INSIDE THIS ISSUE:

SEPTEMBER MEETINGS

OPEN's monthly meeting for September will be held on Wednesday the 3rd at 1:00 pm

New members of the club are invited to attend as we are always looking for new ideas and feedback on how the club is performing.

The next Launceston Computer Group (LCG) meeting will be at 7:15 pm on Wednesday OCTOBER 1st. No meeting in September.

LCG Committee 2014/15

President: Janet Headlam

Vice President: Ivan Turmine

Secretary: Iris Meek

Treasurer: Dennis Murray

Ass. Treasurer: Laraine Rist

PC Librarian: Vacant

Mac Librarian: Vacant

Newstream Editor: Ron Baker

<mailto:editor@lcg.org.au>

Public Officer: Judy Hall

Webmaster/Content: Tom Olsen

<mailto:webmaster@lcg.org.au>

Auditor: Ron Baker

Publicity Officer: Iris Meek

"V.I.C.T.O.R." Co-Ordinator: Robert Tierney

LCG Committee: Glenn Gilpin, Reinhard von Samorzewski,Eleanor Horder, Bruce Dineen

OPEN Committee 2014/15

O.P.E.N. Co-ordinator: Robert Tierney.
Responsible for the smooth running of the Centre on a daily basis

O.P.E.N. Chairperson: Laraine Rist.
Chair all meetings of OPEN and ensure that they run smoothly

O.P.E.N. Vice Chairperson: Robert Tierney.
Chair meeting when the Chairperson is unavailable.

O.P.E.N. Minute Secretary: Heather Loffel.
Handles all incoming and outgoing communications
Responsible for the documentation and distribution of all meeting minutes

Treasurer: Dennis Murray.
Responsible for all monies and banking

Assistant Treasurer: Laraine Rist.
Help the Treasurer where necessary.

Newsletter Editor: Dennis Murray.

Publicity Officer: Iris Meek.
Responsible for all advertising

Membership Co-ordinator: Eleanor Horder.
Keep Membership database up to date.

Co-ordinator O-learn: Eleanor Horder

Tutor Co-ordinator: Laraine Rist, Robert Tierney & Dennis Murray.
Keep regular contact with Tutors to bring ideas and concerns to meetings

Maintenance Co-ordinators: Dennis Murray.
Responsible for the maintenance and repairs to all computer equipment

"V.I.C.T.O.R." Co-ordinator: Robert Tierney.

Webmaster/Content: Tom Olsen. <mailto:webmaster@lcg.org.au>

OPEN Committee: Janet Headlam, Karia Wicks, Sandra Viney, Kay Dawson.

OPEN NEWSLETTER – September 2014

FROM THE ASSISTANT EDITOR

One of the changes that members using club computers may notice in the coming months is that our old-faithful anti-virus program VET is being uninstalled from all our computers.

Although the product has been performing satisfactorily, trying to deal with the administration side of our arrangement with the company concerned has become totally unworkable.

So from now on you may, from time to time, notice that AVG will be popping up messages on your monitors. In general terms it is OK to 'update' the program when the pop-up appears but if you have any doubts please ask a tutor for advice.

For those using the free version of AVG on your own laptops or home computers you will also need to pay attention to a couple of 'traps' that lie within the updating or upgrading process.

On several occasions members have complained that they have either lost their AVG protection or are seeing messages that inform them their coverage will run out in a few days time unless they pay for the product.

There are two main reasons for this :

(1) During the initial installation process there are options to select 'Ultimate protection' or 'Basic protection'. The former looks inviting because of all the features it offers but if you take that option you are only installing a 30-day trial of the paid version.

(2) When the AVG on-screen interface appears on your monitor there is an enticing 'Start Free Trial' button on the bottom. Click it and you convert your Free AVG to the 30-day trial version of the paid product.

Fortunately AVG does provide a method of 'downgrading' back to the free version but you need to do it through 'Programs and Features' in the Control Panel.

Dennis

HOW MUCH SPACE IS ON YOUR COMPUTER'S HARD-DRIVE?

A couple of months ago I mentioned that people should make themselves aware of the contents of external hard-drives that they use for back-ups.

Reason 1 is to confirm they really have backed-up what they intended, and **Reason 2** is to check that there is space available for the next back-up.

Although modern computers and external drives tend to have more capacity than we think we will ever use it is still advisable to know what free space is available.

The practice should also extend to the hard-drive that resides inside your tower or laptop, particularly if it is a few years old. These days it is hard to buy a new hard-drive under 500 Gigabytes but older computers may have as little as 40 GB or 80GB.

That's certainly true for a few of our club's older XP machines that only have 80 GB hard-drives (*or in practical terms about 74GB*). I was quite shocked while using OPEN10 recently when a message popped up declaring that there wasn't any free space on the hard-drive, so I set out to find out where all the space was being used.

In the end it was a false alarm, a 'glitch' in the system that righted itself after a re-boot, but it did highlight that a lot of the programs we install these days can consume a lot of disk-space. For instance, later versions of Print Artist and other graphics programs take up around 7 GB each—a far cry from the 200-odd Megabytes used by Print Artist 4.

Other known high consumers of hard-disk space are video and movie files, and high-end games. On a computer belonging to a person who I assist from time to time 'younger members' of the family had filled up the hard-drive to near bursting point through unchecked downloading of TV programs and installation of space-consuming action games.

VENUE TELEPHONE NUMBER

The club telephone is available during class hours.

***** 6343 4928 *****

Members and tutors can be contacted at the clubrooms **during class hours** by telephoning the number shown above.

Monday to Friday 10am – 3pm

Tuesday evenings 7pm—9 pm

VICTOR PHONE NUMBER 0408 174 235

Contact the Coordinator Rob Tierney for

assistance with computer problems at home

(Bookings are subject to availability of tutors.)

"THE BLUE SCREEN OF DEATH"

This is the term used when a computer suffers a major failure that prevents it from operating normally. It's called BSOD because that is exactly what you see - the screen on your monitor is bright blue with white writing that proclaims that some sort of disaster has befallen you.

Quite often the cause is the failure of a single component and in my most recent encounter with BSOD it was a faulty memory module that was the culprit. Removing one of the two memory modules (*lucky guess first time*) enabled the computer to start normally although a little slower than usual.

And please remember that although your computer may appear to be terminally ill the data on your hard-drive data may still be intact. Have an experienced person check it out!

