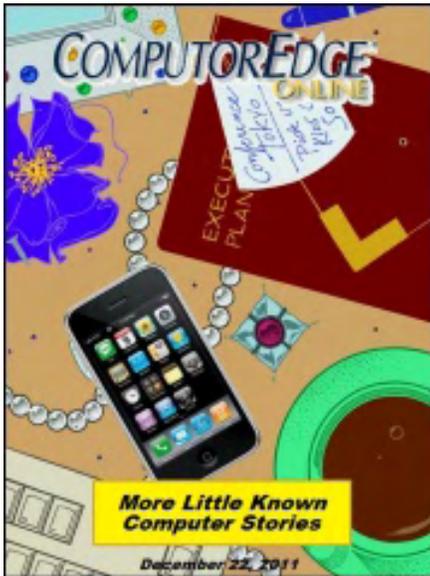


ComputerEdge™ Online — 12/23/11



This issue:
 Touchscreen Steering Wheel, Snazzy Software for Photographers, and Men's Room Gaming

These and more little known computer stories, plus Digital Dave.

Table of Contents:

[Digital Dave](#) by *Digital Dave*

Digital Dave answers your tech questions.
 Hard Drive Says Full!; Streaming/Over-the-Air Versus Cable; Which E-mail Client?

[Back Pocket Dialing, Smoking Smartphones, and Virtual Tours](#)

by Marilyn K. Martin

More Little Known Computing Stories
 Back Pockets Dialing "911"; Fiery Issues For Pants and Printers!; Radar That Sees through Concrete Walls; Real and Virtual Tours—Zoos to Museums; Tricked Out Toilets and Gaming Urinals; Touchscreen Steering Wheel; Gaming News—Mobile Graphics and Doomed Consoles; Drone Aircraft Set to Enter the Civilian World; New and Notable Smartphone Apps; Technology and Law Enforcement; Selling Off Our TV Band Spectrum?; Snazzy Software and Web sites for Photographers.

[Windows Tips and Tricks: Windows 7 Taskbar Secrets](#) by Jack

Dunning

Tips for Using Windows 7 Taskbar Hot Keys and More!
 Jack demonstrates how to configure the Windows 7 taskbar making it friendlier while introducing some useful key combinations. Plus, a new e-book is introduced for getting even more power from the Windows 7 taskbar.

[Wally Wang's Apple Farm](#) by Wally Wang

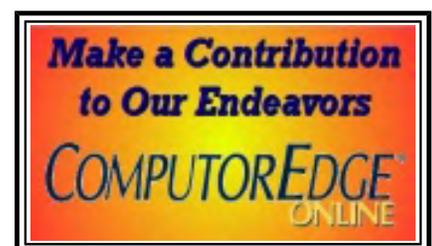
The Struggling Print Publishers
 The Struggling Print Publishers; The Wright Brothers vs. Everyone; Make Your Own



(Click Banner)



(Click Banner)



(Click Banner)

iPhone/iPad Video Game; The Android Patent Wars; The Strange World of a PC Manufacturer; Safari Windows.

[Worldwide News & Product Reviews](#) by Charles Carr

The latest in tech news and hot product reviews.
Santa Saved!; Nine Ways to Save on Electronics During the Holidays; Time to Get Your Head in the Cloud?; De-stress the Holidays; Most Popular Holiday Tech Toys.

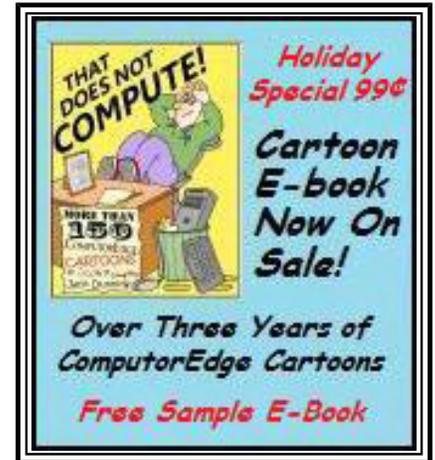
DEPARTMENTS:

[Editor's Letters: Tips and Thoughts from Readers](#) by

ComputerEdge Staff

Computer and Internet tips, plus comments on the articles and columns.

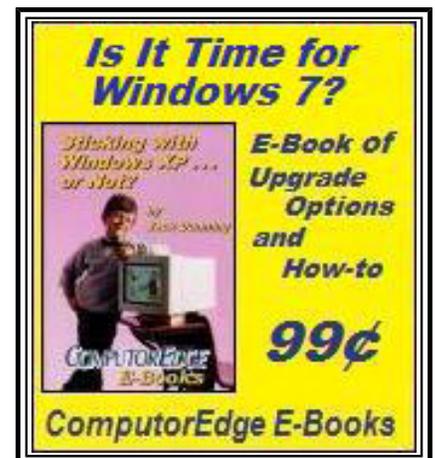
"Cloud Costs and Usability," "Stripping Text Formatting," "Wally's Columns Are Wonderful," "This Icelandic Cloud Has a Silver Lining"



(Click Banner)



(Click Banner)



(Click Banner)

Send mail to ceeditor@computoredge.com with questions about editorial content.

Send mail to cwebmaster@computoredge.com with questions or comments about this Web site.

Copyright © 1997-2011 The Byte Buyer, Inc.

ComputerEdge Magazine, P.O. Box 83086, San Diego, CA 92138. (858) 573-0315

[Return to Table of Contents](#)



Digital Dave

“Digital Dave answers your tech questions.” by *Digital Dave*

Hard Drive Says Full!; Streaming/Over-the-Air Versus Cable; Which E-mail Client?

Dear Digital Dave,

My wife's computer says it only has five gigabytes left from the original 500 gigabytes that came with it. It is a Compaq with Windows 7 installed. I am being accused of eating up her hard drive although I haven't touched it! It has Norton installed as per Comcast. I am at a loss as to what is eating up her hard drive. Any help would be greatly appreciated.

*Mark Kowal
Thornton, CO*

Dear Mark,

I've seen this happen before with a new Windows 7 computer and of course it's your fault. It's always your fault! After all, you are the husband. (Naturally, I'm kidding.)

The last time I saw this the Backup and Restore program was set to the main drive (C:). It quickly filled up with the system image and other file backups. Plus, if you have implemented some Windows 7 Libraries from other computers on your network, it could also be backing up those libraries.

The first thing you should do is open Backup and Restore (type "backup" in the "Search programs and files" field in the Start Menu and select Backup and Restore from Programs. This window will tell you which drive is being used for backup and allow you to manage space. You can also change the settings to limit the number of items being copied.

If you don't have a second drive to use for backup, I recommend getting an external USB drive. This will take the load off of the main drive and stop your wife from blaming you.

If backup gone wild doesn't seem to be the problem, then you need to review what's on the drive. I searched *ComputerEdge* articles and found this one written by Jack Dunning about SequoiaView. It's a free program that will give you a graphic look at what's on the hard drive.

There is also a program called Disk Cleanup which should help you resolve the issue (see Figure 1). (Type "disk" in the "Search programs and files" field in the Start Menu and select Disk Cleanup.)

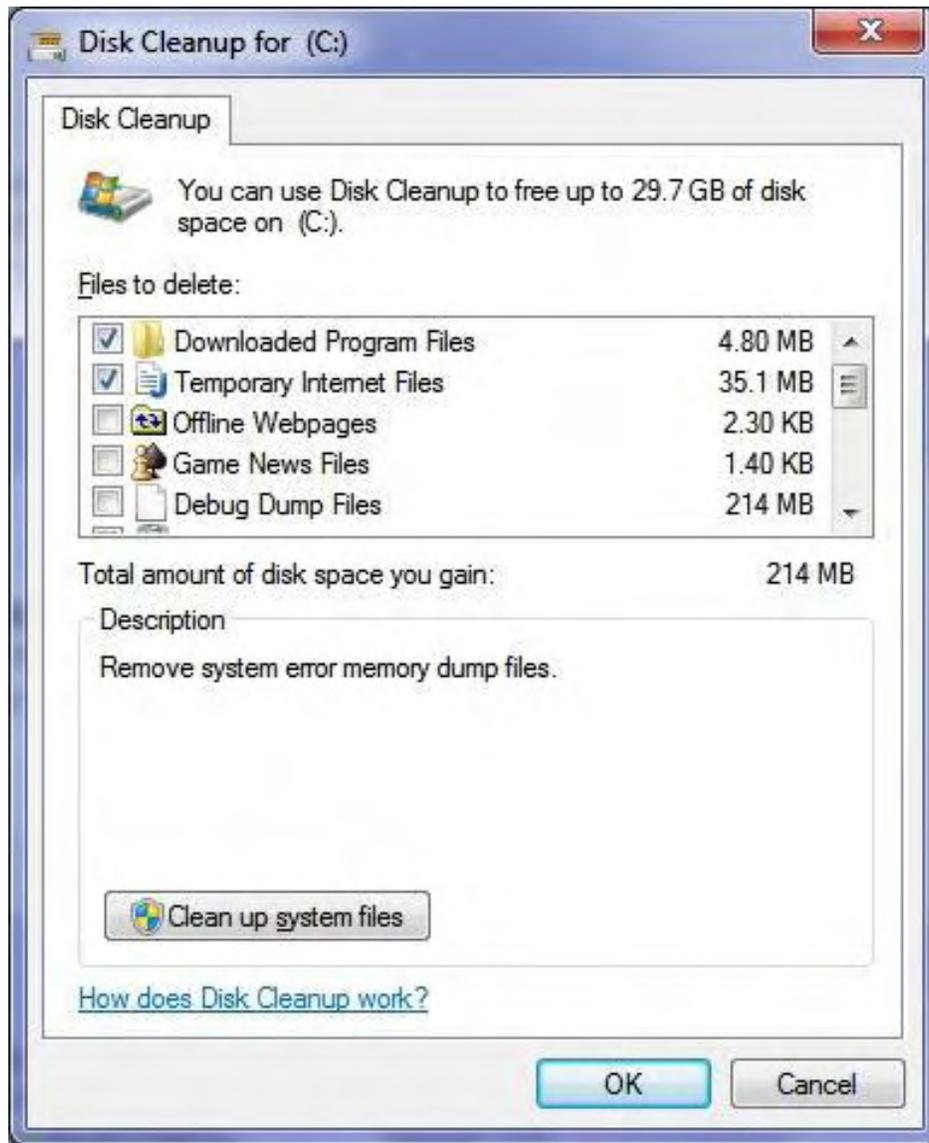


Figure 1. Windows 7 Disk Cleanup window.

