



The PULP

HUGE this month:
 General Meeting: Sept. 17th
 Using Preview as an Editor
 See you there!
 New Location !!!!!

Knights of Columbus
2533 Main Street,
Glastonbury, CT

Q&A Session: 7:00PM–7:30PM
 Meeting starts at: 7:30PM

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MEETING LOCATION
Knights of Columbus
2533 Main Street
Glastonbury, CT



Editor's Corner

This month we'll explore some of the other uses for 'Preview' besides just looking at PDFs and pictures. October is Computer Security Awareness Month and that will be the theme for that meeting.

Many people have been saying for years to backup your data, but we may need to go a step beyond that and update it. For example, Microsoft Office 2011 Mac software can't read a 1997 PowerPoint file. I'm having that problem with a presentation I did for HUGE, on backups I need to find that old computer and software. So it is not enough to save and protect our data, we need to keep it fresh.

Before Siri there was Bob. You remember Bob, that annoying face in Windows 95 & Office with a dog that tried to help you get around. Well, he's back (sort of), Microsoft Bing is working on a personal assistant to help personalize searches.

Want/need some extra money? Google is paying up to \$5,000 for Chrome bugs. Microsoft needs your help to fix botched patch KB 2859537 (it updates the kernel). If you applied the update in August and your system crashed and/or getting errors which disappear after uninstalling the patch, contact Microsoft.

Researchers at the Univ. of Southampton have recorded a 300KB file on a glass crystal in 5D. It is thought that the storage life will be indefinite. In a shorter time frame, Sony

and Panasonic are working on a 300 GigaByte Optical Drive that maybe available by 2015.

Researchers at Security Research Labs have demonstrated an ability to send a text message with a virus to a SIM card, giving them "root" access to (take over) the phone. This allows eavesdropping, tracking, making purchases, etc. They tested about a 1,000 cards, I'd guess if you have a smartphone, you're vulnerable.

Forensic researchers have developed an undetectable method for tracking GSM based cellphones using the differences in generated radio patterns. The method claims a 97% accuracy and is undetectable by the user.

Researchers at the University of Rochester have demonstrated an optical cloaking device with the ability to hide large objects (people) from visible sight (a human invisibility cloak). The demo is available on YouTube

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Here is the appropriate copyright citation and a link to the full text. articles from "Tidbits"

<http://creativecommons.org/licenses/by-nc-nd/3.0/>



A Little Computer Quiz

by Stuart Rabinowitz

The trivia and minutiae of the computer related world. The answers will appear next month or you can submit an answer sheet at the General Meeting. Good Luck.

Wikipedia seems to have taken over the world of encyclopedic research. Have a question go to Wikipedia, But what about the conflict that seems to infest some of the articles (AKA -- edit wars)?

- 1 For 2012, what english entry generated the most re-edits?
- 2 What was the most controversial set of topics world-wide?
- 3 What percent of the total edits did those topics amount to?
- 4 The top ten accounted for what percent of the total?
- 5 We've all played computer games of various types; cards, shoot-m-up, strategy, etc, but what game do assembly language programmers play to test their coding skill?

Answers to June, 2013 Quiz

1 I know that very few of us have VHS machines left, but they were popular at one time. In fact some companies used them as a platform for games. What was the first board game that got adapted to run on/with a VCR?

A Clue -- In the family room with a tape

2 When was it released?

A 1985

3 What was the most successful of the genre?

A Clue -- In the home treater with an iron

4 On a semi-personal level, CompTIA recently celebrated the 20th anniversary of the A+ exam (PC technician). How many exams were taken 20 years ago (1993)?

A 2.265 and don't know how many passed. In 2012 the number was 115,919.

5 Early in the month of May LinkedIn celebrated its 10th anniversary. What other social media company got started in 2003?

