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Cyber Criminals, Urban Startups, and More!

Do Some Good Tech; The Black Hat Convention; Global Cyber Criminals; Government Cyber Leakers; Retail Innovation and Technology; Windows XP Apocalypse; Urban Start-ups; Executives and Mompreneurs; Following a Founder Genius.

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Digital Dave answers your tech questions.

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Do Some Good Tech, Ethical Hackers and Cyber Criminals, Windows XP Apocalypse and Urban Start-ups

Do Some Good Tech; The Black Hat Convention; Global Cyber Criminals; Government Cyber Leakers; Retail Innovation and Technology; Windows XP Apocalypse; Urban Start-ups; Executives and Mompreneurs; Following a Founder Genius.

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Digital Dave

"Digital Dave answers your tech questions." by Digital Dave

Copy Favorites List in Internet Explorer; Alternative E-mail Programs; Saved Passwords in Internet Explorer and Google Chrome.

Copy Favorites List in Internet Explorer

Dear Digital Dave,

I bought a refurbished laptop to use as a backup to access e-mail and Internet in case my main PC fails. I'd like to copy my "Favorites" list from MS Internet Explorer to my backup laptop as well as my "Contacts" list in MS Outlook. I'm running Windows 7 on both machines. I'm unsure where to look to find these data files to copy to a thumb drive for the transfer process. Any suggestions are appreciated! Mike Cardiff, CA

Dear Mike,

In Internet Explorer there is a menu bar across the top of the screen (which may be hidden from view) that includes a File menu on the left end. (This is not the same File that appears when you click the gear icon in the upper right-hand corner.)

In Internet Explorer on your original machine, if you don't see the menu bar (File | Edit | View | Favorites | Tools | Help), then hit the ALT key and it will appear. Click the Export to a file radio button and Next. Check Favorites and Next. Select the Favorites folders you want to copy and Next. This new window will give the path to the folder where the Favorites will be saved. Make a note of this and Export. This is the file that you want to copy to the new computer.

On the new refurbished computer load Internet Explorer and select "Import and export..." from the File menu. (Again you may need to hit the ALT key to see the menu bar.) Click the Import from a file radio button and Next. Check Favorites and Next. The path and filename (probably bookmark.htm) should be where you saved the file from the old computer. Continue to import the file.

You should find a similar method for transferring contacts in Outlook.

You can also use Microsoft's <u>Windows Live</u> to transfer your contacts in the People section. It's done in a similar export/import fashion, but you should be able to access it from both computers.

Digital Dave

E-mail Programs

Dear Digital Dave,

I have a HP TouchSmart All-in-One computer with Windows 7, which means I unfortunately have Windows Live Mail. Personally, I hate it and I can't use Outlook Express. In your opinion, what e-mail program would you recommend for basic e-mail and forwarding of e-mail that contains photography?

Thanks for attention. Rob Macfie San Diego, CA

Dear Rob,

There is a plethora of free e-mail programs which could fill the bill. All you have to do is search on the terms "best free e-mail programs." You'll get many alternatives, but always at (or near) the top of the list is <u>Mozilla Thunderbird</u>.

I don't use my e-mail program for anything other than picking up and sending messages, so I'm pretty easy to please. Any of them should be able to handle photography, but I would go another direction for sending out image files. The problem with large files is that whether they are delivered or not depends upon more than just your e-mail program. There are two e-mail servers, yours and the recipients, which depending upon their setup could block files it deems too large. Plus, depending upon the size of the e-mail attachments, both your upload time and the recipients download time could be extended to an uncomfortable length.

I'd recommend getting a free service such as one of the photo storage sites (<u>Flickr</u>, <u>Picasa Web</u> <u>Albums</u>, <u>Photobucket</u>, etc.) or even better an online sharing site such as <u>Dropbox</u>. That way you can upload your photos to the online service and e-mail links to all your friends and/or associates. There is no wondering whether the e-mail will get through or not based upon its attachments. The advantage to Dropbox is that you can post all type of files, not just images.

Other readers who have more experience with alternative e-mail programs may be able to offer you more recommendations.

Digital Dave

Saved Password in Internet Explorer and Google Chrome

Dear Digital Dave,

In both Internet Explorer and Chrome you are prompted to save the password on most Web sites. If you say no then you apparently can never save the password to that Web site again.

I also have an issue with Chrome. I had a saved password for the Denver Post electronic edition. When I went to change it I looked up the help screen, which told me to delete the password first. Having done that I again haven't been prompted to save the password. I've toggled the save password option in administration to no avail.

Is there a solution to this?

Thank you, Rich Denver, CO

Dear Rich,

In Google Chrome the password settings are found in Settings => Show advance settings... => Passwords and forms. (Click the small icon with the three little horizontal bars in the upper right-hand corner to select Settings from the dropdown menu.) Click "Manage saved passwords." A Passwords window should open and you will be able to change passwords or delete them entirely. At the bottom of the list, there is a "Never saved" list. You may need to delete one of these before Chrome will offer to save it again.

For Internet Explorer things are different depending upon the version of IE. If you have opted to "never save" for a particular site, then you must delete all saved passwords to reset the "never save" sites. Go to Tools => Internet Options and select the Content tab. Click on the AutoComplete => Settings button. In the AutoComplete Setting window which pops up click the "Delete AutoComplete history..." button. In the Delete Browsing History window check Passwords and click Delete. This should remove all saved passwords.

In Windows 8 there is a utility called Manage Web Credentials (search from Start Screen). The saved passwords are found in the Web Credentials tab and can be edited or removed. The same feature can be accessed via the AutoComplete Settings window in Internet Explorer 10 through a Manage Passwords button. However, there is no "never save" listing, so it seems you would need to delete all passwords as noted above to get a new opportunity to save.

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Digital Dave

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Cyber Criminals, Urban Start-ups, and Founder Genius

"Do Some Good Tech, Ethical Hackers and Cyber Criminals, Windows XP Apocalypse and Urban Start-ups" by Marilyn K. Martin

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Do Some Good Tech

In August 2012, the *CSMonitor* reported on how some iPhone and Android apps can help you find worthwhile charities and volunteer opportunities <u>while on-the-go</u>. <u>iKiva</u>, which I've reported on before, is a micro-lending service in developing countries. iKiva shares the stories of these global poor who need a little money for their farms or small businesses, and now has a <u>smartphone app</u>.



"I don't know about you, but my owner volunteered me for this charity clean up. He doesn't do trash."

a wide range of worthwhile causes to back.

VolunteerMatch also has a <u>smartphone app</u>, and is considered the best at matching volunteers with local charities, and even offers job listings for non-profits. UNICEF is another worthwhile charity for children worldwide, and offers several phone apps on <u>Behance</u>.

In June 2012, Nibletz announced a New York start-up called <u>DoGoodBuyUs</u> as a central marketplace to buy and sell <u>charitable goods</u>. Created by Zack Rosenberg, the site offers non-profits an exclusive place to congregate and maximize awareness. They offer a wide variety of charitable products to choose from in an easy to find commercial platform, as well as

MoneyCrashers ran a story in 2012, about where to donate your used furniture to charity. For each piece of furniture you donate, you can deduct the current fair market value from your taxes. You just have to be sure to get a receipt to turn in with your taxes. And the Salvation Army puts out a <u>Donation Valuation Guide</u>, to help determine that value. There are almost a dozen used-furniture charities listed, from the usual national charities (Goodwill and Salvation Army), to the Vietnam Veterans of America and even sites listing ads for free things, like Freecycle and FreeSharing.

And in a personal blog from March 2012, A-Marie Imafidon discusses how charities should embrace a <u>start-up mentality</u>. Crowdfunding sites for charities and non-profits, like <u>PeopleFund</u>, use high-visibility marketing techniques. And leveraging social media, like Twitter, is another great idea for charities to achieve more visibility. Charities also need to get creative to get noticed and ensure sustainability, like <u>DollarShaveClub</u>, whose tongue-in-cheek video sells razor blades for charity.

The Black Hat Convention—July 2013

"Ethical Hackers" are hot right now, and everyone from major corporations to government agencies want to buy or rent their skills for everything from finding software glitches, to seeking out dangerous and unknown back-doors into software and hardware. And no meeting-of-the-minds is bigger than the annual <u>Black Hat Convention</u> in Las Vegas every July, although it has grown into a "global conference series" with events all over the world.

What once started out as a secretive conference for hackers (no real names on sign in, and

only cash for the entry fee) Black Hat has now morphed into a "must attend" event for both hackers and security experts. The <u>opening keynote speech</u> this year was delivered by General Keith Alexander, the current Director of the (embattled) National Security Agency.

Other speakers usually make the news by "<u>exposing vulnerabilities</u>," such as how easy it is to hack electronic locks or start cars remotely. But the Hacker Ethos survives, and pranks ran wild at the recent BH Convention—as well as some thumb-drives with malware. The Seven Unwritten Rules of attendance include "Don't accept gifts," "Anything can be hacked, so be vigilant" and "Don't end up on the Wall of Sheep" (which displays the names and partial passwords hackers have obtained from unsecured computers.)

Global Cyber Criminals—Business is Booming

Also in July 2013, the *New York Times* ran a story about how foreign hackers, on their own, <u>search for secret flaws</u> in governments' computer codes, and then sell them to countries wanting to break into frenemies' computer systems. Business for these do-it-yourself hackers is booming on a state level, as hackers search for software coding flaws called "zero days", and then sell what they find to anyone from the NSA to Iran. And Microsoft recently increased the bounty it will pay for flaws found in MS, up to \$150,000.

A dozen years ago, freelance hackers would discover flaws in, say, Microsoft, and turn them over to MS for free, and receive a t-shirt or Honorable Mention on their Web site. Today, after the Stuxnet worm and Snowden's leaks, "computer vulnerabilities" is a potential goldmine for well connected hackers. Some now broker their discovered flaws for a 15% cut—or royalty fees for every month their disclosed flaw remains otherwise undetected.

Yahoo Small Business Advisor ran a July 2013 article that warns how cyber crime is now aimed at stealing information and data for <u>financial gain</u>—rather than the yesteryear thrill of shutting down Web sites or installing malware. Any size business can be hit by "ransonware," whereby cybercriminals convince a business that dangerous flaws have been found in its computer system, and they need to purchase security-software. This is really rogue antivirus software that lets the cyber criminals into that company's system whenever they want. "Phishing" scams are oldies-but-goodies, involving fake log-in screens, which remain rampant. As well as malicious links and attachments to siphon money from financial accounts of individuals and businesses alike.

In July 2013, the *New York Times* reported that even America's research universities are now subjected to millions of <u>hacking attempts</u> every week, mostly from China. Campuses are having to tighten security, constrict their culture of openness and sharing, and back-track to determine if and what has been stolen. Many times the cyber-thefts are just after personal data, like social security numbers, which means the hackers may be targeting research professors with valuable patents. Hackers often bounce their penetration attempts through multiple computers or countries, so tracing the origins of the cyber-attacker can be a fruitless

search.

Government Cyber Leakers: Prevention and Capture

With the US still trying to determine all the information Edward Snowden (now in Russia) leaked, General Keith Alexander, Director of the National Security Agency, is working to replace human techs with machines.

