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Wednesday 1st February 2012
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Receipt of Accounts

LCG COMMITTEE

President: Ivan Turmine
Vice President: Janet Headlam
Minutes Secretary: Iris Meek
Treasurer: Laraine Rist
Assistant Treasurer   Open
MAC Librarians: Ivan Turmine
PC Librarian: Julie Hjort
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Publicity Officer: Iris Meek
Maintenance Co-ordinator; Dennis Murray
OPEN Co-ordinator: Robert Tierney
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Auditor: Ron Baker
"VICTOR" Co-Ordinator: Robert Tierney
Liason Officer Eleanor Horder
General Committee: Glenn Gilpin,
Reinhard von Samorz Harvey Tavener
Barry Symonds

OPEN COMMITTEE

Chairperson   June Hazzlewood
Co-ordinator   Rob Tierney
Vice Chairperson Rob Tierney
Minute Secretary Eleanor Horder
O Learn Coordinator E Horder
Tutor Coordinator   E Horder
Membership Coord. Karia Wicks
Newsletter Editor Iris Meek
VICTOR Coord. Rob Tierney
Publicity   I Meek
Committee: Marie Cleaver, Janet Headlam, Heather Loffel, Kay Dawson, Pauline Hardy, Irmgard Rosenfeldt and Sandra Viney.

OPEN NEWSLETTER – January 2012

OPEN

AGM

With election of

Office bearers

For 2012

OPEN COMMITTEE 2011

Chairperson	June Hazzlewood
Co-ordinator	Rob Tierney
Vice Chairperson	Rob Tierney
Minute Secretary	Eleanor Horder
O Learn Coordinator	Eleanor Horder
Tutor Coordinator	E Horder
Membership Coord.	Karia Wicks
Newsletter Editor	Iris Meek
VICTOR Coord.	Rob Tierney
Publicity	I Meek

Committee: Marie Cleaver, Janet Headlam, Heather Loffel, Kay Dawson, Pauline Hardy, Irmgard Rosenfeldt and Sandra Viney.

What a delightful Christmas luncheon we had at Sunny Hills in December. Not too many hiccups. A great turn out of members and some partners and lots of surprises thrown in.
Well done Rob & Co!

VICTOR TELEPHONE NUMBER
Help for members
0408 174235

Summer School continues from January 9 until normal session resume January 23. There are no Wednesday sessions during this period.

FAMILY HISTORY ON-LINE

Jan 25 –10 am—noon
Jan 25   1pm—3pm
Feb 8   1pm—3pm
Feb 22– 10 am—noon

Please note: classes return to Normal time slots next year.

VENUE TELEPHONE NUMBER
The club telephone is available during class hours.
63434928
10am –3 pm

SPECIAL CLASS

The requested Maintenance and email Filtering class held November 30 will be repeated Wednesday morning February 15 10am –noon.

SPECIAL CLASS

Creating Posters
Showing another use for the
Print Artist program

WOT?? NO OPTICAL DRIVE!!

With much of the computing world heading towards touch-screen devices e.g. iPads, tablet computers and e-readers, I have just made what many people may consider a curious decision. I have purchased a net-book which is in effect a tiny lap-top computer.

I've looked at 'tablets' and have decided they aren't for me. I see all those colourful icons on the screen and quite frankly few of them are of any interest to me. For the foreseeable future I believe my computing will be 'mainstream' based on office applications, internet and e-mail.

For those purposes I prefer a keyboard and mouse (or mouse-pad) that is solid to the touch, and facilities that will enable me to connect to hardware such as scanners, printers, portable hard-drives and USB flash drives.

But what net-book owners don't get as part of their mini laptop is an **optical drive**—i.e. a CD or DVD device. Put simply there isn't a lot of room for one in a computer that measures just 10 inches by 8 inches and is less than an inch deep (*sorry about the old measurements but that's just the way the computer industry operates).*

So watching DVD movies and playing music CDs aren't on the agenda unless I decide to add an external CD or DVD drive.

By now you might be asking the question "How, pray tell, are you going to get any additional software loaded on to the net-book?" It's fairly easy when we are talking about programs such as Picasa2, Irfanview which are only a few megabytes in size and even good old AVG antivirus can be loaded onto a USB flash drive, but what about MS Office which usually comes on a self-installing CD?

LIFE WITHOUT AN OPTICAL DRIVE

The method I have been using is to fool the net-book into 'believing' that there is an optical drive fitted and that there is a CD inserted in it—in other words a virtual CD drive with a virtual CD in it!

Members who have down loaded a Windows Service pack from the 'net may have encountered the term ISO. An ISO is a byte-for-byte copy of a CD or DVD and in the case of a Service Pack you then need to burn the ISO to a CD or DVD in order to install the software on your computer.

The program I have been using, PC User Disk Jockey, can actually create ISO images of software CDs which can be copied to a flash drive or portable hard disk. The second string to Disk Jockey's bow is that is can then create a virtual CD drive into which the ISO can be loaded and run just as if it was a physical CD.

So the process would go like this :

1. Install Disk Jockey on to a computer that has an optical drive fitted.
2. Insert a software CD and create an ISO image of the CD.
3. Copy the ISO image **and** the Disk Jockey program file on to a USB flash drive.
4. Install Disk Jockey on the net-book (or any other device that doesn't have an optical drive).
5. Start the program, use the option to 'mount' a virtual CD drive and load the ISO file into it. You can then install the software.

