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OCTOBER MEETINGS

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The Launceston Computer Group (LCG) meeting will be at 7:15 pm on Wednesday OCTOBER 1st.

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 — October 2014

FROM THE ASSISTANT EDITOR

As you will note from the timetable in the column to the right our major event for October is Seniors Week.

To attend any of the special afternoon sessions you must fill in one of the registration sheets that are available at the club.

There will a limit of 20 people for each session—10 visitors and 10 OPEN members so please make sure you are registered.

If you have a friend or family member who is not yet a member of OPEN please spread the word to let them know that these Seniors Week sessions are available.

With an increasing number of members bringing their own laptops and tablets to classes it is often necessary to move keyboards and 'mice' to make room for members to set up.

Please make sure that any equipment your move is treated with care **and** is returned to its normal position when you pack up your laptop.

I would also mention that if you need to unplug one of the club's computers or monitors to provide a power outlet for your laptop please re-connect the piece of equipment when you are finished. Failing to do this can cause concern for members attending the subsequent classes.

The final word on the subject of equipment is for student-members and tutors to be aware of the correct shut-down procedures—turning off the monitor does not shut down the computer!

Dennis

☆ **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.)**

SENIORS WEEK TIMETABLE
All sessions will be free to attend

Special Presentations	1:00 to 3:00 pm daily
Monday October 13	How to Buy a Computer
Tuesday October 14	Introduction to iPads
Wednesday October 15	Introduction to eBay
Thursday October 16	Introduction to Android tablets
Friday October 17	Internet Security

Friday October 17 6:00 to 8:00 pm
Social Night to celebrate OPEN's 13th Birthday

You can attend any of the Morning Sessions from 10:00 am to 12:00 noon each day regardless of whether it is your 'scheduled' day or not. If you have a special subject that you need assistance with, please ensure that a 'qualified' tutor will be present.

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

OCTOBER MEETINGS

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STORAGE versus MEMORY

There still seems to be some misunderstanding of the term 'memory' as it applies to computers.

Increasing the amount of **RAM** (Random Access Memory) in a computer does not increase the amount of storage.

Additional RAM enables the computer to perform several tasks simultaneously. I often liken it to having additional hot-plates on a stove - the more you have the more things you can cook at the same time.

Perhaps the confusion is caused by the fact that both memory and storage are measured in Gigabytes. But while the amount of RAM in most modern computers would range somewhere between 2GB and 8GB, storage in the form of hard-disk drives is measured in hundreds or even thousands of Gigabytes (*1000 GB = 1 Terabyte*).

There is also a significant difference in the size and appearance of the two items—a RAM module for a 'tower' is a flat, thin component (*see picture at right*) while a hard-drive is a much larger, and heavier item (*see below*).

Hard-drives fitted to laptop computers are much smaller as there isn't as much space inside the case to accommodate them.

OPEN NEWSLETTER – October 2014

WINDOWS 8
TWO YEARS DOWN THE TRACK

Yes, that's right folks ... on October 26 will we celebrate (*or maybe not?*) the second anniversary of the official release of Windows 8.

During that time the operating system has seen updates in the form of Windows 8.1 and the curiously-named Windows 8.1 Update 1, with the latter probably being the equivalent of the Service Packs that were seen in earlier OS's.

It would be fair to say that Windows 8 hasn't been a hit with everyone. The 'tiled' Start screen that was designed primarily for touch-screen devices and the 'Modern' programs that have no obvious way to close them have proven difficult to handle for people trying to use keyboard and mouse on a system that was primarily designed for touch-screen inputs.

However, Windows 8 can be 'tamed' and tailored to your requirements.

From the time of the first 'beta' (*test version*) of Windows 8 it was apparent that some 'old knowledge' was going to be helpful. I refer in particular to the use of keyboard shortcuts and an understanding of the Folders and Files layout of a computer.

I'll be the first to agree that Microsoft's change to the 'Libraries' in Windows 8 can be a confusing. Why, for instance, do we have Pictures and My Pictures?

Well, it's because Windows 8 's Libraries structure includes a Public user as well as the primary 'My' user. My advice is that you remove the Public user from your Libraries structure if you don't need it.

The same goes for all the unwanted 'tiles' on the Modern Start screen—if you don't use them then 'un-pin' them to reduce the clutter of the Modern Screen.