Disk Cleanup will help to locate those files which can be deleted without affecting your system.

Digital Dave

Dear Digital Dave,

I always read your responses regarding video streaming from computer to a television with great interest. I have sporadically researched options with my current ISP/cable provider, but I am still hesitant to make the changes I think will allow me to maintain my current options, while severing my cable service.

Currently my ISP and cable provider are the same. They provide me with a gateway (wireless capable), a DVR/digital converter (for my main TV, a CRT) and two additional digital converters (which I don't currently utilize because I only have the one TV).

My basic plan to eliminate the Cable service (keeping the ISP) is this:

1. Hook my current TV to an antennae (to get local programming).

2. *Install a streaming device such as Roku, or purchase a Wi-Fi capable flat screen.*
3. *Upgrade to greater bandwidth (my current service is only 1.5 Mbps max).*
4. *Purchase a DVR (we hardly ever watch live TV to avoid commercials).*

My questions:

1. *Do I need a digital antennae/digital converter to get local programming on my CRT?*
2. *Do I need a digital antennae for a flat screen with digital tuner?*
3. *Will I get better streaming if I hardwire my TV to the computer via CAT5e?*
4. *What are the bandwidth requirements for Cat5e vs Wi-Fi?*
5. *Do I need a service to have DVR capability (sorry for my ignorance)?*
6. *Do I need a DVR or do the streaming services work like "on-demand" cable?*
7. *If I stream to multiple TVs simultaneously, does this require greater bandwidth?*

And the big question: Is the cost for greater bandwidth and streaming services going to cost me as much as I'm paying now for cable, in which case, why bother?

*Manny
San Diego*

Dear Manny,

These are many of the questions that are being asked by people everywhere. The cost of cable television with hundreds of channels (most of which you couldn't care less about) is driving people to consider alternatives. I know of a number of people who have given up cable television only to find that *they don't miss it at all*. As for myself, I can only think of a couple of channels that I might miss since the primary network broadcasts can be brought in over the air. Truthfully, of the television I watch at least fifty percent is streaming video. Here is my view of your questions:

1. If you have an older television, then you will need a digital converter to change the over-the-air digital television broadcast to an analog input for your set. If you are buying a new television, then most likely it will already be setup for receiving the digital signal. All you will need to do is plug in the antenna. There is no difference between a digital antenna and analog antenna. The physics of RF (Radio Frequency) transmission and reception is not affected by digital technology.
2. There is actually no such thing as a digital antenna. There are various configurations of antennas (rabbit ears, arrays, rooftop, etc.), but they all do the same thing. Your primary concern will be getting the best reception—which means getting the antenna as high as possible and pointing in the optimum direction. As it turns out, the rooftop aerials that can be rotated from below tend to give the best reception. The flat indoor array antennas have also reviewed well, but they are still sensitive to orientation and like to be near a window in many houses. If you can plug an antenna into a television, you can use it.

3. Hardwired cable will generally offer more speed and reliability than Wi-Fi, although the problem of wiring (punching holes in walls) makes cable less attractive. Today's Wi-Fi is almost as fast as wired networks and will deliver the same quality when streaming video. Since streaming video is digital, it is less susceptible to minor variations in signals. If you get a picture, it will be a good picture. If the picture is pixelated or goes off, then you are most likely having a problem with either a connection or your Internet speed. Most Internet connections are way slower than your internal network—whether wired or wireless—so in most cases there will be no advantage to a hardwired setup for video streaming.

4. Cat5e cable will theoretically handle one Gigabit (1,000 Megabits) bandwidth. To get those speeds you will need a router and network cards that also handle one Gigabit. The current Wi-Fi standard "N" will do about 300 Mbps. Again, the router and equipment will need to be "N" compatible. Although slower than wired, the Wi-Fi is plenty fast enough for streaming.

5. While I'm not as familiar with DVRs (Digital Video Recorders), it is generally understood that you do need a service to use a DVR. TiVo is the best known service and charges a monthly fee (or \$499 lifetime). The TiVo boxes range from \$99 to \$299.

There have been other companies offering competing DVRs (ReplayTV), however they have not done well because of legal opposition from the free television networks and cable television DVRs. The networks are not happy about commercial skipping which is one of the main reasons for owning a DVR. The cable companies rent DVRs for a monthly fee which has minimized the market for TiVo.

You can buy a television receiver card for your computer which will turn your computer into a DVR, but this may be beyond the scope of what you want to take on. Possibly other readers will add comments to fill in the gaps on the question of buying a DVR.

6. You do not need a DVR for video streaming services. They are very similar to the on-demand service from cable television. In fact, Internet video streaming is killing the cable on-demand services. This is one reason why the cable companies would like to either charge the companies such as Netflix more or put limits on how much the customers can download. (I understand that Comcast currently has a monthly cap on downloading.)

7. If you're simultaneously streaming to multiple televisions, then you will need more bandwidth from your ISP. In fact, if you are doing a major download to your computer, it could affect any video streaming you're doing at the same time.

Video is not actually streamed directly to your television. It is first loaded in a memory buffer then fed to the television at the proper rate. The movie download continues while you are watching and, if your Internet speed is fast enough, you will never notice a break. With slower Internet connections you may occasionally see a pause while the streaming device is "rebuffering" the video.

Netflix will adjust the quality of your viewing to fit the speed that it detects. Here are some guidelines:

- 1 Megabits/sec for viewing on a laptop computer.
- 2 Megabits/sec for viewing standard definition video on a TV.
- 4 Megabits/sec for viewing High Definition video.
- 5 Megabits/sec or more for the best audio and video experience.

If you are streaming to more televisions simultaneously or doing other Internet intensive activities, these numbers will

go higher.

Now for the big question: How much will it cost?

This depends upon the Internet providers in your area. If there are multiple service providers (ISPs), then there is a much better chance that you can cut a deal. This would include looking at DSL, satellite and cable providers. Don't just accept the rates that you see on the Web. Call them and discuss your situation. They may be anxious to get you as a customer.

The cost for more bandwidth may not be that much more than the lower speeds, although I would expect that it will be somewhere between \$25 and \$50 a month for the speed you may want. It is important to note that it may not cost that much more to go to the next level of speed. For example, going from three Megabits to seven Megabits may only add five or ten dollars to a \$40 to \$45 dollar monthly fee.

In any case, you should be able to cut your current cable bill (Internet plus cable programming) by one half or down to a third of the current level. You will be adding back the cost of an Internet streaming service, but if you've added free over-the-air television, then you should have more than enough entertainment to fill your downtime.

Digital Dave

Dear Digital Dave,

What e-mail client do you use, since you said you don't use Outlook? I seem to remember you work for the company that produces Eudora.

*Larry McLaughlin
Aurora, CO*

Dear Larry,

With the nature of my work, I use whichever e-mail comes with the operating system. If I'm on a Vista machine, I use Windows mail. With Windows 7, I use Windows Live Mail. If I'm on a Mac, I use the Apple Mail program—the same for iPad. I'm not great at using a program such as Outlook to manage my computer (or life) activities so I'm looking for the minimum in e-mail programs.

I believe that Eudora (wiki.mozilla.org/Eudora_OSE) is now open source and has wrapped itself in the Mozilla Thunderbird code base. There is no particular reason to stick with the e-mail program that comes with an operating system unless all you want to do is pick up mail.

Another great option that works for many people is to use a Web client such as Gmail. I know people with other e-mail addresses that have everything forwarded to their Gmail account so that they can manage everything there.

Digital Dave

[Return to Table of Contents](#)



Back Pocket Dialing, Smoking Smartphones, and Virtual Tours

“More Little Known Computing Stories” by Marilyn K. Martin

Back Pockets Dialing "911"; Fiery Issues For Pants and Printers!; Radar That Sees through Concrete Walls; Real and Virtual Tours—Zoos to Museums; Tricked Out Toilets and Gaming Urinals; Touchscreen Steering Wheel; Gaming News—Mobile Graphics and Doomed Consoles; Drone Aircraft Set to Enter the Civilian World; New and Notable Smartphone Apps; Technology and Law Enforcement; Selling Off Our TV Band Spectrum?; Snazzy Software and Web sites for Photographers.

Back Pockets Dialing "911"

According to a local story out of Chicago, 500 times a month someone's uncovered cell phone in a pants' pocket or purse accidentally hits the speed-dial for 911 (chicago.cbslocal.com/2011/12/01/with-growing-cell-phone-use-butt-dials-to-911-also-rising). Since 90% of these emergency calls are accidental, 911 Coordinators bemoan the time and energy their services have to expend to verify that there is no emergency. 911 Operators have to stay on the line until the call drops, then dial back immediately to see if there is a real emergency. In extreme cases, officers have to be dispatched to track down the caller and verify that there is no emergency.

All this takes time and attention away from genuine emergency calls. This is said to be a growing problem across the country, according to national emergency management agencies. They suggest covering your phone's touchpad or keyboard when not in use. And if your phone accidentally dials 911, stay on the line and let the operator know that it was a mistake.

Fiery Issues For Pants and Printers!





“Fred claims he wasn’t doing any ‘Butt Dialing’ on his smart phone, but it looks like he lied.”

According to RegHardware, there have been several instances lately of smartphones overheating in pants pockets (www.reghardware.com/2011/12/02/)

samsung_galaxy_s_ii_combusts_in_mans_pocket). First came news of an Australian airline passenger whose iPhone "overheated and belched out significant amounts of dense smoke" in mid-flight.

Then came word of a guy who heard a strange sound, felt a too-hot sensation on his leg, then smelled burning. As he yanked his two-week old Samsung Galaxy S II out of his pants pocket, smoke was belching out of both the phone and his pocket. Batteries and power packs have been identified as the likely culprits.

MSNBC recently ran a story about the possibility that hackers from anywhere in the world could instruct your Hewlett-Packard (HP) printer to overheat and catch fire (latimesblogs.latimes.com/technology/2011/11/can-a-hacker-really-set-fire-to-your-printer-hewlett-packard-responds.html). This according to Salvatore Stolfo, of the Computer Science Department of Columbia University's School of Engineering and Applied Science. Mr. Stolfo and his team have spent months investigating the "hackability of Hewlett-Packard printers," and have concluded that, "These devices are completely open and available to be exploited."