While this procedure may seem of limited value at this point in time there will soon be other devices that are not fitted with CD or DVD drives e.g. the new lightweight laptops known as ultra-books.

ISOs AS A METHOD OF STORAGE

When you have been involved with computers for several years it is inevitable that you are going to build up a library of software CDs—every printer, scanner, and software disk you have ever owned!

Many of us become 'hoarders' because we are fearful that one day we might need that CD we are planning to throw away.

So what if you could have the best of both worlds—a computer room free from the clutter of stacks of CDs but at the same time retaining the software that you (or someone else) may need in the future.

Creating ISO images of your software CDs and then storing them on your computer's hard drive would be an efficient method of storage.

Modern computers have hard drives which are now measured in hundreds or thousands of Gigabytes and have the capacity to hold a heck of a lot of software. No t every software disk holds the maximum CD volume of 700 MB so you won't necessarily run your hard drive out of space in a short time.

Finally it should be remembered that the software on ISOs (i.e. virtual CDs) is licensed under the same rules as physical CDs—you will still need to retain your licence codes and in most instances this will need to be validated before you can use the software. A text file located in the same folder as your ISO would be an appropriate place to store that information.

Dennis Murray

OPEN NEWSLETTER — January 2012

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LCG Inc

Annual General Meeting

Wednesday February 1 at 7pm

Business: To present reports

and financial statements

for 2011 and to

elect new

Office bearers for 2012.

Australia Day 2012

OPEN will NOT

be closed

Normal

Classes apply.

Wishing all members and tutors a Prosperous New Year and Good Health throughout 2012
And any sick members
a very speedy
Recovery.

GRAPHICS WORKSHOPS

The popular Graphics Workshops will resume

March 7 from 10 am— noon

to review what has been learned so far.
Workshops will be held the first
Wednesday morning of each month to give all students a chance to catch up.
Students must register on the special sheets near the front desk.

I tend to forget that not everyone has a computer or access to one so I was very surprised with the following:

My McAfee has a very fast spamming device which isn't always correct...so this week it took out an email which I was waiting for. The "bin" could not be accessed so I phoned a friend and asked if she could get in touch with the sender and tell her the problem so it could be re-sent.

The original sender then left a message for me to call her as she could not understand the message which was passed on to her : New chum interpretation as told be original sender

(she told me that your cat had eaten the message!!)

We had a laugh and sorted out the message, but I will be more careful next time I call some-one who doesn't own a computer!

OPEN Session Times

At Studioworks, 1 Pipeworks Rd, L'ton

Standard Sessions $5.00

Monday	10 am –12	General & Beginners
	1 pm – 3 pm	**Beginners & PC Support**
Tuesday	10 am –12	P C Support & Beginners + Mac
	1 pm – 3 pm	As above
	7 pm—9 pm	PC Support (Night Class)
Wednesday	10 am—noon	Special sessions or Meetings
	1.pm—3 pm	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

SPECIAL WEDNESDAY SESSIONS

Please register on the sheets – numbers may be limited

Date	Time	Topic	Details
Jan 25	10 – 12	Family History	Judy, Sandra, Laraine
	1 pm—3 pm	**Family History**	**On line searches etc**
Feb 1	10am –noon	**Creating Posters**	**Using Print Artist**
	1 pm—	**OPEN MEETING**	**Annual General Meeting**
Feb 8	10 am-noon	Basic Graphics	Start new sessions with Judy & others
	1:00—3 pm	**Family History**	**Judy, Eleanor, Laraine & Sandra**
Feb 15	**10am—noon**	**Computer**	**Maintenance & email filtering**
	1 pm—3 pm	**Level 2-3 Graphics**	**Start new sessions for 2012**
Feb 22	**10 am-noon**	**Family History**	Searching families on the internet
	1 pm—3 pm	PSP X1	Advanced Graphics with Judy & Eleanor
Feb 29	10 am—noon	TBA	Fifth Wednesday Special Class
	1 pm—3 pm	**TBA**	**Fifth Wednesday Special Class**
Mar 7	**10 am-noon**	**Graphics Workshop**	**Judy, Laraine, Sandra & helpers**

ASCCA

One of the outstanding presenters at the recent conference was Paul Wallbank. He is CEO of five companies and a regular broadcaster with the ABC. He began by introducing **C**onversation, **C**ommunication, **C**ollaboration and **C**ommunity.

He went on to outline some of the Google Apps available and gave us his web page http://www.paulwallbank.com

He has helped hundreds of businesses, government departments and community organizations adapt to social media, eg cloud computing and mobile and broadband internet.

Mail Chimp handles newsletter mail and checks if members have opened it (very handy for OPEN)

Survey Monkey for scheduling diary.

Census and Yellow pages only just launched,

Facebook already has 800,000,000 users. He has not taken yet to Google Plus, but likes Twitter as a medium and uses Blogs and Word Press to keep on top of work as he travels about Australia.

He can see in the future lecturers going on line so that they can be seen on many campuses at one time, not just in Australia but worldwide.He can also see this as a tool in medicine,

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LEVEL 2 & 3 GRAPHICS

using Paint Shop Pro 7 and 8

Feb 15   1 pm—3 pm

PC Support Classes
resume Tuesday evening
January 31 between
7 pm and 9 pm.