This *Washington Times* article from August 2013 disclosed that General Alexander predicts that 90% of the "system administrator" positions (like Snowden held) would be cut in the coming years. The agency is already moving to adopt a cloud system, that uses machines to move and store sensitive data, "to make networks more defensible and secure." Even John Brennan, CIA Director, added that efforts are underway (probably government-wide) to "make technical opportunity less and less available."

In July 2012, *Wired* reported that the Pentagon had already come up with a new idea for busting government <u>computer leakers</u>, by targeting how they Search and then enticing them with decoy documents to snag them. Called Fog Computing, or "disinformation technology," Pentagon computer scientists claimed they already had a prototype for "automatically generating and distributing believable misinformation (to) track access and attempted misuse."

Their first step is to bury potentially valuable information in a pile of worthless data, making it harder for potential leakers to figure out what to disclose. The more the leaker searches, the faster he/she can be caught by bogus documents. Like replacing techies with machines, this "electronic tracking" was hailed as the best way to shut down the "insider threat" of government embedded leakers, bypassing the dubious practice by the Dept. of Justice of going through suspects' e-mails and phone calls. (Although it apparently didn't work with the recent mega-leaker, Edward Snowden.)

More on Retail Innovation and Technology

In June 2013, the *Minneapolis Star Tribune* (through the *Denver Post*) reported that a reverse effect is being observed with some online retailers—they are now opening <u>offline stores</u>. Despite dire predictions that brick-and-mortar stores are going extinct, some online "specialty" stores are opening physical stores. <u>Sigma Beauty</u>, a fast-growing online makeup retailer, recently opened their first outlet at the Mall of America. Although online retailers enjoy lower overhead costs than physical stores (from space leases to hiring clerks/cashiers), adding an outlet store lets customers examine the products up close. This can create a bond with customers that solidifies their interest in that mostly-online retailer.

Also in June 2013, the *CSMonitor* ran a story that Microsoft and Best Buy were teaming up to open <u>brick-and-mortar mini-stores</u>. The two retail giants are opening 600 Windows Stores this

summer in the US and Canada, which will replace the computer sections of certain Best Buy stores. In April 2013, Best Buy also allowed Samsung to open mini-stores (staffed with Samsung employees) in certain Best Buy outlets. Microsoft hopes the Windows Stores will help customers become more familiar with Windows 8, ultimately boosting PC sales.

The Seattle Times reported in July 2013, that Seattle-area artists are using <u>Etsy</u> to help <u>sell</u> their creations online. Seattle retailer <u>Nordstrom</u> has even partnered with Etsy on an 80-piece collection for weddings, which includes handcrafted work by five Etsy artists. Retailers are attracted to Etsy, which is becoming a national trend, because "that's where people go to find art accessories that really come with a story." Etsy offers original art and craftwork for people who want to break out of the sea-of-sameness arts and crafts found in most national chains.

Windows XP Apocalypse—Microsoft Stops Support Next Year

According to *Computerworld* in June 2013, Microsoft's plan to <u>end support</u> of Windows XP in April 2014 may be a game-changer in multiple ways. Hewlett-Packard executives happily expect a significant boost in PC sales when XP shuts down.

But WindowsITpro, in August 2013, announced that Windows XP still <u>accounts for 37%</u> of all desktop operating-system usage share (as of July 2013), well ahead of all other Microsoft Windows programs except Windows 7. They think this "XP Apocalypse" may be a disaster in the making, since 510 Million PCs around the world still run XP.

In August 2013, Computerworld reported that global hackers are already searching for and storing <u>XP viruses and exploits</u>, preparing to unleash them the second Microsoft stops supporting Windows XP next April. Similar to what I reported above, cyber-criminals expect to charge twice their normal "ransom" by selling these XP exploits after Microsoft's support for XP ends. Although deep-pocket corporations and government agencies can pay Microsoft a bundle to continue supporting their XP systems, the only option for most businesses using XP is to upgrade to Windows 7 or 8. Experts already predict that signs of "bug-banking" for XP vulnerabilities should show up during the fourth quarter of 2013, by "a sharp reduction in the number of publicly-disclosed or used-in-the-wild XP vulnerabilities."

Urban Start-ups: Sharing Economy and Come-to-You Services

In January 2013, the *Los Angeles Times* ran a round-up of <u>start-up service providers</u>, and how they were growing and expanding. <u>Capsule</u> is an event-based sharing platform now focusing on weddings, and has now partnered with <u>TheKnot</u> for photo-sharing technology of the Big Day. While <u>PromoJam</u> simplifies the process of creating marketing campaigns, with a dashboard

display for information about campaign traffic, social engagement and conversion rates. And parking app, <u>ParkMe</u> received new investment funds for their comprehensive database of onstreet and off-street parking locations and availability, and plans to expand from their original 500 cities in the US and Europe.

Also in January 2013, the *San Jose Mercury News* (through the *Denver Post*) ran an article about how the "sharing services" model for start-ups, from sharing cars to spare bedrooms, is now being used to <u>match consumers</u> with less expensive professional services, many of which can come to your home. <u>YourMechanic</u> has a mobile network of certified auto mechanics that will come to your home or office. <u>Homejoy</u> is a maid service you can book online. And similar services are popping up to rent chefs through <u>Kitchit</u>, or mobile barbers through <u>GoHaircut</u>.

Start-up News: Executives and Mompreneurs

In May 2013, the *New York Times* ran an article about how many new successful start-ups are being created by "professed company builders," now investing their own money and acquired skills as executives to start their own companies. These seasoned executives or venture capitalists call themselves "serial entrepreneurs," and typically operate multiple companies at one time. These investors-turned-inventors are frequently motivated by personal passions to start companies. They can also tap their many friends and acquaintances for capital, if need be. And venture capitalists like the idea of funding "people with operational experience who can give their full attention to these companies."

The Miami Herald in May 2013 ran an article about how South Florida "mompreneurs" are turning their <u>parenting solutions into start-ups</u>. With 30% of US companies now owned by women, "technology has made it possible for women to manage their families and work life, while being a mompreneur has made it possible for them to be the owners of their own time. One successful mompreneur is Lourdes Leon-Vega, who started <u>Tutti-Bambini</u> as a maternity concierge service and baby boutique. Now a certified "baby planner," Leon-Vega leases 1,500 square-feet of space in South Miami, which offers expectant mothers' classes in everything from prenatal fitness to sibling training.

Following a Founder Genius: Microsoft's Steve Ballmer

According to an August 2010 article in *MubbisherAhmed*, founder Bill Gates' managementstyle at Microsoft started the whole new-agey, "office culture" of <u>casual-and-fun</u>. Gates wanted employees to love working in MS offices, and find inspiration through casual discussions and even playing video games. Gates then eliminated the bureaucracy and "stupid rules" most corporations are built around, and created great morale by encouraging and respecting individual effort. Gates also had a clear vision to aim for—becoming a Corporate Tech Giant—and hired the smartest people (many friends and former colleagues already loyal to him) who could also work hard toward that goal, through constant innovation. Throw in a tight budget, and Gates' famous ability to quickly analyze proposals down to the bottom line, and it's easy to see how the Gates Model of Business is now being taught far and wide.

Steve Ballmer was Bill Gates' right-hand-man he'd known since Harvard, and was Microsoft's President. Like many successful partnerships-of-opposites, Ballmer was the gregarious salesman to Gates' quiet brainiac. Ballmer was tapped to be CEO when Gates retired in 2000, although Gates hung around as Microsoft Chairman. Having worked with Gates for around three decades, Ballmer stuck to the Gates blueprint of taking risks with innovation—but not with finances.

He successfully tripled Microsoft's revenue, and sought to reshape MS from focusing on "packaged software" to "devices and services." But his experience was in PCs, and all other top management (who might have had more experience in "devices and services") had left or been pushed out. Ballmer first survived the criticism for not jumping on the mobile bandwagon quicker, trailing Apple and Google. But the introduction of the overly-complicated Windows 8 in 2012 was a disaster, and the upcoming new quirky Xbox introduced in early 2013 has also taken a lot of flack. In August 2013, Ballmer announced that <u>he will retire</u> within the next 12 months.

Following A Founder Genius: Apple's Tim Cook

Steve Jobs was to computer hardware, what Bill Gates was to computer software. Jobs created his first bare-bones Personal Computers in his parents' garage, and also went on to create and grow a mammoth tech company that has inspired near legendary fandom. <u>His management style</u> was more device-centric, focused on spotting opportunities for improvement (like cell phones) and creating an environment to bring that opportunity to fruition. His business genius was to bypass the consultants and market research, and listen to what people wanted or needed to improve their own productivity. In a pinch, Jobs would just follow his instincts, rather than submit to "paralysis by analysis."

Apple wasn't as "employee friendly" as Microsoft, and at times was crazy and even draconian. But Jobs did recruit the smartest people he could, and was quick to jettison them if they weren't as committed to Apple as he was. Difficult to work for, Jobs accomplished a lot with his personal charisma, such as "making the design of a power supply feel like a mission from God," and was his own best salesman. Sickly in his later years, Jobs was acutely aware of the need for successors to run his beloved Apple, and worked hard "to make the whole executive team good enough to be successors." With lots of medical-leave, amid calls by investors for a succession-plan, Jobs resigned in early 2011 and died that August.

Jobs hired Tim Cook from Compaq in 1998 to fix Apple's production mess. This partnership

too seemed to be the best-of-opposites, Cook's calm and methodical brainiac as Chief Operating Officer, to Job's mercurial and demanding genius. By 2008, CNN Money was predicting that "operations whiz" Cook was the <u>best choice to replace</u> founder-genius Steve Jobs. And Cook was thoroughly tested early by stepping in as "interim chief executive" as Jobs got sicker and took more leave from Apple.

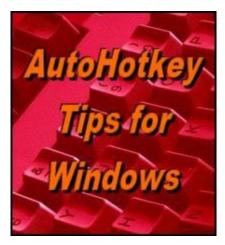
As Apple's official CEO since 2011, Tim Cook is described as "demanding and unemotional," a private workaholic appreciated for his even temperament, who can still cut to the bottom-line in meetings with one sentence (much like Bill Gates). He too inherited lots of expectations for a company that has morphed from a "scrappy industry pioneer" into a corporate behemoth. But despite his reputation for being stat-driven and consensus-oriented, he has depth and breadth of "gadget experience," and <u>can deftly manage</u> the iPhone and iPad product lines Jobs started.

But Cook too has had to ride herd on unacceptable glitches, like Apple Maps. And deal with constant questions about Apple's pile of cash, and whether or not there are "totally new products" in the pipeline. He's also fired a few of Jobs' soul-mates at Apple (while promoting others), which may have contributed to the quiet flood of employees bailing to new companies. But despite endless Cook-firing rumors, *Forbes* suggests that as long as iPhone sales and activations remain strong, Cook's job as Apple CEO is probably secure.

Marilyn is a freelance writer and humorist, with a special interest (besides computers and technology) in Science Fiction. Besides short stories published in various magazines, she also has some new e-books available on Amazon Kindle: Hunting Monster Aliens is an ongoing series of novellas, about a wise-cracking team of ghost investigators who occasionally turn into alien-monster hunters. <u>Culture Crash! A California Yankee Transplanted to Texas</u> is a collection of humor essays chronicling her adventures in her new home-state.