But no sooner was that story released, than HP quickly issued a refutation. "Speculation regarding potential for devices to catch fire due to a firmware change is false," the company charged in a news release. "HP LaserJet printers have a hardware element called a 'thermal breaker' that is designed to prevent the fuser from overheating (and) causing a fire."

Radar That Sees through Concrete Walls

Massachusetts Institute of Technology (MIT) announced in October 2011 that they had developed a new radar technology that can literally see through solid concrete walls (www.huffingtonpost.com/2011/10/18/mit-radar-technology-see-through-walls-_n_1018593.html). The technology still has its limits (it can currently "see" only 8 inches past a wall), but it filters out inanimate objects, like furniture. So only people show up, no matter if they are hiding or motionless. Despite concerns about the violation of civilians' privacy, the technology is aimed at military applications.

Real and Virtual Tours—Zoos to Museums



Google Street View (www.google.com/streetview) displays interactive images of cities in 360-degree detail. But the Street View cars that photographed most of the images couldn't collect data from smaller locations like amusement parks and shorelines. So enter the Street View Tricycles, and new imagery from places such as the High Line Park in Manhattan, Oakland University and the Detroit Zoo (www.freep.com/article/20111108/COL41/111080311/Mark-W-Smith-Google-goes-



Detroit-Zoo). The Google team is also using a specially outfitted snowmobile to record snowscapes in Street View.

A couple New York City museums are dispensing with the venerable "audio wands" you hold up to your ear after plugging into the code at each exhibit. The American Museum of Natural History (AMNH) is now offering a free mobile app (www.technologyreview.com/blog/helloworld/27365/?p1=blogs) with their newest exhibit, "Beyond Planet Earth." And the Guggenheim is offering a \$3.99 "Maurizio Cattelan: All" app. According to the New York Times, fully half the members of the American Association of Museums "will be using mobile devices in some way by the end of this year (2011)."

There are also technology companies focusing on museum apps, although the AMNH and Guggenheim designed their own. Museum apps can add animation and video, or even a level of augmented reality. Curators are torn, however, between wanting apps to complement the visitor's experience, and wanting the apps to substitute for visiting the exhibit. The quality of museum apps is uneven at present, but all experts agree that they will shake up the museum experience. Visionaries even foresee virtual museum tours of "imaginary exhibitions" that only exist in cyberspace.

Tricked Out Toilets and Gaming Urinals

You probably missed it, but November 19th was the 10th annual World Toilet Day (latimesblogs.latimes.com/technology/2011/11/tricked-out-toilets-for-world-toilet-day.html). The organization was formed in 2001 to raise awareness of the 2.6 billion people worldwide who do not have access to proper sanitation. (Unknown if the many Occupy protests were included.)

So the time was appropriate to discuss the upper-end of toilets, or how the 1% outfit their bathrooms. Kohler's top-of-the-line "Numi," which retails for \$6,400, comes with so many features that it has its own touchscreen remote control. You can activate the lid and seat, then sit on your throne and enjoy a heated seat, a foot warmer and built-in speakers.

Duravit's "Sensowash Toilet" also comes with a remote control, and can adjust the temperature of the water, seat and even air. It also stores user-profiles. Toto's "Washlet 400" offers hands-free flush, and an unexplained "massage feature." Or, if you have \$12,000 to spend on a commode, Toto's Miyabi Collection offers a plum-and-bamboo design painted with 24-karat gold.

In England, a London bar has installed "the world's first urine-controlled video games (www.telegraph.co.uk/news/newstopping/howaboutthat/8916942/The-latest-in-Wii-technology-video-game-urinals.html)." Male visitors to the bathroom in "The Exhibit Bar" (rather aptly named) have the option to play one of three video games, instead of mindlessly wasting the average 55 seconds just staring at a blank wall. The hands-free game is driven by the men's "aim" into the urinal, and stops when the stream does. Players can later post their scores via mobile devices, to either Twitter or a live leader board to "compete with their friends."

Touchscreen Steering Wheel



In a recent article I wrote about smart-cars, fully self-driving vehicles are still in the future. So dangerous bored, distracted or exhausted drivers will still be on our roads for awhile. Now German researchers have created a multi-function touchscreen steering wheel (www.msnbc.msn.com/id/43296926/ns/technology_and_science-Tech_and_gadgets/#.TtJGI3pl_4Y). "Intuitive thumb gestures" can change the radio or



zoom in on a map, so drivers can keep their eyes on the road.

The prototype is made from 11-millimeter thick, clear acrylic ringed in infrared LEDs. Attached to the bottom is an infrared camera which picks up the reflections made when the surface is touched. Such a multi-touch steering wheel would mean redesigning the traditional

steering column, so the team is currently in talks with automotive companies.

Gaming News—Mobile Graphics and Doomed Consoles

According to MIT's *Technology Review*, gamers are driving a revolution in mobile apps (www.technologyreview.com/business/39038/?p1=BI). Since an estimated 60% of smartphone owners regularly play games on their mobile devices, chip makers have been competing to make better graphics capabilities "by means of dedicated processors that are now among the devices' most complex and powerful subsystems." These graphics processors can paint hundreds of thousands of pixels at a time, to render the complex 3-D environments demanded by modern video gamers.

According to a November 2011 article, gaming consoles are soon to go the way of the dodo (www.industrygamers.com/news/game-consoles-are-fundamentally-doomed-says-garriott/). Consoles are massive investments for companies like Sony and Microsoft, according to the article, with longer cycles now (before introducing a new product) for these companies to recoup costs. Consoles are also facing more pressure from mobile devices like smartphones and tablets. "I think fundamentally the power that you can carry with you in a portable is really swamping what we've thought of as a console," says Ultima creator Richard Garriott.

Drone Aircraft Set to Enter the Civilian World

It was probably only a matter of time, but the Federal Aviation Administration (FAA) will propose new rules in January 2012 to start allowing police departments, farmers and others to fly drones (www.latimes.com/business/la-fi-drones-for-profit-20111127,0,6584711.story) for civilian purposes. Farmers and nuclear safety inspectors in Japan are already using drones, as are Archeologists in Russia.

Police are looking forward to using drones as air support to chase runaway criminals. Drone makers think the biggest commercial market for drones will be police departments, and AeroVironment, Inc. (www.avinc.com/) has already developed a small helicopter drone specifically for law enforcement. Besides police, utility companies think drones could help them monitor oil, gas and water pipelines. And farmers want drones to spray their crops with pesticides.

The FAA has already issued 266 active testing permits for civilian drones. But they haven't permitted them in national airspace on a wide scale yet, due to concerns that the technology doesn't yet have adequate "detect, sense and avoid" capabilities to prevent midair collisions.

New and Notable Smartphone Apps

A stylish new wristband called "Up band" from Jawbone (jawbone.com/), syncs with the iPhone to prod people into making healthier choices (www.freep.com/article/20111115/COL41/111150310/Mark-W-Smith-Jawbone-Up-nudges-you-think-healthy). Its motion sensors chart your sleep quality, and can be set to vibrate to wake you up. It also keeps track of your food intake, and even tracks your movement during the day to tell you how many steps you've taken.

It also vibrates to tell you when you've been sedentary for too long. You are urged to take a photo of a meal and name

the components, and it then asks you three hours later how you feel. It's mostly a cheerleader, with no calorie counter or nutritional guide, but fits the lifestyles of most average Americans (unlike the more specialized tracking systems for athletes, such as Nike+, or apps such as RunKeeper).

A new smartphone security app (www.ktvn.com/story/16160753/safety-smart-phone-application-launches) was released in late November 2011. Called the Arm Safety Button, it is especially helpful in dangerous neighborhoods, or during holiday shopping when criminals can appear out of nowhere to steal your purchases. If you are attacked, you can slide an icon upward to activate the alarm system. A GPS map of your location is sent to police, along with the photos your smartphone takes immediately after the alarm is activated. There is also a one-click connection to 911, and a flashlight. Currently only available for Android, the designer says it will soon be available for Blackberry and iPhone too.

PayPal and Skype are collaborating with Facebook to integrate services. PayPal has designed a new app called Send Money (www.siliconvalley.com/personal-technology/ci_19358278). The app will allow users to send money to one another through Facebook, using PayPal. And Skype now allows Facebook users to make video calls to their Facebook friends within the Skype interface. (Skype was previously owned by eBay, but was bought by Microsoft earlier this year for \$8.5 billion.)

Technology and Law Enforcement

In 2009, the New York Police Department began using a new fish-eye lens camera called a Panoscan, which has revolutionized crime-scene photography (lens.blogs.nytimes.com/2011/11/18/crime-scene-investigation-360-degrees/#more). The camera creates high resolution, 360-degree images, taking from 3 to 30 minutes to produce the panoramic photographs depending on available light. These shots allow investigators, from their desk computers, to point-and-click over evidence from the crime scene that they might have been missed.

In March 2011, The Federal Bureau of Investigation (FBI) published a PDF called "Wireless Evolution," of which a redacted edition was later obtained due to a Freedom of Information Act (FOIA) request. In the report, the FBI discussed present and future wireless Microsoft technologies (www.networkworld.com/community/blog/fbi-eyeing-microsoft-technologies-assist-law-) that can/could assist law enforcement.

Microsoft's "Skinput" uses customizable sign language movements involving the hands and arms, to soundlessly tap out text messages on a forearm. Technology that utilizes gesture control movement, like Momo for Windows Mobile, are especially of interest to the FBI. The report also mentions that "Microsoft is in the process of designing a mobile device that can collect trail data while a user walks indoors, underground or in other spaces where GPS signals are not available or too weak."

The Web site for Justice Technology Information Network (www.justnet.org/Pages/home.aspx), is a program of the Office of Justice Programs' National Institute of Justice. The site offers information and news, with sidebar topics ranging from Biometrics to Court Technologies to Sensors and Surveillance. The day I visited the site, the top news was "Electronic Warrants Speed Law Enforcement."

Selling Off Our TV Band Spectrum?

A November 2011 article in MIT's *Technology Review*, discusses congressional plans to sell off our TV band spectrum (www.technologyreview.com/communications/39136/?p1=MstRcnt). As the deficit super-committee and congressional technology committees search for new money, they are considering "incentive auctions" such as selling TV band spectrum. *Technology Review* cautions that selling off as much spectrum as possible "would threaten the future of wireless innovation in the U.S."