Julie, Barry, Laraine and helpers
For students unable to attend
during the daylight hours

possibly surgery and science lessons.He loves Skype and the way it brings families together over thousands of miles.

He predicts huge changes in the way we access the internet over the next 3 to 5 years.
Cheers, Iris

PSP X1
Advanced Graphics using PSP X1
Follows on from the basic and level 2 and 3 classes.

February 22 1 pm—3 pm

MAC USERS

Mac Tutors
Reinhard, Ivan and Maurice
Are there to assist
Mac students

BASIC GRAPHICS

Feb 8 10 am—noon
Mar 14 10 am—noon

Watch Notices and Registration sheets
For further classes and vacancies.

TALKING TECH: LOGGING ONTO WINDOWS SECURELY WITHOUT A PASSWORD

We all know that passwords are an archaic method of authenticating users to log onto computers. Bill Gates predicted the death of the password way back in 2004, citing the problems with passwords that we all know about: we have too many of them to remember; if they're short and simple, they can be cracked; if they're long and complex, we forget them and write them down. With the rise in the use of mobile devices such as tablets and smartphones, another problem with passwords has reared its head: "typing" in a long and complex string of characters that you can't see on the screen is a pain to try to do on a tiny virtual keyboard, so we end up having to try several times to get it right, and end up frustrating (or even locked out of our accounts if they're set to shut us out after a specified number of failures).

We've talked here in the past about some of the alternatives to passwords, such as smart cards and biometrics. Both are commonly used in high-security business environments, but neither has caught on much with home users and small businesses. These authentication mechanisms require special equipment such as card readers or fingerprint or iris scanners, making them relatively expensive to deploy. Cards can be lost or stolen, and many people object to biometric identification on the grounds that it's intrusive and that storing such information in a database (which is necessary to use it for this purpose) creates privacy issues.

In response, software makers have been coming up with more creative, software-only ways of identifying and authenticating computer/device users. Some of the implementations are still a little rough around the edges, but it's good to see vendors thinking outside the usual boxes when it comes to logon authentication.

One way of determining whether a computer user is who he/she claims to be is based on the way humans recognize other people's identities: Does the user who is trying to sign in under John Doe's account *look like* John Doe? Facial recognition programs compare your facial features to an image of your face that's on file in a database, by analyzing the structural elements such as the positioning, size and/or shape of your eyes, cheekbones, jaw, chin, nose, etc. These are features that aren't easily changed although, of course, plastic surgery, serious injuries or some types of theatrical makeup can change them.

Facial recognition software is used in many applications, ranging from photo organizing programs that use it to help you tag photos automatically (Windows Live Photo Gallery, Picasa, iPhoto and Facebook all do this) to heavy-duty security software used by the Department of Homeland Security to search for known terrorists in public locations such as airports or large sporting events.

The recently released version of Android (4.0 or Ice Cream Sandwich) includes facial recognition for unlocking the phone, but it's far from perfect. Rumor has it that Apple, too, is considering building facial recognition into its iOS devices, having received a patent for such technology. There are already third-party apps for that. Facial recognition is also used by Microsoft's Kinect/Xbox Live system and might end up in Windows 8, although we don't know yet which features will make it into the final release. You can get third-party facial recognition logon software for Windows 7 and Vista, as well.

More recently, it's been reported in the official "Building Windows 8" blog on the Microsoft MSDN website that Windows 8 will use a different type of authentication, "picture passwords," which involves having you select an image and then draw gestures (such as circling one item in the photo) to serve as the authentication mechanism. This has been criticized as a weak form of security, because someone could observe your gestures and would then know your "password." And of course, it would only work with a touchscreen. It's actually similar to the pattern-recognition unlocking mechanism that's been standard on Android phones for a while, whereby you "connect the dots" in a pattern of your choosing to create a visual "password."

Many who grew up watching "Star Trek" think of the Starfleet ships' computers as the ultimate computing systems of the future. You never saw Captain Picard typing in a password or even submitting to an iris or palm scan to interact with the computer (although he *did* have to enter an alpha-numeric code in order to issue especially critical commands such as "self-destruct"). Generally, though, he just talked to the computer (and it talked back, sounding suspiciously like Majel Barrett). Voice recognition is a form of biometric authentication that analyzes both physiological components of one's voice (tone and pitch) and behavioral characteristics (such as accent or dialect). Then this voice sample is compared to a known valid sample of the individual's voice in the database (referred to as a "voiceprint").

Voice authentication is generally easier and less expensive to deploy than other forms of biometric identification. Instead of having to buy and install a reader or scanner, you use hardware that's already built into most laptops: the microphone. There are a number of third-party voice authentication systems; Nuance (maker of Dragon NaturallySpeaking dictation software) also makes voice authentication applications called VocalPassword and FreeSpeech.

(Continued from page 8)

Some analysts predict that alternative methods of authentication such as voice and facial recognition will become more prevalent in 2012. What do you think? Is the old tried-and-true password good enough for you, or are you looking forward to newer, easier and (we hope) more secure ways of proving your identity to the computer systems with which you interact? Which alternative form of authentication do you think will replace (or supplement) passwords in the years ahead? Join the discussion in our forum or let me know your opinions via email.

