Date | Time and Venue |
|--------------------------|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OPCUG General Meeting | Wednesday, September 14 th | 7:30 p.m. Auditorium of the Canada Museum of Science and Technology , 1867 St. Laurent Blvd. http://www.sciencetech.technomuses.ca/english/index.cfm |
| Beginners' SIG | Wednesday, September 14 th | Immediately following the OPCUG General Meeting. |
| Linux SIG | Wednesday, September 14 th | Immediately following the OPCUG General Meeting. |
| Beer BOF (Wing SIG East) | Wednesday, September 14 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).

ARTICLE

Reviving My Apevia PC

by Robert Davis, Tampa PC Users Group
RobDavis7@verizon.net

Last Sunday afternoon I powered up my financial PC, got a cup of coffee, and returned to find it wasn't powered up anymore. I hit the power on button, the lights flashed and went out again. It also had a bad smell to it. Not the best way to start the afternoon! This is a PC that has all our financial records on it, and I hadn't backed up the data for a couple weeks. When I opened the box, the smell appeared to be from the power supply. I called Bob LaFave who said if the power supply stinks it's probably bad. I thanked him for calling back and said I would call if replacing the power supply didn't fix the problem.

I have an old dead PC lying around with a good power supply in it. Not being sure what that meant at the time, I went to CompUSA and was fumbling through the many power supply selections. Another guy who was gathering stuff to build a PC came over and explained about the power supplies. My new PC has a P4 motherboard, which requires the extra plug. My old PC was not a P4 type, so the power supply was not right for my newer Apevia PC. Of course, all the new power supplies are equipped to handle the P4 and more. So I pulled both power supplies but found the old one didn't have a four-pin plug added on the motherboard power socket.

Unfortunately, the guy took the last of the 600-watt power supplies that were on sale, so I had to settle for a 550-watt unit for about \$10 more. But I figured the \$10 extra I paid by fumbling around there was the price I paid to find out what to buy. My original Apevia system came with a 350-watt power supply. I had talked the salesman I bought it from a couple years ago into adding a CD ROM drive, and a 3.5" disk drive. They also had added a second hard drive. So I think what happened is the 350-watt power supply was straining all the time to handle all the extra load and finally died. So a 550-watt power supply should be able to handle the extra load without a problem.

I installed the new power supply, even though it had several extra cables with odd connectors that I had no idea what they were used for. I bundled them up out of the way. Then came the challenging smoke test. The system came up without a hitch. You know, the first thing I did was back up that data! It may be my imagination, but it seems the PC is running better now than before. Anyway, I'm a happy camper again.



This article was originally published in the March, 2011 issue of Bits of Blue, the official monthly publication of the Tampa PC Users Group (TPCUG) and is reprinted here with the permission of TPCUG (<http://www.tpcug.org>).

PRODUCT REVIEW

Exploring Linux—Part 18 *by Alan German*

These days I am almost Windows-free, as I use Linux for almost all of my computing needs. Nevertheless, there are still some tasks for which I still resort to Windows, and these are mainly related to making backups.

Typically I make full image backups of my hard drive using Acronis True Image and, while the rescue CD runs in a Linux environment, and could be used to create backups, I still find it convenient to boot into Windows and use the hard-disk version of the program.

Similarly, even though I now routinely run inosync to provide a real-time backup of my data partition ([Exploring Linux – Part 16](#)), I still like making intermediate backups of certain file folders, and even of the entire data partition, on my hard drive. For these tasks I was using PC Magazine's wonderful (but, regrettably no longer free) WMatch utility program, and Microsoft's free SyncToy utility, respectively.

But, there are equivalent Linux programs available for the latter. It's just that I haven't got around to trying any of them. Well, at least, I hadn't until now!

I decided to start small and look for a utility that would make a backup of a file folder on the hard disk to a USB memory stick. Yes, I know that earlier ([Exploring Linux – Part 9](#)), I said you could do this with rsync, but this is a command line program, and even using a bash script file doesn't make the process all that user friendly.

A lot of chat on the web suggests using Unison, an open-source utility that includes a graphical user interface; however, use of this package isn't straightforward as it seems to require some considerable tweaking of file permissions before it will successfully create backups.