It mentions two recently released wireless products, Amazon's Kindle Fire, and the unlimited voice, text and data service from Republic Wireless. Both rely on Wi-Fi, which is becoming the basic infrastructure for wireless communications. "Current and yet-to-be-invented wireless technologies could be under threat, if the super-committee successfully pushes its idea to sell the unlicensed spectrum that those technologies would use," the article concludes.

Snazzy Software and Web sites for Photographers

Xerox research labs have developed a computer program called Aesthetic Image Search to tell you when a photo is not so great, or if it has that intangible, magical quality that makes for a terrific photo (gizmodo.com/5862074/this-magic-app-can-tell-you-if-your-photos-suck-or-rule?tag=photography). Gizmodo checked out the alpha version of the software, and reports that the program really does what it advertises. Viewing a screen with so-so photos on one half (Bad), and the other half of the screen loaded with terrific photos (Good), the reviewer reports that his eyes were immediately drawn to the beautiful and intriguing photos deemed Good.

Gizmodo also did a November 2011 article on a comparison of eight photo-hosting Web sites (gizmodo.com/5862248/point-and-click-8-photo-hosting-websites-compared?tag=photography). Ignoring the giants in the field of photo-sharing/storing, and the sites aimed at money-making pros, Gizmodo went looking for the overlooked gems and rated them. Each photo-hosting site has its pros and cons, mainly depending on your ability and preferences as a photographer. Most have at least a couple levels of membership, with one "free" option. (Note: The eight Web sites are listed alphabetically, not by best qualities first.)

Marilyn is a freelance writer and humorist with many interests. She has sold teen anti-drug articles, as well as had numerous esoteric articles published. She has almost seventy mini-articles on Helium.com (www.helium.com/users/573405/show_articles), and is writing a humorous Young Adult Science Fiction series, *Chronicles of Mathias*. Volumes One and Two have received a "Gold Star for Excellence" from TeensReadToo.com (www.teensreadtoo.com/ReptilianRebirth.html), and are available from most on-line bookstores.

[Return to Table of Contents](#)



Windows Tips and Tricks

Windows Tips and Tricks: Windows 7 Taskbar Secrets
“Tips for Using Windows 7 Taskbar Hot Keys and More!” by Jack Dunning

Jack demonstrates how to configure the Windows 7 taskbar making it friendlier while introducing some useful key combinations. Plus, a new e-book is introduced for getting even more power from the Windows 7 taskbar.

It's been almost a year since I wrote an article for this column, but as I was compiling an e-book about the Windows 7 taskbar, I realized that there were some tips which did not appear in any of the original columns, yet they needed to be offered. Some of what I include did appear in various other columns, but here they are included to highlight the capabilities and uses of the taskbar.

What shocked me as I was compiling and updating this work was not only how many really good tips and tricks are offered here, but how few I had actually implemented myself. As I retested and refined the ideas from the numerous past columns and articles, I relearned how I could get more out of my Windows computers. It was as if it were the first time I had seen these techniques—even though I was the author. I realize that there is so much involved in using Windows, that it is worthwhile to have references which help to remind us of things that we can do better. That is one of the purposes of turning "Windows Tips and Tricks" columns into e-books.

The Windows 7 Taskbar

The taskbar—normally located at the bottom of the Windows screen is the flight instrument panel and controller for a Windows computer. When configured for a specific user, it can virtually eliminate the need for some of the other Windows components such as the Start Menu. All versions of Windows have tools for tailoring the Windows taskbar, but Windows 7 has unique features that need to be understood in order to make the best use of them. Much of what is discussed in the updated Windows Tips and Tricks e-book (www.computoredgebooks.com/Windows-Tips-and-Tricks_c4.htm) applies to Windows XP and Vista as well.

While there are significant differences in the Windows 7 taskbar, all versions of Windows allow basic taskbar setup via the Properties window. To open the Properties window, right-click on an open area in the taskbar and select Properties. The Taskbar and Start Menu Properties window will open with the Taskbar tab selected (see Figure 1). Much is the same as earlier versions of Windows, but there are a few significant differences.



Figure 1. The Taskbar tab in the Taskbar and Start Menu Properties window.

Windows 7 continues to include the options for "Lock the taskbar" and "Auto-hide the taskbar." Locking the taskbar is especially important if little kids have access to your computer. It's not uncommon for some parents to sit down at their computer only to find that the taskbar has moved to one side or the other, or to the top of the screen. Even worse, the taskbar may have disappeared. Locking the taskbar will prevent any movement or changes to the taskbar. (You can continue to pin quick-launch buttons to the taskbar while it is locked.)

Auto-hide is for those people who want to maximize their screen area. When enabled, Auto-hide will slide the taskbar out of sight. When the cursor is hovered over the taskbar area (or a notification appears), it will slide back into view.

In Windows 7 there are more options for saving space in the taskbar. First, the Quick Launch buttons and open program tabs are combined into one. This was discussed in an earlier "Windows Tips and Tricks" column. Even with this automatic space-saving checking and applying "Use small icons" will allow much more to fit on the taskbar.

In previous versions of Windows, if you wanted to move the taskbar to the top of the screen or either side, you needed to grab it (click in an open area) with your left mouse button and drag it to the new location. You can still drag your unlocked taskbar around, but now the Properties window has an option for relocation.

There are three options for the taskbar buttons: Always combine, hide labels; Combine when the taskbar is full; and

Never combine. Never combine will take up the most space on the taskbar since the program tabs will never compress into a single tab. One advantage to this mode is that the individual tabs will continue to toggle between open windows and minimized windows—as they do in Windows XP and Vista—when you left-click on the tab.

You can change the way the Notification area on the right side of the taskbar works by clicking "Customize..." under Notification area in the Properties window.

The Taskbar tab in the Taskbar and Start Menu Properties window is where you control many of the basic setup features. However, there is much more that can be done to add more power and functionality to your taskbar—including adding specialized and tailored toolbars. These tips can be found in previous *ComputerEdge* articles (use the search feature at the top of the page) or in the *Windows Tips and Tricks: Windows 7 Taskbar Secrets* (www.computoredgebooks.com/Windows-Tips-and-Tricks_c4.htm) e-book.

Hot Keys for the Windows 7 Taskbar

Windows 7 has more hot key combinations than earlier versions of Windows. Many are the same as Windows XP and Vista, however some have been changed to work with new features in Windows 7. In my experience, you'll find a couple that you'll want to use all of the time. Others you'll soon forget.

The combination I find most useful with the Windows 7 Taskbar is **SHIFT plus left-click** on a taskbar button when an open program overlay is showing. This will return the button's lost quick-launch function and open another instance of the program window.

WIN plus number (1-9) launches the application pinned to the taskbar in that position, or switches to that program. (Add **SHIFT** to open a new window when a first window is already launched.)

CTRL plus WIN plus number (1-9) cycles through open windows for the application pinned to the taskbar in that position.

ALT plus WIN plus number (1-9) opens the Jump List for the application pinned to the taskbar. The **arrows keys** can then be used to move through the list (**ENTER** to select).

WIN plus T focuses and scrolls through items on the taskbar. (This type of key combination you would only use if your mouse wasn't functioning. Good luck remembering them.)

WIN plus B focuses on the System Tray icons. The **arrow keys** allow movement and **ENTER** to open.

SHIFT plus right-click on a taskbar button shows the window menu for the program (like XP does). This is especially useful for minimizing windows and restoring functionality for viewing open windows simultaneously when it is a grouped button.

CTRL plus left-click on a grouped taskbar button cycles through the windows of the group.

Drag a file to a taskbar button pinning the file to the current application's Jump List. **SHIFT** plus drag a file to a taskbar button opens a file with the current application.

While not a complete list of hot keys for the taskbar, these appear to be some of the most useful. Some of them appear in the earlier *ComputerEdge* articles and again in the e-book. If you would like to see a complete listing of the e-book's contents or obtain a copy in EPUB format (iPad, NOOK, etc.) or MOBI format (Amazon Kindle), it can be found at *ComputerEdge E-Books* (www.computoredgebooks.com/Windows-Tips-and-Tricks_c4.htm) (99 cents).

Jack is the publisher of *ComputerEdge* 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 www.computoredge.com. He can be reached at ceeditor@computoredge.com. If you would like to contribute to *ComputerEdge* endeavors, please visit ComputerEdge E-Books (www.computoredgebooks.com/Contribute-to-ComputerEdge-Magazine_c3.htm).

[Return to Table of Contents](#)



Wally Wang's Apple Farm

“The Struggling Print Publishers” by Wally Wang

The Struggling Print Publishers; The Wright Brothers vs. Everyone; Make Your Own iPhone/iPad Video Game; The Android Patent Wars; The Strange World of a PC Manufacturer; Safari Windows.

Wally Wang's Apple Farm

Printed books, newspapers and magazines are slowly fading away. They may never disappear completely, but they serve little purpose any more now that the Internet makes mass distribution of information much faster and simpler.

One sign of the publishing industry's strange reluctance to adapt to change comes in the form of e-book prices. Most people believe that e-books should be priced much less than the print version, due to the elimination of costs associated with printing, storing and distributing a printed book. Yet Business Week reports that many publishers are actually pricing e-books (www.businessweek.com/technology/publishers-are-still-missing-the-boat-on-ebook-prices-12152011.html) at a price higher than print versions.

The logic for pricing e-books so high is that publishers feel that consumers recognize the greater value of e-books that allow you to easily search for text while storing hundreds of e-books in a single device like a Kindle. This sounds strangely similar to the music industry's claims that audio CDs were less expensive to duplicate and more durable than vinyl records, so therefore CD prices needed to remain high due to the added value of a CD in the customer's hands.

Needless to say, the high price of CDs encouraged rampant piracy, which is what's happening with e-book priced higher than printed books. Print publishers want high e-book prices to drive people to buying printed books. If someone wants an e-book instead, they still need to pay the high price to support the publisher's infrastructure designed around printed books.

In the short-term, this props up the publisher's profits, but in the long-term, exploiting your customers means customers will eagerly search for alternatives, and those likely alternatives will come from piracy and self-published authors who can sell e-books at much lower prices than a traditional print publisher.

In the past if you wanted to write and publish a book, you had two choices. First, you could go through a vanity publisher, which required money upfront to print your book. Then you received a box full of books that no bookstore would likely sell, but at least you had a book you could give or sell to others.