XP Tip of the Week: Reset shell folders path to default

Windows XP designates a number of "special folders" such as the My Music, My Pictures, History, Favorites, Programs and others. The location of these folders for each user is stored in the following registry key:
HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\Explorer\User Shell Folders

If you redirect the special folders by moving them to a different location, the path is changed in the registry. But some programs won't work correctly if they can't find the special folders in the default locations. You can reset these folders to the default locations by editing the registry, but there's an easier way. Just use the Fix It tool in KB article 886549.

Windows 7 Tip of the Week: Make a shortcut to network adapter properties

1. If you frequently check or change the properties of your network adapters (for example, if you have multiple adapters and you disable and enable different ones regularly, or if you need to change your DNS servers or other TCP/IP settings for your NIC), you probably get a bit weary of all the clicks required to get to the adapter's Properties sheet: Start | Control Panel | Network and Sharing Center | Change Adapter Settings. You can save a few clicks by creating a shortcut.

    The obvious way to do that would be to drag the icon of your network adapter(s) to your desktop ? but that shortcut won't have the Properties sheet for the adapter when you right-click it (you'll get the Properties of the shortcut link instead). Here's a better way:

    Right-click on empty space on the desktop.

2. Click New | Shortcut.
3. In the location field, type explorer.exe ::{7007ACC7-3202-11D1-AAD2-00805FC1270E} and be sure to put a space after "explorer.exe."
4. Name it "Network Connection" or whatever else you want to identity it.
5. Click Finish.

Now when you double-click the shortcut, you'll go directly to the Network Connections window.

Windows 8 Tip of the Week: More user-friendly reset/refresh process

One of the chief complaints about Windows used to be that if the operating system got badly corrupted, you had to reinstall the OS and then reinstall all your programs and reconfigure your settings. Microsoft has made things better in that regard over the years; with System Restore you can "roll back" to a state where things worked, without wiping out your applications. Windows 8 aims to improve the process even more, with simplified options to "reset" or "refresh" the PC. The former will work somewhat like the "Restore factory settings" option on a smartphone, whereas the later cleans up the system files but doesn't remove your (Metro) apps or personal settings. While both of these are doable in earlier versions, they will be much easier in Windows 8, and the refresh option will actually install a new copy of Windows, then restore your apps, data and settings. Read more about it in PC Magazine's article here.

Windows Phone 7 Tip of the Week: Better browsing with mobile IE 9, part 2

I provided some tips on using the mobile version of IE 9 in Windows Phone a couple of weeks ago. Here are a few more ways to get a better browsing experience on a Windows Phone 7.5 device. In many cases, you can make a phone call quickly and easily from a web page by just tapping on the phone number link. And if you see an address on a web page that looks like a link, tapping it will bring it up on the map. Want to share the page you're browsing to Facebook and/or Twitter? Just tap More (...) and then select Share page | Social networks.

To switch between the tabs you have open in IE, press and hold the Back button. This opens up the App Switcher, and you can flick through the pages to find the one you want, then just touch it.

Want to see that hidden status bar while you're browsing? Just tap and hold More (...) and then drag up very slightly. This will reveal the bar with the time, battery indicator, etc. Drag it back down and release to make it go away again.

Say goodbye to BIOS — and hello to UEFI!

By Woody Leonhard

If you've ever struggled with your PC's BIOS — or been knee-capped by a rootkit that assailed the BIOS — you undoubtedly wondered why this archaic part of every PC wasn't scrapped long ago.

Well, be of good cheer: Windows 8 will finally pull the PC industry out of the BIOS generation and into a far more capable — and controversial — alternative, the Unified Extensible Firmware Interface.

To best understand where we're headed, it's helpful to look at where we've been. An integral part of every PC, the Basic Input/Output System spans the entire history of the personal computer — more than 30 years. The very first IBM PC had a BIOS. And despite extraordinary advances in hardware and software, the BIOS we still puzzle over today is not much different from the one in that original PC. Essentially a miniature OS, the BIOS has a simple but critical function — when a PC powers up, the BIOS checks that all hardware is in order (the POST or "power-on self-test" sequence); fires up the full operating system on the machine, such as Windows (using OS loader code); and then hands all control of the computer over to the OS.

Although older operating systems (such as DOS) relied on the BIOS to perform input and output functions, modern OSes (including Windows) have their own device drivers and completely bypass the BIOS after they're up and running.

These days, it's rare that a PC user is forced to invoke the BIOS's cryptic and somewhat enigmatic user interface. Usually, it's in response to some near-catastrophic system failure.

The Unified Extensible Firmware Interface (UEFI) is essentially the next generation of BIOS. It's a system that potentially offers new and more advanced control of the boot-up process. If your PC is less than two or three years old, chances are good that it already has UEFI (more info) capabilities. Chances are *very* good that you didn't know that, because the hardware manufacturers have been carefully keeping the old BIOS interface as your default boot system. But that will change with Windows 8.

How UEFI is different from/better than BIOS

The standard BIOS has all sorts of problems, not least of which is its susceptibility to malware. For example, there are rootkits that hook themselves into the BIOS OS-loader code, permitting them to run underneath Windows. They're difficult to remove and will reinfect Windows over and over.

And because the BIOS sits on a chip on the motherboard, it's more difficult to update than an operating system or an application. So most PC users never update their BIOS, leaving the PC possibly incompatible with newer operating systems. (The early PC BIOS was hard-coded on a chip, so upgrading required replacing the entire chip or PROM.)

