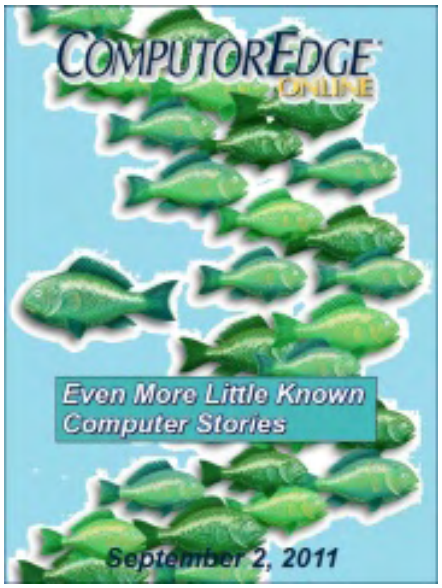
ComputorEdge™ Online — 09/02/11



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Even More Little Known Computer Stories

Obscure stories about how people are using computers and the Internet.

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Digital Dave

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

Microsoft Office 2010 Bullets; Running Netflix on a Blu-Ray DVD; Scanning Photographs.

Dear Digital Dave,

I am going crazy. I upgraded to MS Office 2010. For the most part I love it, however, editing and creating a default bullet is not an option. I've searched for answers online, but the only I've found is the option to create a whole new style.

I hate it. Why would Microsoft do that to us? The problem started when Windows picked the default bullet. It was either a stupid diamond or blank sort of square. I found the specific fonts that it was pulling from and deleted them, so I now I get a blank, unless of course I search out the new style I created.

The problem with that is that it sometimes defaults to the very much hated boring Times New Roman font. Do you know of anything I could do aside from uninstalling and reinstalling office every couple of weeks (which resets the black dot bullet as default). Thanks for your help.

Rose
Aurora, CO

Dear Rose,

It's been a long time since I've used Microsoft Office, but it seems there must be a way to reset the default bullet. I Googled "bullet default in Microsoft office 2010" and found quite a bit of information (plus a number of people with the same problem). Sometimes finding a solution is just a matter of using the right words in a search. I will usually try various possibilities when I'm not getting satisfying results. Surprisingly sometimes typing in the entire question will occasionally bring you to the exact answer.

There is one such result at Microsoft Answers (*answers.microsoft.com/en-us/office/forum/office_2010-word/how-do-i-change-the-default-bullets-in-word-2010/8b36d9e3-44a1-4e1b-abc9-d57254c82950*). If you check out the URL (and the title of the article) you will see "How Do I Change the Default Bullets in Word 2010?" embedded in it. While that doesn't guarantee the right answer, it is certainly on the right topic. Put that question to your search engine and you will get a number of possibilities.

I welcome a response from anyone who knows the exact way to resolve this problem, although I did turn up this article from Shauna Kelly (*www.shaunakelly.com/word/bullets/controlbullets20072010.html*). Unlike me, she seems to know what she's talking about.

Here's a possibility from a friend who has Microsoft Office 2010, "I have Office 2010! When I right click on the document, 'Bullets' is one of the choices. If I mouse over that, a little menu appears with a selection of bullets and an option to define my own and add them to the selection. Maybe she isn't using the right click menu? I didn't know how to put one in and that was the first way I found (within seconds). Seems pretty easy and customizable."

Sometimes the answer is just a right click away.

Digital Dave

Dear Digital Dave,

How do you connect your DVD player (Blu-ray) to HDTV for streaming Netflix, Hulu, etc?

Richard Chavez
Chula Vista. CA

Dear Richard,

First, it's important to understand that your Blu-ray DVD player needs to be Netflix, Hulu, etc. capable to stream video to your HDTV. Devices which stream video are specifically adapted for the function—meaning they have either built-in or downloadable software which will access the Internet streaming accounts. Plus, the device will include a network connection, either direct Ethernet or Wi-Fi (often both) for accessing the Internet. Not all Blu-ray DVD players are Internet capable. If yours is capable of video streaming, then most likely you will see the Netflix logo (the leader in Internet video streaming) on the box or possibly on the player itself.

Even if your DVD player is Netflix capable, which other services may be available will depend upon what your player supports. These deals are worked out between the manufacturer and the streaming companies.

Assuming that your Blu-ray player does support Internet streaming, the hookup to your HDTV should be fairly straight forward. In most cases, you should be able to use an HDMI (*en.wikipedia.org/wiki/HDMI*) cable to connect directly from your player to one of the HDMI ports in the television. This will provide the best digital video and audio for either DVD playback or streaming. You may need to purchase an HDMI cable, but they can be found for a reasonable price at Amazon or Costco. (Most retailers overcharge for these cables, including places like Best Buy and Target.)

If for some reason you don't have another HDMI port available on your HDTV (they are all taken up by other devices such as cable boxes), then you should be able to hookup with component video. This consists of three cables for the video. (If you have a three-part component cable, the red, green & blue ends are matched with the same color jacks on your devices. Otherwise make sure that each cable connected to the TV matches the appropriate output on the DVD player.) The audio will need separate connections (left and right).

Available on some DVD players is the older, lower quality composite video which consists of one video cable and two audio. This may not be supported on your HDTV.

Another step down in quality would be to use a DTV/SDTV video hookup. This is the signal used by broadcast television and requires a single cable. You will probably find it on your HDTV although the Blu-ray player is unlikely to support it. (You will be limited to standard definition video and audio with this connection.) Any other options will depend upon what is available for both your DVD player and the HDTV. Check your manuals.

Once you are hooked up, the firmware for your Blu-ray player should come up automatically when you turn on the player and select the appropriate HDMI (or other input) channel on the television. Follow the instructions for hooking up to the Internet and logging on to your Netflix (or other service) account.

Digital Dave

Dear Digital Dave,

I am looking for some simple software that will allow me to use any TWAIN compliant scanner to scan multiple photos at a time and separate them into individual files. For instance, place four 4" X 6" photos on the platten, close the cover, start the scan and get four files, one for each photo. A few years ago I came across software that did this, so I know it exists. I have thousands of family photos that I need to digitize and I don't need to modify them in any way. My current scanner did not come with this type of software.

Marcus
Alabama

Dear Marcus,

That's an excellent question. Scanning photos is certainly a tedious process. I guess that I would probably put them all into one file in a gang and cropped them out when I needed them. But I'm lazy that way. I'm sure that there is someone out there who remembers the program you're referring to.