OPEN NEWSLETTER – September 2014

GETTING TO KNOW YOUR LAPTOP'S KEYBOARD

Because the keyboards on most laptop computers usually have less room for all the keys that are found on a desktop keyboard you will often find that compromises need to be made.

One of those compromises is in setting up some of the keys to be 'multi-tasking' i.e. to use one key to perform more that one function.

And that is the operative word— **function**!

Near the bottom left of the keyboard you will probably see a key with the letters **Fn** on it. This is the **function key** and when you hold it down in conjunction with another key on your keyboard it changes the action of that key.

Most of the special function keys on any keyboard are located two rows above the QWERTYUIOP row of letters and are labelled F1 to F12. But they also may have a second symbol on each of the keys—ideally in a different colour that coincides with the colour of the **Fn** key at the bottom of the keyboard.

So what additional functions can you use with **Fn**? On the laptop beside me at the moment the F7 key has a 'hieroglyphic' showing a finger pointing at the mouse-pad.

Holding down the Fn key and tapping F7 turns the touchpad off which is very handy if you're one of these people who accidentally brush the mouse-pad while typing a letter and find that they are typing several rows above or below where they intended. (*Fn plus F7 turns it back on*)

On the Left and Right arrow keys of my laptop are two 'star symbols' - holding **Fn and tapping Right Arrow** brightens the display on the screen, while **Fn plus Left Arrow** dims the display.

Other Fn combinations can be used for increasing, decreasing or 'muting' speaker volume, sending the display to an external monitor, and even enabling part of the keyboard to be used as a numeric keypad.

Most laptops will have the functions I have mentioned but the positioning might differ between manufacturers.

Dennis

ANDROID TRAINING SESSION

Wednesday September 17 1:00 to 3:00 pm

With Bruce Dineen

Bruce will continue to provide you with the answers on how to get the best out of your Android tablets and smart-phones.

NEW POWERPOINT COURSE

Wednesday September 1st, 2014

10:00 am to 12 noon

Robert Tierney will conduct the first session of a new PowerPoint course on September 1.

PowerPoint is a handy tool for doing instructional presentations and for organising your photos into a continuous slideshow that can be used to document a trip or major event in your life.

Please note that a minimum of five (5) students will be required for this course to proceed.

MICROSOFT PUBLISHER SESSION 2

Wednesday, September 17

10:00 am to 12 noon

The object of this session will be to create a one-page publication that will include various 'objects' that are used to create a Publisher document e.g. text boxes, pictures, columns etc.

The session will cater for both styles of MS Publisher— 2007 and before, that use the traditional drop-down menus, and 2010-2013 versions that use the 'ribbon' interface.

Tutor will be Dennis Murray.

LEVEL 2 & 3 GRAPHICS

With Paint Shop Pro 7 and 8

Wednesday September 10

10:00 am to 12:00 noon

ADVANCED GRAPHICS

With Paint Shop Pro XI

Beginners

Wednesday September 24

1:00 pm to 3:00 pm

COMING UP IN OCTOBER

Introduction to Facebook

Wednesday October 1, 10:00 am to 12 noon

Rob Tierney will guide you through the pleasures and 'perils' of Facebook.

FAMILY HISTORY 2014

Wednesday September 10
1:00 pm to 3:00 pm

Wednesday September 24
10:00 am to 12:00 noon

New information is being added to our resources on an on-going basis to help you trace your family's origins. Contact the club for more information.

Classes limited to 8 people.

Join tutors Judy, Margaret G and Sandra V for these informative sessions.

OPEN Session Times

At Studioworks, 1 Pipeworks Rd, L'ton

Standard Sessions $6.00

[Some special tutorial materials may incur additional charges]

Monday	10 am –12	General & Beginners
	1 pm – 3 pm	**Basics and Beyond**
	3:30 pm — 5:30 pm	**Beginners Class**
Tuesday	10 am –12	O-Learn & Beginners [all day]
	1 pm – 3 pm	**Mac [all day]**
	7 pm—9 pm	Basics (Night Class)
Wednesday		Special sessions or Meetings
		As for mornings (see rosters)
Thursday	10 am –12	General & Beginners
	1 pm – 3 pm	General &
Friday	10 am –12	General & Beginners
	1 pm – 3 pm	Beginners Class

OPEN NEWSLETTER – September 2014

SPECIAL WEDNESDAY SESSIONS

Please register on the sheets – numbers may be limited

Date			
September 3	10 am—12 noon	Microsoft PowerPoint	Robert Tierney will conduct the first session of a new course on how use Microsoft's presentation program
	1 pm onwards	**OPEN Monthly Meeting**	**Presentation of Financial Reports and General Business.**
September 10	**No LCG Meeting in September**	**Launceston Computer Group Monthly Meeting**	
	10 am—12 noon	Level 2 and 3 Graphics Class	Graphics using Paint Shop Pro 7 and 8
	1 pm—3.00 pm	**Family History**	**Judy, Margaret G and the team will help you trace your ancestors.**
September 17	10 am—12 noon	Microsoft Publisher	Catering for all versions of Publisher the object will be to create a one-page document with headings, text-boxes and pictures.
	1 pm—3.00 pm	**Android Tutorial Session**	**More from Bruce Dineen on how to keep your Android tablet or smart-phone under control.**
September 24	10 am—12 noon	Family History	Use our extensive range of resources or use Ancestry.com on-line to research your Family History.
	1 pm—3.00 pm	**Advanced Graphics PSP XI**	**This course enable users at all levels to learn Graphics skills.**

SPECIAL EVENT COMING UP IN OCTOBER : SENIORS WEEK will be held from Monday, October 13, to Friday, October 17.

TIDY UP YOUR DOWNLOADS FOLDER

I work on other people's computers on a fairly regular basis and I am often surprised by what I find in their Downloads folders. When you are looking for a piece of software that you've downloaded in order to solve a problem it can be a little annoying when you have to hunt for it among scores, or even hundreds, of unorganised files.

In my opinion the Downloads folder should only be a temporary destination for files that are 'downloaded' from the Internet, and not a permanent home for software installation files, e-mail attachments and other documents emanating from 'Cyberspace'.

One of the major 'cloggers' of the Downloads folders that I see are multiple copies of software installation files. It is at this point that I would remind members and computer users in general that downloading software rarely results in a program being automatically installed. To achieve that you need to double-click the downloaded (*zipped or executable*) file to set the installation process in motion.