ComputorEdge E-Books has converted many of Marilyn's computer humor columns into four e-books.

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Yet, One More Reason to Use AutoHotkey Free Software!

Common AutoHotkey Messages and Errors Encountered

by the Novice

"Here Are a Few Issues Every Beginner Should Understand" by Jack Dunning While all AutoHotkey users encounter these warnings and errors at some time, they can cause a great deal of frustration for the beginner. Here is how to deal with them.

The following review of the AutoHotkey e-book <u>*A Beginner's Guide to AutoHotkey*</u> was posted on Amazon.com the other day:

"I found it a little difficult to follow, it's disorganized; randomly providing hotkey recipes without talking about exactly where to begin; from downloading and installing to how to deal with unexpected error messages, like: 'An older version of the script is already running'. That error appeared on day one and I still don't know what to do about it."

I mostly agree with this review and attached a comment to it on Amazon.

First of all, although I had seen the same AutoHotkey "older version" message many times when I was starting (and still do occasionally), I neglected to mention it in the first book. This was a complete oversight on my part. Virtually everyone will experience this message at some time—even if they are not writing the script. I plan to fix that omission when I update the book (probably in a couple of months). For now I will provide an answer here, plus address a couple more common errors people are likely to encounter when writing AutoHotkey scripts.

An Older Instance of This Script is Already Running

If an AutoHotkey script (or compiled EXE file) is already loaded and you attempt to run it again by either double-clicking the icon in Windows Explorer or using the Run dialog, there is a reasonable chance that you will see a warning as in Figure 1. An instance of the script running is the same as a separate process or window when running any program. Most programs such as Web browsers allow you to run it multiple times (instances) opening additional windows or

instances. Some programs such as e-mail clients only allow one instance to run at a time. This avoids possible conflicts between two identical processes.

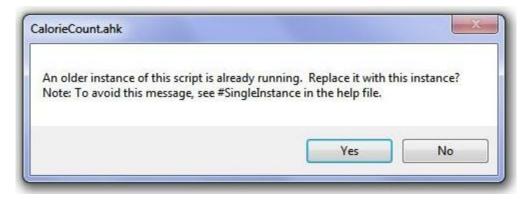


Figure 1. By default AutoHotkey only allows one instance of a script to run. If you try to load another while a first is running, this window warning will pop-up.

By default AutoHotkey does not allow more that one instance of a script to run. If you want to reload the script without getting the warning, the easiest way is to right-click on the AutoHotkey icon in the System Tray and select Reload This Script as shown in Figure 2. This will replace the current instance with the latest saved version of the AHK file (*CalorieCount.ahk* shown in Figure 1 above) without asking questions.



Figure 2. When testing AutoHotkey scripts, using Reload This Script will avoid the single instance warning window.

Not only is the reload automatic, but it saves returning to Windows Explorer (of the Run dialog) to rerun the script. Of course, you can always click Yes when the warning window pops up, although that extra step can get annoying.

You can override that default behavior by adding #<u>SingleInstance Off</u> to your script, but you

may not want to do that since it will leave multiple instances of the script running—a new one every time you load the script from Windows Explorer or the Run command. In most cases, you will want only one instance of a script loaded. In that situation, it's better to add #SingleInstance Force to the script which will automatically reload your script with the new version and avoid the warning.

I would avoid using *#SingleInstance Ignore*. While this will stop the warning window from popping up, it also will not reload the script. This could drive you crazy if you think you're reloading the script, but don't see the changes.

There are times when you want to load multiple instances—as is the case with the InstantHotkey app. The InstantHotkey which sets up a temporary hotkey combination for adding tailored text to any document. If you want to set up more than one hotkey combination, each with its own text, you need a separate instance of the app running for each combination. (You could write one script to create multiple hotkey combinations, but that would greatly complicate the script.) This multiple use of the app is made possible with the #SingleInstance Off command. However, this is an exception rather than the rule. If this were done with the Calorie Counting app, then confusion between open windows could (and probably would) cause data loss. (By the way, the InstantHotkey app, which can be downloaded at the ComputorEdge AutoHotkey Dropbox download Web site, has just been updated to include an Add Text menu item in the icon right-click menu in the System Tray which can substitute for using the temporary hotkey combination.)

There are a couple of common errors which could confuse novice AutoHotkey script writers.

Common AutoHotkey Errors

When loading AutoHotkey scripts, it's common to encounter pop-up windows showing errors found in the syntax of the script. Usually it's a spelling mistake in the code or a malformed command. The error window displays both the error and where it is located in the script. Normally, it's merely a matter of correcting the code, saving the script and rerunning it. Here are a couple of the more common errors that are more likely to occur and how to deal with them.

Missing Label (Subroutine)

Many of the AutoHotkey commands allow the addition of an option called <u>g-Label</u> which calls out the name of a "label" or subroutine found within the script. It appears in the form of the subroutine name with the letter "g" in front of it (i.e. *gCheckTime*, *gCalculate*, *gAddItem*, etc). (The "g" stands for <u>Gosub</u> which is the command for calling a subroutine.) The g-label option is commonly used in the GUI controls of an AutoHotkey window. The label (subroutine) is executed when the control is either clicked or changed—depending upon the type of control. The subroutine uses the same name as the g-Label without the "g" with a colon added at the end (i.e. *CheckTime:*, *Calculate:*, *AddItem:*, etc). If the g-Label option is used in a line of code, but the subroutine isn't found, then AutoHotkey displays an error (see Figure 3) and the script stops loading.

	Target label does not exist. cally: gWhatsUp?
>	Line# 032: Gui, Add, Text, xp-100 yp+28, Serving Size 033: Gui, Add, Edit, w300 xp+100 yp-3 vFood3, Serving size 034: Gui, Add, Text, xp-100 yp+28, Calories/Serving 035: Gui, Add, Edit, w50 xp+100 yp-3 vFood4 number gTotalCalCalc right 036: Gui, Add, Text, xp+70 yp+3, Number Servings 037: Gui, Add, Edit, w50 xp+100 yp-3 vFood5 gTotalCalCalc right 038: Gui, Add, Text, xp+70 yp+3, Calories 039: Gui, Add, Text, xp+70 yp+3, Calories 039: Gui, Add, Text, w50 xp+50 yp vFood6 gWhatsUp? 040: Gui, Add, Button, xp-400 yp+23 gAddItem, Add to List 042: LV_ModifyCol(1, 0) 043: LV_ModifyCol(2, 150) 044: LV_ModifyCol(3, 125) 045: LV_ModifyCol(4, "Integer 50 NoSort") 046: LV_ModifyCol(5, "Float 50 NoSort") 047: LV_ModifyCol(6, "Integer 50 NoSort")
ine cu	

Figure 3. If the g-Label option is added to a command line, but the subroutine is not found, an error results and the script stops loading.

The resolution is as simple as adding the subroutine to the script—even if it doesn't do anything. For the example in Figure 3, the following code would eliminate the error:

```
WhatsUp?:
Return
```

Eventually, the associate code is added between the *WhatsUp?*: and the *Return*, but initially matching the label name to the g-Label option called will suffice. The *Return* is required to mark the end of the subroutine.

The Variable Already Exists

Another common error encountered by beginners occurs when AutoHotkey attempts to create a variable with a GUI control which was previously created (see Figure 4). This rarely happens when the script first loads unless the same variable name is inadvertently used in more than one control. Normally, the error pops up when the script attempts to create a GUI window that already exists.

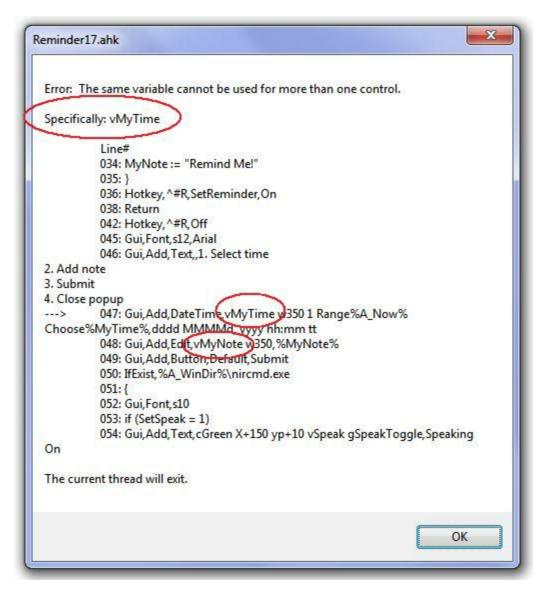


Figure 4. The "same variable" error usually occurs when a hotkey combination or another subroutine attempts to recreate a GUI window which already exists.

Even if the AutoHotkey GUI window is closed (either through code or by clicking the "Close" x in the upper right-hand corner, it continues to exists. That means any attempt to recreate it will result in an error. The *Gui, Show* command can still reactivate the original hidden window as long as the script hasn't been terminated by exiting or killing the process. Exiting or terminating the app would force users to restart the script if they wanted to use it again.

Dealing with this error can be a little more complex than the simple "Missing Label" error, but there are a few different ways to resolve it. The best solution is to ensure that the GUI

window is loaded only once when it first runs by locating the GUI code in the auto-execute area at the beginning of the script. Then, whenever the window needs to display, a hotkey subroutine which includes only the *Gui*, *Show* command is used. That way the script never attempts to create the same variables again.

Another option is to include the <u>Gui</u>, <u>Destroy command</u> in the subroutine that closes the window. This will clear the GUI controls and all of their variables from memory, thus allowing the recreation of the GUI and all variables the next time it's needed. However, any settings changed or set to non-default values will be lost (reset to the defaults).

Another way to avoid the error without destroying the GUI even though the GUI setup code exists within the same hotkey routine is to only run the GUI setup when it does not exist. The following is an example of this approach which prevents the error while allowing the GUI to maintain the last date set:

```
^#D::
DetectHiddenWindows, On
IfWinNotExist, Select Date
{
    Gui AddDate:Add, MonthCal, vDayPick
Gui AddDate:Add, Button, Default, Submit
}
Gui AddDate:Show,, Select Date
DetectHiddenWindows, Off
Return
AddDateButtonSubmit:
Gui AddDate:Submit
FormatTime, DayPick, %DayPick%, MMMM d, yyyy
Send, %DayPick%
Return
```

This is an AutoHotkey script which uses the <u>MonthCal control</u> to select and add a formatted date to any document (i.e. May 28, 2013) (see Figure 5). This is a modification of the *AddDate.ahk* script found on the download site, but altered to be included in a larger group of AutoHotkey apps combined into one script.

4	May, 2013					
Sun	Mon	Tue	Wed	Thu	Fri	Sat
28	29	30	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1
2	3	4	5	6	7	8
	C	1	Today:	8/26/	2013	

Figure 5. The MonthCal control is used to add a selected date to any Windows document or edit field.

Since this snippet is included in a larger AutoHotkey script which performs various tasks, it's not desirable to preload the GUI in the auto-execute section. *Gui, Destroy* could be used (and is used in the original script), but the GUI would default to today's date, thus losing the sought-out setting of "May 28, 2013" (in Figure 5) every time the hotkey reloaded it. This would force me to navigate from the current day to "May 28, 2013" whenever I wanted to place that date in a document.