I did find a program on CNET called Scan Speeder (*download.cnet.com/ScanSpeeder/3000-12511_4-75446103.html*) which seems to do exactly what you want. It must be fairly new since it doesn't have any reviews posted. It does have a ten-scan free trial and may be worth the $29.95 if you have a ton of photos to do.

If you do give it a try, please let me know how it works out. I never know when a box of old photos will be uncovered at a relative's house.

Digital Dave

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Little Known Computing Stories III

"The Internet Saving Rural America, Virtual Makeup and E-Prescriptions" by Marilyn K. Martin

Dropping TV for Web Content; The Internet to the Rescue!; Virtual Makeup Apps; Saving Lives with E-Prescriptions; New Workspace: Tablet Computers and More Display Screens; E-Crime Continues to Evolve...; ...And So Does Law Enforcement's Digital Tools; Hiring Hackers?; Domestic Unmanned Aerial Vehicles.

Below are more recent computing stories or trends you may have missed. In our complex digital world, even the smallest ripples of embraced innovation can foreshadow giant trends. Enjoy!

Dropping TV for Web Content

With the slow and uncertain economy, consumers are spending more time at home, and looking for ways to cut household entertainment costs. The latest Nielsen Co. report stated that time spent viewing video on computers at home and work increased by 45% over 2010. According to dMarketer, more than 1/3 of online U.S. adults (or nearly 60 million people) routinely watch full length television shows online.

According to a June 2011 article (*www.denverpost.com/television/ci_18235689*) in the Denver Post, more and more TV watchers are "cutting the cord" for more personalized entertainment choices—and fewer commercials. In 2010, approximately one million U.S. households dropped their TV cable. Dropping a $75/month cable habit, consumers are finding free entertainment on YouTube or DVDs checked out from a local library.

There are under $10/month subscriptions to Netflix and Hulu, with single $.99 to $3 download selections from iTunes or Amazon. Netflix has even started producing original content. And Google, which recently bought YouTube, is investing $100 million to create original programming that will eventually air on 20 new YouTube channels.

The Internet to the Rescue!

According to a July article in the Detroit Free Press, rural Michigan communities are struggling to keep young people in small towns that lack jobs and entertainment. One small town called Owendale is working on a solution. They are one of several rural areas to receive part of $123 million in grants from the U.S. Department of Agriculture to provide Internet service in the next three years.

According to James Turner, state rural development director for the USDA, it's all about connecting school and health centers to larger institutions in cities, and "exposing small businesses to the global marketplace." Internet access in many rural communities has been hard to come by, mainly since Internet providers have been reluctant to dig miles of cable to pick up only a handful of customers. But now wireless Internet can be provided from strategically placed towers.

Historically, the introduction of railroads, electricity, then interstate highways to rural areas were investments that paid off with "huge economic growth." The USDA hopes introduction of the Internet will duplicate that growth, and save some dying small towns.

Virtual Makeup Apps

According to a July review (*latimesblogs.latimes.com/technology/2011/07/modiface-makes-the-ipad-your-new-makeup-counter.html*) in the Los Angeles Times, there is now a "virtual makeup counter" in an iPhone/iPad/iPod app. Called "ModiFace (*modiface.com/*)", the company behind the app uses facial recognition technology in their Ultimate Virtual Makeover (UVM).

Jenny uses her new iPad makeup app to check her progress.

Users can upload a facial photo of themselves, and then experiment with different makeup, from foundation to lipstick and mascara. If the user finds something they want to buy, the UVM will tell the user the brand and color name of the product, and take them directly to the Web site of that makeup company. There the user can upload credit card information, then arrange to have that makeup item delivered. Similar UVM technology is being tried out by other makeup companies, even at kiosks in drugstores.

Saving Lives with E-Prescriptions

According to a July reprint article (*seattletimes.nwsource.com/html/health/2015596627_script14.html*) in the Seattle Times 20% of New Jersey physicians are experimenting with an electronic prescribing system through Surescripts (*www.surescripts.com/*). From a small laptop in an exam room, a participating physician can write and send a prescription straight to the patient's pharmacy. It saves time for both physician and patient—as well as avoiding deadly mistakes.

Research has shown that e-prescriptions reduce medication errors by nearly 85%, when physicians switch from paper to e-prescriptions. Mainly since a red flag pops up in a patient's medical history on the physician's laptop, if a harmful drug interaction would result from a being written, e-prescription. This factor alone could help avoid the 7,000 deaths each year from medication errors. Physicians also like the one button approach to refills, as well as the color coded tiered system that lets them know the most inexpensive yet effective medications available.

New Workspace: Tablet Computers and More Display Screens

According to a July 2011 article (*www.cio.com/article/686843/Tablets_Used_Widely_for_Business_Says_Social_Nuggets_Survey*) on Cisco employees promising to

work on tablet computers if their company buys them, is proving to be true based on a recent survey.

Research firm Social Nuggets reports that "business activity" accounts for more than 25% of all activity on Apple iPads and BlackBerry PlayBooks, while "business activity" accounts for just under 20% of all activity on Android tablets. (Shopping accounted for 23% of the activity on Android tablets, and gaming accounted for 17.5% of activity on iPads.)

According to a recent essay (*seattletimes.nwsource.com/html/businesstechnology/2015625557_ptmacc16.html*) in the Seattle Times by Jeff Carlson more and more people are working with multiple display screens on their desk. Carlson connects his home MacBookPro to a 20-inch external monitor, which is his main monitor for working.

He keeps iChat, Twitter, Skype and other applications on his laptop screen, "that can be consulted at a glance." He longs for more external monitors, but so far "chain displays" exist only in theory. However, new software called Air Display can turn even iPhones or iPads into additional display screens.

E-Crime Continues to Evolve...

An Anti-Phishing Working Group (*www.ecrimeresearch.org/*) (APWG) is a "non-profit global pan-industrial and law enforcement association focused on eliminating the fraud, crime and identity theft that result from phishing, pharming, malware and e-mail spoofing of all types." They held their first "eCrime Researchers Sync-Up" in Dublin, Ireland in March 2011, for e-crime investigators and researchers—and those wanting to get into the field. Also attending were principals exploring avenues of research of direct interest to their grant portfolios.