Some Internet browsers (*Internet Explorer and Safari*) have a 'Save As' option that allows you to direct the file you wish to download directly into an appropriate folder e.g. a photo of a new grandchild could be directed to the Pictures>Grandkids Photos folder, while a PowerPoint slideshow could be saved in a Videos>Slideshows folder.

For people who use Mozilla Firefox as their preferred Internet browser you will find that Firefox's default setting directs all downloaded files to the Downloads folder. From that point it is up to you to 'drag and drop' those files into more appropriate locations.

As a guide you could have an **Already Installed** folder for software that you have installed, photos attached from emails could be directed to folders in the **Pictures Library,** and newsletters could saved in appropriate folders within the **Documents Library.**

And in those instances where you have multiple copies of software installation files the most appropriate place to direct them is to the Recycle Bin.

Dennis

WILL THE REAL MOVIE MAKER STAND UP?

Following on from an article that appeared a few months ago I would like to reinforce the point that computer users should ensure that great care is taken before installing software from the Internet.

In a recent instance a club computer had a 'Movie Maker' program installed on it but is wasn't the legitimate Windows Movie Maker from Microsoft. Let's just say that the unintended by-products of the installation were 'interesting'.

Some months ago I re-configured a laptop computer for a member whose laptop had suffered a hard-disk failure and in reinstalling the software the member requested that a program named Orbit Downloader should be included.

During the installation process I had to un-tick options **eleven unwanted programs.**

Sometime later I decided that the Orbit Downloader would make a great example for a PowerPoint demonstration of the perils that computer users face when installing software. I copied it on to one of my flash-drives and I now find that every time I connect that flash-drive to a computer the anti-virus software immediately flags it as a 'nasty'. Would YOU still continue to use the program?

What steps can be taken to prevent the infiltration of PUPs (*potentially unsafe programs*) on to your computer?

Make sure that the download site is reputable, and if you aren't sure please ask an experienced tutor.

Don't fall for the invitations to install 'miracle programs' that promise to speed up your computer.

Where possible use proven software that has already been downloaded to our server-computer, or which is available from other reputable sources.

Be aware that sometimes just visiting certain types of website can result in the installation of unwanted toolbars and spyware that can slow down your computer.

Do regular scans with 'supplementary' security programs.

PARTITIONING—WHAT IS IT ABOUT?

Partitioning is a procedure that enables the hard-drive inside a computer to be 'electronically divided' into two or more sections. So even though your computer has only one physical hard-drive installed you may find that your Windows Explorer screen shows that you have a C:drive and a D:drive (*or some other letter in certain cases*).

Perhaps the most frequent users of partitioning are manufacturers of laptop computers. Many of them create a 'Recovery Partition' where they store an image of your computer's operating system. This partition is a way of re-installing your system should something serious go amiss with your OS. **You should not make any changes to this partition.**

However, it should be remembered that when a System Recovery is performed your computer reverts to the factory settings. **Your personal files and programs WILL NOT BE RESTORED!**

Some people use a second partition (e.g. a D-drive) as the storage area for their documents and photos etc. So if something was to go wrong with the operating system on the C:drive there is a good chance that the information on the D:drive will still be intact.

With the extremely high-capacity hard-drives fitted to current computers disk fragmentation is not a common cause of 'computer slow-down', but I recently encountered a situation where a computer with a 250 GB hard drive could not be defragmented because several large TV video files had been downloaded on to the drive.

Defragmentation relies on 'chunks' of data being moved into free space elsewhere on the hard-drive. When some of those 'chunks' are several Gigabytes in size it is hard to find free space to move them to.

A more appropriate way to store large video files would be on a separate partition that didn't have to be 'defragged'.

Dennis

The Windows Maintenance Challenge: Part 1

By Fred Langa

Can commercial software maintain your PC better than Windows' built-in and free tools?

This article is the first in a series that will help you determine which tools — free or paid — yield the best results on your specific PC.

Personal-computer salvation? Or snake oil? You've undoubtedly seen the ads; they state something similar to: "This software is guaranteed to make your PC run like new! Download it for free!"

The ads often promise a fix for every PC affliction: "It's the only software that instantly speeds up your PC, prevents crashes, fixes system errors, boots Windows faster, deletes malware and junk files …" and so on, and so on.

For many PC users, that sounds great. Simply click a button and everything gets magically fixed. That's certainly easier than trying to use all those tools already built into Windows — or the myriad of specialized, third-party maintenance tools.

But in truth, there never has been one application that fixes all Windows problems — and it's doubtful there ever will be. Windows is simply too complex, and the range of PC configurations is virtually infinite. A suite of tools might do the trick, but then there's the question of free versus paid.

Windows has built-in tools for nearly any problem — and they, along with many third-party tools, are completely free. Most of the do-it-all maintenance applications are paid. (These commercial products often offer a free scan; but to fix any system errors they might find, you have to accept a paid subscription.)

Naturally, you'd assume that commercial maintenance tools offer significantly better and easier troubleshooting than do Windows' free tools. But do they? Clearly, this question calls for a test.

Using a relatively simple before/after comparison In outline form, the test plan for this series of articles is simple:

Take a mainstream, real-life PC and get it running as well as possible, using only Windows' built-in maintenance tools and conventional maintenance techniques. Once the test PC is thoroughly cleaned, measure maintenance-related variables such as startup/shutdown speed, free disk space, number of reported Windows errors, and so forth. Make a system image of the now clean, baseline setup. One by one, run several full-blown, commercial maintenance tools on a freshly restored system image of the baseline PC. That'll give each commercial tool exactly the same starting conditions. Note what each commercial tool finds, and see whether it improved the system's overall performance. Also note any nonquantifiable, subjective elements of each tool's operation.

The results will then show whether the commercial maintenance tools can improve the test PC beyond what Windows' built-in and free tools can do.

A comparison of techniques, not products At this point, you might think this article is a standard software review. But it's emphatically not!

There are numerous reviews of commercial PC-maintenance products on the Web. But the results of those reviews all have an important shortcoming: they apply only to the machine used to test the software. No matter which PC configuration I chose for maintenance tests, it wouldn't be exactly like yours. In fact, it might not even be close.

Ultimately, the purpose of this Maintenance Challenge is not to find the best maintenance tool for the test PC. The goal is to help you find the tool or tools that work best with your specific combination of hardware, software, skills, and personal preferences.

To that end, these articles have an optional hands-on component that lets you work along with me. It'll let you safely produce your own custom test results.