The solution is to add a conditional (*IfWinNotExist, Select Date*) which checks for the existence of the window before setting it up. If it exists, then the GUI setup is skipped and the window is merely activated with the *Gui, Show* command.

Detecting Hidden Windows

Also of interest is the use of the DetectHiddenWindows command. Since most of the various windows commands (*WinActivate*, *IfWinActive*, *WinWait*, *IfWinExist*) are affected hidden windows (by default those commands won't see hidden windows), it can be another source of frustration for the novice AutoHotkey script writer. Closing a window hides it. The *Gui*, *Show* and <u>WinShow commands</u> are unaffected by hidden windows and work fine. In most cases such as this example issuing the *DetectHiddenWindows*, *On* makes the script work. While it may not be necessary, using the *DetectHiddenWindows*, *Off* command at the end of the script keeps it clean.

Using GUI Names in Combined Scripts

Note that in the *GUI* command lines of code in the above script, a name has been added to each *GUI* command. In this case, *AddDate*:

```
Gui AddDate:Add, MonthCal, vDayPick
```

```
Gui AddDate:Add, Button, Default, Submit
Gui AddDate:Show,, Select Date
```

This needs to be done whenever you're combining snippets of AutoHotkey scripts which include multiple GUI windows. Adding a unique name to each GUI distinguishes them from each other within the same script. If you're using standard labels such as the *ButtonSubmit* shown, the *GUI* name must also be added to the label name (*AddDateButtonSubmit*:).

The Style of the AutoHotkey E-books

If someone is just starting out with AutoHotkey, there are tutorials available online such as that at the <u>AutoHotkey Web site</u>. That one is short, to the point and might suffice for many people. I certainly reviewed it when I started out. But for me, learning the nuances of AutoHotkey is more a journey than a step-by-step procedure. I'm interested in showing what AutoHotkey can do rather than the teaching every possibility for each command. The specific details of the command variations are available through the <u>AutoHotkey Command Reference</u> at the same AutoHotkey site. My goal is to offer immediate results in the form of short apps while the teaching appropriate tricks along the way. I use and explain what is needed for the app. Hopefully, people will be inspired with more useful ideas of their own and figure out whether different command options are needed. If so, they will soon be writing the apps that are right for them.

Once it is understood how one AutoHotkey command can be used in a practical way, more ideas will follow. For example, when I first looked at the *ListView* control, all I could see was the obvious list of Windows files—similar to what's found in Windows Explorer. But as I determined to dig into how *ListView* works and write about my insights, lights started to turn on. I have since written the barebones To-Do List app, the Address Book app, and I'm currently working on the Calorie Counting app. I also have plans for an AutoHotkey app control center. All of this was inspired by learning how to use *ListView*. At times, the approach I take in my e-books (and this column) may seem rambling and disorganized, but this is the nature of learning the nuances of AutoHotkey and script writing. (This is how writing scripts actually works for me—and I suspect for many other people.) My efforts are not just to show how it's done, but to acknowledge that it is never a straight path and there are missteps along the way. I hope to encourage readers to not give up when they hit that seemingly insurmountable obstacle.

If you need something to the point, then I recommend the online resources. It's all there and I see little point in me merely republishing that excellent information. However, I recognize that there are improvements to be made in my current e-books. In addition to adding the above examples of commons issues that a novice may encounter to the *Beginner's Guide*, I plan to add an index to the chapters and commands contained in the book. The second book, *Digging Deeper*, has a chapter index and I recently found it very useful. (Working on the latest Calorie Counter app, I couldn't remember how I padded some text and had trouble finding the original

source on the Web. I looked in the *Diggin Deeper* e-book index and, *voilà*, there it was. I'm glad I had the reference and index. It's not possible to remember everything—unless maybe you wrote the language.)

There is a bit of wandering in my books, but ideally it makes them easier to read, and it certainly makes them much more interesting for me to write them.

If you have already purchased one or both of the e-books, I will let you know through this column when any update is available. Amazon will automatically allow updates for your Kindle books and if you bought them from the <u>ComputorEdgeBooks Web site</u> and have used up all of your downloads, send an e-mail with your order number to <u>ComputorEdgeEbooks</u>. We will give you more downloads so you can get the latest version. (Not now, but when I announce an update.) I've given up working with iTunes because they offer meager results and are a pain to work with. If you are looking for an iPad version (EPUB) then they are available at the <u>ComputorEdgeBooks Web site</u>.

Plus, for people who would like to print a copy of one of the AutoHotkey books, we now have them available in <u>PDF format for printing</u> at the same site—you supply the paper and ink —if you really want something you can write spill coffee on. The PDF file is formatted with real page numbers for standard letter size paper to fit in a regular school notebook. If you've previously purchased an EPUB version of one of the AutoHotkey e-books at the site, you can contact us for a discount on the PDF version.

A Beginner's Guide to Astarbition	The Lipbace DEF	A Bighner's Unite to Astallation	The Pinker QCF			
Lingto Saper Langue Control and Langue The same Langue Langue Sameng Control Langue	and dishey Tang Singlada and an and a second and a second and the	Figure 3, Antolisticsy Lipitons (CET for				
Figure 2, Annalisationy simple input with To	est and Feb COL	The Picture GUI				
The GUI in Figure 2 was activated with the following rosa	tine:	The Ficture Gill can be used to add loges and other images to the buttons and objects.				
) Example: A single input-base that asks for first as Gai, Abb, Desty, First came: Gai, Abb, Desty, East came:	er and lash cases	The Button GUI				
Sub, Join, Jong, John Ander Sub, Join, Sait, 2013 effectives yan , The yan makina Sub, Join, Raita, 2013 effectives and the same state Sub, Join, Raitana, affectives, Sub , The index Raitandk - Sub, Sama, Single Joyn Samagie return ; The script ion of a same in some same same	una alter present.	The <u>Harten GLE</u> shows in Figure 4 at the loft is one of the most commonly used objects for triggering sub-resizes. When Harton is added with GUL, it automatically creates the label for the mostine it will hanch:				
Guillines BattanOli		Gai, Ani, Barten, Telault, D				
Gol, Sakait ; Eave the input from the ones to much Median Two moments "Wiresilandt Lantikandt". Rainings	annamiatasi mariakin.	In the example above "BartostOK" becomes the label. The label could just as easily be any other word, each as, BattoreTancel, BatterProsoRe, or whenever ture has been added to the batter. (The spaces and special particulation are autoreastically sentials.)				
Note that the Add sub-command was used five times to a controls, plus one Button control. While the Buttos/IK so it merely sends the input to a Migflox (message bea). Yo	ript is run when the button is clicked, a could just as easily use the script to	The Radio GUI				
Send (Send, You entered "%FirstName% %LastName%, oditing field by replacing the Miglilox line.	") the output to any working test	The <u>Radio Gill</u> is used to set up a group of selection o button is selected, the remaining buttons will be desclo- the CheckBas GUI is a better option.				
The UpDown GUI						
The <u>Ipflware Gulf</u> controls the arrows to change increme Figure 3 shows <u>four levels of increments</u> .	nts of numbers. The coumple in	Australia Territory Wark a diverse to be a block of North a diverse to be a block of North and				
		Figure S. Autoritativy Radio	halter (Z.1.			
54		55				

Figure 6. Sample pages from the Beginner's Guide to AutoHotkey in the PDF format for printing on letter sized paper for putting in a notebook.

If you have any questions about AutoHotkey that I might be able to shed some light on, don't

hesitate to ask. I'm happy to answer any AutoHotkey queries since it's likely that many others have encountered similar frustrations—plus the answers are likely to end up in these columns and a book. I can be reached via the <u>ComputorEdge Web site</u> (there's a link on the left side of every page for AutoHotkey questions) or you can e-mail me at <u>AutoHotkey Questions</u>.

The Calorie Counter App Update

It was pointed out last week that in the original version the food import feature only worked properly in the Calorie Counter app with Google Chrome. I think I've fixed the problem with both Firefox and Internet Explorer—pending other bugs being found. This is a pretty normal problem with a work in progress.

I've uploaded the new version of *CalorieCount.zip* to the *ComputorEdge* <u>AutoHotkey</u> <u>Dropbox download Web site</u> which also includes a weight tracking field, plus I've fixed a couple of other problems in the code. If you've run the previous version, it may be best to delete the *CalorieCount.txt* data file (do this when the program is not running) to get a clean start. Some of these problems tended to corrupt the data file.

As usual while I was working on these problems, other functions (which used to work) stopped working properly. This happens because even though you're working on what seems like an isolated portion of the script, it actually interacts with other functions. If you compared the scripts (the one posted now with the code in <u>last week's column</u>), you would find a multitude of changes. I've come out of this with a much better understanding of how data is handled by AutoHotkey in both variables and data files. I will clarify my finding in the coming weeks and give warnings about the mistakes I made.

There are some interesting aspects of the Calorie Counter app that are worth digging into. In particular, the entire data file is read into a variable for quicker real-time access and data manipulation, but the variable is still saved to a data file at critical points. Plus, a Weight field has been added for tracking the progress of the diet. (That feature and the browser fix are in the latest posted version.) I believe that this is the first script I've done that includes spreadsheet-like calculations—although only simple addition and multiplication. There is a lot going on in that script which needs reviewing.

I'm considering using the Sort command to create a quick food dictionary from the data file, but that may need to wait.

* * *

If you're interested in either of the AutoHotkey e-books, you can find more information at our <u>AutoHotkey Book page</u>.

Jack is the publisher of ComputorEdge Magazine. He's been with the magazine since first issue on May 16, 1983. Back then, it was called The Byte Buyer. His Web site is <u>www.computoredge.com</u>. He can be reached at <u>ceeditor@computoredge.com</u>. Jack is now in the process of updating and compiling his hundreds of articles and columns into e-books. Currently available:

Just Released! <u>Hidden Windows Tools for Protecting</u>, <u>Problem Solving and Troubleshooting</u> <u>Windows 8, Windows 7, Windows Vista, and Windows XP Computers</u>.

Jack's <u>A Beginner's Guide to AutoHotkey</u>, <u>Absolutely the Best Free Windows Utility Software</u> <u>Ever!: Create Power Tools for Windows XP</u>, <u>Windows Vista</u>, <u>Windows 7 and Windows 8</u> and <u>Digging Deeper Into AutoHotkey</u>.

Our second compilation of stupid *ComputorEdge* cartoons from 2011 and 2012 is now available at Amazon! <u>That Does Not Compute, Too! ComputorEdge Cartoons, Volume II:</u> <u>"Do You Like Windows 8 or Would You Prefer an Apple?"</u>

Currently only at Amazon.com, *Jack's Favorite Free Windows Programs: What They Are, What They Do, and How to Get Started!*.

Available from Amazon, *Misunderstanding Windows 8: An Introduction, Orientation, and How-to for Windows 8!* Also available at <u>Barnes and Noble</u> and <u>ComputorEdge E-Books</u>.