Committing crimes through computers continues to evolve beyond hacking and bullying. According to a July article (*www.suntimes.com/6577515-417/accused-gps-stalker-tells-judge-he-wants-to-plead-guilty-to-murder.html*) in the Chicago Sun Times, a Canadian man supposedly stalked his Illinois ex-girlfriend by gluing a GPS tracking device to her car. He allegedly stalked her for several days, before ambushing and killing her.

...And So Does Law Enforcement's Digital Tools

According to an AP story (*news.yahoo.com/fbi-police-high-tech-fight-crime-150137180.html*) on Yahoo, the FBI's "digital forensics specialists" can provide solid proof in cases weak on other evidence. They have helped convict high-profile defendants like former Illinois Gov. Rod Blagojevich and top Enron Executives. Last year, the FBI's 14 Regional Computer Forensics Laboratories processed 3,000 terabytes of information, and are fast becoming crucial law enforcement tools.

In one instance, Khalid Ouazzani, who owned a Kansas City used car parts store, was secretly supporting al-Qaeda by night. Using covert communications more complex than mere encryption, Ouazzani was using a form of "steganography," or the art of hiding messages within other messages. But the FBI's digital forensics specialists cracked the code, and a convicted Ouazzani now faces 65 years in federal prison.

Agents have recovered crucial data from computers that have been set on fire, tossed into lakes, shot with guns and smashed to pieces. They can also crack passwords with tools that bombard a hard drive with 500 million guesses per second. Agents have even found child pornography hidden on Xbox 360 game devices.

Local law enforcement is also stepping up their use of technology. They are embracing biometric identification systems to speed up fingerprint matches, facial recognition software and citywide cameras to monitor crime. In the same article, Pinal County (Arizona) Sheriff Paul Babeu expects to have 75 deputies outfitted by September with facial recognition devices that also scan irises and fingerprints, and attach to iPhones.

Hiring Hackers?

As strange as it seems at first glance, the National Security Agency (NSA), among other government agencies, is actively recruiting people with hacking skills, according to an August 2011 article (*www.reuters.com/article/2011/08/02/us-usa-hackers-idUSTRE7710PY20110802*) in Reuters Multiple government agencies and corporations descended on Las Vegas the first weekend in August for "Defcon," the annual hacker convention. (The $150 entry fee was payable only in cash, no registration and no names taken.)

Among the 10,000 attendees, Government agencies and corporations alike were looking to hire people with computer hacking skills. The NSA, especially, is looking to hire 1,500 people by the end of September, and another 1,500 next year, most of them "cyber experts"—including hackers—as cyber-warriors. The recruits still have to pass a six-month background check and lie detector test. Even the Chief Hacker who founded "Defcon", Jeff Moss ("Dark Tangent") is now a member of Homeland Security's Advisory Council.

Domestic Unmanned Aerial Vehicles

According to a July article (*www.boston.com/business/technology/articles/2011/07/18/tiny_unmanned_craft_fly_into_danger_controlled_by_an_iphone/*) in the Boston Globe, MIT's Humans and Automation Lab has developed software to fly remote controlled miniature aircraft with an iPhone. With funding from Boeing, an MIT team is developing unmanned aerial vehicles (UAVs) "the size of a pizza box, and equipped with cameras that can stream video of otherwise inaccessible locations."

They are also working on controllers that can be used by even untrained operators. The iPhone application takes advantage of an accelerometer built into the phone. So operators can move the phone up, down, right or left, as if it were a joystick, and the UAV moves accordingly. GPS coordinates can also be typed in to steer the UAV to a specific destination. The operator can then watch video or snapshots taken by the on board camera on the iPhone screen.

Using these mini-aircraft for law enforcement is probably in the future. Meanwhile, Ogden (Utah) Police Chief Jon Greiner hopes to add a 52 foot long unmanned blimp to his force that will stream live video of his city. According to the Yahoo/AP story cited above, Chief Greiner says the blimp will cost less than a patrol car, and will serve as a crime fighting, eye in the sky for Ogden.

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.

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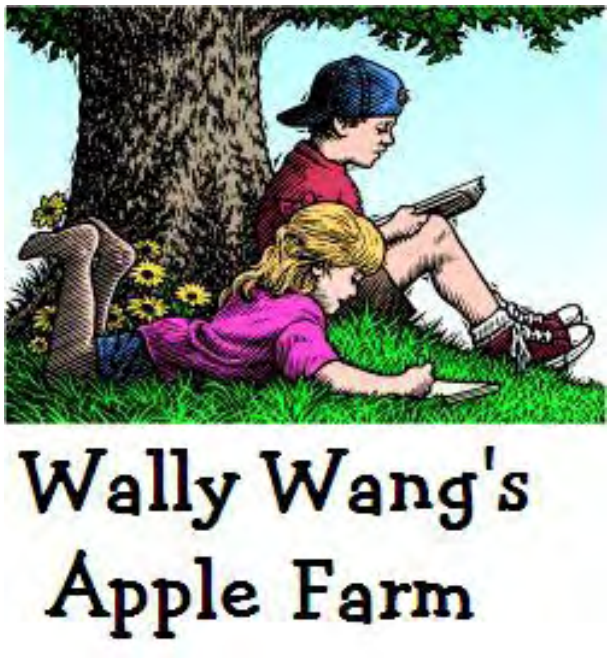

Wally Wang's Apple Farm

"Death of the Middleman" by Wally Wang

Death of the Middleman; Orangutans More Open-Minded Than Some Humans; Mac OS X 10.7.1; Bye-Bye to WebOS; Why the HP TouchPad Failed; Steve Jobs Resigns as CEO; Free Visual Collaboration Program; Create Your Own Word Puzzles; Searching text.

Morgan Spurlock, the man behind the "Supersize Me" movie where he documented eating nothing but McDonald's food for thirty days and nearly killed himself in the process, has a new show called "A Day in the Life." You won't find his new show on any of the television networks but exclusively on Hulu (*www.hulu.com/*).

The reason Hulu is producing a show is to provide exclusive content available nowhere else. The problem Hulu and other video streaming sites like YouTube and Netflix are facing is that they're nothing more than delivery services. The content creators, the television and film studios, control all the actual content of movies and TV shows. As a result, the studios can dictate the terms to all the content delivery services, usually to their disadvantage.