For example, in this article I'll discuss how I used Windows' built-in maintenance tools to create a clean test system that's lean, secure, and stable. (Links to previous Windows Secrets articles will tell you how to properly use the tools.)

If you wish, you can go hands-on, giving your PC the same thorough tune-up I gave the test PC. (You can do it even as you read this article.) Or you can simply read the articles, using my results as a general guide to free and commercial maintenance tools and techniques.

That said, if you do choose the hands-on option for this article — and I hope you will — your PC will almost surely end up leaner, cleaner, more secure, and closer to error-free than it is now. That's a worthy goal in itself!

Follow the Maintenance Challenge through to its conclusion, and you should have a set of custom test results that apply to your PC. You'll definitely know whether free or commercial maintenance tools are the right fit for your unique mix of hardware, software, skill level, and personal preferences.

Let's get started!

Building the base system with a thorough tune-up To clean the test PC, I used — and I suggest you use — the maintenance tools and techniques discussed in two Windows Secrets articles: the Jan. 10, 2013, Top Story , "Let your PC start the new year right!," and the Jan. 16 Top Story "Keep a healthy PC: A routine-maintenance guide."

A complete PC-maintenance process is laid out in those articles, along with numerous links you can follow for additional how-to information. The tools and techniques discussed work on all current Windows versions. Most even work on XP!

Allow some time for the tune-up. Depending on when and how much maintenance you've previously done on your system, the complete process can take anywhere from a few minutes to several hours. (Some tasks, such as defragging and malware-scanning, will take some time to complete, but you don't have to stay at your PC.)

Once all the maintenance tasks are completed, we're ready to establish some baseline measurements.

Quantifying the maintenance results When comparing most things, it's almost always useful to have some measurements that

are objective and repeatable. Numbers might not tell the whole story, but they can tell a very important part of it.

For example, the main reason to remove junk files is to increase disk space — and the best measurement for junk-file removal is whether you have more space and how much. Likewise, the only way to know whether a maintenance tool has improved startup and shutdown times is to time them.

For this series, I took my initial, baseline measurements immediately after completing the test-system's tune-up. Most of the recommended measurements are a cinch to do and take only a few minutes.

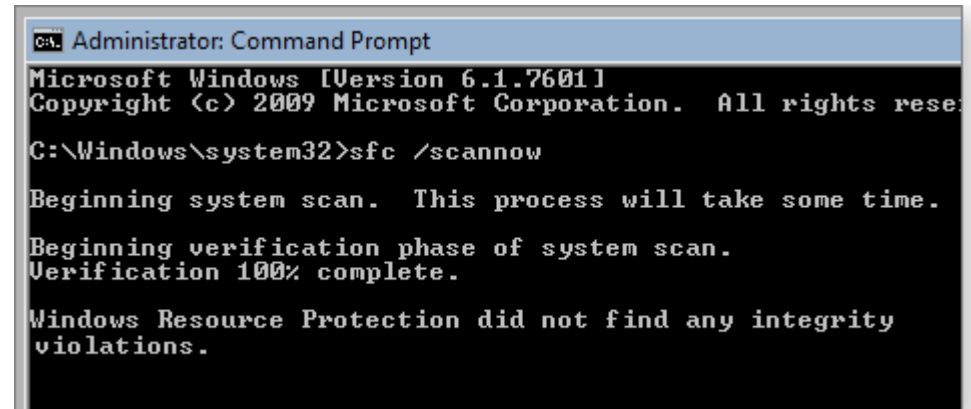Here's what I measured, and how you can perform the same measurements:

Disk usage: To determine exactly how much disk space your setup is using, in Windows/File Explorer, right-click the drive of interest (typically, C:) and select Properties. In the Properties dialog box, record the numbers following Used space and Free space. You can copy them to a Notepad file, but it'll be safer (and give slightly more accurate test results) to put them on paper.

You also can get a count of the number of files and folders on your drive. Click the C:\ folder and group-select (select all; CTRL + A) its contents. Right-click on the selected items and select Properties. Properties will list the total number of files and folders in the selection. (You'll notice that the total size of the files in this files-and-folders Properties box is different from that given by the overall disk size Properties mentioned above.

That's because the files-and-folder size count skips some hidden files and folders plus files the user doesn't have permission to access. In contrast, the overall disk space count includes everything. I prefer to use the overall disk-space count, but you are free to use either. Just stick with one or the other.)

Registry size: Some commercial tools claim to not just correct Registry errors but also shrink (compress) the Registry for greater speed. You can quantify the size of your Registry by locating all Registry-related files (NTUSER.dat and so forth) and adding up their sizes. You also can open regedit.exe and export (File/Export) the full, expanded contents of the Registry. Use the .reg file as another basis for comparison.

Operating system file integrity: To make sure all operating system files are valid and uncorrupted, run Windows' built-in System File Checker (sfc.exe; more info). Let the tool, shown in Figure 1, try to correct any problems it uncovers.


```
Administrator: Command Prompt

Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation.  All rights rese

C:\Windows\system32>sfc /scannow

Beginning system scan.  This process will take some time.

Beginning verification phase of system scan.
Verification 100% complete.

Windows Resource Protection did not find any integrity
violations.
```

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Figure 1. Windows' built-in System File Checker can verify the integrity of all operating-system files; and attempt to correct problems. (Shown: A clean bill of health.)

Rerun sfc.exe (ideally, several times if it doesn't give a clean bill of health) and then record the final number of OS integrity violations that remain uncorrected. There should be none, but record whatever final number you're given.

System stability and other errors: Windows' built-in Reliability Monitor (Figure 2) tracks and displays information on every crash, hang, and hiccup generated by Windows and installed applications.
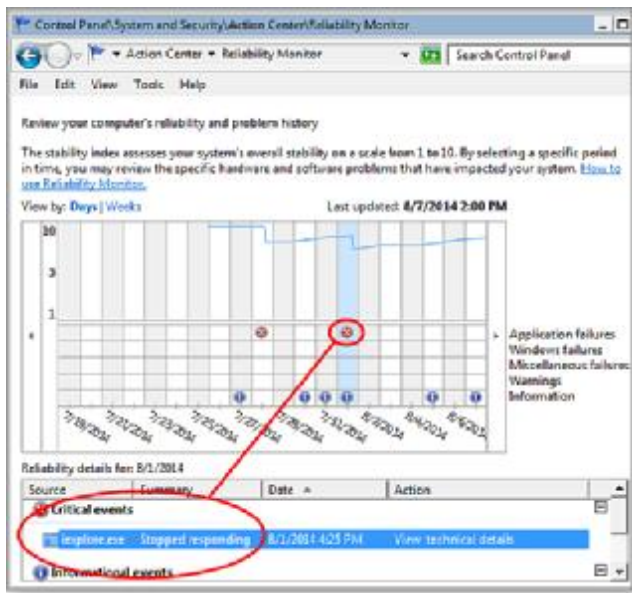

Figure 2. Windows' built-in Reliability Monitor records the what/where/when of system errors. Here, it documents an Internet Explorer crash.