And don't focus too much on Windows 8 itself. Your Graphics programs, Word-processing and Spreadsheets, and even the Internet will look almost the same in Windows 8 as they do in earlier operating systems so make that the focus of your attention.   *Dennis*

INTRODUCTION TO FACEBOOK
Wednesday October 1st 10:00 am to 12 noon
With Robert Tierney

Rob will advise you of the 'pleasures and perils' of Facebook.

How to create your account and how to be a safe and responsible user of this Social Networking service.

POWERPOINT SESSION
Wednesday October 29th, 2014
1:00 –3:00 pm

Robert Tierney will continue his series on how to get the best out of Microsoft PowerPoint.

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, October 29
10:00 am to 12 noon

The September session covered basic Publisher techniques used to create a simple one-page 'newsletter'.

For October we'll look at more documents that can be created with the program.

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 October 8
10:00 am to 12:00 noon

ADVANCED GRAPHICS
With Paint Shop Pro XI
Beginners
Wednesday October 22
1:00 pm to 3:00 pm

PUBLIC HOLIDAY
Thursday October 9th
Launceston Show Day

The club will be open for the usual morning and afternoon sessions on this day.

FAMILY HISTORY 2014
Wednesday October 8
1:00 pm to 3:00 pm
Wednesday October 22
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 Margaret G and Sandra V for these informative sessions. (Judy Hall will be on leave during October)

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 & Beginners
Friday	10 am –12	General & Beginners
	1 pm – 3 pm	Beginners Class

OPEN NEWSLETTER – October 2014

SPECIAL WEDNESDAY SESSIONS

Please register on the sheets – numbers may be limited

Date			
October 1	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.**
	7:15 onwards	**Launceston Computer Group Bi-Monthly Meeting**	**General Discussion on computer topics**
October 8	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.**
October 13—17 SENIORS WEEK	10 am—12 noon	"FREE RANGE" SESSIONS	These sessions are FREE to attend, and FREE of the restriction that you can only attend on your usual day.
	1 pm—3.00 pm	**SPECIAL PRESENTATIONS**	**See the Seniors Week Schedule elsewhere in the newsletter. You must reserve a place to attend.**
October 22	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.**
October 29	10 am—12 noon		
	1 pm—3.00 pm		

OPEN NEWSLETTER – October 2014

HOW TO SET UP A MANUAL BACK-UP

A few months ago I published an article in which I posed the question "Do you know what is on your external hard-drive" i.e. the place **where you hope** you are backing up your personal files, pictures etc.

At the time I commented on the case of one of our members being unable to access 'automatically backed-up' information when their computer had to be re-configured.

I also probably mentioned the situation of another member having to negotiate multiple layers of auto-backup folders that made it almost impossible to locate individual files.

I recommended to both members that they employ a manual back-up strategy that replicates the folder structure on their computer's inbuilt storage—the internal hard-drive.

We start off by creating a new back-up folder on the external drive—if I was doing at the time I am writing this article I would call it 'Manual Backup 260914'.

Inside that folder I would create several sub-folders that replicate the Libraries structure—let's call them **Docs, Pics, Musik, and Vidz.**

Why the abbreviations, you ask? Well it's because Windows can be a bit precious if you try and have the same Library names on your external drive as on your internal hard-drive. It is prone to asking silly questions about merging folders, and I prefer to avoid the possibility of something going wrong.

There are a few more folders we should incorporate in our Manual Backup—**Email, Faves, Contax, DLoads and DTop**. These folders will contain copies of information that won't be part of the Libraries structure.

Dtop, an abbreviation for Desktop, is very important because I have noticed than more and more people seemed to be using Desktop folders as a storage area for Pictures and Documents. During a recent back-up I noticed that a member had hardly any pictures in their Library but several Gigabytes of photos in a folder on the Desktop.

I don't agree with that practice but I'll cover that in another article. *continued*

PERFORMING A MANUAL BACK-UP

Now that we have our back-up folder structure set up on the external drive let's do the back-up.

We'll start of with the Documents library—click on Documents in the left-hand pane and you should see all your documents folders and any individual files listed in the right-hand pane –see the screen-snip below.
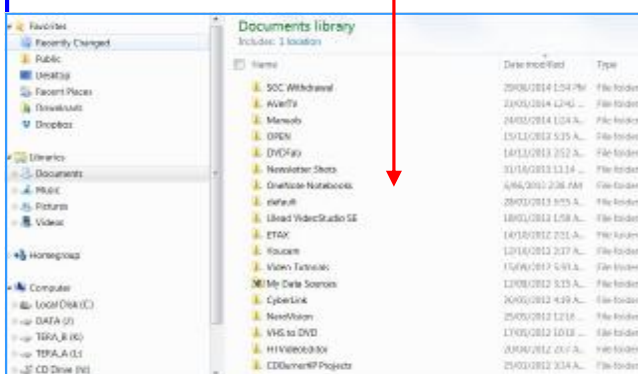
Use the **CTRL + A** keyboard shortcut to select all folders and files and drag them over to the Manual Backup>Docs folder on your external drive. Repeat the process for Pictures, Music and Videos by 'dragging and dropping' to the appropriate folders within your Manual Backup structure.