A MySpace



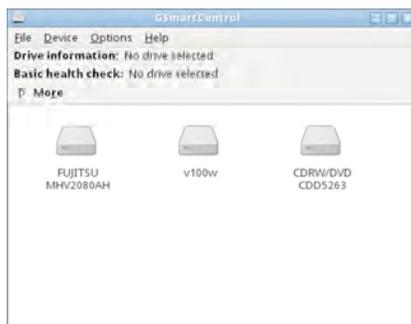


Interpreting SMART Data

By Dick Maybach, member, Brookdale Computer Users' Group, NJ
 March 2013 issue, BUG Bytes
www.bcug.com
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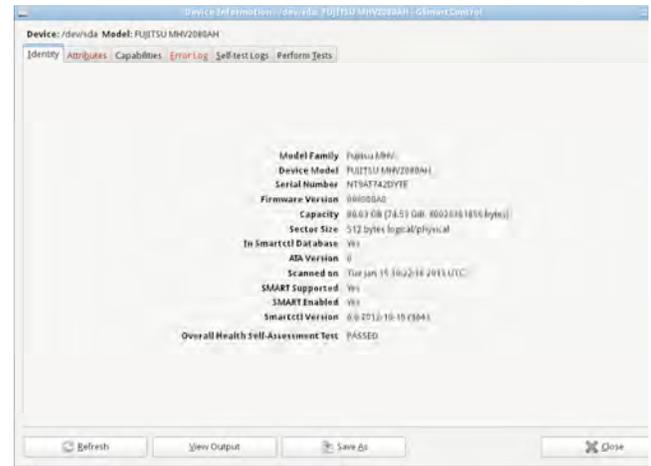
SMART (Self-Monitoring, Analysis and Reporting Technology - often written as S.M.A.R.T.) is a feature most hard drives use to provide you with indicators of their reliability. The hope is that these will predict pending failures and allow you in time to move data to another device. Unfortunately, experience shows that this is possible only about half the time. While SMART is a useful tool, it does not relax at all the importance of following a rigorous backup procedure.

Even when SMART detects a problem, it probably does not inform your operating system, largely because operating systems seldom ask. Instead, you must take the initiative by using one of the many free programs available. For this discussion, I'll use GsmartControl (<http://gsmartcontrol.berlios.de>), which is available for Linux, Mac OS X, and Windows and can check both internal and external hard disks. This program is one of the tools included in Parted Magic, a diagnostic tool I carry on a memory stick in my key case. (See my article in April 2012 issue of BCUG Bytes, available at <http://www.bcug.com>.) The subject of the tests here is a much used laptop and its occasionally abused hard drive. The first screen you see when GSmartControl starts shows the disks; see the screen-shot below. This shows three drives, a Fujitsu internal hard disk, an external Western Digital (labeled v100w) USB drive, and an internal CD-ROM drive.



Right-click on a drive icon and select View details to see what SMART knows about a drive. There isn't

much under the Identity tab of interest, although the model and serial numbers could be useful if you have a warranty issue. However, note the red labels on the Attributes and Error log tabs, which show that SMART has detected problems in this disk.



The next screen-shot shows the *Attributes* tab. Note the line highlighted in pink, indicating a problem, in this case an off-line uncorrectable error. Before we panic though, let's gather a little more information. Note first that no sectors have been reallocated, indicating that the failure wasn't permanent. (Modern disks have a reserve of unused sectors that they can substitute for those that fail, but they don't make the swap unless a sector experiences repeated errors.) Also note the total number of operating hours, almost 5400 in this case; we'll use this later. This figure applies only to this particular disk, a replacement for the original after it failed. The laptop also has a new motherboard, but replacing that didn't affect the SMART data on its hard disk.



ID	Name	Failed	Normalized value	Worst	Threshold	Raw value	Type	Updated	Flag
1	Raw Read Error Rate	never	100	100	0	0	old age	continuous	0a0000
2	Throughput Performance	never	100	100	0	22347776	old age	on-offline data collect	0a0000
3	Spin-Up Time	never	100	100	25	7	old age	pre-failure	0a0001
4	Start/Stop Count	never	80	99	0	3038	old age	continuous	0a0022
5	Reallocated Sector Count	never	100	100	24	0 (22000 0)	old age	continuous	0a0023
7	Seek Error Rate	never	100	100	0	5734	old age	continuous	0a0026
8	Seek Time Performance	never	100	100	0	0	old age	on-offline data collect	0a0028
9	Power-On Time	never	99	95	0	5200h55m27s	old age	continuous	0a0029
10	Spin-Up Retry Count	never	100	100	0	0	old age	continuous	0a0031
12	Power Cycle Count	never	100	100	0	3622	old age	continuous	0a0032
13	Head Reattach Cycle Count	never	100	100	0	249	old age	continuous	0a0033
15	Load/Unload Cycle	never	97	97	0	68800	old age	continuous	0a0035
184	Temperature (Celsius)	never	100	100	0	25 (30h0m14.147)	old age	continuous	0a003a
195	Hardware ECC Recovered	never	100	100	0	110	old age	continuous	0a003d
196	Reallocation Event Count	never	100	100	0	0 (0-6379)	old age	continuous	0a003e
197	Current Pending Sector Count	never	100	100	0	0	old age	continuous	0a003f
198	Offline Uncorrectable	never	100	100	0	0	old age	on-offline data collect	0a003b
199	UDMA CRC Error Count	never	100	100	0	0	old age	continuous	0a0036
200	Multi-Zone Error Rate	never	100	100	0	19152	old age	continuous	0a0038
201	Run Out Cancel	never	100	100	0	253278295473	old age	continuous	0a0032