The UEFI is a more sophisticated system that runs before your primary OS kicks in. Unlike the BIOS, UEFI can access **all** PC hardware, including the mouse and network connections. It can take advantage of modern video cards and monitors. It can even access the Internet.

And as you can see in Figure 1, UEFI offers a modern, easy-to-decipher user interface. It could make dual-booting simpler, more visual, and controllable by mouse or touch. If you've ever played your BIOS, you discover that UEFI is in a whole new dimension.

Figure 1. The Asus.com website offers this view of a UEFI-interface screen — clearly, an improvement over the typical BIOS UI we're faced with today.

Unlike the BIOS, the UEFI can exist on a disk, just like any other program — or in nonvolatile memory on the motherboard or even on a

(Continued from page 10)
network share.

At this point, it's important to note that systems can run either the BIOS or the UEFI — or both. When they're both used, the BIOS goes first to run POST, then the UEFI takes over and hooks into any calls that may be made to the BIOS. (Windows typically doesn't make calls directly to the BIOS, but other operating systems might — and the UEFI will handle them, not the BIOS.)

The UEFI can also run without the BIOS — it can take care of all OS loading/interface functions previously handled by the BIOS. The only thing the UEFI can't do is perform the POST or run the initial setup (configuring the CPU, memory, and other hardware). PCs that have the UEFI but no BIOS have separate programs for POST and setup that run automatically when the PC is powered on.

As we all know, the BIOS initialization process — including POST — seems to take a long time. The UEFI, on the other hand, can run quickly.

Moreover, a BIOS is easily reverse-engineered and typically has no internal security protection, making it a sitting duck for malware. A UEFI can run malware-dodging techniques such as policing operating systems prior to loading them — which might make rootkit writers' lives considerably more difficult. For example, the UEFI could refuse to run OSes that lack proper digital security signatures.

And that's where the UEFI controversy begins.

Windows 8 will implement UEFI in new ways

Back in September, Microsoft wrote voluminously about the UEFI in Windows 8. The first post, "Reengineering the Windows boot experience," talks about the basic ways Windows 8 will use the UEFI. (If your PC doesn't support a UEFI, Win8 should still work fine.)

The article shows how current text-based, boot-time options, such as system repair store and image recovery, can be made more usable with a new graphical interface. The story goes on to describe how system startup could go, in seconds, from power-on to Windows Desktop without so much as flickering the screen. It also shows how dual-boot will work with a graphical face-lift.

The changes appear to be largely cosmetic, but they're long overdue and a wel-

come improvement to the constrained, DOS-era recovery environments under which Windows operates.

The second article, "Protecting the pre-OS environment with UEFI," shows how the UEFI secure boot — using Public Key Infrastructure (PKI) digital certificates — validates programs, peripherals, and OS loaders before they can run. The system can go out to the Internet and check whether the UEFI is about to run an OS that has had its certificate yanked.

If it sounds a lot like Secure Sockets Layer protection — no stranger to controversy, as I detailed in my Sept. 15, 2011, Top Story — there certainly are similarities.

Microsoft states it will let the hardware manufacturers struggle with the difficult question of who controls the digital-signature keys. "Microsoft supports OEMs having the flexibility to decide who manages security certificates and how to allow customers to import and manage those certificates, and manage secure boot. We believe it is important to support this flexibility to the OEMs and to allow our customers to decide how they want to manage their systems."

Still, Microsoft is ensuring that anyone buying a certified Windows 8 PC can rely on a certain level of protection from rogue OS loaders. "For Windows customers, Microsoft is using the Windows Certification program to ensure that systems shipping with Windows 8 have secure boot enabled by default, that firmware not allow programmatic control of secure boot (to prevent malware from disabling security policies in firmware), and that OEMs prevent unauthorized attempts at updating firmware that could compromise system integrity."

The controversial side of dual boot

When those details first hit, the Linux community flew up in arms. Dual booting between Windows 8 and Linux might require a digital signature from a recognized certificate authority. That authority might be Microsoft, through its Windows Certification program, and Linux folks would have to pay the piper.

That controversy went on for a while but eventually died down (though it never disappeared) when it became clear that putting together the signature is relatively easy and not very expensive.

Then another conflagration started last week. To understand why, you have to understand that UEFI secure boot has two bail-out options. First, most PCs let you turn off UEFI secure boot entirely. You have to be sitting at the computer and do it manually, but it's easy enough. In one of the Microsoft postings mentioned previously, the company acknowledged that hardware manufacturers could "allow customers to … manage secure boot."

Second, there's a provision for something called "custom secure boot mode" in which you, as a customer, can sit at your computer and type in a signature for any OS loader you darned well like. This manually created whitelist overrides the Windows 8 or third-party check, letting the UEFI run OS loaders unhindered.

You must also understand that Windows 8 will run on two entirely different hardware platforms — Intel/AMD platforms spanning the range from (ponderous!) tablets to full-size desktops, and the svelte, tablet-friendly ARM platforms. If you use Win8, one of your first decisions will be which platform you choose.

The Linux world was taken aback when researcher Glyn Moody and the Software Freedom Law Center announced last week in a blog that Microsoft is making specific demands from hardware manufacturers who intend to sell Windows 8 bundled with their ARM machines — that is, those lightweight Windows 8 tablets. The Microsoft restrictions prevent hardware manufacturers from disabling secure boot and also prevent hardware manufacturers from implementing "custom secure boot" whitelists — but again, only on ARM hardware.