To avoid this problem, Hulu, YouTube and Netflix are sponsoring their own shows rather than rely on ever increasing fees demanded by the content creators. This may be part of the reason why Netflix raised their prices, the content creators demanded more money (*news.cnet.com/8301-31001_3-20080205-261/what-was-hollywoods-role-in-netflix-price-hike/*). The content creators realized they held the real key to the treasure, so they intend on making the content delivery services pay as much as possible for the privilege of delivering their content to the consumer.

However, the real key are the delivery services. Hulu can easily invest money to become a content creator, essentially reducing their dependence on the current content creators. Eventually, expect sites like Hulu and YouTube to offer their own shows and bypass the television and film studios altogether.

Of course, they still need to rely on film and TV studios for content, but they won't be dependent on them when they can offer their own shows and movies as well. The new entertainment sources will no longer be the television channels but specific, brand name Internet sites like Hulu.

Netflix has already seen the future of streaming video by weaning people away from DVDs and Hulu can already see that the future is creating and delivering exclusive content. As cable television starts losing television viewing subscribers (known as "cutting the cord"), more people will simply get their entertainment from the Internet.

Why bother recording shows on a digital video recorder when you can stream the shows you want at your convenience? Old fashion broadcast television is already dead and cable television is the next to go. Eliminate the

middleman and you can see the results from the bankruptcy of Borders Bookstores to the closing of post offices as fewer people need postal mail to communicate any more.

The future is in any industry that eliminates the middleman. The dying industries are always the middlemen themselves. Apple has taken this first step in eliminating packaging and DVDs by making Mac OS X 10.7 Lion a downloadable option. As more software gets distributed through sites such as the Mac App Store, there will be less reason to buy software in physical packages any more, which has already eliminated stores that used to specialize in selling software along with hurting the disc duplication and packaging market that thrived on supporting the middlemen of physical software distribution and storage.

In your own job, ask yourself if you're working in an industry that's a middleman or one that's working to circumvent the middleman. If you're working in a middleman industry, it's time to get out now before it's too late. Just ask any former employee of Borders, Hollywood Video, or the post office.

Orangutans More Open-Minded Than Some Humans

At the Milwaukee County Zoo, zoo keepers let two orangutans play with an iPad (*kotaku.com/5830764/these-orangutans-play-with-ipads/*) once a week. Since orangutans are highly intelligent creatures, zoo keepers believe the iPad gives them mental stimulation to keep them from getting bored or depressed. The orangutans favorite games include a finger painting app called DrawFree along with iFishPond, Flick Kick Football, and the interactive book *The Fantastic Flying Books of Morris Lessmore*.

Zoo keepers report that the orangutans seem particularly enchanted with videos of themselves, other orangutans, and other zoo animals. Richard Zimmerman, executive director of the Orangutan Outreach organization, eventually hopes to let the orangutans go online and play with other people and orangutans from other zoos.

Figure 1. An orangutan uses an iPad.

"If the iPad games can help alleviate any boredom they might otherwise feel," Zimmerman says, "we are all for it! And if zoo visitors can see this in practice and then go home with a better appreciation for the orangutans as sentient, intelligent beings who need to be protected in the wild, then everybody wins!"

If an orangutan can find a valid use for an iPad, perhaps there's still hope that some human beings will find a way to use an iPad productively as well. At the very least, such human beings can acknowledge that even if they don't have a use for an iPad, there are plenty of people, orangutans and even dolphins (*www.msnbc.msn.com/id/37478756/ns/technology_and_science-science/t/ipad-help-humans-speak-dolphins/#.Tk6mgOvFQ-c*) who can find a productive use for the iPad.

Mac OS X 10.7.1

The first update to Mac OS X 10.7 Lion has arrived and fixes the major problems with Lion, such as its tendency to lock up the entire computer when viewing videos in Safari. With the major bugs fixed, the only reason to still avoid Lion is to wait until your favorite software can run on it.

Most publishers have released Lion compatible software and most software designed for Snow Leopard will work just fine under Lion. Still, there's a chance that your favorite software may not work correctly under Lion, so check with the publisher first before making the move to Lion.

Lion may be a bit troublesome like all new operating system updates, but it's still a vast improvement over Snow Leopard. One new feature of Lion is its support for using the trackpad for creating Chinese characters.

To write Chinese characters on a trackpad, click the Apple menu and choose System Preferences. When a System Preferences window appears, click the Language & Text icon. A Language & Text window appears.

Click the Input Sources tab. Now scroll down and select the Chinese check box (either Simplified or Traditional). The main goal is to make sure Trackpad Handwriting is selected.

Figure 2. The Language & Text window lets you select Trackpad Handwriting.

Click the close button of the Language & Text window to make it go away. You should now see an American flag icon on the right side of the menu bar. Click on this icon and a menu appears. Choose one of the many Chinese options and then choose Show Trackpad Handwriting. A trackpad window appears.

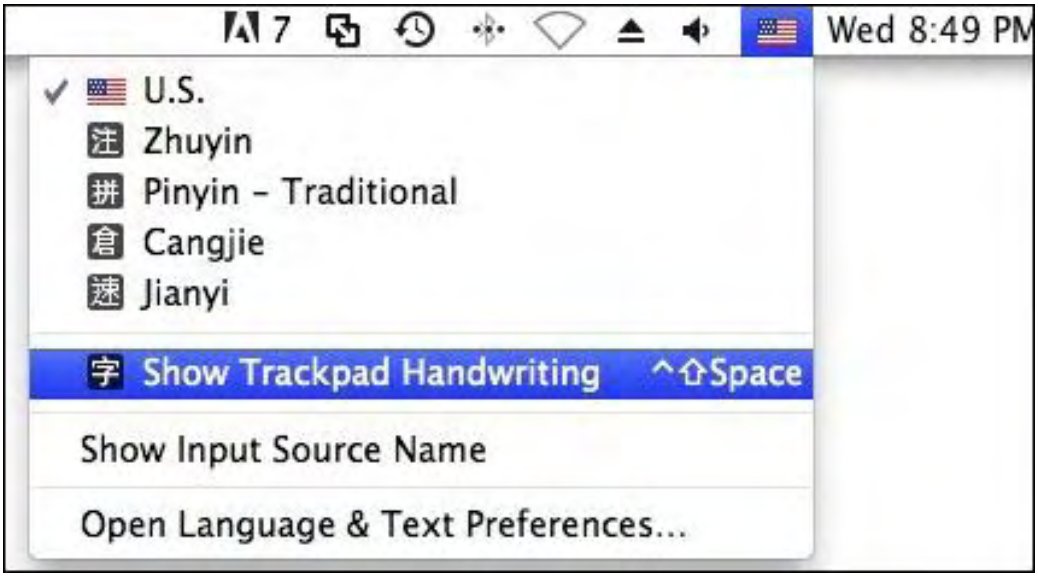

Figure 3. The Show Trackpad Handwriting lets you draw Chinese characters on the trackpad.