Many reported "errors" are actually minor, transient events that require no remediation. But if you find serious trouble — it's a judgment call — Reliability Monitor's Action column and Check for solution option might provide solutions.

When you're done, make note of how many significant, unremediated errors remain — ideally, there should be none.

To access Reliability Monitor:

Win7/8: Open Control Panel in Category view. Under System and Security, click Review your computer's status and then click Maintenance. Next, under Check for solutions to problem reports, click View reliability history. Vista: Click Start, type "perfmon" into the search box, and then press Enter. In the Reliability and Performance Monitor window's left-hand navigation pane, click down through Reliability and Performance/Monitoring Tools/Reliability Monitor.

For more information on using Reliability Monitor:

"How to use Reliability Monitor" – Microsoft Windows article "Using Reliability Monitor" – TechNet article Startup/shutdown speed: It takes a few steps to quantify startup/shutdown performance, but it isn't hard. In fact, all you need is anything that measures seconds.

For startup, carefully time how long your system takes to go from power-on to a stable desktop. Don't run any applications;

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immediately measure shutdown time by starting the clock when you click Shut down and stopping the clock at lights-out.

That method works, but I prefer to remove the effects of human reflexes from the results. Instead, I used two very simple batch files to automatically record precise start and stop times.

If you'd like to try automatic start/stop timing, here's how to create the batch files:

Open Notepad and enter (or copy/paste) the following two lines: echo Restart began at %time% >> "C:\Users\{username}\Desktop\timelog.txt"

shutdown -f -r -t 00 Replace {username} with your Windows sign-in. For example, my path would be: C:\Users\Fred\Desktop\timelog.txt. Save the file to the desktop and name it timedrestart.bat. Now create the second batch file. Open Notepad again and enter (copy/paste) the following two lines: echo Restart ended at %time% >> "C:\Users\{username}\Desktop\timelog.txt"

exit Again, replace {username} with your own Windows user name. Name this second file bootdone.bat and save it to your PC's Startup folder, typically located in the following path. (Again, do not put the first batch file — timedrestart.bat — in the start folder.) C:\Users\{username}\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\Startup For the final time, replace {username} with your own. (You might have to unhide Windows' hidden files to see AppData.)

In practice, here's how you'd use the files. Note: This assumes you're not using a Windows sign-in password (more on that below).

With your system freshly maintained, fully booted, operating normally, and with no other software running, click timedrestart.bat in Windows/File Explorer. That file will write the current time to a timelog.txt file on your desktop and then trigger an immediate forced warm restart.

When the reboot completes, bootdone.bat (in the Startup folder) will automatically record the finish time in the same timelog.txt file.

Your resulting timelog.txt file will contain pairs of lines, like these:

Restart began at 18:39:48.70 Restart ended at 18:41:17.67 Doing a little math (or using a tool such as the free online Time Calculator) will quickly reveal the exact amount of time this full shutdown/restart cycle took. For example, in the above example, the time is 1 minute and 29 seconds (rounded to the nearest second).

Whether you're using the manual or automatic timing methods, you should perform several full restart cycles, back to back. Average and save the results with the other metrics you're gathering.

Note: For maximum accuracy, ensure that no unnecessary external factors interfere with the boot process. For example, I temporarily configured my test PC (a Win7 box) to automatically sign in to Windows, avoiding the usual sign-in

(Continued from page 11)

pause during the reboot process (more info). I also made sure there was nothing in the optical drive and that no USB drives were plugged in.

Other items: If there are other maintenance tasks or optimizations that you wish to perform, now's the time. Likewise, make note of any additional maintenance metrics that are important to you.

A clean, secure, error-free base system To review: Based on all the major maintenance tasks referenced above, here's what's been done so far:
Pre-maintenance system image/backup made Junk/temp files cleaned Registry cleaned System scanned and verified as malware-free Firewall operation verified Drives checked for logical errors and any errors corrected Drives defragged Operating system and browser(s) fully updated Other software fully updated with all relevant security patches BIOS and drivers updated, if necessary Operating System files' integrity verified System errors checked; significant errors remediated Post-maintenance system image/backup made Baseline maintenance metrics recorded and saved, off-system It's an impressive list, and you might be perfectly happy with the way your system is right now. If so, great!
But maybe you'd get even better results from a different tool. Next week, I'll show you what happens when I ran several different commercial maintenance tools on the same PC setup; you'll see which tools — commercial or free — did a better job.

And again: If you choose the hands-on option, you'll produce customized test results that are specific to your own unique mix of hardware, software, skill level, and preference.
You'll know, definitively, whether free or commercial maintenance tools are the best fit for you

Top Story The Windows Maintenance Challenge: Part 2 By Fred Langa

Can commercial, third-party maintenance software outperform Windows' built-in, free tools?

This is the conclusion of a two-part series that will help you determine which PC maintenance tools — free or paid — yield the best results on your specific system.

PC maintenance suites: Free versus paid This two-part series came about because of an ongoing debate over PC scan-and-repair tools. We've all seen the ads for paid Windows-maintenance tools. They typically claim to correct slowdowns, improve system-startup times, prevent crashes, fix all sorts of hidden system errors, and more.

But do they really deliver as advertised? Do they do more than the free tools built into Windows? Over the years, numerous tech publications have attempted to answer those questions. But, as I noted in Part 1 of this series, all those reviews have had one major flaw: the test results on one or two systems can't be applied generally to most Windows PCs. Windows

configurations vary enormously, and what works (or doesn't work) on one setup might not work (or work just fine) on another setup.

So the Windows Maintenance Challenge takes a different tack to answer the long-standing free-versus-paid question — it shows you how to test maintenance tools yourself and find what works best for your specific Windows configuration.

Part 1 of this series discussed how to build and check a thoroughly cleaned, baseline system using the free tools that come with Windows. Part 2 will tell you how to run commercial Windows-maintenance tools on the baseline system and find out whether they make any significant improvements over what you get for free.