Available exclusively from Amazon, <u>Windows 7 Secrets Four-in-One E-Book Bundle</u>, <u>Getting Started with Windows 7: An Introduction, Orientation, and How-to for Using</u> <u>Windows 7</u>,

Sticking with Windows XP—or Not? Why You Should or Why You Should Not Upgrade to Windows 7,

and *<u>That Does Not Compute!</u>*, brilliantly drawn cartoons by Jim Whiting for really stupid gags by Jack about computers and the people who use them.



Wally Wang's Apple Farm

"Spending as a Substitute for Thinking" by Wally Wang

Wally Wang's Apple Farm

Spending as a Substitute for Thinking; Apple's Patented 3D User Interface; 3D Scanners; Steve Ballmer Announces Retirement; Lynn University Dumping Textbooks for iPad minis; Creating HTML5 Animation; The Finder Window.

It's no secret that Americans like to think of themselves as the best in the world in everything. Yet the American education system rarely achieves number one status in any field except in spending the most money per student while getting some of the lowest test scores in return.

Ames High School recently purchased <u>1,425 MacBook Air laptops</u> for high school students to use. Superintendent Tim Taylor said that "Research shows that students learn better when they interact with the teacher, other students and the subject matter, and when teachers adapt the level and method of instruction to the student."

Of course, just throwing a MacBook Air at a student alone won't necessarily help, but if the school is willing to change their curriculum to teach students to think using MacBook Airs (or any computer for that matter), then any improvement in student test scores will likely come from the change in curriculum and teaching style and less from relying on any particular technology.

The Netherlands has even opened seven "Steve Jobs schools" where students get individualized instruction <u>through an iPad</u>. This "Steve Jobs" initiative hopes that "teachers will no longer simply convey knowledge to a group of children; they will be transformed into coaches that support children with their individual and group projects." If this project succeeds, the iPad will likely help transform education, but the iPad itself won't magically be the reason why kids are learning better. The iPad can only improve education if the curriculum itself also improves.



Figure 1. Schools in the Netherlands plan to allow individualized learning with an iPad.

In the book <u>*The Smartest Kids in the World: And How They Got That Way,*</u> author Amanda Ripley studied the American education system and determined that countries like Poland and Finland actually focus on teaching children how to think even with the lack of technology in the classroom.

When American exchange students studied overseas, <u>they noticed</u> that "Math classes tend to be more sophisticated, with lessons that show the often fascinating ways that geometry, trigonometry and calculus work together in the real world. Students forego calculators, having learned how to manipulate numbers in their heads. Classrooms tend to be understated, free of the high-tech gadgetry of their schools back home. And teachers in every subject exhibit the authority of professionals held in high regard."

While countries like Finland "channel more resources to the neediest kids, America funds its schools through property taxes, ensuring the most disadvantaged students are warehoused together in the worst schools."

Can you imagine if Finland and Poland had a stronger military than the United States? That would be cause for national alarm, but if Finland and Poland has a stronger educational system than the United States, American government officials seem to shrug their shoulders and ignore the problem, which shows how little most Americans value education compared to

emphasizing excellence in sports instead.

Where schools can improve is by changing from methods that don't work to using methods that do work whether students use a computer or not. American schools can start by seeing what works in countries like Finland and Poland, and not mistaking high test scores for creativity and intelligence, which is the failing of most Asian countries.

Schools need to emphasize teaching thinking skills rather than rote memorization of abstract facts that seem to have no relevance to the students' own life. When schools can do that, then the technology they buy can help. To see how schools around the world have been using Macintosh computers and iPads in the classroom (hopefully by using the technology to change the way they teach), visit Apple's Education Page.



Figure 2. Apple's Education page provides real stories of Apple products in education.

If schools simply buy more technology but maintain their failing methods, it should come as no surprise when they continue to fail anyway whether they have a MacBook Air, an iPad, or a Windows PC in the classroom.

Apple's Patented 3D User Interface

Apple helped make touchscreen gestures common and popular, and now the company may

soon emphasize <u>3D user interfaces</u> as well. The idea behind 3D user interfaces is that a device like the iPad could detect hand gestures beyond the flat, two-dimensional plane of the screen. Instead, you could gesture above the screen to control a device.

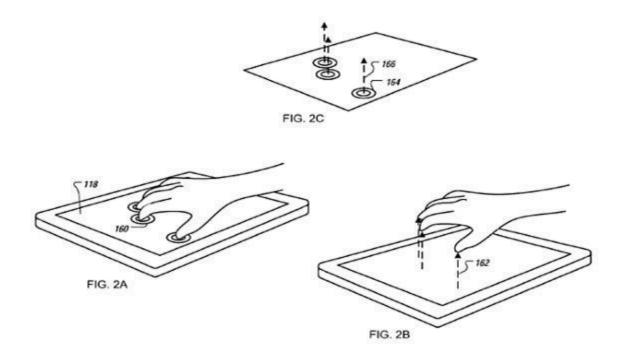


Figure 3. Apple's new patent for creating a 3D user interface.

Such 3D user interfaces would allow users to manipulate objects on the screen in ways far more intuitive than using a mouse or touchpad. Just as people readily grasped the idea of using touch gestures on a flat screen to control a smartphone or tablet, expect people to become familiar with using 3D user interfaces in the future. Why use a touchscreen when you can use a 3D gesture recognition interface that's more intuitive to use?

One huge problem with 3D user interfaces will be the cost of recognizing hand gestures from a distance, much like Microsoft's Kinect. Still, costs will keep falling and capabilities will keep rising, so it's only a matter of time before today's old fashion user interfaces will look as antiquated as yesterday's MS-DOS prompts and text-based screens.

3D Scanners

Most people accept the idea that 3D printers can revolutionize manufacturing by lowering costs and giving everyone access to manufacturing that was previously denied to ordinary people. Even Microsoft is adding <u>3D printer support</u> to Windows 8.1. While MakerBot sells 3D printers, they're also offering a <u>3D scanner</u>.



Figure 4. MakerBot's 3D scanner can digitize any object as a 3D schematic.

Scan any small item into the 3D scanner and you can create a 3D digital file of that item. Now you can send that 3D file to print on a 3D printer anywhere in the world instantly. Scan a design in Norway and within seconds that design can appear on 3D printers in South Africa, Brazil, Japan, and the United States.

The combination of 3D scanners with 3D printers means you can duplicate items without having to design them yourself. As 3D scanners get cheaper and capable of scanning larger items, and as 3D printers get cheaper and can create items out of multiple materials, the physical world will start going digital. Just as computers have turned everyone into a publisher either in print with a desktop publishing program and a laser printer, or online through the Internet and blogs, so will 3D scanners and 3D printers turn everyone into a manufacturer in ways that have yet to be explored.

There's still plenty of excitement in the world of computing if you just look in the right areas. If you insist on clinging to the past, don't be surprised when you wake up one day and wonder how the world has passed you by.

Steve Ballmer Announces Retirement

As soon as Steve Ballmer, Microsoft's CEO, announced he would retire in the next year, the

price of Microsoft's stock jumped almost 9 percent. When the promise of leaving makes people happy, that tells you everything you need to know about what other people think of you.

The big problem with Steve Ballmer was that he was more of a manager than a leader. He knew how to keep Microsoft profitable by fine tuning their existing Windows/Office/server and tools strengths. He had no idea how to transition Microsoft away from total dependence on Windows. Rather than diversify, Steve Ballmer led Microsoft to focusing everything around supporting Windows, overusing the Windows name for Windows Live, Windows Messenger, Windows RT, and Windows Phone 7. Compared to Steve Jobs, Steve Ballmer <u>embraced</u> <u>complexity</u> over simplicity and confusion over clarity.

Steve Ballmer killed Microsoft's promising Courier tablet and gave us Windows 8 instead as his vision of a no-compromise solution that compromises as both a tablet and a desktop operating system. When <u>asked about Google's Chrome OS</u>, Steve Ballmer even remarked that companies shouldn't announce an operating system before they launch it (anyone remember Vista?) and they should stick to one operating system instead of two (unlike Steve Ballmer's one operating system solution of Windows RT, Windows Phone 7, and Windows 8).

When Windows Mobile held 30 percent of the mobile phone market, Steve Ballmer <u>laughed at</u> <u>the iPhone</u>, then promptly watched Windows Mobile fade away as the iPhone took over the smartphone market until the iPhone makes more than all of Microsoft's products combined.

When asked about the impact of the iPad and tablets on PCs, Steve Ballmer gave a rambling answer that claimed <u>PCs would remain dominant</u>. When you listen to the lack of clarity and vision Steve Ballmer offers in his reply, it's no wonder his leadership for Microsoft remained just as equally vapid and scatter brained.

Steve Ballmer announcing his sudden retirement, coming so closely after <u>reorganizing the</u> <u>company</u> in July, makes his departure look more like he was pushed out of the company. Microsoft finally has a chance to embrace a true leader for a change. Whatever his faults, Bill Gates was a true leader. Whatever his qualities, Steve Ballmer was simply a manager and not a leader. A manager can keep an existing business going just as long as that existing business can continue thriving. Even the best manager in the world would have no chance keeping Borders Books, Kodak, or Tower Records alive.

Without Steve Ballmer, Microsoft finally has a chance to move beyond their Windows-centric world. Then again, Microsoft has invested so much time and money in promoting a Windows-centric world that it will be hard for anyone to change the stagnant culture at Microsoft any time soon.

Perhaps in addition to getting rid of Steve Ballmer, Microsoft should get rid of most of their executives along with their board of directors as well. Then Microsoft could give control of the company back to their programmers and engineers, and actually listen to customer feedback before releasing products that few people want like Windows 8 on a desktop PC.

Lynn University Dumping Textbooks for iPad minis

College textbooks are way too expensive, bulky, and generally useless since few classes use the entire book. That's why Lynn University decided to <u>dump paper textbooks</u> altogether and make students use an iPad mini instead. The university loans the iPad minis to each student, who will get a free upgrade after two years. If the student graduates, they get to keep the iPad mini.

"This is a huge moment in the history of Lynn University. We are one of just a few schools in America deploying iPads in this way," Lynn University President Kevin Ross said. "It is the culmination of years of planning and preparation by our staff."

Considering that Barnes & Noble makes a good chunk of their income operating university bookstores selling paper textbooks, you can expect Barnes & Noble to circle the drain even faster before <u>disappearing altogether</u> like Borders Books. With so many schools from colleges to high schools to elementary schools using the iPad, you can expect many success and failure stories to start appearing. Whatever happens, there's no doubt that the iPad has changed the computing market (along with the e-book reader market) forever, which isn't bad for a device that critics once dismissed as useless when Apple first introduced it in 2010.

Creating HTML5 Animation

The world of Adobe Flash is dying since Flash can't work reliably on mobile devices. Although many people are using Flash to create mobile apps, creating animation for Web pages, especially when viewed in mobile devices, requires learning HTML5.

To see an example of what you can do with HTML5, just visit Apple's own site promoting their upcoming <u>Mac Pro computer</u> that would have rivaled supercomputers a decade ago. You could create HTML5 code manually but it's far easier and simpler to use a special HTML5 editor instead.

One of the simplest HTML5 editors to use is <u>Tumult Hype 2</u>, created by two former Apple engineers. Hype works much like creating a PowerPoint presentation. Just plop text, graphics, or buttons on the screen (called a scene in Hype). Just like PowerPoint, Hype lets you create additional scenes so you can present more than one screen of information.