If you move the cursor over an attribute in this table, you will see an explanation of its significance, as shown in the next screen-shot. Here, it says that perhaps we should be concerned, but SMART has not yet issued a warning, probably because the disk has not reallocated any sectors.

Let's look at the *Error log* tab to see what else we can learn. Note in the next screen-shot that although there have been 80 errors logged, the last one was at 1968 hours of operation, and we learned earlier that this disk has operated for nearly 5400 hours. In other terms, the last error occurred just 36 per cent into the total operating time. At this point, we relax; we needn't replace the disk, although we probably will begin pursuing our backup program with renewed enthusiasm.

Here too, moving the cursor over the high-lighted message will produce an explanation, shown in the next screen-shot.

The last tab we'll examine allows us to run tests. As the screen-shot shows, the short one takes just two minutes. A more rigorous one is available, but for this disk it will take almost an hour.

For more information on SMART, see <https://en.wikipedia.org/wiki/S.M.A.R.T>. In particular, this lists the following parameters that merit close scrutiny, but not all manufactures include all of these.

- o *Reallocated Sectors Count* - discussed above
- o *Spin Retry Count* - failed attempts to get

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Researchers Demo Ubiquitous Gestural Control via Wi-Fi Sensing

by Adam C. Engst: <ace@tidbits.com>, @adamengst
 article link: <<http://tidbits.com/e/13824>>
 2 comments

We've become accustomed to tapping and swiping our smartphones, but what if you could control devices in your home or office with gestures made from wherever you're standing? WiSee, a technology developed by University of Washington computer scientists, can recognize gestures by analyzing how specific body motions disrupt Wi-Fi signals — no special sensors or cameras are necessary. The overall effect is a lot like the Xbox Kinect, which relies on cameras and thus works only in a single room.

<<http://www.washington.edu/news/2013/06/04/wi-fi-signals-enable-gesture-recognition-throughout-entire-home/>>
 <<http://en.wikipedia.org/wiki/Kinect>>

"This is repurposing wireless signals that already exist in new ways," said lead researcher Shyam Gollakota, a UW assistant professor of computer science and engineering. "You can actually use wireless for gesture recognition without needing to deploy more sensors."

The UW researchers created a special receiver that listens to the Wi-Fi signals from all the devices in the home, and looks at the minute Doppler shifts and multi-path distortions that result from human movement within the environment. Using the MIMO (multiple-input and multiple-output) technology inherent to 802.11n, WiSee can differentiate among up to five people within the space. Since you wouldn't want random movements to be interpreted as gestures, WiSee requires a trigger gesture, after which it watches only that person, presumably until a timer elapses or someone else takes control. The trigger gesture could also serve as a password of sorts. At the moment, only a single device can be controlled at a time,

though the researchers are looking at how to control multiple devices simultaneously.

In testing in a two-bedroom apartment and an office environment, WiSee was able to identify nine whole-body gestures with an average accuracy rate of 94 percent (the accuracy rate for random guesses is only 11 percent). False positives — unintentional movements that were interpreted as gestures — happened roughly 2.5 times per hour when two gestural repetitions were required; increasing the necessary repetitions to four essentially eliminated false positives (0.07 events per hour). See "Whole-Home Gesture Recognition Using Wireless Signals" (PDF) for the full paper.