For the non-Library folders the procedure will vary because not all of them will appear in the area above the Library structure. Your **Favourites** and your **Contacts** appear in your User folders on the C:Drive, while your **Email** will probably have to be exported from inside your e-mail program.

The time taken to perform a Manual Back-up will depend on the amount of data that you need to copy. It may also be influenced by the type of USB ports and external drive you have. USB3 is about 5 to 6 times faster than USB2.

DON'T WEIGH DOWN YOUR DESKTOP

There was a time in computer history when there was a limit to how much 'stuff' you could store on your Desktop.

If you exceeded the magic number you ran the risk of convincing your computer that its hard-drive was full and it may have stopped working all together. It's a good thing that the limitation doesn't apply to modern computers because they'd be dropping like flies on a daily basis.

When I talk about not weighing down your Desktop I'm not referring just to scores of program shortcuts. It seems that quite a few of our members have adopted a procedure of using the Desktop as the default (*or standard*) location for saving certain types of files, with folders full of photos being a regular culprit. In the case I referred to in the article "How to Set Up a Manual Back-Up" I mentioned that a member had hardly any photos in the Pictures Library but there were several Gigabytes of photos in folders on the Desktop.

So why does this happen? My best guess is that many people still don't understand the structure of Libraries, folders and files on their computer so the Desktop becomes a convenient dumping-ground when they are saving or moving files.

One of the difficulties some people may encounter when saving files is that the Save As dialog box may be too small to display the structure in its entirety.

But did you know that you can 'stretch' the Save As dialog box by placing your mouse on the 'dotted' area at the bottom right and dragging it diagonally. It's a very similar procedure to re-sizing a picture or a 'window'.

In one of last month's articles I mentioned that you should review the contents of your Downloads folder and move some files to more appropriate locations.

Perhaps the same practice could apply to your Desktop? It shouldn't be too difficult to drag photo-folders from the Desktop into the more appropriate Pictures Library.

Enhance Windows' online security with EMET 5 By Susan Bradley

Microsoft recently updated its Enhanced Mitigation Experience Toolkit, a free application that can protect you from dangerous zero-day attacks.

Here's a review of what EMET does - and why and when Windows users should run it on business and personal systems.

A little extra dose of security for Windows It's no secret that cyber attacks are getting more sophisticated by the day. Keeping Windows systems safe from Internet-based attacks is an ongoing challenge, both for Microsoft and for Windows users. Perhaps the biggest challenge for Windows users is protecting against zero-day attacks - new threats that are, for a time, unknown to our installed anti-malware applications.

Our systems are often most vulnerable during the interval between the launch of a new exploit into "the wild" and the addition of its signature to anti-malware databases. Most security apps have tools that attempt to prevent zero-day attacks by searching for malware-like behavior. But the results are typically far from reliable.

Microsoft, of course, offers various security tools. One of the best for defending against zero-day threats is the Enhanced Mitigation Experience Toolkit (EMET). I previously discussed EMET over a year ago in the On Security column , "Microsoft adds Windows 8 support to EMET." As is obvious from the title, the most important enhancement was support for Microsoft's newest operating system. But Version 4 also added various security enhancements, as noted in an MS Security Research and Defense Blog post) was released this past November, and 4.1 Update 1 (more info) came out in May. On July 31 (just before the Black Hat 2014 hacker confab in Las Vegas), Microsoft delivered EMET 5.0, which, among other things, added protection against attacks on EMET.

EMET is a free, standalone security application, but it's not an all-purpose anti-malware tool. It works alongside Microsoft and third-party anti-malware apps to protect against attacks that target common software such as Internet Explorer, Office, Acrobat, and Java. It's compatible with all supported versions of Windows, from Vista SP2 and Windows Server 2003 SP2 through Windows 8.1 and Windows Server 2012 R2.

A common misconception is that EMET is an enterprise IT tool. Though it's well suited for that environment, Microsoft clearly states that it's also applicable for home-PC security.