You can also embed audio into an HTML5 file so viewers can hear an audio file play when they click or tap on a button. In this way, you could create lesson plans or sales presentations on your site. For many people running a business, their Web site can be like an automated sales person who can greet and educate visitors any time of the day.

Once you've placed items on a scene, you can animate your objects by clicking a Record button. Just place your items in an initial location and click the Record button. Now move your

items to their final location and click on a timeline to define how much time you want to elapse before your chosen objects move to their final location. Then click the Record button to stop recording.

Defining the initial and final location of an item, plus the amount of time to elapse between the initial and final location defines simple animation. By using Hype, I put together a simple animated Web page for my friend who is promoting a cartoon series he's pitching to the networks called "Life of Mikey." By visiting <u>his site</u> you can see how Hype can create simple, yet effective animation in minutes.



Figure 5. Hype can animate text and graphics quickly and easily.

For another example of how HTML5 and Hype can display information on different scenes, visit my <u>screenwriting blog</u>. This example shows how you can create interactive HTML5 displays where clicking a button displays different information. Best of all, Hype creates HTML5 pages that look and work equally well whether viewed on a computer or through a mobile device. With more people browsing through mobile devices, making sure your Web site responds to touch gestures can be crucial in attracting and maintaining your following.

To help you design mobile-friendly HTML5 files, download the free <u>Hype Reflect app</u> for iOS so you can connect your iOS device to your Macintosh through a Wi-Fi network. Then anything you create in Hype can appear on your iOS device so you can see exactly how your HTML5 files will look on an iPhone or iPad.



Figure 6. Hype Reflect lets you preview Hype projects on an iOS device.

Normally when you animate an object, you choose its initial location and its final location. Then Hype takes care of moving that item across the screen in a straight line. If you want more variety, Hype can now create curved paths so you can make objects move in curves instead of a plain straight line.

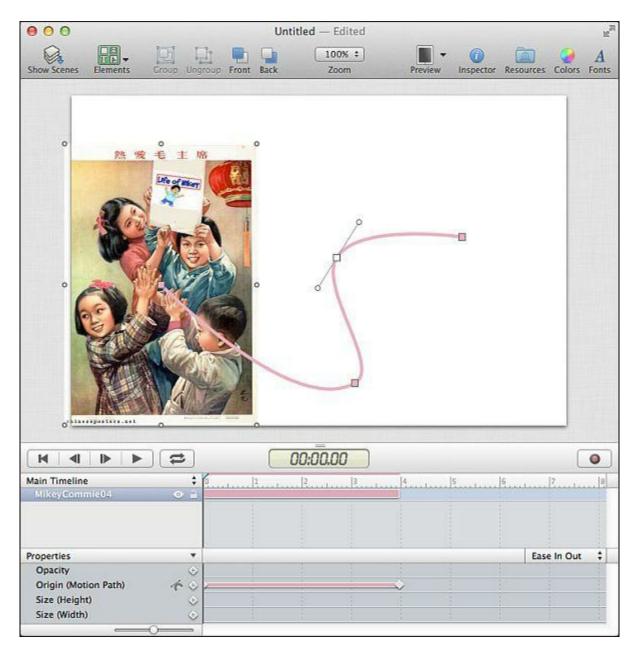


Figure 7. Hype lets you create curved paths for moving objects.

The basic idea behind Hype is to define the starting location of items, define the ending location, and specify how much time you want an object to take moving from one location. If you want to get fancy, you can curve the motion path. After an hour at the most, even novices should be familiar enough with Hype to start creating interesting HTML5 designs.

Hype is simple, easy to learn, yet powerful in giving you enough options to create practically any type of animation you wish. If you're a Web designer, you need to understand HTML5 now and Hype provides quick access to HTML5's animation features. Without Hype, you can manually code everything. With Hype, you can create your animation and focus on creativity rather than writing code.

If the idea of writing HTML5 code doesn't excite you, then you'll probably want an HTML5

editor like Hype to do the hard work so you can have fun letting your imagination create animation quickly and easily instead.

* * *

The left pane of the Finder window always lists common folders. While you can drag and drop new folders into this left pane, OS X provides another way to choose what should appear.

Click the Finder icon on the Dock then choose Finder > Preferences to open the Finder Preferences window. Click the Sidebar icon and now you'll see a bunch of check boxes you can clear or select to choose what items to appear in the Finder left pane.

Image: Organization Finder Preferences	
General Labels Sidebar Advanced	
Show these items in the sidebar:	
FAVORITES	
🗹 📇 All My Files	
AirDrop	
Applications	
🗹 🔜 Desktop	
Documents	
Downloads	
Movies	
🗹 🎵 Music	
Pictures	
🗆 î bothecat	
SHARED	
🗹 🥌 Back to My Mac	
Connected servers	
Bonjour computers	
DEVICES	
🖸 💭 Wallace Wang's iMac (683)	
E Hard disks	
🗹 📃 External disks	
CDs, DVDs, and iPods	

Figure 8. Selecting check boxes to decide what appears in the left pane of the Finder window.

In the early days, before Wally became an Internationally renowned comedian, computer

book writer, and generally cool guy, Wally Wang used to hang around The Byte Buyer dangling participles with Jack Dunning and go to the gym to pump iron with Dan Gookin.

Wally is responsible for the following books:

My New Mac, Lion Edition My New iPad 2 Steal This Computer Book Microsoft Office 2010 For Dummies Beginning Programming for Dummies Beginning Programming All-in-One Reference for Dummies Breaking Into Acting for Dummies with Larry Garrison Strategic Entrepreneurism with Jon and Gerald Fisher How to Live with a Cat (When You Really Don't Want To) The Secrets of the Wall Street Stock Traders Mac Programming For Absolute Beginners Republican Fairy Tales (Children's Stories the 1% Tell About the Rest of Us) The Zen of Effortless Selling with Moe Abdou The 15-Minute Movie Method Erotophobia (A novel)

In his spare time, Wally likes blogging about movies and writing screenplays at his site "<u>The 15</u> <u>Minute Movie Method.</u>" Wally can be reached at <u>wally@computoredge.com</u>.

Worldwide News & Product Reviews

"The latest in tech news and hot product reviews." by Charles Carr

FBI Special Agent: Anonymous Arrests Were "Huge Deterrent" on Hacker Group; OMG! Using Text Speak Doesn't Affect Grammar or Spelling? LOL!; Escalating Phone Bill Cramming Schemes Hit Mobile Users; LG Intuition cell phone (Verizon); Music to Your Ears.

FBI Special Agent: Anonymous Arrests Were "Huge Deterrent" on Hacker Group

The Huffington Post's Gerry Smith sent us this article:



The hacker collective Anonymous has not produced as many highprofile cyber attacks as it once did, a drop-off that can be directly attributed to the arrests of the group's core members, an FBI official told *The Huffington Post*.

Starting in late 2010, Anonymous captured worldwide attention through a series of attacks against U.S. companies and government agencies, stealing data and defacing or crashing Web sites.

But the arrests last year of five members of Lulz Security, an influential splinter group of hackers, had a "huge deterrent effect" on Anonymous by creating an "added layer of distrust" within the hacking group, according to Austin P. Berglas, assistant special agent in charge of the FBI's cyber division in New York.

"All of these guys [arrested] were major players in the Anonymous movement, and a lot of people looked to them just because of what they did," Berglas said in an interview with HuffPost.

The 2012 arrests relied on the help of a key informant, Hector Monsegur, aka "Sabu," who was caught and then cooperated with the FBI. The fear that one of their own could turn them in has sowed distrust within the hacking collective, according to Berglas.

"The movement is still there, and they're still yacking on Twitter and posting things, but you don't hear about these guys coming forward with those large breaches," he said. "It's just not

happening, and that's because of the dismantlement of the largest players."



Gabriella Coleman, a professor at McGill University who studies Anonymous, said there was "no doubt" the arrests dealt a major blow to "a central node of activity" within the group. But Anonymous is still very much alive, she said.

"They could easily emerge again as a force to contend with," she told HuffPost in an email.

The arrests of members of Anonymous last year were among several highlights to come out of the FBI's cyber division in New York. (The five core members of Lulz Security have pleaded guilty.) In another case, the FBI in New York led an investigation that resulted in the arrests earlier this year of three alleged operators of the Gozi virus, which infected at least 1 million computers and stole millions of dollars from banks around the world.

A former Army captain, 41-year-old Berglas leads the FBI's cyber division in New York, one of the busiest of the FBI's 56 field offices. His office overlooks the skyline of lower Manhattan, the center of the financial world and a frequent target of hackers. Last month, a Russian man was charged with breaking into the servers of the Nasdaq stock exchange and deleting, changing and stealing data...

Read more <u>here</u>.

OMG! Using Text Speak Doesn't Affect Grammar or Spelling? LOL!

Martin Hofschroer writes in representing Kaplan International Colleges:

Research by Kaplan International Colleges revealed that 63% of surveyed English learners thought that their English grammar or spelling was no worse due to using text speak such as

LOL and YOLO.

This claim came despite 5% of those surveyed stating that they use text speak when writing essays and 3% asserting that they use it during exams. The survey also discovered that 71% use text speak when texting on phones, 64% use it online and 14% actually use it while speaking out loud.

Anna Robinson, Kaplan's Junior Operations Manager for the UK & Ireland, said: "While we would never recommend using text speak in formal written work, students on our junior English courses are proficient in the latest mobile devices so it is natural that they use it in everyday life.

A recent study of primary and secondary school children by researchers at Coventry University found no evidence of any detrimental relationships between use of texting slang and children's conventional literacy abilities.

Author Dr Clare Wood, Professor of Psychology in Education at Coventry University, said that her empirical research supported the results of Kaplan's survey into the psychology of English learners.

She said: "Our own work examined children who used mobile phones and assessed them over the course of an academic year in one study, and over just 10 weeks in another. We found that not only was there no evidence of a negative association between literacy skills and the tendency to use texting slang or abbreviations when using SMS, in fact it seemed to be adding value to the children's conventional spelling abilities, because of the highly phonetic nature of the text abbreviations which are most commonly used. They seem to enable children to rehearse their understanding of how speech sounds map onto printed characters in a way that benefits their normal literacy development."

Other survey results include:

- LOL and THX were the most used text speak acronyms by English learners.
- 66% use LOL and THX
- 63% use OMG
- 26% use 2MORO
- 21% use GR8
- 12% use YOLO
- 77% use text speak because: "It is faster than writing full words."
- 15% use text speak because: "Everybody else does it."
- 3% use text speak because: "My parents cannot read it."

Escalating Phone Bill Cramming Schemes Hit Mobile Users

Lisa Inouye with the PMBC Group writes:



Very few mobile phone users know of a new escalating scheme called "cramming," where small, unauthorized charges are appearing as one-time fees or monthly subscriptions added to phone bills, listed as regular-sounding phone terms. Scambook wants to warn the public to check their bills carefully and regularly so they can recognize these charges that may otherwise go unnoticed, and to dispute them immediately with their service provider.