The left side of the trackpad window displays different commands. The middle of the trackpad is where you can draw characters. The right side of the trackpad is where you can tap a character that you want. As you draw in the middle of the trackpad, the right side of the trackpad window displays a list of characters it thinks you're trying to write.

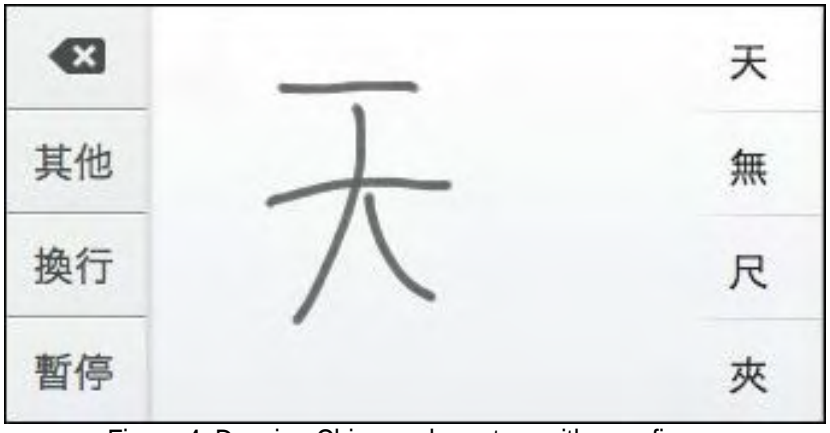

Figure 4. Drawing Chinese characters with your finger.

It takes time to get used to drawing Chinese characters on the trackpad, but it's just one way that the Macintosh makes it easy for people of other cultures and languages to use a computer without having to buy or install anything extra. Thanks to the advanced finger gesture features of Mac OS X 10.7 Lion and a trackpad, writing Chinese characters on a computer is not only practical but relatively easy, especially compared to other types of computers.

Bye-Bye to WebOS

When Hewlett-Packard bought Palm Computing for $1.2 billion, their plan was to use webOS to compete against the iPhone and iPad in the smart phone and tablet market. After taking a long time to finally release a webOS tablet (TouchPad) and a webOS smart phone (Veer), Hewlett-Packard has announced that they're going to stop development on all webOS devices.

In less than two months from announcing the TouchPad and boldly proclaiming that they were going to be "number one plus (*news.cnet.com/8301-13506_3-20065265-17.html*)" in the tablet market to suddenly announcing they're discontinuing the TouchPad and Veer, Hewlett-Packard has made the strategic business decision to exit the

low-margin world of devices like tablets, smart phones and PCs.

At least Hewlett-Packard only wasted $1.2 billion acquiring Palm Computing and then not getting any revenue from the acquisition. For Hewlett-Packard to give up on tablets, smart phones and PCs indicates that they believe the future lies elsewhere. If Hewlett-Packard can't see much of a future in those markets, what chances will others have in competing in those same markets?

It's easy to see why HP would abandon the tablet and smart phone market, but why give up on PCs unless the future of Windows PCs doesn't look profitable either? IBM sold its PC business to Lenovo, and Lenovo seems to be doing fine (for now). As Apple computer sales (*www.ft.com/intl/cms/s/2/af5dbc86-c977-11e0-9eb8-00144feabdc0.html#axzz1VPdux2YV*) continue outpacing Lenovo, even Lenovo may find that selling PCs may not be as profitable as it once was.

With razor thin profit margins on PCs, hampered by the comparatively high license fee of Windows (in relation to the cost of the PC itself), fewer companies can afford to sell PCs. Hewlett-Packard reportedly earned $9.6 billion in revenues from PCs but only kept $569 million in profits.

If both IBM and Hewlett-Packard want to distance themselves from the low-margin market of PCs, perhaps the market for Windows PCs may be sinking faster than everyone might think.

Why the HP TouchPad Failed

Less than two months after releasing the TouchPad, Hewlett-Packard canceled it. If you want a tablet from Hewlett-Packard, you can still buy their Slate PC (*h10010.www1.hp.com/wwpc/us/en/sm/WF05a/321957-321957-64295-3841267-3955550-4332585.html?jumpid=in_r602_slate*), which was their original tablet competitor.

Forrester Research analyst Sarah Rotman Epps says that the TouchPad's untimely demise (*www.usatoday.com/tech/news/story/2011/08/HP-TouchPad-is-a-casualty-of-iPads-popularity/50047542/1*) "has as much to do with the commoditization of the PC business as it does with Apple. I won't be surprised to see RIM abandon the tablet market."

Why are so many Android, Windows 7, webOS and QNX based tablets failing while Apple continues selling iPads nearly as fast as they can make them? Part of the answer lies in the fact that Apple reportedly rejected the iPad design several times before finally releasing it to the public as the original iPad in April 2010.

In comparison, other companies are trying to compete against Apple's third or fourth generation iPad (the original iPad) with a hurriedly rushed first-generation tablet. This is like a rival air force trying to compete against the B-2 stealth bomber by building a World War One biplane. A first-generation product will never be as polished as a third or fourth-generation product.

A second reason why so many tablets fail is because they focus on technical specifications rather than actual applications. Rivals can create tablets with faster processors, more memory and higher resolution screens, but all of that technology is useless if you can't take advantage of it.

If the iPad is a window, then Apple built their window facing the Grand Canyon while other companies built windows with better technical specifications overlooking a garbage dump. It doesn't matter how good these other windows are if you don't want to see the view they can show you.

The iPad is more than a list of technical specifications just as Facebook and Twitter are more than the technology that runs their Web sites. With the iPad, you get access to a whole world of apps that expand the usefulness of your iPad. With rivals, you get access to a much more limited world of apps that restricts the usefulness of your tablet, like a Ferrari with no wheels.

Companies can't just build something and expect people to line up to buy it just because it has the fastest processor, the most memory, and the sharpest resolution screen in the world. It's not just about the software or hardware but both.