Who should consider EMET? If you do any online tasks that involve sensitive personal information - purchases and online banking, for example - I would strongly recommend downloading (site) and test-driving EMET 5. The download site also includes a PDF-based instruction manual with additional guidance for businesses and domain-based networks. But again, EMET is a good tool for standalone machines, too.

(Continued from page 7)

A few important notes on installing EMET 5 If you have a previous version of EMET installed, you'll need to remove it from your systems before installing Version 5. Also, EMET requires .NET 4.0 to run. Patch Watch readers know of my aversion to .NET, but the most recent versions (such as .NET 4.0) have been generally well behaved.

During Version 5's installation process, you'll be asked whether you want to use the recommended settings. I recommend accepting that option (see Figure 1); doing so will set up profiles for frequently attacked applications including Adobe Acrobat, Adobe Reader, Internet Explorer, Java, Office, and MS WordPad. It will also add security-certificate trust rules for online services.

The recommended settings will also enable reporting through Windows' notification area and the Early Warning Program, which sends a report to Microsoft when EMET detects a possible attack attempt.

Figure 1. When prompted for your initial EMET settings, click the Use Recommended Settings option.

Now let's see what additional protections EMET gives to Windows.

EMET's tools for catching zero-day threats Let's start with EMET's settings. Look for the EMET icon (a padlock) in Windows' list of notification-area icons. Right-click it and select Open EMET (see Figure 2).
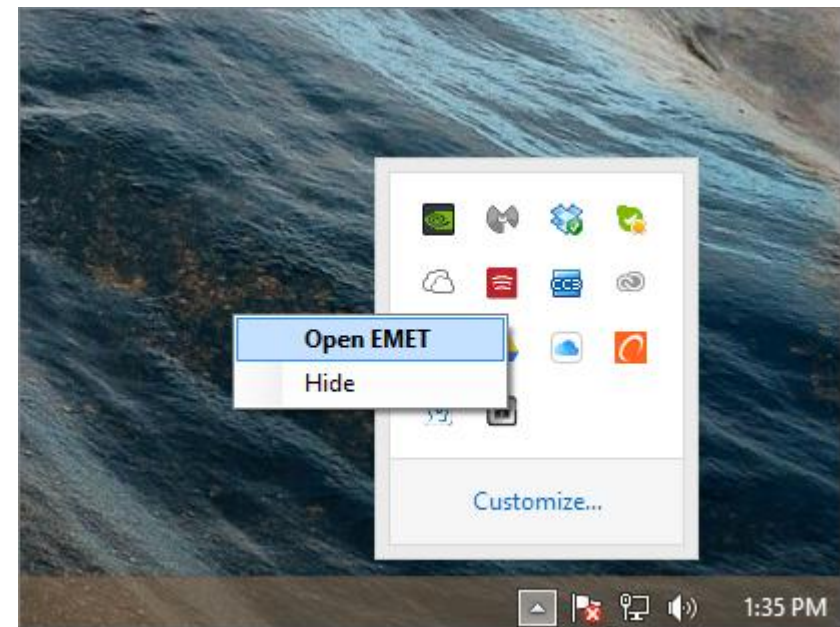

Figure 2. Access EMET via Windows' notification area.

Figure 3 shows EMET's initial settings. Data Execution Prevention, Structured Exception Handler Overwrite Protection, and Address Space Layout Randomization are all set to Application Opt In; Certificate Trust (Pinning) is enabled.
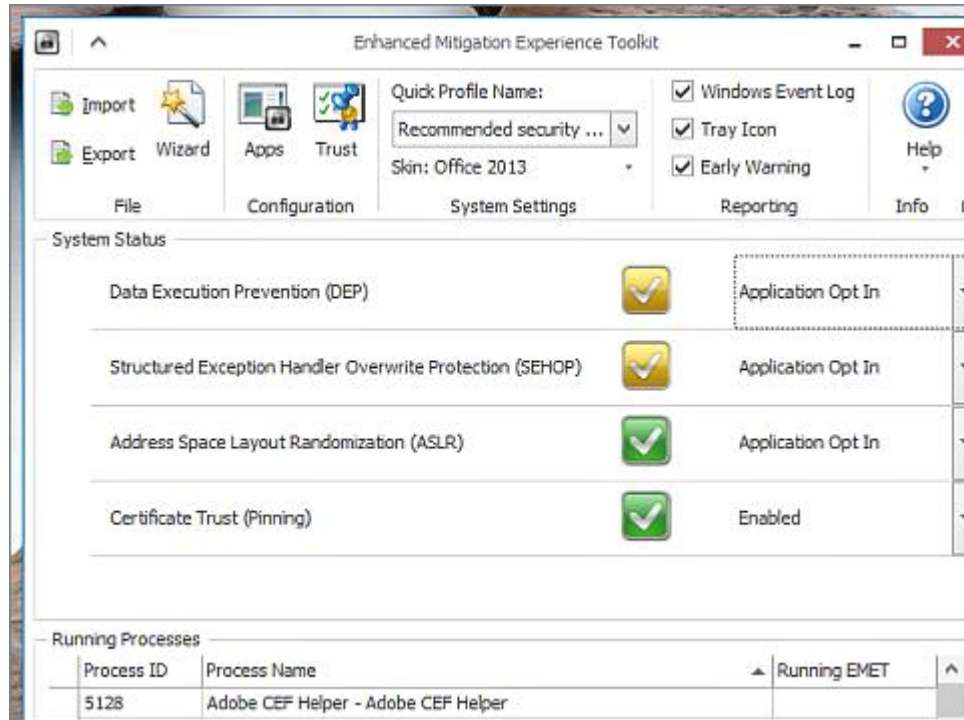