<http://wisee.cs.washington.edu/wisee_paper.pdf>

Although WiSee's proof-of-concept requires a special receiver, the researchers say that the necessary technology could be embedded in consumer-level wireless access points. Also, the paper and demo video say nothing about how WiSee controls things like music volume, television station, and the like — although such hand-waving (hah!) is understandable in a proof-of-concept, a real-world system would have to come up with a coherent method of controlling a potentially wide variety of devices and applications. That's not impossible, but it is a non-trivial problem.

<<http://www.youtube.com/watch?v=VZ7Nz942yAY>>

 read/post comments: <<http://tidbits.com/e/13824#comments>>
 tweet this article: <<http://tidbits.com/t/13824>>



Freeware

By Berry F. Phillips, Member, Computer Club of Oklahoma City
April 2013 issue, eMonitor
www.ccokc.org
editor (at) ccokc.org

During the many years that I have been writing the Computer Hysteria Column, I have been a strong advocate of using freeware. On my computer, the only commercial software is my operating system. All the rest of the software on my system is freeware. Perhaps this frugality has something to do with my Scottish ancestry or I could be considered just plain cheap! In any event,

I have done my best to give my readers some tips on freeware that I have used on my system that is exceptional. Free software is a valid choice for the home computer, office computer and Internet server uses. It is very important to remember that freeware is not cheap or an inferior option.

Freeware comes in two basic types, free software with proprietary (private) code, and open-source software. Some freeware can be functionally superior to equivalent commercial software and even of higher quality.

For example, the Firefox browser was built and developed by a large distributed workforce as opposed to a small centralized one. A large number of programmers can contribute a range of skills, and whose input is graded by peer review. These programs can be tested and developed in a wide variety of locations and situations. These community based projects would cost millions to create commercially. The bottom line, free software can be of the highest quality and should not be considered inferior to commercial products. The products they generate are among the most successful applications in the world, PHP, MySQL, Apache, and various types of Linux.

What are the best free programs that work the best? It used to be utilities. However, today there are many priceless small programs that work better than the operating systems resident applications. Free software is a viable solution in every possible area of a computer's work. The acceptability of freeware is demonstrated as the

standard server solution. Freeware is widely used in PC security situations. Free versions of popular firewalls, antivirus and antispyware programs are often accepted as first choice. How do you find the best freeware to use on your system?

For years I have recommended Gizmo's Freeware be bookmarked on your computer for fast reference when you need fully reviewed and recommended freeware. In August 2010, PC Magazine included Gizmo's Freeware in its "100 Top Websites of 2010." As of November 2011 it was rated by Alexa in the top 3000 sites in English speaking countries and in the top, 5,000 worldwide with more than 100,000 people visiting the site every day. It is also the most bookmarked site under "freeware" at most of the web's major bookmarking services.

Gizmo's Freeware is a community-based site dedicated to keep the site independent and noncommercial. The site is maintained by hundreds of volunteers. Freeware is reviewed for safety and performance by these volunteer editors with comments from users. Gizmo's best freeware list is available at the website and has been used for years to locate the best freeware. You can post on forums, respond to reviews after using the freeware, and even write review depending on your computer skills. I would strongly encourage you to bookmark and visit this website which will save you money as well as increase your computer capabilities.

<http://www.techsupportalert.com>

I will have to admit that I am "hysterical" about this website.

**What Are File Types?**

Jim Cerny, Director, Sarasota PCUG, Florida
May 2013 issue, Sarasota PC Monitor
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Did you ever try to open a file and the computer wouldn't let you? Did you ever wonder what those three or four letters mean after the dot (i.e. period) in a file name? Well, it all has to do with "file types" also known as file "formats". And the purpose of my article is to give you a good basic overview of "file types".

Why are there different "types" of files? Well, there are many different programs out there that can run on your computer. These programs are written by different people and different companies. If you use a program to create (and save) a new file you will generally need that program to open or use that file. For example, if I use the Paint program to create a drawing, and I save that file in the "My documents" folder, I will need to open the Paint program again to see that file. If I give that file to someone else, that person needs to use the Paint program on their computer to open and see my drawing. In another example, if I create a spreadsheet using the Excel program, I will need to use the Excel program to open that spreadsheet. That's not too hard to understand, is it? The problem is when you try to open a file you did not create on your computer. Suppose, for example, someone sent you a file attached to an email. You need the right program to open that file.