Forbes makes this mistake with their recent analysis claiming that Research in Motion's new Blackberry Colt smart phone could save the company (*www.forbes.com/sites/greatspeculations/2011/08/13/rim-risks-playbook-repeat-with-qnx-but-colt-could-take-stock-to-43/*) by early 2012. The reason? Because the Blackberry Colt will use the QNX operating system.

Without explaining how the QNX operating system is superior to rivals like iOS or Android, what advantage does QNX hold for the average consumer? If the average consumer can't figure this out, why do analysts expect them to buy any product just because of some new technical feature that offers no clear benefits?

Products like the HP TouchPad ultimately failed because they lacked a long-term vision behind them. The iPod didn't succeed because it could play music but because it could connect to iTunes and allow purchasing of music. The iPhone and iPad aren't succeeding because of physical features but because so many people are creating apps for them. Until companies look beyond technical specifications, they'll forever doom themselves to superior mediocrity and frustration.

As MarketWatch mentions, Hewlett-Packard (*www.marketwatch.com/story/hewlett-packard-sums-up-worst-of-corporate-america-2011-08-19*), like too many corporations, simply lack leadership, innovation and basic intelligence although you can safely assume that a handful of top executives will still receive fat bonuses for wasting money, cutting jobs, making poor decisions, and padding their own bank accounts at the company's expense.

Steve Jobs Resigns as CEO

After Steve jobs announced his resignation as Apple's CEO, analysts have questioned Apple's future. Apple could probably coast for the next five years doing nothing but maintaining their current market and still remain profitable, which means you could put anyone in charge as CEO and they'll get credit for churning out profits (just like Steve Ballmer as CEO of Microsoft).

However the real challenge for any company is maintaining a long-term vision for the company's future, even if it looks bleak in the short-term. Most companies make two mistakes. First, they focus solely on the short-term, which results in making decisions that look profitable now, but undermine the company's long-term future. Just think how Kodak clung to the film developing business for too long while ignoring the digital photography market, and now Kodak is no longer the first name people think of when someone mentions digital photography.

The difference between short-term and long-term vision is like driving across the country. If you have a long-term vision, you can see that if you want to drive from Los Angeles to New York, no matter what detours, road closings, and obstacles get in your way, you can steadily head towards New York regardless of what the current road conditions and surroundings may look like.

If you focus strictly on a short-term vision to guide you, you'll pull out of your driveway and turn in the direction that looks less cluttered and more picturesque. Keep driving solely based on what roads look nicest and fastest from your windshield and chances are extremely good you'll wander aimlessly while never traveling from Los Angeles to New

York. If by some miracle you do arrive in New York, you'll likely have wasted much time getting there.

When CEOs focus on the short-term, they boost stock prices, give themselves fat bonuses, and ultimately undermine the future of the company. Then another CEO steps in, repeats the process, and the company remains directionless as the top executives plunder the corporate coffers until the company eventually disappears like Borders Bookstores.

Besides maintaining a long-term vision for the company, a second problem for most companies is that they protect their current product line at all costs. Microsoft is doing that with Windows and Blockbuster Video did that with their retail stores. Every company's current product line will eventually become obsolete, so companies need to cannibalize their current product line with something new before a rival does it first.

Threatening your own product line requires innovation. If you constantly kill innovation because it threatens your current product line, then someone else will simply do it for you. Microsoft is stagnant because they've lost their original vision ("Microsoft software everywhere") and modified it to protect their current product line ("Windows everywhere").

Why isn't more Microsoft software running on Android, the iPhone and iPad? Microsoft already makes money from sales of Microsoft Office for the Macintosh, so it only makes sense to sell as many copies of your software to any device regardless of who makes it. instead, Microsoft is using Microsoft Office as a tool to keep people wedded to Windows. Even today, the Mac version of Microsoft Office isn't as capable as the Windows version (lack of Access, OneNote, Excel features, etc.).

Whoever runs Apple or any company simply needs to maintain a long-term vision, regardless of short-term circumstances, and constantly work to cannibalize their own product line before a rival can undermine their entire business model first. If Apple's new CEOs won't do that, then look for a company that can and will do that, and that will be the company that drives the future of technology.

Free Visual Collaboration Program

People have long been accustomed to jotting down notes and sharing word processor documents with others, but what if you have pictures that you want to share and jot down notes highlighting different items? Ideally, you should use a graphics program like Skitch (*skitch.com/*), which is free.