Figure 3. EMET's initial default settings Here's what these settings do.

Data Execution Prevention: DEP (more info) has been around since Windows XP, but EMET allows applications not specifically compiled for EMET to be added to its sphere of protection. It adds more DEP protection than does Windows alone. In short, DEP defends against all-too-common malicious exploits that use memory-buffer overflows. EMET reserves areas of computer memory for specific types of programs. For example, memory flagged for executables will allow only programs, services, and device drivers to run. A hacker can't use that protected area of memory to hide malicious code. Structured Exception Handler Overwrite Protection: Introduced in 2009, SEHOP (MS blog post) helps prevent attacks that overwrite the Structured Exception Handler - simply put, a "buffer-overflow" exploit. Address Space Layout Randomization: ASLR (more info) randomizes the memory location of key application components, making it more difficult for a hacker to directly access the memory location of known vulnerabilities in the app's code. (Without ASLR, applications tend to run from specific memory addresses.) ASLR is supported in Vista and all succeeding versions of Windows. XP can't use either SEHOP or ASLR; you might be able to run EMET on XP, but it will give little if any enhanced protection. (There's no magic wand that will make XP more secure. EMET highlights the inherent weaknesses in XP. Adding EMET to XP is, as the old saying goes, putting lipstick on a pig. Features such as randomized memory locations and SEHOP simply can't be bolted onto XP.)

Certificate Trust (Pinning): We still rely heavily on trusted-

(Continued from page 9)

certificate authorities for our basic online security. By default, EMET assumes that certain Secure Socket Layer certificates (more info) are trusted. It expects to find valid certs for common sites such as Facebook, Skype, Twitter, Yahoo, and Microsoft sites that require MS account credentials. Sites whose certificates don't match what EMET expects to see are automatically blocked. This could protect you if, for example, you're tricked into going to a fake and malicious Facebook site.

Applications EMET protects by default Again, if you clicked the Recommended Settings option when you installed EMET, it will help prevent attacks against applications that are most prone to vulnerabilities: Adobe Acrobat and Reader, Internet Explorer, Java, Office, and WordPad. Those defaults are sufficient to protect you from the bulk of zero-day attacks.

That protection isn't absolute, of course - there's no such thing as a perfect security system. For example, as noted in a Feb. 24 Kaspersky Threatpost article , Bromium Labs security researchers developed an exploit that bypassed EMET. Fortunately, the exploit was a proof of concept - not something that's in the wild, as far as we know. Microsoft has since patched EMET block that exploit. (On the other hand, it's been reported that some malware developers are adding a component to their code that scans for EMET. If the malicious code finds EMET installed, it doesn't try to run.)

An MS Security Research and Defense Blog post notes two new features in EMET 5. The first, Attack Surface Reduction (ASR), provides added control over how vulnerable software is used. For example, some businesses must run older Java plugins for their internal websites. EMET 5 can block browsers from loading Java plugins from external websites but still allow Java code from internal sites.

By default, ASR blocks Adobe Flash plugins from running within Excel, PowerPoint, and Word. It can also prevent websites not listed in IE's Trusted sites zone from running numerous scripting languages within the browser - languages such as Java, MS Vector Markup Language, MS XML Core Services, Windows Script Host runtime, and MS Scripting runtime.