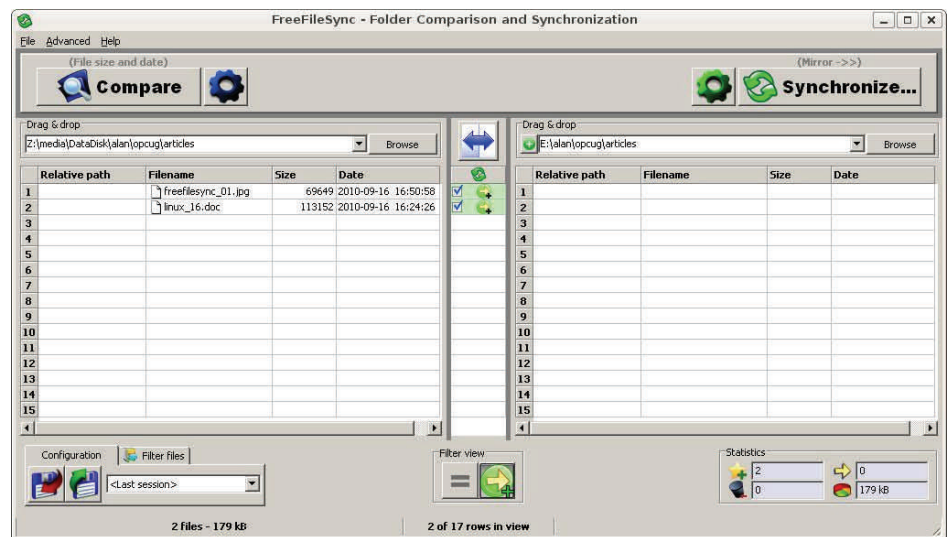
Then, I came across FreeFileSync on SourceForge touted as “...an open-source folder comparison and synchronization tool... optimized for highest performance and usability without restricted or overloaded UI interfaces.” This sounds perfect for my purpose!

FreeFileSync comes in both Linux and Windows flavours, but take care which operating system you are running when you go to download the package. The choices offered are those for your current OS so, if you want a Linux version, download it on your Linux box.

The download arrives as a .tar.gz file, meaning that it is a compressed tar archive – a Tape ARchive or tarball – compressed using the GNU zip (Gzip) protocol. I researched how to unpack the tarball and expected to have to use the terminal command: `tar -zxvf FreeFileSync_v3.9_Ubuntu_10.4.tar.gz`, where the switch `z` filters the file through `gzip`, `x` indicates that the files in the archive are to be extracted, `v` produces a verbose listing of the extracted files, and `f` indicates that the archive file name is provided.

But, then I found a much easier way to achieve the same result. Simply double-clicking on the .tar.gz file in Ubuntu brings up the File Roller archive manager, complete with an Extract button! I created a FreeFileSync folder and extracted the files from the archive. Included amongst these was a file named FreeFileSync. This is the executable version of the utility.

Double-clicking on this file brought up the program. Now, it was simply a matter of selecting the source folder on my hard disk, and the target folder on my USB memory key, by browsing both drives, and pressing the Compare button.



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Linux—Part 18 (Continued from page 4)

Well, maybe it wasn't quite that simple. To my mind, the browse function is enabled a little clumsily. Simply clicking on the browse button only gives a list of places on the system that are already specified. I found that I needed to select Browse – Other in order to open up a tree directory from which I could readily select any particular drive and folder of interest. Not terribly intuitive!

The directory comparison only lists files that are different between the source and the target. In the case shown, the text file for the current article, and an associated screenshot, have not yet been backed up to the USB drive. To do so, all that is required is to press the Synchronize button.

Note (in the text displayed just above the synchronize and compare buttons) that the program has been configured to “mirror” the source files on the target drive, with files being compared based on their date-time stamps. Any new files in the source folder will be copied to the target, any updated files will be overwritten in the target folder, and any files deleted from the source folder will be removed from the target. This ensures that the target folder is maintained as an exact copy of the source folder.

While these are my preferences for a backup system, the program is configurable using the two cog-wheel type buttons. File comparison may be made by date and time, or by file content. Synchronization can be set to be two-way, mirrored, updated (no target deletions), or even customized to the user's preferences. Deleted files can be sent to the trash, to a folder of the user's choice, or erased immediately. The Advanced menu option allows considerable further configuration of the program, including language selection, and a global setting to ignore one-hour time differences (daylight savings) on files.

The Help menu is relatively brief, but very informative. The basic program operations are clearly described with the use of coloured illustrations. More complex tasks to be undertaken by the advanced or specialized user are explained in some detail.

One final idiosyncrasy of the program worth mentioning is that, while the program ran fine on my Ubuntu 10.04 test bed, it refused to run at all on my Ubuntu 8.04 LTS production machine. The workaround for the latter turned out to be truly bizarre – download the Windows version of FreeFileSync – and install and run this version of the program under Wine! However, the good news is that, for this setup, the browse function leads directly to a tree directory, and successful completion of a folder synchronization is terminated with a pleasant musical trill from the system speaker.

Personally, having used WMatch for many years, I find the lack of a list of “all files” a little disconcerting, but perhaps I can assure myself that the end product is indeed a true backup copy, and so a display of only the new and/or changed files is all that is really necessary. Time – and additional use of FreeFileSync under Linux - will tell!