Since buying boxes full of books can be expensive, a new form of vanity publishers appeared that offered print-on-demand services. This let you write a book and sell it to others, but instead of printing a bunch of books ahead of time, they only printed a book whenever someone wanted it. Print-on-demand publishers still demand money upfront for

their services, but at least you don't have to store boxes full of books that you've purchased yourself.

The second approach was to convince a traditional publisher to publish your book. In return, the publisher retained all rights to the book along with taking the lion's share of the profits.

With e-books, potential authors have a third alternative to self-publish an e-book. Self-published e-books cost nothing but time to produce. There's no cost for printing, storing, or distributing an e-book so you never have to spend any money upfront.

Best of all, you don't have to wait for a publisher to accept and approve your book. You can simply write and publish it as fast as you wish. While self-publishing will likely produce a lot of poorly written e-books, it's not much different than walking into a bookstore and finding a lot of poorly written printed books.

To create an e-book through Amazon's Kindle Direct Publishing program (kdp.amazon.com/self-publishing/signin), just upload a Microsoft Word document and a book cover graphic image, and Amazon converts it into the Kindle e-book format. Price your e-book between \$9.99 and \$2.99 and Amazon gives you 70 percent of the profits (compared to 10-15 percent of the profits that a traditional print publisher gives you), plus you retain all rights to your book (unlike traditional print publishers that take the rights for themselves).

Price your e-book outside of this \$2.99 - \$9.99 range and Amazon gives you 35 percent royalties, which is still far more generous than any traditional print publisher will give you. Best of all, your e-book now reaches the entire planet of people who have Internet access. With traditional book distributors like Borders gone, more people will turn to Amazon and other Internet retailers to find the books they want.

A smaller rival to Amazon is Barnes & Noble's PubIt site (pubit.barnesandnoble.com). Like Amazon, Barnes & Noble doesn't charge anything to submit an e-book. They simply take the same percentage of profits from each sale of an e-book so it's in their best interest to get as many e-books out to the public as possible. To submit an e-book to PubIt, you just have to create an EPUB file, which you can easily do through the Export command in Pages.

Nearly everyone has heard of Amazon's Kindle, but far fewer have heard of Barnes & Noble's Nook. For those who don't have a Kindle or a Nook device, they can download the free Kindle and Nook software for their tablet, computer, or smart phone, although the Nook software isn't available on Blackberry OS or Windows Phone 7 while Kindle is.

If you're going to publish your own e-books, you can choose both Amazon and Barnes & Noble. However, Amazon is offering a lending service for their Amazon Prime members, who pay a \$79 yearly fee for the privilege of free shipping and access to borrowing select Kindle e-books for free.

For e-book authors, this lending service provides another potential source of revenue. Amazon puts up a fixed amount of money every month, such as \$500,000, and based on the number of times people borrow your e-book, you get a percentage of this royalty money. By participating in Amazon's lending program, you can still sell your e-books, but you can make additional money through lending your e-book out for free as well.

The one catch is that if you participate in Amazon's lending program, you can't distribute your e-book digitally through any other source including your own Web site or Barnes & Noble's PubIt program. Still, given the much larger audience that Amazon attracts, sticking exclusively with Amazon and their lending program may be more profitable than trying to sell e-books through both Amazon and Barnes & Noble.

To learn more about marketing and selling e-books, read John Locke's *How I Sold 1 Million E-Books in Five Months* (www.amazon.com/gp/product/1935670913/ref=as_li_tf_tl?ie=UTF8&tag=the15minmovme-

20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1935670913). John Locke basically sells action novels for 99 cents and has built up a small following that enjoys his recurring characters in each novel. Part of the secret is that you can't write just one e-book and hope to make a million dollars. Instead, you have to write multiple e-books that appeal to the same audience. That way people who like one of your e-books will likely buy the others so each e-book acts like part of a wider net, trying to attract an audience.

Put one e-book on Amazon and it's easy to overlook. Put ten e-books on Amazon and now you've increased your visibility by ten times. John Locke's secret is simply promoting his e-books through Twitter and other social media sites, targeting his e-books towards a specific audience, and writing multiple e-books that cater to his specific audience.

Anyone can duplicate John Locke's strategies since they have less to do with writing quality and more to do with marketing. John Locke's novels may not be worthy of comparison to Shakespeare, but they don't have to be. They just have to be entertaining and competently written. By pricing each e-book novel at 99 cents, John Locke also makes the risk of buying low enough so people will take a chance and try one of his novels.

If you're interested in writing a book, don't wait for the permission of a foot-dragging traditional publisher. Just start writing, targeting your e-book towards a specific audience, and keep churning out e-books that please that particular audience. If you love writing, you'll gradually find your own loyal audience who will buy everything you write.

You may not get rich, but then again, you may sell one million e-books at 99 cents, which would translate into roughly \$350,000 with Amazon's royalty rate. With traditional publishing, your book can only make money as long as the publisher keeps it in print. With e-books, your e-book will always be available to everyone who can access the Internet. Even if you only make \$10 a month through sales, that can translate into \$1,200 over ten years, which will be more money than you would have made if you hadn't sold your e-book at all.

E-book publishing is the way of the future for authors who not only want control over their writing, but also want a steady source of income that will continue to grow with each additional e-book that you write. With those types of advantages, how much longer can traditional print publishers last while they artificially inflate e-book prices to gouge their customers?

The Wright Brothers vs. Everyone

After the Wright Brothers invented the airplane, the whole world congratulated them on their achievement while everyone acknowledged their hard work. That's the myth the history books tell you, but the truth is far different.

The Wright Brothers patented their idea for wing warping, which allowed for greater control. Glenn Curtiss soon built an airplane of his own and tried to design his airplane around the Wright brothers' patent. Glenn Curtiss claimed that the Wright brother's patent wasn't necessary to build an airplane, but the Wright brothers contended that Glenn Curtiss had violated their patent. In court, the Wright brothers originally won, but Glenn Curtiss kept up the battle until World War One arrived and the government ended the patent battle (www.centennialofflight.gov/essay/Wright_Bros/Patent_Battles/WR12.htm) for good.

Now look at how Apple introduced the iPhone that changed the smart phone market, yet like the Wright brothers, Apple has been forced to protect their patents from copycats like Android. Even more discouraging is how many people claim that the iPhone did nothing new, yet these same people rush out to buy Android phones because they want the benefits that the iPhone introduced. Of course, refusing to acknowledge an invention is nothing new as the Wright brothers also discovered.

Before the Wright brothers invented the airplane in 1903, Samuel P. Langley worked with the Smithsonian Institution to develop the world's first heavier than air flying machine. When the Wright brothers succeeded first, the Smithsonian displayed one of Langley's airplanes, claiming it had been the world's first heavier than air flying machine (*siarchives.si.edu/history/exhibits/documents/wright.htm*) rather than the Wright brothers' airplane.

For the next forty years, the Smithsonian denied that the Wright brothers had invented the airplane. Only until 1944 did the Smithsonian and Orville Wright finally come to terms and in 1948, forty-five years after the Wright brothers first flew, the Wright 1903 Flyer appeared on display in the Smithsonian.

Today we all acknowledge that the Wright brothers invented the airplane, but the Smithsonian initially denied that the Wright brothers had succeeded, preferring to promote Samuel P. Langley's airplanes instead, which didn't fly. For an institution like the Smithsonian to deny facts seems ludicrous, until you realize how many people still prefer denying the obvious.

If the people who denied the Wright brothers' invention while violating the Wright brother's patents were alive today, they would feel right at home denying the influence of Apple while simultaneously violating Apple's patents, just like many companies do today. The idea of exploiting inventors and denying the significance of their work has continued from the Wright brothers until today, and will likely continue plaguing inventors until the end of time with hordes of people joyously denying facts and stealing ideas while pretending to be honest and ethical in the process.

Make Your Own iPhone/iPad Video Game

Lots of people like the idea of creating their own iPhone/iPad game, but not many people like the idea of trudging through Objective-C code and learning how to use Xcode. For a much simpler alternative, sign up for free video game programming lessons through LiveCode's Game Academy (*www.runrev.com/game_academy/index.html*).

LiveCode Academy

What is LiveCode | Sample Videos | What's Included | Training Team | **Sign Up**

LIVE CODE Game Academy

December to January

See the game in action.
Download the Galactic Gauntlet through iTunes

Learn to Create a Mobile Game in Seven Weeks

Registration Still Open – Webinars Available On-Demand

The mobile gaming industry generated nearly \$8 billion this year and is expected to reach \$11.4 billion by 2014. Now you can get in on the action with your very own mobile game.

Twitter | LinkedIn | Facebook | YouTube | Facebook Like 244

LiveChat Offline

SIGN UP NOW
FREE ONLINE COURSE

Figure 1. LiveCode offers a free video game training course.

The people at LiveCode have created a free iPhone/iPad app called Galactic Gauntlet (itunes.apple.com/gb/app/galactic-gauntlet/id470771906?mt=8) where you control a rocket ship as flying saucers block your way. The game is relatively simple, but provides the basic concepts for creating a video game.



Figure 2. Galactic Gauntlet is a simple game for learning basic video game concepts.

Best of all, learning LiveCode is far easier than learning Objective-C, which means you'll spend more time actually designing your game and less time dealing with the complexity of Objective-C programming. By taking the concepts you can learn for free from LiveCode's game academy, or simply modifying the source code to their free game, you can quickly and easily create your own video game that you could sell or give away for free as well.

Video game programming may not be easy, but it's well within the reach of everyone who uses LiveCode, which offers simple programming commands that closely resemble English. You may not achieve as much success as Angry Birds, but with LiveCode, you can create your own iPhone/iPad game in weeks instead of months or years.

The Android Patent Wars

It seems like practically everyone is trying to make money off Android except for Google. Microsoft reportedly receives royalties (www.mobileburn.com/16788/news/samsung-to-pay-microsoft-android-royalties-as-part-of-cross-licensing-deal) from manufacturers using Android. Oracle and Apple is trying to sue companies using Android, and now British Telecom (fosspatents.blogspot.com/2011/12/british-telecom-sues-google-over-six.htm) has joined the battle.

With so many companies suing Android for patent infringement, even companies like Oracle and British Telecom who don't directly compete against Android smart phones, there are two ways to look at this problem.

One is that Android is so popular that everyone wants to take unfair advantage of it. Two, Android really does infringe on other company's patents and they're legitimately trying to protect their ideas just like the Wright brothers did with their wing warping patent.