> The second new feature - Export Address Table Filtering Plus (EAF+) - enhances the EAF found previously in EMET. As the aforementioned SRD post states, EAF+ will:

"Perform additional integrity checks on stack registers and stack limits when export tables are read from certain lower-level modules "Prevent memory read operations on the PE header, sections, import/export table pointers of selected modules when they originate from suspicious code that may reveal memory corruption bugs used as 'read primitives' for memory probing."

Small businesses are especially at risk Small-business owners in the U.S. should keep in mind that business bank accounts are not protected by FDIC insurance. As noted security expert Brian

Krebs has unfortunately had to point out numerous times, business bank accounts can be wiped out with a single online transfer - leaving account holders no recourse for recovering the stolen money. Krebs's "Online banking best practices for businesses" page endorses dedicating one system exclusively to online banking and gives other useful security tips. Obviously, I believe it's important to install EMET on those dedicated systems.

But again, I recommend setting up EMET on any PC used for online banking. To better secure my financial accounts, I'm willing to put up with a few broken webpages or the occasional unexpected browser closure (more on that below). These days, it's easy to restrict my casual - and potentially riskier - Web browsing to some other machine. It doesn't need to be Windows-based; it could be an iPad, a Kindle, or a cheap Google Chrome laptop.

EMET is good, but it's not for everyone Given the never-ending threats to Windows, you might be wondering why Microsoft hasn't simply built EMET's advanced security features into the operating system. Some or all of EMET's capabilities probably will be included in future versions of Windows. But the current Windows ecosystem is vast and diverse - perhaps overly diverse. EMET's protections might be incompatible with your Windows configuration and specific computing needs and habits.

As you use EMET, you might find webpages closing unexpectedly, error messages popping up, and requests to send error reports to Microsoft. You might also have to spend some time adjusting EMET so that it's not overly intrusive on your particular setup.

Practically speaking, EMET doesn't need to be installed on every system. If you're a gamer or use your system for casual purposes unrelated to your personal finances, the side effects of EMET's protection - broken webpages or browser closures - might be more than you want to put up with. Simply put, it comes down to convenience versus security.

That said, if Internet Explorer isn't your default browser, most Windows users will likely see few if any side effects from EMET, day to day. Give it a try; the next time we have a zero-day attack, you'll be better protected. If it proves too intrusive, you can try adjusting it - or simply remove it.

Stay safe out there!

Sneak peak: An early look at the next Windows

By Woody Leonhard

After months of speculation, we're now seeing some *credible* leaks showing *parts* of the next Windows.

Invitations are going out now for Microsoft's Windows Technical Preview debut, scheduled for Sept. 30 in San Francisco; here's what the current tea leaves portend.

Will a rose by any other name smell sweeter?

There's one fundamental problem with talking about the next version of Windows. It seems, at this time, that no one knows what it'll be called. Inside Microsoft, some developers refer to the next Windows as "Threshold." But that label might apply to an entire wave of Microsoft product changes — not all of which are specific to Windows. Most of us call it **Windows 9** simply because it's a reasonable name that everyone understands. To keep things simple, I'll stick with "Windows 9" for the rest of this discussion.

You can bet your last shekel that Microsoft won't burden the next Windows with any reference to Version 8. In other words, the chances of a "Windows 8.2" run less than zero. I'm confident Microsoft wants to distance itself from the Windows 8 disaster as quickly and cleanly as possible. Who could blame them?

Also unlikely to reappear is any version of Windows with "RT" attached (just the label; the platform will remain and prosper).

It's a name I've hated and railed against since day one.

There's one other Windows-naming camp I tend to side with. It predicts the successor to Win8 will be called simply **Windows.** That doesn't mean version numbers will go away — we'll always need some way to refer to the precise release. But it does mean that "Windows" on a phone, "Windows" on a tablet, "Windows" on a PC, and "Windows" on a server can be thought of as the same operating system — though with some necessary differences both to the interface and under the hood. Or at least the versions will be marketed that way, regardless of the technical sleight-of-hand involved.

With a single "Windows" label, Microsoft might also give up its archaic attempts to wring more money out of customers by releasing different **editions** of a particular Windows version — i.e., Windows Home, Windows Pro, Windows Enterprise, etc. I hope that comes to pass. Who knows, we might even see the end of 32-bit versions of the OS.

Microsoft has had success selling its subscription-based version of Office. So it's not inconceivable that the company will release a "rented" edition of Windows — call it Windows 365. (If there is a Win365 in the works, it probably won't be in place when Microsoft releases Windows Technical Preview, which should ship around the end of September.