In other words, if at some point in the future you buy an ARM-based tablet with Windows 8 preinstalled, you won't be able to dual-boot with Linux or any operating system other than the ones that pass the security check. Presumably that could mean Windows 8 or some later version of Windows that Microsoft might ordain in the future.

Aside from the fact that the restrictions fly in the face of what Microsoft specifically said in September, it's hard for me to get too worked up about them. If you buy a Win8 (ARM) tablet, you won't be able to root it (Wikipedia definition), and you may not be able to upgrade it. You'll just have to take that into account when you think about buying one — assuming Microsoft is up-front about the limitation and mentions it to consumers.

Intel-based Windows 8 machines — even tablets (including tablets that run only the Metro interface) — aren't hobbled by those ARM restrictions. At least at this point, Intel/AMD machines are, in fact, required to allow multibooting (with signed operating systems) and even to replace Windows 8 with an OS of your choice. It remains to be seen whether Microsoft's going to change its mind about that distinction.

It's a brave new world out there, with Win8 tablets going up against the iPad 3 later this year. Stay tuned!

FREE DUPLICATE PHOTO FINDER

If you're like me, you probably have multiple copies of the same photo all over the place on your hard drives. This is good from the standpoint of backup – it means if one of them gets deleted, you still have another. But sometimes it makes for a disorganized mess. This little program, Awesome Duplicate Photo Finder, will help you clean up your photo collection without the painful process of going through all those pictures manually. It can compare pictures and not only find those that are identical, but also photos that are very similar to one another (different sizes, black and white versions, etc.). Give it a try and let me know what you think. (Note: be sure to click the correct link – *not* the big green "Download" button for File Viewer).

BY A 15 yr. OLD SCHOOL STUDENT
who got an A+ for this entry
(TOTALLY AWESOME)!
Since the Pledge of Allegiance And The Lord's Prayer
Are not allowed in most Public schools anymore Because the word 'God' is mentioned.....
A Student in Arizona wrote the attached NEW School prayer:

"New Pledge of Allegiance"
Now I sit me down in school
Where praying is against the rule
For this great nation under God
Finds mention of Him very odd.

If scripture now the class recites,
It violates the Bill of Rights.
And anytime my head I bow
Becomes a Federal matter now.

Our hair can be purple, orange or green,
That's no offense; it's a freedom scene..
The law is specific, the law is precise.
Prayers spoken aloud are a serious vice.

For praying in a public hall

Might offend someone with no faith at all..
In silence alone we must meditate,
God's name is prohibited by the state.

We're allowed to cuss and dress like freaks,
And pierce our noses, tongues and cheeks...
They've outlawed guns, but FIRST the Bible.
To quote the Good Book makes me liable.

We can elect a pregnant Senior Queen,
And the 'unwed daddy,' our Senior King.
It's 'inappropriate' to teach right from wrong,
We're taught that such 'judgments' do not belong..

We can get our condoms and birth controls,
Study witchcraft, vampires and totem poles...
But the Ten Commandments are not allowed,
No word of God must reach this crowd.

It's scary here I must confess,
When chaos reigns the school's a mess.
So, Lord, this silent plea I make:
Should I be shot; My soul please take!
Amen

Great Android helper apps for Windows

By Fred Langa

Some free and low-cost apps make your Android phone and your Windows PC work together as a team.

Use these tools to optimize your home or office Wi-Fi setup, remotely control your PC from your phone (or your phone from your PC), share and transfer files in either direction, create and edit full-blown Microsoft Office documents on your phone, and much more!

First, however, I have a confession to make: I was a reluctant convert to smartphones — in large part because I'm fad-phobic. When I see crowds of people standing in line, glassy-eyed, waiting to get their hands on the latest smartphone offering, my natural inclination is to back away and run in the other direction.

Part of it is seeing how fragile and fussy many expensive smartphones are. And part of it is that I just didn't initially see the need for many smartphone functions.

Android changed that for me. My Android smartphone isn't flashy or expensive, but it's survived mishandling that surely would have cracked the glass of an iPhone. It makes calls reliably, no matter how I hold it. It gives me instant access to e-mail, messaging, my calendar, contacts, news, and weather. It's handy to have a camera always available for snapshots. I love having always-up-to-date, GPS turn-by-turn navigation available, no matter where I am or in whose vehicle I'm riding. It's great to have instant access to my music collection, and I've enjoyed being able to live-stream my favorite hometown radio stations when I'm on the road.

But one of the biggest surprises I got from my Android phone was the way it could work with and improve my Windows PC use, both at home and on the road. I never expected that.

In the rest of this article, I'll show you some of the most interesting and promising apps that I've found for making an Android phone a highly useful adjunct to a Windows PC, and vice-versa.

All the apps I'll describe here are either free or low-cost, and none requires high-end phone hardware. In fact, my phone is an ordinary, mainstream unit currently running Android 2.3.3 (a.k.a. **Gingerbread**). Chances are, no matter what Android-based phone you have or may get, all the apps I talk about in the following paragraphs will run just fine for you.