With Microsoft and Apple suing Android, it's easy to think they want to block competition for their own smart phones, but with Oracle and British Telecom suing, it's harder to see why they would want to block Android from growing. If Android does violate multiple company's patents, that means Google will have to pay licensing fees along with

damages. Google may have to charge licensing fees to use Android as a result, which could drive companies to use the open source webOS operating system instead.

As more companies pile on the Android patent infringement bandwagon, you can make your own opinion on whether these other patents are valid or not and if Android really does violate such patents. Whatever the case, just remember that Android and the iPhone are carving up the smart phone market between themselves, leaving little room for Windows Phone 7, webOS, or Blackberry.

The Strange World of a PC Manufacturer

Acer used to make lots of money selling netbooks. Then the iPad arrived and the netbook market cratered, despite the insistence of multiple critics who claimed that netbooks were better (www.channelinsider.com/c/a/Spotlight/10-Reasons-Why-A-Netbook-Is-A-Better-Choice-Than-An-iPad-396227/) than the iPad. Now J.T. Wang, Acer's CEO, has a new idea (www.smartcompany.com.au/information-technology/20111209-acer-to-start-pursuing-a-more-profitable-strategy.html): "We will shift our strategy to improving profitability from pursuing market share blindly with cheap and unprofitable products."

The big question is why did Acer knowingly make cheap products in the first place and why did they think market share was more important than profitability? If this is the kind of thinking guiding major corporations, it's no wonder so many of them are failing in the market place.

The problem with the PC market is that companies keep slashing prices and cutting expenses, resulting in lower product quality and customer service. With razor thin profit margins on each PC sold, PC manufacturers have to work harder to sell more computers and make less money. This is the reason Hewlett-Packard initially thought about exiting the PC business (before changing their mind again) and the reason why Dell Computers has exited the netbook market (www.theverge.com/2011/12/15/2639138/dell-quits-netbooks) altogether.

With PC prices coming down, the only way to make a profit is to make cheaper products. When the retail price of Windows nears the price of an entire computer, the only company making money in the PC market is Microsoft. How much longer can PC manufacturers keep working as low-paid slave laborers for Microsoft's bottom line?

The Windows PC business is unsustainable for nearly everyone but Microsoft. When companies can barely afford to sell, let alone advertise and distribute Windows PCs, they'll simply exit the market. Do-it-yourself PC building kits aren't the answer either if a copy of Windows costs nearly as much as all the parts needed to put together your own computer.

Windows spread because so many companies could make money supporting it. Take away this financial incentive and Windows no longer has a reason to grow. The battle between Windows and rivals like Apple has nothing to do with technical capabilities and everything to do with financial incentives. As Windows loses its financial incentives, it will simply stop growing and start shrinking. Just search for "declining PC sales" and see what your favorite search engine has to tell you.

[As PC Sales Decline, iPad Grabs Share -- InformationWeek](#)

www.informationweek.com/news/hardware/desktop/230200053

Jun 7, 2011 – Analysts continue to downgrade **PC sales** forecasts, but also warn that other than iPad, tablets are not selling as fast as the industry had hoped.

[H.P. and Dell Say Slower Sales of PCs Affected Revenues ...](#)

www.nytimes.com/2011/05/18/technology/18compute.html

May 17, 2011 – Analysts attribute some of the weakness in consumer **PC sales** to the rise of tablets. Overall **PC sales declined** 1 percent to 3 percent during the ...

[PC Sales Should Not Be Declining | John C. Dvorak | PCMag.com](#)

www.pcmag.com/article2/0,2817,2383752,00.asp

Apr 18, 2011 – I think I know why **PC sales** are **declining** and a solution to fix the problem. Hint: it has to do with marketing.

[Declining PC Sales are Hurting More Stocks than Hewlett Packard ...](#)

wallstcheatsheet.com/.../declining-pc-sales-are-hurting-more-stocks-t...

Aug 31, 2011 – Analysis of companies and stocks hurt by **declining PC sales**.

[Faced with declining sales, the PC market needs Windows 8 | The ...](#)

www.mb.com.ph/.../faced-with-declining-sales-pc-market-needs-win...

Faced with **declining sales**, the **PC** market needs Windows 8. By ALLAN D. FRANCISCO. September 21, 2011, 10:12am. MANILA, Philippines – Microsoft's ...

[Intel, AMD wrestle with declining PC sales - MarketWatch](#)

www.marketwatch.com/.../slowing-pcs-seen-weighing-intel-amd-resu...

Apr 15, 2011 – Intel and AMD are set to report first-quarter results amid signs of a weakening **PC** market and questions on the impact of the Japan crisis.

[Consumer PC sales growth declines for first time ever: iPad the ...](#)

www.tuaw.com/.../consumer-pc-sales-down-for-first-time-ever-ipad-t...

May 29, 2011 – Business Insider has posted a chart that tracks consumer **PC** growth from June of 2007 to March of 2011. According to the chart consumer **PC** ...

[The Jaded Consumer: Apple Bucks Declining PC Sales in Europe ...](#)

jadedconsumer.blogspot.com/.../apple-bucks-declining-pc-sales-in.ht...

Nov 14, 2011 – According to Gartner, Apple's nearly 20% rate of unit **sales** growth rate over the year-ago-quarter helped to push Apple into the top 5 vendors ...

[Technolog - iPad not to blame for PC sales decline, report says](#)

technolog.msnbc.msn.com/_.../6618265-ipad-not-to-blame-for-pc-sa...

May 10, 2011 – Don't blame the iPad for affecting **PC sales**, says The NPD Group: Nearly 75 percent of iPad buyers say they weren't choosing between the

Figure 3. Plenty of articles document the declining sales of PCs.

* * *

If you browse regularly using Safari, you may notice unwanted pop-up and pop-under windows displays ads for car insurance quotes or the MacKeeper utility program. The longer you browse, the more of these additional windows appear.

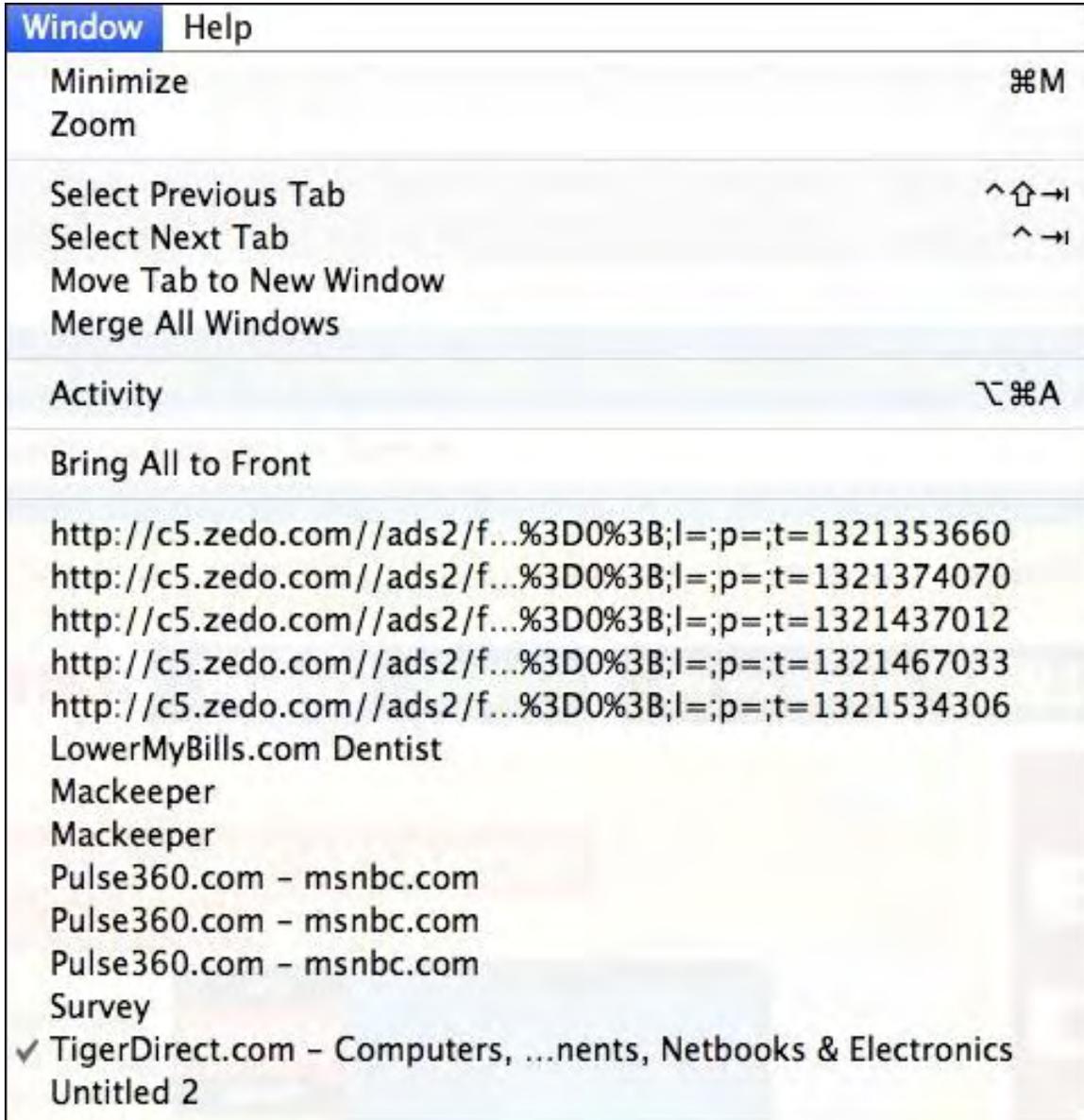


Figure 4. The Window menu lets you view how many unwanted additional Safari windows are open.

One way to spot and remove them is to go to the Windows menu to see the list of open windows, then close each one individually. A much faster method is to choose Window => Merge All Windows. This command displays all open Safari windows in a single window displaying separate tabs. Now you can easily click the close button on each tab to close it quickly.

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 particples with Jack Dunning and go to the gym

to pump iron with Dan Gookin.