As with Part 1, this article is designed to let you safely work along with me. You don't have to test the same group of paid products discussed below — you can use the following steps to test whatever maintenance tools you wish. When you're done, you'll know which tool yields the best results for you.

Of course, you can also simply read these articles and use my results as a general guide to free and commercial maintenance tools and techniques. You don't have to do anything to your PC if you don't want to!

But by participating, you're sure to have a cleaner and more secure system. Why not give it a try?

Ready? Let's begin.

Some final steps before testing paid products Again, today's article builds on the information, procedures, and preparations discussed in Part 1. To get up to speed on the topic, or to verify that your PC is ready for today's tests, please review the Aug. 14 Top Story , "The Windows Maintenance Challenge: Part 1."

(Note: Before starting this process, you'll want to be comfortable with creating and restoring complete system backups. And you'll want to ensure that your backup/restore system really works.)

With the preparatory tasks in Part 1 done, I was ready to start testing Windows-maintenance tools. Here's how I ran the tests — and how you can, too.

I began by making a complete, up-to-the-minute system image. I prefer system imaging, but you can use any backup tool you're comfortable with, as long as it can completely restore your entire system from scratch.

This system image is in addition to any other system image you've already made. Its only function is to create an initial, standardized, baseline system for each maintenance tool tested.

While the imaging was taking place, I used that time to organize some of the data gathered in Part 1 into a simple table format.

Your table can include whatever metrics you want to track.

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Those shown below in Table 1 are just examples — a possible starting point.

Baseline System				
Restart (min:sec)	File size (C:)	Registry size (export)	Stability issues	Security issues
1:31	56.1GB	19MB (223MB)	0	0

Table 1. The baseline system's recorded stats. The stability and security results are based on Windows' built-in Reliability Monitor and represent a clean system.

- Here's why I picked these specific examples.

Restart: Some commercial maintenance tools promise to automatically improve boot times. Tracking the length of a shutdown/restart cycle lets you examine that claim. File size: Tracking the aggregate size of all files on C: will let you verify claims of superior junk-file removal. Registry size: Some tools boast of enhanced Registry cleaning and compression. Noting the original and final Registry sizes can help gauge that claim. Stability and security issues: Assuming that Windows' built-in Reliability Monitor can find any true system errors, the baseline configuration has no known defects. (Nearly every PC has minor errors that don't affect system performance or reliability.) That "zero-defect" condition provides the baseline for paid maintenance tools that claim to discover hidden stability or security issues.

Again, these are just a few examples. Your table can include any measurements you consider important.

As with the testing metrics, you can test whatever maintenance tools you wish. I picked Reimage, Iolo's System Mechanic, and PC Pitstop's PC Matic mostly because of their high visibility — and because they offer either free diagnostic tools or money-back guarantees on the full commercial tool.

Note. Keep in mind that these products were tested on pre-cleaned baseline systems. After Part 1 was published, a reader asked why I hadn't used a system known to have issues. The short answer: there's no way to create a representative "dirty" Windows setup — the results would have been meaningless. And using a known-good setup provided information on the biggest problem with many automated Windows-maintenance tools: false positives. (More on that below.)

By luck of the draw, Reimage was up first.

Reimage: An automated maintenance system As with many commercial maintenance tools, Reimage offers a free diagnostic scan of your system. But if you want the software to make repairs, you have to pay. I won't post a long laundry list of Reimage's features and options; that's all available on its homepage.

Using Reimage starts with downloading and running the Reimage Repair Setup Wizard software. Once the installation

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process finishes, the program immediately begins scanning your system. Reimage first compiles and displays a system profile and then provides a reliability report based on information stored by Windows. It then scans for malware.

Once the scan is done, Reimage displays a relatively simple summary report. On my baseline system (freshly restored from the cleaned baseline image), Reimage reported 10 "stability issues" and one "security threat." Surprisingly, it assessed the test PC's Windows Damage Severity as "high" (see Figure 1). Remember, it was scanning a system that had already had a thorough cleaning.

Figure 1. Reimage's free report on my clean baseline system's condition. It rated system damage as high.

The Security Threat was alarming. Reimage reported that a Windows system file contained a virus (see Figure 2).

If true, that meant the operating system itself was compromised!

Figure 2. Reimage's description of an infected Windows file I was dubious about the supposed infection. Before the baseline image was created, the system had been scanned and found to be 100 percent clean. And Reimage was installed and run

immediately after I restored the image. There should have been no opportunity to become infected. Moreover the "infected" file — searchfilterhost.exe — looked okay; its file properties appeared identical in every way to the same file on other Windows systems.

- Was there a virus? To find out, I scanned searchfilterhost.exe using six different and well-regarded anti-malware tools available online or built into Windows:

VirusTotal VirSCAN.org ESET's Online Scanner Malwarebytes Anti-Malware Windows' built-in System File Checker (more info) Microsoft Security Essentials Because none of the six scans flagged the "infected" file, I concluded that Reimage's malware report was a flagrant false positive.

Next, I looked at the 10 reported "stability issues" and cross-referenced Reimage's reports with incidents recorded by Windows' built-in Reliability Monitor (see Part 1).

None of the reported "stability issues" was serious; none required action or attention. For example, at some point during system prep, I'd started a backup but then decided to do a full system image. So I manually cancelled the backup.

Reimage apparently dug this harmless "backup did not complete" datum out of Windows' internal reliability logs and reported it as "Windows Backup has crashed." Reimage also offered to "fix the problem." Given that I was the problem (I had aborted the backup), I wondered what Reimage's "fix" would be.

The more I looked at the 10 "security issues," the more convinced I became that they were false positives, mistakes, or over reactions to routine, trivial, and harmless system events.

If I were using Reimage to clean my day-to-day PC, I probably would have bailed out then and there. As far as I could tell, Reimage wasn't flagging anything substantive, and the seemingly erroneous or exaggerated "issues" didn't inspire my confidence.

But for the Maintenance Challenge to be thorough, I needed to complete my test of Reimage. I ordered a Reimage license (U.S. $70 per year) and authorized the software to start repairs.

Surprisingly, the repair process took about two hours to complete, including a reboot in the middle. Reimage's work was mostly opaque, providing only the vaguest on-screen indication (e.g., "Repair damage") of what it was fixing.