There are two types of cramming schemes currently affecting mobile phone users. There is cramming committed by real companies practicing shady business tactics, like adding fees or subscription charges when purchases or downloads are made. While outright scammers are cramming even when users do not opt in to their services.

The FTC is also advising consumers to keep an eye open for the following kinds of charges: long-distance calls, charges from unknown companies, charges associated with unfamiliar area codes, and membership or subscription fees.

In an article at scambook.com, Miranda Perry writes:

Want to lower your monthly mobile phone bill? The best place to start is to end cramming. Cramming is the term for small unauthorized charges that have been added to your phone bill by a third party.

These charges take a variety of forms, ranging from one-time fees to monthly subscriptions, and they may be listed under generic billing names that sound like regular phone services. If you're not familiar with your bill, you may not realize you're being charged.

Cramming has existed since the era of landlines but now it's also becoming a widespread problem on cell phones. Luckily, most phone service providers and cell phone carriers allow you to dispute these unauthorized charges—if you catch them in time.

Let's review how cramming happens, how you can stop it (and thereby lower your bill) and the steps you should take to prevent third parties and scammers from cramming your bill in the future.

Fine Print and Outright Scams: How Your Phone Bill Gets Crammed

Is your cell phone bill higher than it should be due to excess unauthorized charges?

There are two primary types of cramming: cramming committed by real companies practicing shady business tactics, and cramming committed by outright scammers.

A third party may cram your phone bill when you purchase extra services or download apps for your smartphone. You are opting in, but the company is deceptive about what it's actually charging you.

There may be additional fees or subscription charges associated with your purchase, but they're buried deep in the fine print or disguised in heavy legal jargon.

Scammers, on the other hand, can find sneaky ways to cram even if you don't opt in to their services.

Scammers may trick you with "free" downloads for cell phone items like wallpaper or ringtones, acquire your phone number from a black market affiliate list, or even blast out spam messages and then start charging anyone who replies "STOP."

Both types of cramming can sneak onto your phone account under innocent-sounding billing names such as Minimum Use Fee, Activation Fee, Voice Mail or Member Fee. The most devious schemes may also keep their charges as low as \$2 or \$3 a month.

By using a generic name and a low fee, they're hoping you'll overlook the charge or just assume it's a standard part of your bill.

Take Control Over Your Phone Bill

So how can you protect yourself from cramming? It's easy. Read your phone bill!

Check your bill every month, line by line. Most bills itemize each charge, so if you see a product or service listed that you don't recognize, call your service provider and ask about it.

Identify the regular monthly charges that are part of your plan so you'll be able to spot anything unusual.

Know how much you pay every month. If your bill suddenly goes up, even by a few dollars, examine it closely and find out why.

Remember, cramming won't show up as "Scam Charge, \$10″ — it will be listed as something completely different, often under the name of a service that sounds legitimate. The FTC advises consumers to keep an eye open for the following kinds of charges:

- Charges for long-distance calls you know you didn't make
- Charges from companies you've never heard of
- Charges associated with unfamiliar area codes
- Membership or subscription fees

If you discover an unfamiliar charge, call your service provider right away to dispute it.

Prevent Future Phone Bill Cramming

Because so many phone service providers allow charges from third parties, virtually anyone could be hit with cramming charges. We recommend you take the following steps to reduce your risk of cramming:

1. Avoid using your number in contest entries. Many contests are created for malicious affiliate marketing programs and your phone number may be sold to a scammer. If you insist on entering contests and the contest insists that it needs your number, sign up for Google Voice to get an alternate forwarding number.

2. Watch out for "toll free" numbers. Be aware that many "toll free" entertainment hotlines may transfer you to a paid 900 line or automatically enroll you in a monthly membership. Listen carefully to all the rules stated when you call, and if you think you've missed something, get transferred to a customer service operator or hang up and consult the hotline's website for its full terms of service.

3. Always read the fine print! Don't download any apps or join subscription services without reading the fine print very carefully. Shady companies may cram your bill by advertising something as free when it's actually a free trial — and by downloading the app, you've just opted into monthly charges without realizing it.

4. Call your cell phone provider. Your phone carrier may have options to block third-party charges, app, collect calls and 900 numbers. Call customer service to find out how you can guard yourself from unwanted charges.

5. Be careful when sharing your phone. If you let your friends or family members play games on your smartphone, make sure they don't click on any in-game advertisements or download apps without your permission. Your friend might open the door for cramming charges without being aware of it.

If you suspect a company has charged you without your authorization, submit a complaint on Scambook.

Read more <u>here</u>.

LG Intuition Cell Phone (Verizon)

Product: Intuition Manufacturer: LG Carrier: Verizon Web site: <u>www.verizonwireless.com</u> Price: Free with two-year activation. Other pricing plans including month-to-month and outright purchase We get offered a *ton* of smartphones here at *ComputorEdge*—that's right, 2,000 lbs. in the past year alone—and, to be honest, the distinction between one model and the next can get fuzzy—their amazingly-sharp screens notwithstanding.

Phone manufacturers themselves work diligently to create a distinction between their phones and the rest of the pack. Perhaps the greatest differentiator at the moment is the quest for the perfect screen size.



I remember hearing more than a few snickers from colleagues when Samsung announced their Note series a couple of years ago—basically Galaxy S 3's and 4's with super-large screens. But those critic snickers quickly turned into Samsung paydays when the public began snapping them up faster than candy bars at 5 p.m. on Oct. 31.

LG must have been watching because they recently released the Intuition, a smartphone that seems to think the sweet spot might be not only a large screen (5") but a 4:3 aspect ratio, rather than the near-universal 16:9.

Exclusive to Verizon, the LG Intuition aims to combine a smartphone and a tablet. That is, create a phone big enough that you don't look ridiculous using it, yet small enough that you either a) leave your tablet at home or b) decide that you won't even NEED a tablet if you buy this thing.

Under the hood, it's pretty much got it all: camera, 1.5 dual core processor, 4G LTE, 32GB of memory.



LG claims that the 4:3 aspect ratio is better for reading books, browsing, and taking notes. This is a claim that Apple has made for years about their choice of a 4:3 ratio for the iPad and lots (and lots) of people seem to agree. LG also claims that the Intuition's screen is easily readable in direct sunlight. We're not quite there yet, but I was generally pleased.

A feature called QuickMemo allows you to easily take notes and easily share them friends and co-workers, or just yourself. The Intuition includes what they call a Rubberdium (no, a new addition to the Periodic Table has not been made) pen to make note-taking or drawing easier, but I've found it also works surprisingly well with just a fingertip. The Intuition also lets you natively view or edit Word, Excel, and PowerPoint documents.

In a lot of ways the Intuition a lot like many smartphones out there but, if you're looking for a not-too-large phone that will also double as a tablet, this might just be the perfect fit.

Specs (from Verizon/LG):

8 Megapixel rear-facing camera with LED flash 1.3 Megapixel front-facing camera for self portraits and video chat Say Cheese Shot - use your voice to take a picture Beauty Shot - smoothes and brightens skin tone Face Tracking - automatically finds & focuses on faces Customizable Shot Mode, Brightness, Scene Mode, ISO, White Balance, Color Effect, Timer & Shutter Sound Advanced Image Editor - rename, crop, rotate, add effects, adjust contrast, and much more

Camera Resolutions: up to 3266x2448 (default) Full 1080p HD Video Recording Video Resolutions: Up to 1920x1080 (1440x1080 default) 4:3 display ratio Video Player with Touch Lock, Dolby® Mobile, and Resume Play Function; Supports DivX®, WMV, MP4, 3GP, and 3G2 Formats Video Wiz - make and edit your own movies

Dimensions: 5.50" (H) x 3.56" (W) x 0.33" (D) Operating system: Android Ice Cream Sandwich (4.0)

1.5 GHz Dual-Core Processor & 1GB RAM32GB internal memory (formatted capacity is less)

5.0" XGA IPS Display, 16.7M Color TFT, 1024 x 768 Pixels, featuring scratch-resistant Corning Gorilla Glass

2080 mAh Li-Polymer non-removable) Usage Time: up to 15.07 hours OR Standby Time: 130 hours

Wi-Fi Connectivity: 802.11 b/g/n

Preloaded Games: Real Racing 2 and Shark Dash Polaris® Office - edit and create Microsoft Word, Excel® and PowerPoint® documents

Mobile Hotspot - share a 4G data connection with up to 10 other devices (or 3G with up to five devices)

Notebook - editable book cover and templates with support for drawing, text input, and multimedia clips (image, video, map, voice, and date attachments) QuickMemo - make notes on the display using a finger or Rubberdium pen (included), then save or share via social networks, text message, email, and more; dedicated hot key for easy access Data Sharing with Android Beam and NFC Technology Customizable Icons (including lock screen icon) - use images/photos for icons Home Screen Launch Bar - add up to seven apps Improved Voice-to-Text - dictate messages and text appears immediately on screen for verification Home Screen Folders - drag and drop icons on each other to create folders

Lock Screen - Face Unlock; view notifications without unlocking

Notifications - view thumbnail previews; dismiss notifications one at a time Clean View - pinch the screen to temporarily hide the icons on the home screen Recent Apps - dedicated key for access to recently used applications One-handed keyboard feature LG Shape writer keyboard USB Tethering - share your phone's mobile data connection via USB cable SmartShare - share media wirelessly to DLNA-enabled devices Virtually limitless contacts (limited only by on-board memory) 32GB internal memory (formatted capacity is less) One-Touch speakerphone and speaker-independent voice commands TTY compatible Hearing Aid Compatibility = M3/T3

Music Player with Dolby Mobile; Supports MP3, AAC, AAC+, WMA, WAV, AMR-NB, AMR-WB, MIDI, Ogg Vorbis, and QCELP formats Create and manage playlists Headset: 3.5mm audio jack

Bluetooth profiles supported: HSP, HFP, SPP, A2DP (Stereo), AVRCP, OPP for vCard, FTP, PBAP, GAVDP, AVDTP, AVCTP, HID (keyboard only), MAP (server only)

Digital (CDMA, PCS) 1x, EVDO Rev. A, LTE (B13) Data Transmission: LTE, EVDO Rev. A, EVDO Rev. 0, 1xRTT

Music to Your Ears

Product name: C5 in-ear headphones Manufacturer: Bowers & Wilkins Web site: <u>bowers-wilkins.aiprx.com</u> Price: \$179.99

If you are a music aficionado, one cost-effective way to enhance your mobile listening pleasure is to upgrade the standard earbuds included with your portable music player or cell phone. A wide range of third-party replacement products is available with varying virtues, weaknesses, and price tags. Thankfully, you need not spend an arm and a leg to gain an audibly obvious and satisfying improvement in your music collection's sound profile. An example of earbuds replacements that will make an appreciable difference without risking bankruptcy is Bowers & Wilkins' C5 in-ear headphones. (Actually, they might more accurately be referred to as <u>canalbuds</u>.)

C5 exudes quality in every aspect, beginning with the box in which it ships (Figure 1A). This 4.25" x 2" x 8.25" 11 oz. cardboard package feels rock solid and looks terrific. It has a white sans serif font set against a dark charcoal-grey background, a spotlighted image of the C5 on

ComputorEdge

the front, and an exploded image of the product (showing its internal components) on the back. Accompanying the back's exploded view is text in three languages—English, French, and Spanish—describing C5's virtuous True Sound feature (details in a moment) along with Apple's official "Made for iPod, iPhone, and iPad" seal of approval.