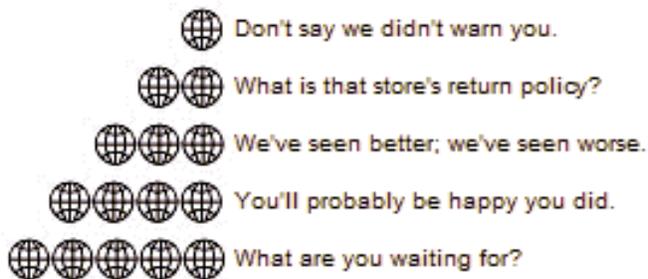
Wally is responsible for the following books:

My New Mac, Lion Edition (www.amazon.com/gp/product/1593273908/ref=as_li_tf_tl?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=217145&creative=399373&creativeASIN=1593273908),
 My New iPhone (www.amazon.com/gp/product/1593271956?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1593271956),
 My New iPad 2 (www.amazon.com/gp/product/159327386X/ref=as_li_tf_tl?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=217145&creative=399373&creativeASIN=159327386X),
 Steal This Computer Book 4.0 (www.amazon.com/gp/product/1593271050?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1593271050),
 Microsoft Office 2010 for Dummies (www.amazon.com/gp/product/0470489987?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470489987),
 Beginning Programming for Dummies (www.amazon.com/gp/product/0470088702?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470088702),
 Beginning Programming All-in-One Reference for Dummies (www.amazon.com/gp/product/0470108541?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470108541),
 Breaking Into Acting for Dummies with Larry Garrison (www.amazon.com/gp/product/0764554468?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0764554468),
 Strategic Entrepreneurism with Jon Fisher and Gerald Fisher (www.amazon.com/gp/product/1590791894?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1590791894),
 How to Live With a Cat (When You Really Don't Want To) (www.smashwords.com/books/view/18896),
 The Secrets of the Wall Street Stock Traders (www.amazon.com/gp/product/B006DGCH4M/ref=as_li_tf_tl?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=217145&creative=399373&creativeASIN=B006DGCH4M),
 Mac Programming For Absolute Beginners (www.amazon.com/gp/product/1430233362?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1430233362),
 The 15-Minute Movie Method (www.amazon.com/gp/product/B004TMD9K8/ref=as_li_tf_tl?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=B004TMD9K8).

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

[Return to Table of Contents](#)

Worldwide & Product news reviews



Worldwide News & Product Reviews

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

Santa Saved!; Nine Ways to Save on Electronics During the Holidays; Time to Get Your Head in the Cloud?; De-stress the Holidays; Most Popular Holiday Tech Toys.

Santa Saved!

Distributed Denial of Service (DDoS) protection provider, Prolexic Technologies (www.prolexic.com), has announced that it mitigated a massive Layer 3 attack last week that targeted the Web site of ... Santa Claus. According to Prolexic:

Seeking to enhance operating efficiencies, Santa is increasingly reliant on an extensive e-Commerce site to process gift requests. "Sending Christmas lists to the North Pole by mail is so 1800s," said Inna Openslae, Global Fulfillment Director. "We've built one of the most visited Web sites in the world and to say it is mission critical is a huge understatement. The happiness of billions depends on access to the site at all times."

"We've seen a continuous rise in the number and size of DDoS attacks since Prolexic began monitoring and mitigating them in 2003," said Scott Hammack, chief executive officer at Prolexic. "As this incident highlights, even if you are a saint based in the North Pole, your site can still be attacked."

When asked about the incident, Santa became rather animated. "What kind of person would want to take down my site and ruin Christmas?" sputtered Santa. "This could only be the work of the Grinch, or perhaps those slacker elves I had to let go earlier this year. I'm glad this incident is over so we can refocus on all the good things about this time of year," said Santa. "Ho! Ho! Ho! Merry Christmas to you all!"

Nine Ways to Save on Electronics During the Holidays

Andrea Woroch, a consumer and money-saving expert for Kinoli Inc., shares "Nine Ways to Save on Electronics During the Holidays":



We've all gone gaga for a pair of socks or gushed over the bath towel Aunt Cindy brought back from her trip, but let's be honest; electronics are the gift everyone wants. According to the National Retail Federation, these coveted items are so in-demand they showed up on more than 35 percent of wish lists. In all likelihood, those who already have an Xbox or iPad wouldn't be disappointed to find another wrapped under the tree.

Though it's nearly impossible to go wrong handing out tablets and Blu-ray players, high prices will blow your budget to bits. To ease the impact this holiday season, try some of these tips for saving on electronics.



1. Haggling Helps

One of the most powerful tactics to use as a consumer is walking away. It's amazing how quickly a steadfast salesperson discounts prices that can't possibly get any lower when you call their bluff. A recent study by Consumer Reports shows shoppers who haggled saved an average of \$82, so clearly

there's little to lose by at least asking.

2. Let's Make a Deal

Remember when you thought movie theater sound was a must? The thought of watching a film without feeling the room shake was inconceivable. Now the surround sound system purchased months ago sits uninstalled, barely removed from the box. Instead of letting these purchases sit idle, try to arrange a swap. Craigslist is an especially good place to connect with others in your area so you don't have to worry about sending items through the mail.

3. Avoid Shipping Costs

Electronics are pricey enough before you tack on the cost of shipping. These days, major retailers are in tune to consumers' demand for free shipping, at least over the holidays. Free Shipping Day offers an excellent opportunity to snatch this year's most coveted electronics without paying for shipping. Scheduled for Friday, Dec. 16, the one day online event will include over 65 electronics merchants, including Best Buy who will offer free shipping with delivery by Christmas Eve.

4. Be Wary of Warranties

If you thought your shopping was all done by the time you got to the register, think again. During the holiday season, merchants are selling extended warranties harder than anything else. This is because warranties tend to have a higher profit margin than the expensive electronics on sale. In most cases the warranty provided by the manufacturer is sufficient. When things go wrong, it tends to happen three or four years down the road instead of during the two years covered by an expensive extended warranty.

5. Discount the Discount

The savings from opening a store credit card are hard to ignore, but in the long run they'll come back to bite you. Generally these cards have higher than normal interest rates and fees that quickly negate any discount you got in the first place. Plus, applying and getting denied for several store cards has a negative impact on your credit score.

6. Upgrading Made Easy

Whether it's a genuine effort to reduce waste in landfills or just an attempt to get customers to upgrade sooner, electronics retailers are increasingly offering exchange programs. One of the most popular is the Trade and Save Program from Radio Shack. There's no cost to participate and you can trade in old electronics purchased from any store. When your items are accepted you'll receive a Radio Shack gift card for the amount of your credit. It's generally best to steer clear of programs which charge for participation or only allow trade-ins within a set time frame.

7. It's New to You

When it comes to buying electronics, many think "refurbished" is a dirty word. In actuality, refurbished products are an excellent way to save money over buying brand new. They often come with a warranty and include new parts and

accessories. For example, refurbished Apple Store items go through a rigorous testing process and are backed by a one year warranty.

8. The Total Package

It's a slippery slope climbing to the top of the consumer electronics mountain. Reaching one peak inevitably leads you down the path to another. There's always a new product needed to make the overall entertainment experience better. Instead of assembling assorted pieces as you go, look for package deals at stores like Costco or Sam's Club with a discount on everything. Before going all-in, comparison shop to ensure the package is a better deal all around. Track prices for each piece at sites like Decide.com and make sure you don't buy just before a big price drop.

9. As Good As New

Unless you work in the industry or upgrade every few months, it's unlikely you'll notice the nuances between HDTV models from last year and this year. What you'll notice for sure is the big discrepancy in price. A recent *USA Today* article found average TV prices have dropped from \$935 in 2007 to \$545 this year. If you're just now upgrading from tube technology, you're probably more impressed with being able to identify individual blades of grass during a football game than HDMI inputs and aspect ratios anyway.

Time to Get Your Head in the Cloud?

Siamak Farah, CEO of InfoStreet, writes in this week with some essential business wisdom for the coming year and beyond:



The famed children's fable, *How the Grinch Stole Christmas*, tells the story about the Grinch who attempts to ruin the holidays for the children of Whoville by stealing their gifts and decorations. As in most fables, the Grinch's diabolical plot is foiled. If only it was that simple in the real world.

2011 has been challenging for most small to medium businesses and business in general will enter 2012 under a cloud of uncertainty. While some industries are seeing an increase in demand, most businesses are trying to hold out, awaiting an improved climate. There seems to be little opportunity to raise prices in a market where customers are demanding lower prices on goods and services (see my blog post on "The Economic Squeeze (www.infostreet.com/blog/small-business-management/the-economic-squeeze/)").

As businesses recognize that 2012 won't likely see increased revenues from a raise in pricing/fees, the pressure to reduce costs will continue to grow.

Despite the fact that there is a large pool of unemployed people, most businesses have actually seen an increase in their cost per employee. This has been as a result of reducing staff that are either under trained or not required for survival, and in turn providing a raise to keep critical and trained employees. Not to mention, these key employees have by and large been asked to fill the gaps created from the reduced worked force.

While on the surface this increase in cost does not seem logical, it is in fact vital. The loss in valuable, trained employees can have a long-term negative impact on any business. "The productivity gained by maintaining a well-trained workforce, even in difficult financial times, can't be overstated. When machines, desks or computers sit idle, productivity will eventually flatten and it could be nearly impossible to recover your momentum.

So where is a business to cut? Fixed costs won't change, we can be assured of increased healthcare costs, and given the gridlock in DC, taxes remain the great unknown for the foreseeable future.

Talk about the Cloud seems to be the topic du jour today as it provides a formula for reduced fixed costs, increased per employee productivity, and a PAYGO model. Yet a survey from ITC service provider found that 57% of businesses are undecided about adopting Cloud services. The reluctance is reported to be centered on concerns for security, reliability and a fear of the unknown. The term 'the Cloud' might be daunting, but in truth most businesses already rely on the Cloud for many services (e-mail, online payments/billing, file sharing, banking to name a few) and employees are using the Cloud, with or without their employer's permission.

- 37% percent of workers claim that they've used their own PC or smartphone for work.
- 26% have purchased work-based software or other technology with their own money.
- 15% of users have downloaded unauthorized applications to their work computers in the past year.
- Of that 15%, 67% have used two to five unauthorized applications for work.

As with any critical purchase, security and reliability concerns need to be addressed by selecting a vendor that has the history, reputation and a loyal customer base...Businesses rely on their Cloud vendors' security expertise since they often don't have enough security personnel on staff, if any, and realize that while it might seem comforting to keep your cash under your mattress, relying on the expertise of our banks to manage financial resources is smarter.