But the real surprise came after the reboot. Reimage spent a very long time downloading many dozens — possibly hundreds — of Windows Update files. I have no idea why; the baseline system was already 100 percent up to date.

When Reimage finished its work, it presented a summary stating that my system had been "missing" three percent of its operating system files — and that another 12 percent were "damaged or incomplete." I don't know what that means, and Reimage provided no additional details.

But I do know that Windows' own System File Checker didn't

notice any missing or damaged system files, and Windows Update reported that no updates were needed. Also, the baseline system was derived from a machine that had been working fine for about four years.

I could only conclude that Reimage's file-replacement activity was unnecessary.

With Reimage's scan and repair done, I next took some sample measurements, shown in Table 2.

Comparative results					
	Restart (min:sec)	File size (C:)	Registry size (export)	Stability issues	Security issues
Baseline System	1:31	56.1GB	19MB (223MB)	0	0
Reimage	1:39	55.4GB	18.6 MB (219MB)	10*	1*

*Reported

Table 2. Reimage's scan metrics varied only slightly from those of the baseline system.

As you can see from the numbers, the clean/repair process made no significant changes to the baseline setup. Boot-up time got marginally longer, while the file and Registry sizes became a bit smaller. Reimage's junk-file and Registry processing might be slightly more effective than Windows' free tools.

It was those stability and security numbers that really stood out. While playing up minor system hiccups might be a minor transgression, incorrectly flagging a system file as infected is, to me, unforgivable. At best, it suggests some faulty analysis by Reimage.

During testing, I jotted down notes about the experience of using Reimage, especially the non-numeric factors: things such as ease of use, speed, interface, and so on.

My notes mostly tell a story of overly aggressive repairs — such as its apparent replacement of system files. For example, after my first run with Reimage, the test system wouldn't boot from the hard drive or via USB. My guess is that Reimage did something fatal to system drivers and/or to the boot records. (Again, Reimage provided few details about its repair actions and processes.)

By booting from a DVD, I was eventually able to restore the baseline system image and get my PC working again. I then tried to run Reimage again to finish the tests. But my bought-and-paid-for unlock key wouldn't work. Apparently, any major change to a system — a system restore, restoring a backup or image, upgrading Windows, or reinstalling Reimage itself — invalidates the unlock key.

I acquired a new key from Reimage tech support, but that took four days, three phone calls, three trouble tickets, and having a Reimage support tech crawl around in the test PC via remote access. I did finally get Reimage to work again, but it was a huge hassle.

So on my test PC, Reimage was effectively a bust.

Of course, you might have an entirely different experience. As is the point of this series, you should do your own tests, record your own measurements and experiences, and draw your own conclusions.

If Reimage (or any other tool in these tests) works for you, then great!

However, make note of any serial numbers, unlock keys, or similar information related to your maintenance-tool purchase. You'll probably need that info if you reinstall the program, ask for tech support, or request a refund.

On the other hand, should you decide not to keep Reimage — or any other commercial Windows-maintenance application — don't bother uninstalling it. These tools make far too many changes to your system. Uninstalling them will not put everything back exactly the way it was. Restore your pre-test system image and go on to the next test.

(Note: I'll go through the next two products much faster, focusing primarily on how they differed from the Reimage tests.)

Iolo's System Checkup/System Mechanic Iolo offers the free System Checkup (site) and the $40 System Mechanic (site).

The two tools work in series; you scan with the free tool to uncover problems and then, if you wish, pay for the full version of the software to make fixes.

For my Maintenance Challenge data points, I ran both tools, one after the other, on a freshly restored baseline system.

As Table 3 shows, System Mechanic trimmed a few seconds off the test systems' restart time, and it also squeezed a few megabytes out of the Windows Registry. But as with Reimage, the improvements were small.

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	Restart (min:sec)	File size (C:)	Registry size (export)	Stability issues	Security issues
Baseline System	1:31	56.1GB	19MB (223MB)	0	0
Reimage	1:39	55.4GB	18.6 MB (219MB)	10*	1*
System Mechanic	1:26	56.1GB	17.5MB (223MB)	10*	3*

*Reported

Table 3. Iolo's System Mechanic produced slightly better boot times and a modestly smaller Registry.

On my system, when compared to Windows' free, built-in tools, System Mechanic wasn't meaningfully better at reducing junk files and saving space — the test system's overall file size was unchanged.

Like Reimage, System Mechanic also seemed to suffer from over-reporting. For example, it said it had found "10 core data conflicts within the Windows communications infrastructure." Because there were no additional details offered, there's no way to know what that really means.

Because the test system was working fine and Windows' own

tools reported no known defects, I assume the "core data conflicts" were the same sort of seemingly minor issues that Reimage reported — i.e., transient conditions and unimportant errors that really require no attention or repair.

System Mechanic was much faster than Reimage, completing its scan-and-clean tasks in about 25 minutes. System Mechanic's license key is a lot more user-friendly, too. After restoring a system image on my test system, I successfully used the unlock key to reinstall System Mechanic.

As with Reimage, do your own tests and draw your own conclusions.

PC Pitstop's comprehensive PC Matic PC Matic is also a two-part system, with a free diagnostic component and a paid-for ($50 per year) repair component. Unusually comprehensive, the program even includes full-time antivirus protection. See PC Pitstop's site for more info, a full features list, and download links.

Once again, I created a fresh copy of the baseline setup and immediately ran PC Matic's free diagnostics. It completed the process quickly — just a few minutes — and produced a list of 25 items it said needed repair or improvement. It also listed one suggested "security adjustment." To its credit, PC Matic provides real information on its findings; it also tells you in advance what steps it will to take if you buy the full version. This is a refreshing change from the "black box" tools that reveal almost

nothing about what they're doing.