Bottom Line

FreeFileSync (Open Source)
by ZenJu
<http://freefilesync.sourceforge.net/>

**CLUB LIFE****Members' Favourites Night coming this fall**

We are planning a members night this fall and are looking for people who would be able to present their favourite programs and gadgets. If you have something and would be willing to share it with the group please contact Andrea Wells at andrea.wells@opcug.ca.

**Request for Leader of the Linux SIG**

The Linux SIG is looking for a volunteer leader starting in September. The group meets after the regular meeting usually for about 45 minutes. The leader does not need to be an expert in Linux. A general interest in the subject and a willingness to discuss products, problems and features of the Linux OS is all that is needed.

If you would be willing to try out this role please identify yourself to Chris Taylor at September's regular meeting.

Reflections... *(Continued from page 1)*

The penultimate screen of the wizard provides summary information related to the specified task. An “Advanced” option lets you further customize the backup by specifying the degree of file compression, the component file size, and allowing text entry into a comment field. By default, the backup process uses “intelligent sector copying” so that, for example, the page file and any hibernation file are not copied to the image in order to save space. This can be overridden by specifying that a clone of the disk should be made.

The final options in the backup process are to run the task immediately or to save the backup instructions as an XML backup definitions file. This latter option is one of the neat features of Macrium Reflect. It effectively provides a mechanism for running the backup at a later time or, by tweaking the XML file, running a similar task.

For example, storing my initial backup set produces the XML tag:
`<file_name>d_datadrive_07jun11 </file_name>`. Clearly, editing the file and changing the date in this tag would allow me to run a backup on my data drive using my standard set of backup instructions but with a customized date being included in the image file name. Stored XML definition files are available through a tab on the main screen. Selecting a given file activates a menu of icons that include options to run the file immediately, edit the file, or schedule when it should be run (e.g. daily, weekly, specified date/time).

The second major tab in the list of tasks provides access to the restore options. The basic image restoration process is more or less the reverse of the backup procedure. Once again, a wizard allows the selection of items such as the image and partition to be restored, the location to which the image is to be recovered, options for the partition type (active, primary or logical), if the image should be verified before recovery is attempted, and whether or not the master boot record for the disk should be restored.

A second option on the restore tab allows browsing through the files and folders in a disk image using Windows Explorer. Selecting a partition within a stored disk image mounts the partition in read-only mode and assigns a drive letter. The virtual disk is then available in Windows Explorer and individual files or folders may be retrieved from the image.

The final option in the list of tasks is “Other Tasks”. These include checking the integrity of a disk option, creating a rescue disk (CD), and editing the program's configuration file in order to change the defaults.

The means of creating rescue disks is yet another of the interesting features of Macrium Select. By default, the system will create a Linux-based bootable CD. This worked fine with the Western Digital external USB drive that I typically use to store my disk images. However, sometimes Linux rescue disks have difficulties with external USB drives and cannot be used to retrieve stored images directly. In such cases, and for users of Windows XP and Server 2003, Macrium Reflect provides a second option. The program will create a rescue disk, using Bart PE (<http://www.nu2.nu/pebuilder/>), in the form of a Bart Preinstalled Environment bootable Windows CD-ROM. A Macrium Reflect PE-builder plug-in is included on the rescue disk such that booting the CD, uses XP's system files and drivers, together with the Macrium Reflect software, to run the restore process. Effectively, the CD boots into a lightweight version of XP, and Macrium Reflect operates in the Windows' environment. And, external USB drives seem generally happy to perform under such conditions.

So, Macrium Reflect has all of the basic functionality to create and restore backup images of entire hard drives or of individual disk partitions. The software includes an excellent help file, with clear text and images describing all of the program's operations.

Now, the program once installed may work just fine, but getting it installed can be a bit of a problem. That was certainly my experience in Vista. [This is a problem with good old Windows Vista - a subsequent installation under Windows 7 went without a hitch.] Firstly, it should be noted that when downloading the free edition of the software, the user is re-directed to CNet's web site. The downloaded package appears to install normally and creates an icon on the desktop. But, when the program is run from this icon, it doesn't just load, it goes into a Windows configuration mode and, in my case, stalled with a “Fatal error during installation” message.

Checking on this error for Macrium Reflect determined that the program must be run as an administrator, but there was no “Run as administrator” option in the right-click context menu. I tracked down a Windows support item (<http://support.microsoft.com/kb/922708>) that detailed a workaround for this issue. The trick is to open the folder that contains the installed program file and right click on this file to bring up the run-as-administrator option. The Windows configuration process now runs, using a built-in license key, and finally Macrium Reflect is launched.

To set up the program so that it automatically runs in administrator mode, you right-click on the program's icon, click on Properties, the Compatibility tab, “Show settings for all users”, and check the box marked “Run this program as an administrator”. Note that on exiting the compatibility tab, “Run this program as an administrator” is no longer checked; however, the program does actually run in this mode. Very bizarre, but it works!