Analyze and improve your Wi-Fi connections

The first Android app that made me realize that my phone could actually improve my Windows experience was FarProc's Wi-Fi Analyzer (free; site; see Figure 1).
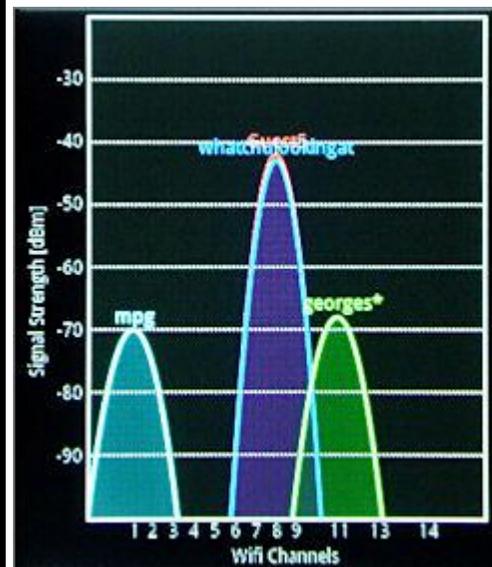
Figure 1. FarProc's free Wi-Fi Analyzer is a five-function tool that lets you identify and explore the Wi-Fi signals in your area. The app's basic *Channel Graph* mode is shown.

Before I go on, a word about these screen shots. Taking a photo of a pixelated smartphone screen with a pixel-based digital camera is not a happy experience; moiré patterns and other artifacts are almost inevitable. I also had to block out personal, identifying information in some photos. I apologize for the uneven quality of these screen shots.

Back to the software at hand: Wi-Fi Analyzer, as you'd expect, shows you all available access points in your area. But the main attraction of this as a Windows helper app is that it also will figure out what the best and clearest channel is for your home or office Wi-Fi router. It might be able to do this better than your router itself can. It did, in my case! (See Figure 2.)
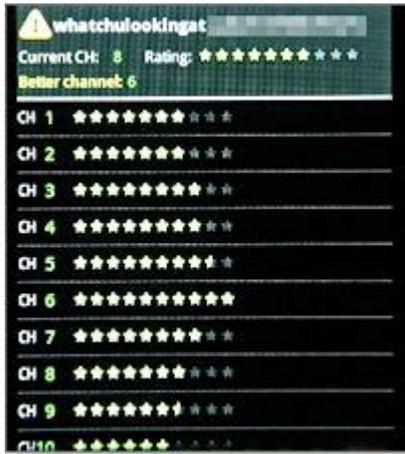
Figure 2. The Wi-Fi Analyzer's most useful function as a Windows helper app is its *Channel Rating* that can automatically tell you the least interference-prone channel available for all your Wi-Fi devices, including Windows laptops and PCs.

I used this app to help overcome intermittent interference from my neighbors' setups. I followed the app's advice and locked my router on the channel it recommended, which was not the one my router had chosen automatically for itself. From then on, my connection speed and reliability improved for all my Wi-Fi devices, both Windows and Android.

In addition to the Channel Graph and Channel Rating functions just mentioned, the app also includes a Time Graph (signal strength over time), a simple list of all Available Access Points, and an analog-style Wi-Fi Signal Strength Meter.

Smartphone tethering and hotspotting

Twice last autumn, my home office lost power and communication for a number of days during separate extreme-weather events. I have a generator, so I could produce electricity, but with no functioning phone or cable modem, I had neither ordinary means to go online to research my Windows Secrets columns nor the usual way to submit them (by e-mail) when I was finished.

So I used my smartphone's standard (and built-in) **hotspot/tethering** function, in which the phone acts as a temporary Wi-Fi access point or router to let PCs get online via the phone's data service and plan. It offers many of the same security features of full-blown routers or access points. I completed and turned in a Top Story and two columns this way. (See Figure 3.)

Figure 3. *Tethering/hotspotting* lets your smartphone act as a standard access point for any Wi-Fi–capable devices (such as Windows laptops).

In addition to emergency use at home, I've also used tethering in motels, restaurants, airports, and other places where the offered Wi-Fi service was poor, nonexistent, expensive, or suspect.

Almost all Android smartphones from 2.2 onward support Wi-Fi tethering; check your owner's manual for specifics. For general information, see this AndroidCentral article or this Wikipedia article.

View and control your Windows PC by smartphone

LogMeIn's **join.me** Viewer (free; site) lets any Android phone securely view any participating Windows desktop. (See Figure 4.)

Figure 4. The free *join.me* viewer lets you see anything displayed on a participating Windows PC's screen, via your Android smartphone.

You can use join.me to remotely view presentations, documents, or anything on a remote PC's screen. (You and the person at the remote PC both use the free software to establish a secure viewing channel.)

But it's only a viewer: you can't use join.me to create new documents, nor can you remotely control the Windows PC.

When I need those functions, I use join.me's more capable sibling, LogMeIn's **Ignition** (U.S. $30; site). It's a smartphone-based remote-control and remote-desktop app that securely gives you total control over any PC that you're authorized to use, as long as that PC is also running any version of the standard LogMeIn software — even the free version (site)!

Ignition comes with special functions that let you emulate right and left mouseclicks, various keystroke combinations (such as **CTRL+ALT+DEL**), and so on — from your phone.

Of course, putting a full-sized PC screen on a smartphone can be problematic, but Ignition's zoom and scroll functions make it manageable.