What are some common "file types"? Here are some common file types and the code (three or four characters after the dot in a file name) that is used for each:

.bmp - Microsoft Bitmap image (created by the Microsoft Paint program)
.doc - Microsoft Word document (2003 version)
.docx - Microsoft Word document (2010 version)
.exe - an "executable" file (i.e. a program)
.html - Hypertext Markup Language (used for creating web pages)
.jpg - Photo, picture, or drawing image
.mpg - a movie or video
.pdf - Portable document format (Microsoft WordPad program)

.ppt - Microsoft Power Point
.rtf - Rich Text Format, a basic text file
.xls - Microsoft Excel spreadsheet

And there are only a few thousand more! You can get the huge list by using Google and entering "file types" or you can learn about a particular file type by entering it in Google as well. The point here is that if a program can create a file you need the same program to open or use that file.

Now having said all that, there are programs than can open and save more than one file type. If you have a digital camera and take photos, for example, each photo is a file and each photo is probably a ".jpg" file (or file type). But there are MANY programs out there than can open these types of photo files and work with them - Picasa, FastStone Image Viewer, Windows Photo Viewer, Adobe Photoshop, and the Paint program are just a few. They can all open and work with .jpg photos.

On the other side of the coin, a program may be able to save the same file as different file types. For example, if I create a new document using the Microsoft Word program, when I save the file (using "Save as...") I can select from several file types at the bottom of the "Save as..." window. If you left-click your mouse on the small black triangle arrow at the right end of the "Save as type" box you will get a list of the different files types that Microsoft Word can use to save your document - such as "rich text format", "plain text", or other old versions of Microsoft Word.

So here are the key lessons for today:

1. If you use a program on your computer to create and save a file you will always be able to open that file again because you have the program that created it to begin with.
2. If you try to open a file that you did not create (such as a file someone sent to you via email) you may not be able to open it unless you have a program on your computer that can open that file type.
3. If you receive a file from someone that you cannot open, contact them and ask them what program they used to create that file. If you do not have that program, ask them to send the file to you in a different format - one that you can open with a

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from pg. 2

(<http://www.youtube.com/watch?v=oJb9RnAVDuE>).

Researchers at MIT have implanted false memories into the brains of mice, causing them to be fearful of an event that didn't actually occur.

The NSA has recently declassified their secrets for searching on the internet. Here's the link to the document.

http://www.nsa.gov/public_info/_files/Untangling_the_Web.pdf

Editor-in-Chief:
Stuart Rabinowitz



For Future Use

from pg. 5

the platter up to speed

- o *End-to-End error / IOEDC* - count of parity errors
- o *Command Timeout* - number of failed commands
- o *Reallocation Event Count* - number of attempts (both successful and unsuccessful) to transfer data to a reallocated sector
- o *Current Pending Sector Count* - number of sectors experiencing errors, but not yet reallocated
- o *Offline Uncorrectable* - number of uncorrectable errors (this term varies among manufacturers)
- o *Soft Read Error Rate* - off-track error count
- o *Drive Life Protection Status* - state of the drive based on its life expectancy

SMART is a useful tool for predicting failures due to aging, but it can't predict sudden catastrophes, such as you driving over your laptop with your car or your disk's electronics developing an open circuit. Keep your backups up-to-date.



from pg.8

program you do have.

4. Use Google to find out more information. Perhaps there are some free programs on the internet that will allow you to "open" and "read" a file.

Hopefully this is not too difficult to understand. It really is not the computer's fault (this time, anyway) and it's not your fault either if you cannot open a file someone else has given you. It's like someone giving you a machine made in another country which uses the metric system. You will need metric tools to work on that machine. Or maybe I can just ask my mechanic for help.



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Editor	Stuart Rabinowitz
Distribution	George Carbonell

Membership: Anyone may become a member. Dues are \$12 per year and include a one-year subscription to The Pulp as well as access to the HUGE Public Domain disk libraries. Meeting topics, times and places can be found on page 1 of this issue.

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September 2013

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8 1966 Star Trek premieres	9	10	11	12	13 Programmer Day	14
15	16	17 General Meeting 7 PM	18	19 Talk Like a Pirate Day	20	21
22 Hobbit Day	23 1962 Jetsons premieres	24	25	26	27	28
29	30					