Macrium Reflect clearly has some issues in terms of installation under Vista but, once it is properly installed, it is exceptionally easy to use and offers very flexible backup, restore and image browsing capabilities. The full edition of the software (US \$39.99) adds many

(Continued on page 8)

OPCUG Free Software Guide—Part 24

Compiled by
Alan German, Dunc Petrie
and Bill Bradwin

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. If you try one of the listed items, you are encouraged to share your experience, good or bad, by providing a brief review of the program for a future issue of the newsletter.

Agent Ransack

This utility from Mythicsoft is a fast file searcher that supports boolean operators, has a 64 bit version and will dig into many Microsoft Office file formats. It is free for both personal and commercial use, and runs on Windows XP, 2000, Vista and 7. Current Release: Version 2010 (762)
Web Site: <http://www.mythicsoft.com/agentransack>



My Font

Windows has many fonts - probably more than you will ever use. But if you want some unusual, fun or custom fonts, you should try the selection at My Font. (Scroll down for the really free fonts!)

Web Site: <http://new.myfonts.com/search/free/fonts/>

TestDisk/PhotoRec

TestDisk is open-source software that will help recover lost partitions and/or make non-booting disks bootable again. The program will fix file system tables, rebuild boot sectors, recover deleted partition, and undelete files for a number of file systems, including FAT, NTFS, ext2, ext3 and ext4. The companion program, PhotoRec will recover lost files including video, documents and archives from hard disks and CD-ROM's, and lost pictures from digital camera memory. The program ignores the file system and goes after the underlying data, so it will still work if your media's file system has been severely damaged - or even reformatted.

Current Release: Version 6.11

Web Site: <http://www.cgsecurity.org/wiki/TestDisk>

Allmyapps

Using this web-based application store for Windows XP, Vista and 7, you can install or update all your applications in just a few clicks of the mouse. You can save your favourite applications in a list which is automatically updated whenever new

versions of the included software become available, and which can be shared with friends.

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



FastStone Photo Resizer

This tool enables users to convert, rename, resize, crop, rotate, change colour depth, add text and watermarks to digital images in a quick and easy batch mode. Support is provided for JPG, BMP, GIF, PNG and TIF files.

Current Release: Version 3.0

Web Site: <http://www.faststone.org/FSResizerDetail.htm>

Desktops

Desktops allows you to organize your applications on up to four virtual desktops. Read email on one, browse the web on the second, and do work in your productivity software on the third, without the clutter of the windows you're not using. Use custom hot keys for switching desktops.

Current Release: Version 1.02

Web Site: <http://technet.microsoft.com/en-us/sysinternals/cc817881.aspx>

SlimComputer

Thinking of buying a new computer? You know it's going to be full of trialware and other useless software items. Use SlimComputer to optimize your new system with push-button controls that let you disable services, remove links, and uninstall the software you never asked for.

Current Release: Version 1.0

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



ClipX

ClipX stores the 25 most recent entries (text or graphics) from the Windows clipboard and makes any one available from a pop-up list at the stroke of a hot key. With a free add-in you can also store a list of permanent clips. As the program's author states: "ClipX is a tiny clipboard history manager. It is sweet. It is free. Use it."

Current Release: Version 1.0.3.8

Web Site: <http://bluemars.org/clipx/>

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

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|-----------------------------------------------------|--------------------------------------------------------------------------|--------------|
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Reflections... *(Continued from page 6)*

features, including incremental and differential backups, encryption, and technical support. But, if you can live with basic backup and recovery options, Macrium Reflect Free Edition may be just what you need.

Bottom Line

Macrium Reflect Free Edition
Version 4.2.3584
Macrium Software
<http://www.macrium.com/reflectfree.asp>

How to get the OTTAWA PC NEWS by e-mail

Want to get the newsletter electronically? There are two formats available: plain text and Adobe Acrobat PDF. Simply send a message in plain text to listserv@opcug.ca. Leave the subject blank and in the body of the message, type: **subscribe NewsletterTXT** (to get the plain text version) or **subscribe NewsletterPDF** (to get the Adobe Acrobat PDF version).

To cancel e-mailing, send a message in plain text to listserv@opcug.ca and type: **unsubscribe NewsletterTXT** or **unsubscribe NewsletterPDF**

And if you decide you do not need the printed version mailed to you anymore, simply let Mark Cayer (membership chairman) know. He can be reached at general meetings, as well as by e-mail at Mark.Cayer@opcug.ca. You might want to wait until you have successfully received at least one issue electronically before opting out from the printed version.

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Subscribers can expect at least one message per month – the meeting reminder that goes out a few days in advance of the general meeting. Other than that, the only time it is used is when the Board feels there is some important news that should be brought to the attention of all members.