The front side of this package actually is a flap. An arrow located mid-way down along the flap's right edge prompts the user to open the flap (Figure 1A) and reveal an illustration on its interior surface. The illustration depicts C5's ear piece properly seated in an ear, and is accompanied by text that again comes in three languages and describes C5's virtuous Secure Loop feature (details momentarily) (Figure 1B). Opposite the flap is an Oklahoma-shaped transparent pane revealing the product within this package (Figure 1B).

Upon opening the box's taped bottom flap, the user finds a small cloth loop attached to an inner cardboard box in which C5 is wedged into a dark charcoal-grey molded plastic tray. The tray, in turn, sits upon two square black cardboard boxes. One box holds three pairs of silicone sleeves (extra small, medium, and large which supplement the preinstalled small pair) and a black velour zippered crescent-shaped carrying pouch. The other box contains the product's documentation—a Quickstart guide (single sheet of card stock, 3.75" square) with text-free drawings on both sides showing how to use the remote, how to insert the in-ear headphones, how to adjust the Secure Loop, and how to install the silicone tips; a registration guide (actually, it is more like a marketing booklet) with pages inviting the product's owner to register and earn three months' free membership in the company's Society of Sound forum, plus color photos of C5 and the company's other audio products; and a safety/warranty booklet. For users who want more details about how to properly use and care for C5, a better option is the downloadable <u>user's manual</u> which includes textual instructions along with drawings.



Figure 1A.



Figure 1B. C5 comes in a box that, like its contents, exudes quality.

Besides its packaging, what distinguishes C5 from competing products? These in-ear headphones (which are available in two colors—titanium (Figure 2) or black), unlike plastic rivals, have a metal (tungsten) casing with a unique cylindrical shape and beveled end. These casings are about an inch long and are lightweight (the whole product including its cables tips the scale at under three-quarters of an ounce).

Each casing's cable enters into a hole on its back surface (Figure 2). The cables are 48" long, slender, twisted, and coated with a transparent Kevlar-like material. This material held up fine in my testing, but testing was too brief to evaluate durability under normal or heavy usage.

The left channel's cable has a metallic three-button audio control/microphone unit located about 4.5" south of the left ear piece. This unit is compatible with Apple's iDevices and its buttons control phone calls (answer/hang up) and tunes (play/pause; fast forward/rewind; increase/decrease volume).

Both channels' cables merge together at a metallic splitter located about 14.5" south of both ear pieces. This tube-shaped splitter is comprised of two separable parts; the northern one can be moved by the user up to the audio control/microphone unit thereby dampening noise that the cables make while the user is walking or otherwise in motion, the southern part is fixed in place. The splitter's south side has an opening for a single cable that ends at a short Kevlar-like

tubing above a standard 3.5 mm stereo jack housed in a metal casing similar to the audio control/microphone unit.



Figure 2. C5's distinguishing features include cylindrical casings that have an angled end and are made of tungsten rather than plastic, Secure Loops, and Micro Porous Filters.

Three additional distinguishing features include <u>C5's Micro Porous Filter caps</u> which the company explains as "[h]undreds of microscopic steel balls [that] act as a sonic diffuser, opening up the sound and making music feel remarkably rich and expansive", Secure Loops which consist of "...plastic-coated wire that curl[s] around the inner rim of your ears and hold[s] the in-ear headphones firmly in place," and Tungsten Weighting which ensures that the ear pieces "...are balanced towards the ear, not away from it, for optimized noise isolation." These three distinctive features combine to produce True Sound which the product literature describes as the "most natural, realistic sound possible." My impressions of C5's audio quality during testing are entirely consistent with this description (more below).

Other <u>noteworthy features</u> include C5's neodymium magnets, CCAW coil, ultra light 9 -m thick diaphragm, 2x 9 mm drive units, 32 ohms impedance, 10 Hz to 20 kHz frequency

response, <1% distortion (THD), and 118 dB/V at 1 kHz sensitivity.

How do these in-ear headphones sound as a result of their distinguishing features? C5's \$179 MSRP (and typical price tag on the web) is above the <u>impulse-purchase</u> \$100 barrier and it might deter casual listeners. However, the sound profile's quality is so high that this cost is justifiable. As long as the user chooses the appropriate pair of included silicone sleeves to achieve a proper seal, C5 delivers a high quality audio profile.

At the outset of testing for this review, I used C5's factory installed small sleeves for several weeks thinking that they were the proper size for my small ears. Mistake. The large pair, despite looking enormous by contrast, provided a proper seal that the small and medium did not achieve. Evidence for this was the obvious change in audio profile. Bass guitars and percussion instruments were essentially missing from my favorite tunes when listening with C5's small or medium sleeves. With the large pair, however, these instruments were readily audible. Other instruments' (piano, electric keyboards, various strings, brass, percussion, etc.) and vocalists' (both female and male) individual notes sounded natural with a clarity and richness that definitely enhanced my listening experience. Users who are accustomed to standard or low-cost earphones almost certainly will discover new facets of their favorite tunes after switching to C5.

Besides its MSRP which could be too high for price-sensitive customers, C5 does have several additional shortcomings worth considering. First and foremost is that bassoholics could be disappointed with C5's handling of their favorite instruments. Despite getting a proper seal with the large sleeves, Secure Loops, and Tungsten Weighting, I found the bass in my favorite tunes to be good but I wished it were as distinct and rich as other instruments sounded. Similarly, passive isolation is good but I wish it were a little better (especially with the large sleeves). The L and R letters are located on the casings' underside are easy to overlook, but this is a minor quibble since the audio control/microphone unit distinguishes the left channel's cable and ear piece. Secure Loops can be uncomfortable for some users, but this too is a minor concern because they are user-adjustable by sliding them or they can readily be removed altogether. Lastly, the audio control unit (whose functions work with Apple's iDevices but not necessarily with Android or other ones) performed inconsistently during testing-I could press the unit's play-pause indentation while music was playing and it continued (or while music was paused and it remained paused); I also could press one of the volume buttons without a corresponding change in the volume. Repeated pressing eventually produced the desired outcome.

In conclusion, C5 in-ear headphones could provide a cost-effective approach for music lovers to improve their listening enjoyment. This product's price tag is outside the impulse-purchase range, but it is mitigated by high-quality features and materials which should ensure audio experience enhancement and a long lifespan, respectively.

Review contributed by Barry Fass-Holmes

In addition to being an editor and columnist for ComputorEdge and ComputerScene Magazines, where he has written hundreds of feature articles and cover stories over the past decade, Charles Carr has also penned well over 1,000 non-tech newspaper and magazine articles and columns for various publications, including two widely-read columns each week for San Diego's North County Times newspaper.

Carr has covered such diverse topics as pesticide use in area schools, invasive background checks for county volunteers, asthma awareness, the debate over standards-based grading, potential vulnerabilities in electronic voting machines, and Southern California's devastating 2003 and 2007 wildfires. He has also written many humorous pieces.

Carr has also edited dozens of stories and articles written by others which have appeared in major publications and web sites across the country.

He has been a contributor and technical advisor to *L.A. and San Diego Parent* magazines and receives dozens of requests a year to appear on Southern California television and radio stations to talk about important events in the tech world.

Carr has judged many writing competitions including San Diego Press Club and Time-Warner Communications contests and was sole judge for the national NAPPA Tech Toys awards for five years (which his kids really appreciated). He was recently a judge for the national "Poetry Out Loud" competition.

He has won many writing accolades, including Press Club awards for Best Column Writing, Consumer Writing and Best Arts and Entertainment, and has repeatedly taken top honors in San Diego Songwriter's Guild competitions for his original musical compositions.

Carr will soon publish his first book, What a World, a collection of his best writings.

Learn more at <u>www.charlescarr.com</u>.



Editor's Letters: Tips and Thoughts from Readers

"Computer and Internet tips, plus comments on the

articles and columns." by ComputorEdge Staff

"17-inch Laptop and Photoshop," "Adding Text to a PDF Document," "Poor Wireless Speeds," "Communicating on the Job"

17-inch Laptop and Photoshop

[Regarding the August 16 Digital Dave column:]

For Ron Ronson: I would make a comment about computer vs Photoshop. I am not a professional photographer, but do use Photoshop CS6 for hobby work on a daily basis. 8GB of RAM is good...especially with Windows 7 and 8. But I find the biggest digital bottleneck is the video board with a dinky memory. When you have multiple layers in work in PS you will at times run out of RAM on the video board and PS will quit working. Worse yet it will not save work in progress...very irritating. Most new computers will come equipped stock with the cheapest, least capable video card available.

-Richard Manteufel, Lemon Grove, CA

Adding Text to a PDF Document

[Regarding the August 16 Digital Dave column:]

Regarding Mike's form PDF filling question. I have opened the SIGN option on the Adobe PDF reader (right side of toolbar). In there is an "Add Text" option. You have to position the cursor where you want to put the text and then type it in. It can be a little clumsy, but my handwriting is awful so it's easier for me.

-Rich DiSanto, Denver, CO

Back in 2003, my son was applying to colleges. A couple of universities provided online PDF documents the applicant could print and fill out by hand. In our case, I downloaded the PDF, captured the form pages at 300% magnification and loaded them as images into a Microsoft Word document. I then created a large text box on top of that page and proceeded to fill in the fields in the text box that overlaid the corresponding fields on the PDF. Once everything was

filled in, I used, if I recall correctly, a PDF print driver to save that application to disk. Finally, because of a predictable unpredictable network outage, I transmitted the applications at 2400 baud to the respective institutions.

-Stewart A. Levin, Menlo Park. CA

Poor Wireless Speeds

[Regarding the August 16 Digital Dave column:]

Earlier this year, I upgraded to an ASUS RT-N12 wireless router in conjunction with Xfinity's cable modem upgrade. This replaced a venerable SMC Barricade wireless router which was sufficiently peppy, but required increasingly frequent resets with the new cable modem. (I assumed it was unable to handle the cable modem firehose.)

Almost immediately, my wife complained about how slow her Internet connections behaved. While I hadn't seen issues, primarily, it turned out because I had run an Ethernet cable into the new router.

I checked upload and download speeds using a couple of Internet sites. Sure enough, we were only getting, at most, less than 1Mbps.

I checked the Internet and found a discussion on an open source router firmware site that said the ASUS firmware version that was shipped with the router had pretty terrible performance. While they suggested replacing the firmware with one of theirs, I checked the ASUS site and found a firmware upgrade that I immediately installed. Problem solved.

-Stewart Levin, Menlo Park, CA

Communicating on the Job

[Regarding the August 16 Worldwide News & Product Reviews column:]

I often use and prefer text messaging for communicating on the job.

-Paul Anthony, San Diego, CA

ComputorEdge always wants to hear from you, our readers. If you have specific comments about one of our articles, please click the "Tell us what you think about this article!" link at the top or bottom of the specific article/column at <u>ComputorEdge.com</u>. Your comments will be attached to the column and may appear at a later time in the "Editor's Letters" section. If you want to submit a short "ComputorQuick Review", or yell at us, please e-mail us at

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