View, control your smartphone from a Windows PC

Damian Kolakowski's **Remote Desktop** (free; site) works in the other direction. It lets you remote-control your phone and access its contents. You get direct access even to your smartphone's root file system from any Windows PC, using Internet Explorer, Chrome, or Firefox. (See Figure 5.)

Figure 5. The free *Remote Desktop* app lets you use your

Windows PC and any mainstream browser to view, organize, and retrieve documents, photos, videos, mail logs, MP3s — anything — on your Android smartphone.

This app makes sharing and organizing the files on your phone much easier —

(Continued from page 16)

you don't have to use the phone's tiny buttons or screen keyboard. Instead, you can use your standard Windows desktop or laptop system's hardware to manage the phone.

And, if you know Linux/Android, you also can use the app's Terminal function to interact directly with the phone's operating system, for near-total control. (Yes, it's potentially dangerous. Be careful!)

Use native MS Office documents on your phone

It's hard to imagine until you see it, but Quickoffice Pro (free trial; $15 to keep; occasional sale prices as low as $5; site) lets you access, create, edit, and share genuine, native-format, Microsoft Office documents, spreadsheets, and presentations on your smartphone. The app supports the file formats used from

Offic   e 97 onward, including Office 2010's
.docx and related formats. The app also includes a **.pdf** viewer. (See Figure 6.)
Figure 6. Quickoffice Pro puts a mini Office-compatible suite into your smartphone.

After you've created or edited a document, you can e-mail it right from inside Quickoffice. Or you can share it through a variety of built-in connections to your accounts on Google Docs, Dropbox, Box, Evernote, Catch, Egnyte, Huddle, SugarSync, MobileMe, Facebook, Twitter, LinkedIn, SlideShare, Docstoc, Scribd, Yammer, and other services.

The app also includes a file manager that lets you create, copy, move, delete, rename, and sort files and folders in your phone's memory. Quickoffice's other features are far too extensive to list here; see the site for the full spiel.

When you use this app with a tool such as Remote Desktop (discussed previously), you can drop live Office files created on your Windows PC to your phone (or vice versa) and always have current, editable versions of your important files available at your fingertips. In some cases, this means your smartphone can take the place of a laptop or netbook on a trip.

As of this writing, a $15 price is current — a remarkably modest amount for an Office suite. However, there's a free trial available, and I also recently picked up a copy of QuickOffice on sale for just $5, which is positively astounding. At either $5 or $15, I think this is a truly great app.

An app in development that bears watching

BlueStacks is a free Android emulator/virtual machine that lets you run your Android apps directly on your Windows PC. It's in late alpha, so there are many rough edges, but when it's finished, it will complete the circle. You'll be able to use BlueStacks to run Android apps on your PC. You'll also be able to use the apps I described previously to access or remotely run your Windows apps from your phone as well as to seamlessly pass documents back and forth.

BlueStacks has two components: Cloud Connect (free; site) runs on your Android phone, and the BlueStacks virtual machine itself (free; site) that runs on your Windows PC.

Definitely worth watching!

These Windows helper apps are only the beginning

(Continued from page 17)

Android use is growing exponentially now, and new apps — free and commercial — are pouring into the marketplace. Some pundits are predicting that the number of Android apps will surpass the number of iPhone apps this year.

You can choose from among many places to scope out what's available, but the sites I find most useful are Google's own enormous Android Market, with some 400,000 apps currently available; AppBrain, which filters, reviews, and rates Android Market apps to help you separate the wheat from the chaff; and Amazon's Appstore for Android, available in the left-hand navigational bar on Amazon's home page. In addition to offering some apps unavailable elsewhere, Amazon also offers one normally commercial app free each day.

Windows is a great OS, and Android is very good and getting better. Together, they make an awesome combination.

A Real Cow boy has no Fear

XP TIP OF THE WEEK: DISPLAY PREFERRED FOLDERS ON THE START MENU

Customize preferred folders on Start menu
The Start menu in XP, Vista and Windows 7 displays shortcuts to several commonly used folders, such as Documents, Music, Pictures and Games. Some of these you might not ever use, and if so you can replace them with favorite folders that you *do* use.
If you're using XP, you can replace the Pictures or Music folder by running one of the scripts that are linked on this page, which also shows you screenshots of the process.

WINDOWS 7 TIP OF THE WEEK: INCREASE THE AMOUNT OF VIRTUAL MEMORY IN WINDOWS 7

1. Virtual memory refers to the use of hard disk space to emulate random access memory (RAM), so your computer can run more programs simultaneously or run memory-intensive programs more easily. If you get a message in Windows warning you that you're low on virtual memory, you can do one of two things: add physical RAM (this is the best solution, because real RAM is faster than virtual memory) or increase the size of the paging file, which is the space on the hard disk that emulates memory (this is the easiest and cheapest). Here's how to do the latter in Windows 7:

   In Control Panel, click the System app under System and Maintenance.
2. In the left pane, click Advanced System Settings. Enter the admin credentials if prompted.
3. Click the Advanced tab.
4. In the Performance section, click the Settings button.
5. Click the Advanced tab.
6. In the Virtual Memory section, click the Change button.
7. Uncheck the box that says Automatically manage paging file size for all drives.
8. Under Drive [Volume Label], click the drive where your paging file is located (note that you can have paging files on multiple drives).
9. Click Custom Size and enter the new, larger size in megabytes. Enter the same number in the Initial Size and Maximum Size fields.
10. Click the Set button.

CLICK **OK.**