When I reviewed its list of fixes, I saw that PC Matic had recommended replacing several drivers on my system (see Figure 3).
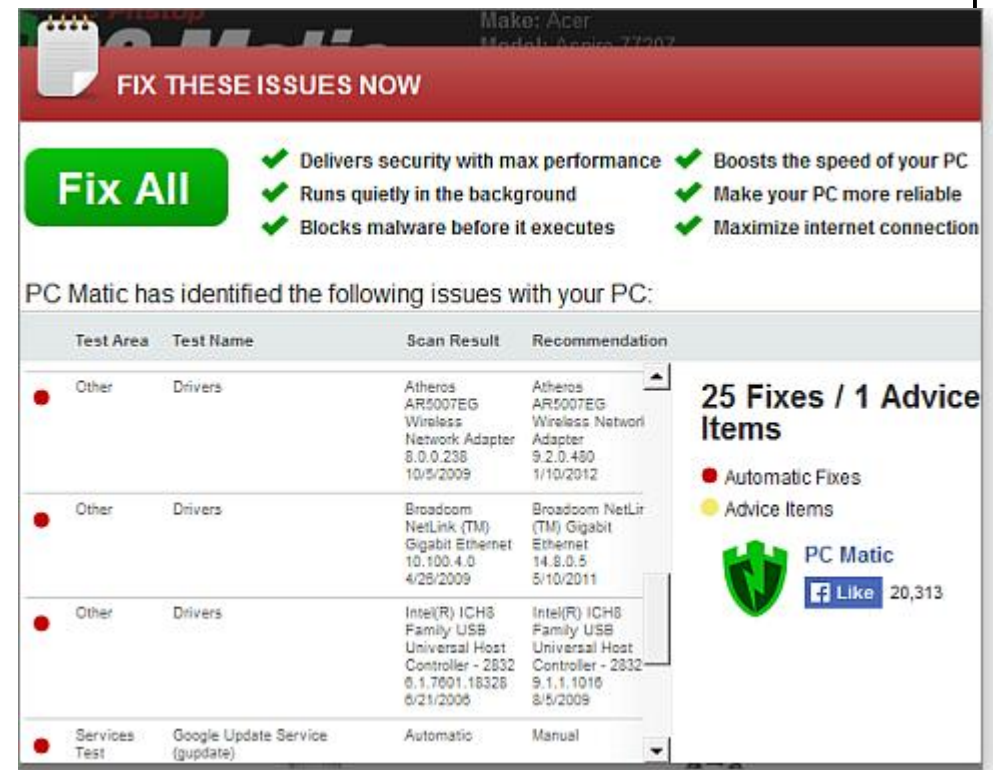

Figure 3. PC Matic is nicely transparent about what it has found and what it plans to do.

But if your hardware is working properly, there's no reason to replace drivers. In fact, the act of needlessly churning drivers is an excellent way to screw up a perfectly good system. (See the

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Feb. 21, 2013, LangaList Plus column , "How and when to update your system's drivers.")

Because the test system's hardware was working fine, there was no need to replace drivers. Deciding not to tempt fate — and possibly destabilize the test system — I opted not to buy and run the repair half of PC Matic. (Replacing the drivers was simply not acceptable to me, so I also took a pass on the other proposed fixes.")

But again, you'll likely get different results on your test system. Run PC Matic and decide for yourself.

Calling the shot: Only your results matter Once you've tested a few paid maintenance programs and analyzed the results, it should be easy to select the best tool for your Windows system. You can also decide what's most important to you: ease of use, features, information provided, and so forth.

Table 4 highlights the results of my tests. As you can readily see, there are no significant improvements in system start times, overall file size, or Registry size. Again, I tested an already clean system — according to Windows' built-in maintenance tools. These numbers might be quite different if you have a poorly maintained PC — or they might not. Every system is unique.

Comparative results	Restart (min:sec)	File size (C:)	Registry size (export)	Stability issues	Security issues
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System Mechanic	1:26	56.1GB	17.5MB (223MB)	10*	3*
PC Matic	N/A	N/A	N/A	25*	4*

*Reported

Table 4. The overall results were remarkably close and consistent. The best results are highlighted in green, but the differences are very small.

It's the subjective areas where the paid tools come into question. In my tests, there were few positives and some glaring negatives — such as Reimage's false-positive malware flagging, its boot failure, and licensing hassles. For me, the best choice is to stick with Windows' built-in and free tools. Using the paid products would not only cost money I don't need to spend, I might end up wasting time researching whether a reported problem really needs fixing. And in the worst scenario, the paid product might crash my system.

But that's me. By doing your own tests, you'll know whether any of the paid products significantly improves your system's performance, security, and stability. It might be tempting to use a commercial product to scan your system for free and then use Windows' built-in tools to fix any found problems. That might

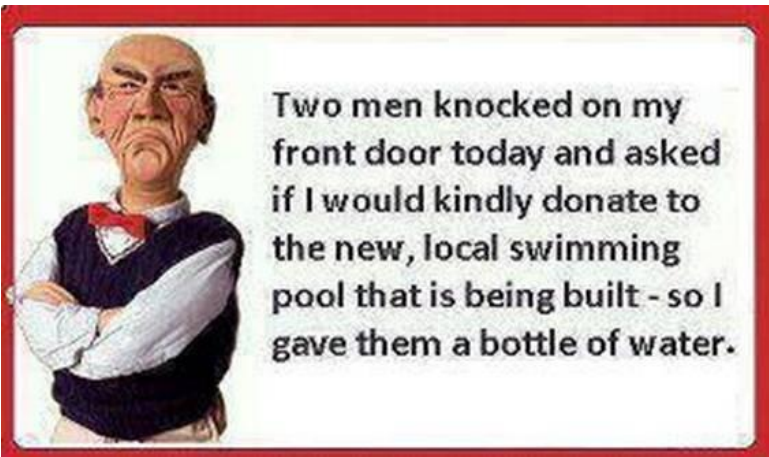work with an informative product such as PC Matic, but it's not feasible with tools such as Reimage and System Mechanic.

If you decide to stick with a commercial maintenance tool, make a full system backup before you install and run it for the first time. Then make another full backup of your newly cleaned system — with the commercial tool installed and set up.

If you decide not to keep any of the commercial maintenance products you tested, just restore your pre-test system image; you'll be back exactly where you started — with a PC that's been thoroughly cleaned with the Windows-based tools discussed in Part 1.

Either way, you win! Commercial tools or free — your PC is now leaner, cleaner, more secure, and closer to error-free than it was before you took the Maintenance Challenge

Two men knocked on my front door today and asked if I would kindly donate to the new, local swimming pool that is being built - so I gave them a bottle of water.

5 DEADLY TERMS USED BY A WOMAN

1) FINE: This is the word women use to end an argument when she knows she is right and you need to shut-up.
2) NOTHING: means something & you need to be worried.
3) GO AHEAD: this is a dare, not permission, do not do it.
4) WHATEVER: A woman's way of saying screw you.
5) THATS OKAY: She is thinking long and hard on how and when you wil pay for your mistake.

BONUS WORD: WOW!
This is not a compliment. She's amazed that one person could be so stupid.