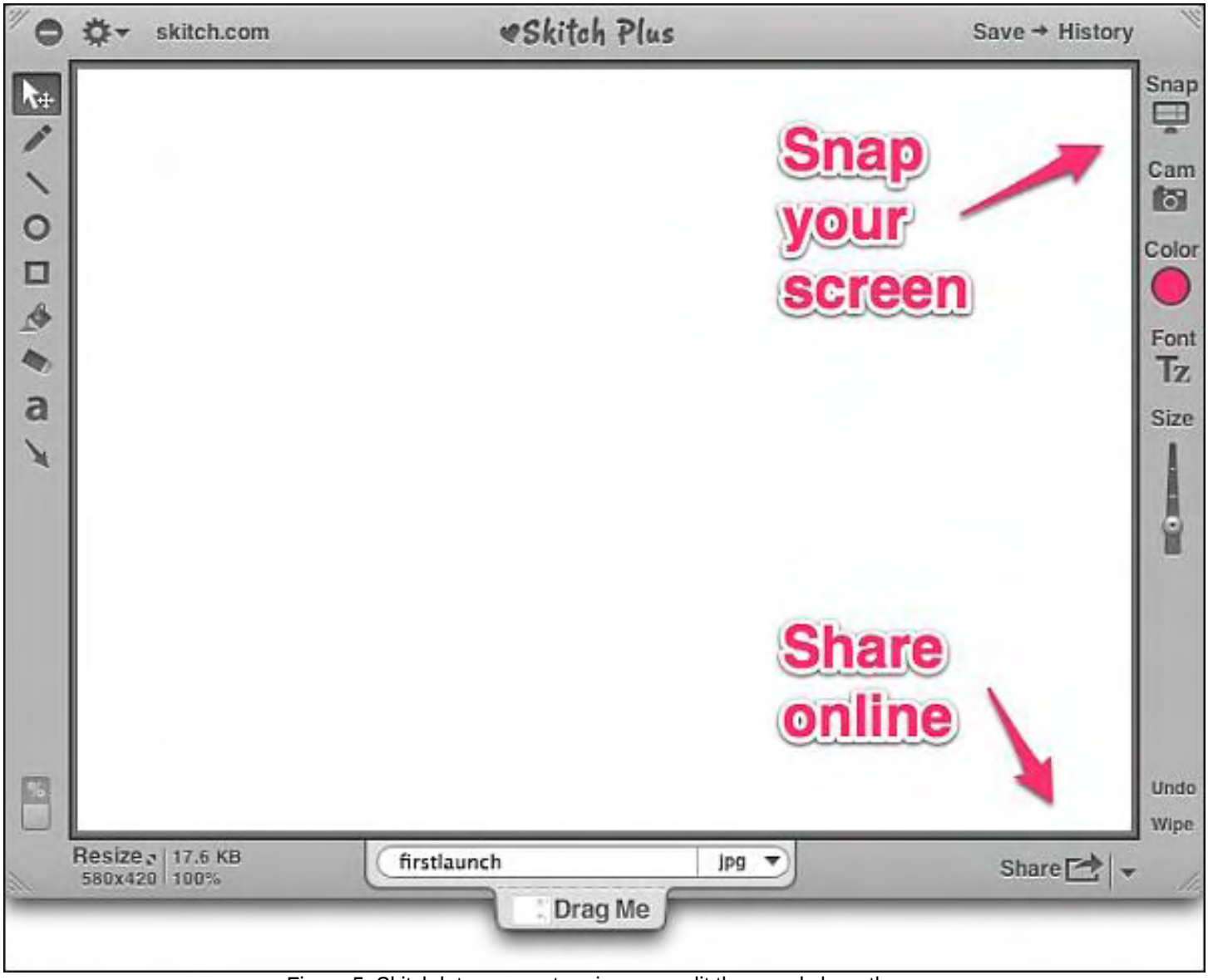

Figure 5. Skitch lets you capture images, edit them and share them.

Let's say you're viewing a Keynote presentation and see one slide that needs correcting. Load Skitch, capture a screenshot of that slide, and then within Skitch, draw arrows and type text pointing out the corrections you want to make.

Besides capturing screenshots, Skitch can also capture an image from your Mac's Web cam. However you capture an image, you can modify that image using Skitch's painting tools such as a line, pencil, or fill bucket. Then you can share it through a free Skitch.com account.

Skitch can be especially useful for collaborating on graphic design projects from designing Web pages to CAD drawings. Because Skitch can capture screenshots, you won't have to risk editing the actual file. Since Skitch is free, you have nothing to lose by trying it and seeing how it might help you collaborate with others in a visual manner that can save you from typing a lot of wordy explanations when a simple picture can explain everything instead.

Create Your Own Word Puzzles

The best software makes difficult tasks easy and fun, allowing your creativity to soar without bogging you down with a myriad of technical details. This is why I prefer Mac OS X over Windows, Pages over Microsoft Word, RapidWeaver

(*www.realmacsoftware.com/rapidweaver/overview/*) over DreamWeaver, and LiveCode (*www.runrev.com/products/livecode/livecode-platform-overview/*) over Xcode. My new favorite software is Crossword Forge (*www.solrobots.com/crosswordforge/*) ($49.95), a word puzzle creation program for both Mac OS X and Windows.

Crossword Forge lets you create crossword puzzles and/or word search puzzles where a page contains seemingly random letters but upon closer inspection, you can spot complete words. Try creating a word search or crossword puzzle by hand and you'll realize how difficult, time-consuming and frustrating this task can be. Now use Crossword Forge and the task becomes amazingly quick, easy, fun and exciting.

To create a crossword puzzle, just type in a clue and an answer. Crossword Forge takes cares of the details of displaying your crossword puzzle automatically. All you have to worry about is adding enough clues and answers, picking out a font, and choosing a background image if you wish. Click a button and Crossword Forge displays your crossword puzzle on the screen.