Windows build 9834 sources — and their reticence

During development of a new Windows version, Microsoft nor-

mally sends out early builds to its partners — companies that need parts of the new OS to make their own products work. Those early releases are supposed to be kept secret, but leaks inevitably happen.

The leaked information below is based on some early Win9 builds, which means you must keep the following in mind. Leading up to Windows Technical Preview, early Windows builds are often branches of the mainstream Windows development. In other words, they're key parts of the new OS but not the entire final product — not by a country mile. And the builds can be months old by the time they're leaked.

Right now, the latest credible leaks of Win9 are based on build 9834 of the Windows Technical Preview branch. ("Credible" means I'm convinced they're legitimate.) If you want to catch up on what's been posted about Win9, here's the short list:

> On Sept. 11, two German sites, **ComputerBase** and **WinFuture,** simultaneously released the same 21 screen shots of what appears to be build 9834. Someone then anonymously reposted those shots on the English-language Imgur site you want to read about each slide individually, Paul Thurrott posted a two-part review on his WinSuperSite — see Part 1. And I published some additional notes in my Sept. 11 InfoWorld Tech Watch story (again, apparently of build 9834) that shows how an updated notification center might work.

WinFuture might be leading the pack in Win9 leaks and appar-

ently made significant cash doing so, given the Peugeot ads, but it's certainly not the only source. For example, ZDNet's Mary Jo Foley remains well connected, posting [revelations >](#) that read a lot like Microsoft press releases. Paul Thurrott [>](#)) is similarly tied into "unofficial" leaks that sure sound "official."

There are numerous other rogue and semi-official sites discussing Win9. Russia-based [>](#) comes up with tidbits from time to time; venerable leaker [FaiKee](#) keeps up with all the news in Chinese; and [Neowin](#)'s Brad Sams seems to have access to many of the latest builds — although he's cagey about releasing information. [The Verge](#)'s Tom Warren seems similarly familiar with recent builds, but he, too, comments rarely.

Many potential sources are afraid of losing or outing their contacts inside the Windows development team. Microsoft is playing the can't-catch-me game, with threats of hellfire and brimstone rained down on any employee that speaks out of school. Of course, that doesn't include those "insider" leaks that sound suspiciously like stealth marketing releases.

What the photos reveal: The Start menu returns

Like a billion or so other mouse-wielding Windows users on the planet, I was immediately drawn to the return of the desktop-based Start menu (as opposed to the Win8 Start screen). It's bellwether evidence that Microsoft's new Windows team is listening to its customers.

The leaked screenshots and video show a Start menu that in-

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cludes a Windows 7–style cascading menu on the left and Metro/Modern tiles pinned on the right. You can even remove all the Metro tiles from the Start menu by right-clicking and deleting them, one by one.

There are lots of options for pinning, deleting, and drag-and-dropping menu items — you can even turn the Start menu off. (After turning the Start menu on or off, you have to sign out of Windows and sign back in.)

Not shown: *Live* Metro tiles in the Start menu — for example, a Music tile that lets you fast-forward or change the volume. That capability will probably show up in a later build, no doubt touted as a revolutionary step forward. I've since learned that MS will call them "interactive" Metro tiles — I think.

Current Win8 users shouldn't forget that Windows honcho Terry Myerson promised in his Build 2014 conference keynote presentation that Microsoft "would be making those [Start menu] features available to all Windows 8.1 users as an update."

So far, we don't know whether the Start menu will appear automatically on machines with mice and trackpads — though I expect that will be the case. My assumption is that Windows will look at the system's hardware during boot. If it doesn't find a mouse or trackpad, it'll revert to the Win8-style Start screen. With some luck, it'll be easy to set a default and have Windows stick with it, even if you forgot to plug in your mouse.

In short, the new Start menu revealed in the leaked screenshots

looks great. I have a problem with all the Metro apps dumped alphabetically into the Start menu's All Apps list, plus a few other minor quibbles. I predict that the final Win9 Start menu — if it's at all close to what's been leaked — will convince 80 percent of all Win8 users to upgrade. Maybe more!

A new, long-overdue notification center

If you've ever used a reasonably modern mobile phone, you know all about notification centers, a place where those fleeting alerts are stored so you can actually look at them. I'm amazed a notification center was never included in Windows 8. As with earlier Windows versions, Win8 spits alerts up on the screen, where they sit for a few seconds and then disappear, never to be seen again.