Perhaps we need to look at the Cloud as a utility and not as a product or a service. Years ago, we dug wells for water and fueled our factories with coal burning furnaces. Now, you turn on the tap and get all the water you need and plug an extension into the wall and electricity is there. We pay only for the utilities we use, increasing and decreasing as demand dictates. Think of the Cloud as a wireless plug for all your computing solutions.

As was noted in a recent article from the Harvard Business Review: "One simple example is when a service is needed only 10 hours per day, five days per week. The cost of owning the servers and applications the 118 hours/week they are not in use is not a good allocation of funds for many businesses. Many Cloud providers allow bringing up services when they are needed and bringing them down when they are not."

Most small businesses and enterprises don't require their Cloud provider to handle voluminous End-of-Month runs that are required for enterprise companies, but the cost benefits are the same. Take a company that in order to secure a new contract needs to partner with another vendor on a one time basis. The project requires the company to build a new intranet to host the CRM, Knowledge Base, Conference Calling, and File Sharing to be used by a large team for a fixed period of time. To purchase these tools would add costs and implementing them would take significant man hours. Utilizing the power of the Cloud, all this could ramp up within hours and the company only needs to pay for the apps needed for the length of the project. And since all the data is in the Cloud, these partners are not required to be under one roof; they can share the data, collaborate, and ramp down when the project is done. Your business can compete against larger competitors for projects without investing significant dollars.

This is the time of year where we are inundated with talk about gifts: what to buy, where, for how much, and for whom. The Cloud provides small businesses and enterprises with the gifts of money (reduced costs), time (increased productivity), mobility (the freedom to work from anywhere, from any Web enabled device), immediacy (you can provision a new service instantaneously), and control (you pay only for what you use).

The Cloud provides a competitive edge that can make the difference between a stellar 2012 or a repeat of 2011.

De-stress the Holidays

AT&T wireless has these tips for using technology to make the holidays a little easier:

Holidays can be stressful. Whether you're flying across the country to see your family/friends or scrambling to get a great last minute gift. All this can be made easier with your smartphone or tablet:



1. **Travel**—Get there hassle free by checking traffic conditions with Google maps or flight status and seat availability online before leaving for the airport.
2. **Cooking for the holidays**—Tasty holiday recipes are a click away. Watching your waistline? No problem, there's an app for that—with a calorie counter, you can snap a shot of your food and see how many calories before committing to another serving of fruit cake.
3. **Shopping**—Why fight the crowds when you can shop from the comfort of home? Most sites have free holiday shipping so take full advantage of specials. If you do brave the stores, use the bar code application to find the best price in town and keep the kids occupied with a host of great games and apps designed to hold their attention while you run last minute errands.
4. **Family**—Capture the special moments with your loved ones this holiday season on your device's high resolution camera and share real time.
5. **Don't be list-less**—Let your smart phone or tablet make your lists and check them twice. List making apps keep present buying manageable and make it easy to send virtual holiday cards.

AT&T's list of favorite holiday apps:



- Angry Birds Seasonal edition (iPhone/Android) **Free**
- Baking Recipes for the Holiday Season (iPhone) \$.99
- Christmas Recipes (Android) **Free**
- Santa's Bag - Christmas Gift List (iPhone) \$.99
- Christmas Countdown Calendar (Android) **Free**
- Chai on Chanukah (iPhone) \$.99
- Droidel (Android) **Free**
- Santa Tracker (iPhone) \$.99
- 3-D Christmas Wallpaper (Android) **Free**
- Talking Santa (Android) **Free**
- Talking Baby Rudolph the Reindeer (iPhone) \$.99

Most Popular Holiday Tech Toys

SortPrice.com (www.sortprice.com) has sent in their annual list of the most popular and sought after products being targeted by consumers this holiday shopping season, which reveals that shoppers are targeting electronics and tech items more than ever this year:

Holiday shoppers are targeting and gobbling up electronics items at a frantic pace in 2011 and are poised to give the product category its most robust holiday season ever, according to new consumer data unveiled today by price comparison site and social commerce solutions provider SortPrice.com.

"Gadgets and tech items have increasingly grown in popularity in recent years but even we didn't expect to see this," said SortPrice co-founder and CEO Doron Simovitch, referencing the category's dominance in his company's annual list of most popular holiday gift items. "Not only do you have consumers actively seeking out electronics, it would also appear that many shoppers who are on the fence about what to buy are turning to the category to fill their shopping lists this year as well."

Electronics account for half of the overall top ten products on this year's list of most sought after holiday gifts, which SortPrice compiles annually by collecting and analyzing site traffic and user searches beginning on Black Friday. For 2011, here are the top tech requests based on roughly 42,000 user searches on SortPrice.com between Black Friday and Sunday, December 11.

- Apple iPad 2
- Samsung HD Televisions
- Apple iPhone
- Beats Headphones by Dr. Dre
- Call of Duty-Modern Warfare 3 for Xbox 360
- Leap Pad Explorer

In addition to being an editor and columnist for *ComputerEdge* 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 www.charlescarr.com.

[Return to Table of Contents](#)



Editor's Letters: Tips and Thoughts from Readers

“Computer and Internet tips, plus comments on the articles and columns.” by ComputerEdge Staff

"Cloud Costs and Usability," "Stripping Text Formatting," "Wally's Columns Are Wonderful," "This Icelandic Cloud Has a Silver Lining"

Cloud Costs and Usability

[Regarding D'Artagnan Fischer's December 2 article, "Some Clouds Can Block the Sun!":]

I'd like to know more about:

- 1) Cloud costs (plus contact info for the providers)
- 2) What drivers must be added
- 3) What network changes have to be made (including at the router)
- 4) How to get around the access speed problem since the Internet is slower than a local hard drive (backups might take forever; video/audio work with Final Cut and Pro Tools are bottle-necked)
- 5) Exactly how to connect to the Cloud using the various platforms (*nix, Mac, Windows, OS/2-eCS),
- 6) Does the Cloud look like another hard drive as far as software is concerned and if so what is the path spec (especially maximum length and disallowed characters)
- 7) What, if any, are the relevant RFCs (www.rfc-editor.org, the word "cloud" shows up in the titles for RFC3056 and RFC6208 but there are likely other relevant RFCs)

Thanks much!

-Peter, Los Angeles

Stripping Text Formatting

[Regarding the December 2 Digital Dave column:]

Hi Dave,

I've been using Notepad for many years to strip unwanted formatting. I keep an icon for Notepad in my tray just for that purpose. It's also useful when pasting something from Word to an older version of WordPerfect. I, of course, have the newest version of WP, which will accept a direct paste from Word, but I also use a 1998 version for a view feature eliminated many years ago that I find extremely useful.

Thanks for your great column.

-Doug Clements, Poway

Some word processors offer an option to paste unformatted text. In Word 2003 and older, it should be under Edit => Paste Special => Unformatted Text. In Word 2007 and newer, there's a little arrow under the Paste button in the

Ribbon, Paste Special can be found there. In Word 2010 (I'm not sure about 2007), in the Paste menu in the Ribbon, one of the icons is of an A on a clipboard, this is for Keep Text Only. In Word 2010, and probably Word 2007, a "mini-menu" appears next to whatever you just pasted, allowing you to Keep Text Only, or to Set Default Paste. I would imagine that most modern word processors have at least the Edit => Paste Special option.

-Phillip Helfenbein

In my version (3.2.1) of OpenOffice org, if you click on edit and paste special you get a menu that includes "unformatted text." This will paste text characters only into your screen in open office word processor (pasted with Ctrl +v).

-Buck

To paste text without formatting, I use a small program called "PureText (www.stevemiller.net/puretext/)." It's one of those programs I install first whenever I set up a new machine.

Basically, I copy text from a browser and press "WIN + V" (instead of "CTRL + V") to paste it without formatting info. It works with programs that don't support "Paste Special" feature.

-Sol, San Diego, CA

To copy and paste text from a Web page in Open Office, under Insert => Paste Special => there are options for unformatted, HTML, or HTML without comments.

-Keith, Highlands Ranch, CO

To Digital Dave from a long-time reader: Regarding your suggestion of using Notepad to strip out only the text from a Web page, I use Notepad and two other techniques:

1) If you don't need to subsequently edit the text, use the Windows 7 Snip tool and then paste into a document or e-mail message,

and

2) Paste the whole thing into Word 2007, use the Paste Options icon, and select Keep Text Only.

-Howard Ray, Colorado Springs, CO

Wally's Columns Are Wonderful

[Regarding the December 9 Wally Wangs Apple Farm column:]

I love Wally's columns. No extraneous words, just lots of good information and insight. (And I also love the anti-Microsoft slant!) So pat him on the back, tell him he's doing a great job and that the readers are proud of him.

-Peter Skye, Los Angeles

This Icelandic Cloud Has a Silver Lining

[Regarding the November 11 Worldwide News & Product Reviews column:]

The author starts off mentioning the Icelandic (ash) clouds that affected so many would-be travelers in Europe. He then transitions to talking about a hub for cloud computing being set up there, and how perfect it is, with "vast quantities of free, renewable energy and cool climate."

He then states:

There's no need to worry about the ash. Protecting such centers from volcanic ash is much safer and easier than protecting them from floods and earthquakes—two natural disasters prone to the current world centers of cloud computing.

Sorry, but I've actually had experience with volcanic ash (Mt Pinatubo), and it makes Iceland about the last place you would want to put data centers. Volcanic ash is typically very abrasive, conductive and literally gets everywhere. It ranges from very coarse to extremely fine, and **does** get through typical filtration systems. Also, volcanic eruptions usually include earthquakes at no extra charge. The quakes from Mt Pinatubo actually broke tiles off of our bathroom walls.

I can see how people concerned with "footprints" would like the idea of endless free energy, but as always, nothing is really free.

-SteveInSD, San Diego, CA

ComputerEdge 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 ComputerEdge.com (webserver.computoredge.com/online.mvc?src=ebook). 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 "ComputerQuick Review", or yell at us, please e-mail us at ceeditor@computoredge.com. If you would like to contribute to **ComputerEdge** endeavors, please visit ComputerEdge E-Books (www.computoredgebooks.com/Contribute-to-ComputerEdge-Magazine_c3.htm).

Send mail to ceeditor@computoredge.com with questions about editorial content.

Send mail to cwebmaster@computoredge.com with questions or comments about this Web site.

Copyright © 1997-2011 The Byte Buyer, Inc.

ComputerEdge Magazine, P.O. Box 83086, San Diego, CA 92138. (858) 573-0315