In the new Win9 implementation, a window in the lower-right corner of the screen pops up notifications as they occur. To go back to a recent alert, you simply click the notification icon in the task bar and a list of recent events pops up. Golly, that's almost as good as the original 2007 iPhone — or every version of Android since 2008. Nice to see Windows catching up.

Bottom line: The Win9 notification center shown in the leaked video is hardly revolutionary, but it's at least usable.

Metro might become mainstream — or maybe not

Microsoft has never come up with a concise and descriptive name for its tile-based interface. The official "Modern" just

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doesn't cut it. Perhaps the company will come up with something better for Win9, but for now most of us stick with the officially abandoned "Metro" for clarity.

That said, based on the leaked videos, the support system for Metro apps will change enormously.

As widely predicted, Metro apps will run in *resizable* windows on the desktop — where they should've been in the first place. Heck, third-party products such as Stardock's ModernMix ([site](#) already let you run Metro apps in a desktop window. (Speaking of start-menu replacements, they essentially saved Windows 8 in the minds of many Win8 users. I wonder whether Microsoft will crush those products with Win9?)

Those resizable windows will have maximize, minimize, and close icons in the upper-right corner, just where they've been since time immemorial. They'll also have right-click context menus that might include an anemic settings list plus functions such as Search, Sharing, Play, Print, Project on a projector, and/ or Switch to full screen.

Somewhat unexpectedly, Microsoft seems to be toying with the idea of ditching the Charms bar. You remember the Charms bar: those slide-out icons on the right of the screen that mostly just get in the way?

Removing the Charms bar might make some Metro app developers unhappy — those who actually used the Charms bar for something useful such as for searches or for printing. (Almost nobody has made use of the Share function, but that's another story.)

It's a dilemma for Microsoft. If it completely kills the Charms bar, third-party developers who actually took advantage of it will have to retrain their customers to use the right-click context menu. That's actually a bigger change than it might seem, especially on a touch-screen device.

Expect the Charms bar debate to rage on, right up until Win9's release to manufacturing (RTM).

The screenshots and videos suggest that not much has changed on the Metro/Modern side of Windows. That's no doubt a temporary state of affairs; expect Windows 9's Modern interface to look a lot more like Windows …, Windows …, uh, the next version of Windows for phones. (Microsoft is dropping the name "Windows Phone.") On the mobile side, there are many changes coming down the road. But we probably won't see them until the new phone software and ARM-based software get a good shake-out.

Cortana and other worthwhile new features

The one feature everyone's expecting, Microsoft's voice-activated assistant Cortana, seems buried at this point. None of the screen shots or videos shows Cortana at all. But you can bet that Cortana will be a huge selling point for Windows 9. After all, Microsoft has to catch up to Siri and "OK, Google!" — even on the desktop.

There are lesser features floating in the shadows. For example, Storage Sense is a mobile-device feature that maps out your storage — how much is taken up by programs and how much by photos, music, videos, digital lint, and other user data. It will likely find its way into Windows 9. (Never mind that dozens of third-party apps already fill that gap.)

It's a near certainty that Win9 will ship with Internet Explorer 12, though nobody outside Microsoft has seen the new browser yet. IE 12 most likely won't show up in the forthcoming Win9 Technical Preview.

I've not heard about other new features, but Win9 will probably have stronger ties to OneDrive in an attempt to make Box, Dropbox, Google Drive, and the like less attractive. And Microsoft will no doubt add more incentives for using a Microsoft Account. It's also likely that Win9 will have better support for higher-resolution screens and multiple monitors — and possibly better compatibility with docking stations, making for easier transitions from strictly mobile to slightly tethered.

What's the next development step for Windows 9?

There have been sightings of builds 9835 and 9836 detected on the Web but no screenshots or other leaks that I've seen. Given the information spilled by WinFuture and the past release history of new versions of Windows, you'd expect to see leaked builds from one of Microsoft's partners. That hasn't happened, but it probably will soon.

Keep in mind that even the official Windows Technical Preview is not completely representative of the final, shipping Windows. Some features will be added just before RTM, and others will be left on the cutting-room floor. We saw that with Windows 8's Developer Preview and RTM — the bits that shipped in the Developer Preview, particularly the user interface, had changed significantly by the time Windows 8 shipped.

This much I know for sure: I'm going to like Windows 9 — or whatever it's eventually called — one heck of a lot more than I liked Win8. I know that's faint praise, but Windows 9 has "winner" written all over it.

At this point, anyway.