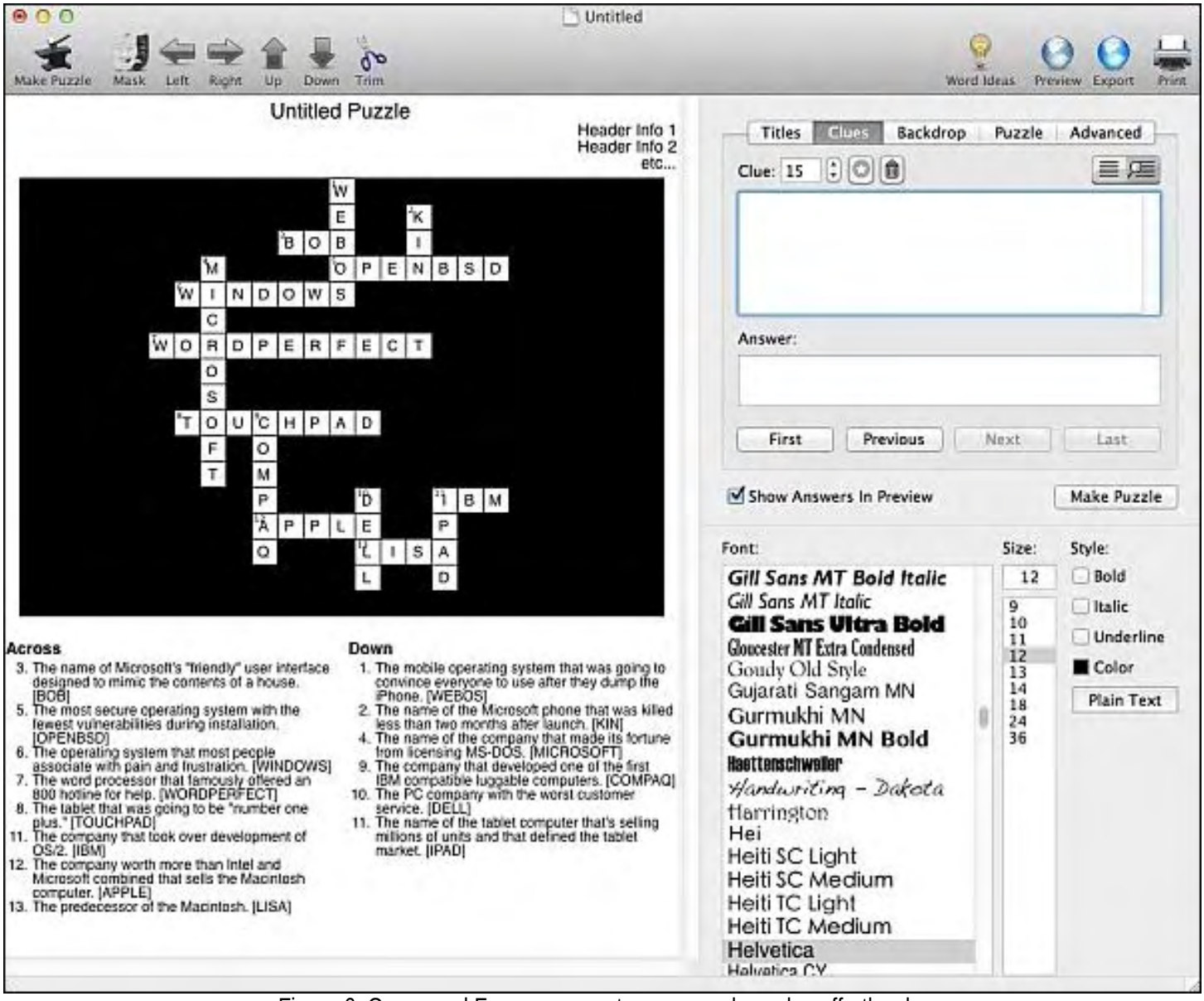

Figure 6. Crossword Forge can create crossword puzzles effortlessly.

Take your crossword puzzle answers and turn them into a word search puzzle instead. Without any additional typing,

you can create both a crossword puzzle and a word search puzzle at the click of a mouse.

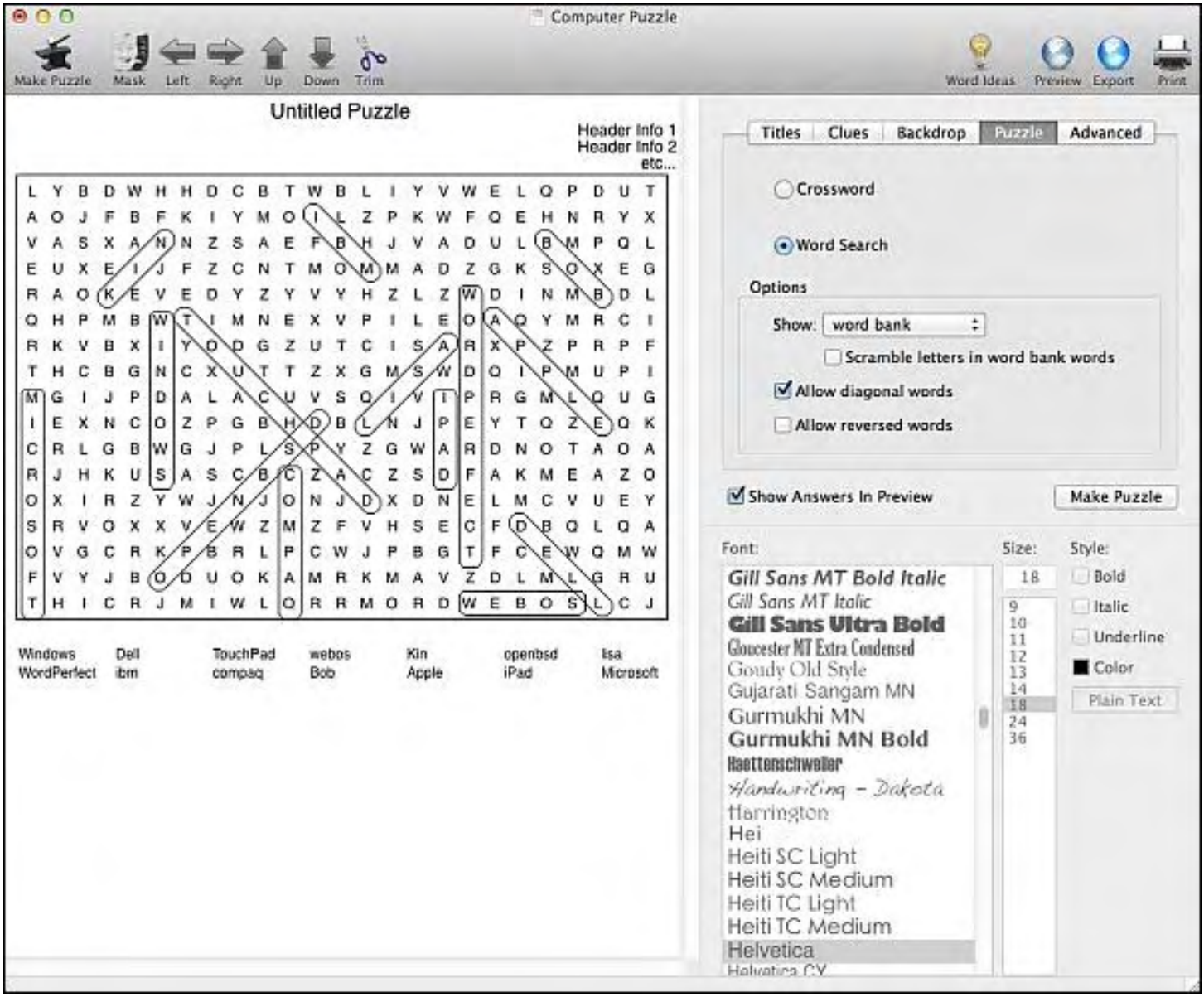

Figure 7. Creating a word search puzzle is simple and fast.

Teachers and parents can use Crossword Forge to create interesting puzzles for children that contains words that they might know (such as character names from "Star Wars" or "Transformers") or vocabulary words that you want children to learn. For both teachers and parents, Crossword Forge can provide an endless number of puzzles for fun or education.

Children can also have fun using Crossword Forge to create puzzles for themselves and their friends that can contain gossip, slang and words they think are funny because adults don't seem to like them.

Another way to use Crossword Forge is to practice with foreign languages such as French, Hebrew, Arabic, Russian, or Chinese. Now you can create puzzles for your children or students to help them learn new vocabulary words in multiple languages.

When you're done creating a crossword or word search puzzle, you can save it as a graphic image, text file, PDF file, or Web page. This lets you share your creation with others in the most convenient way possible.

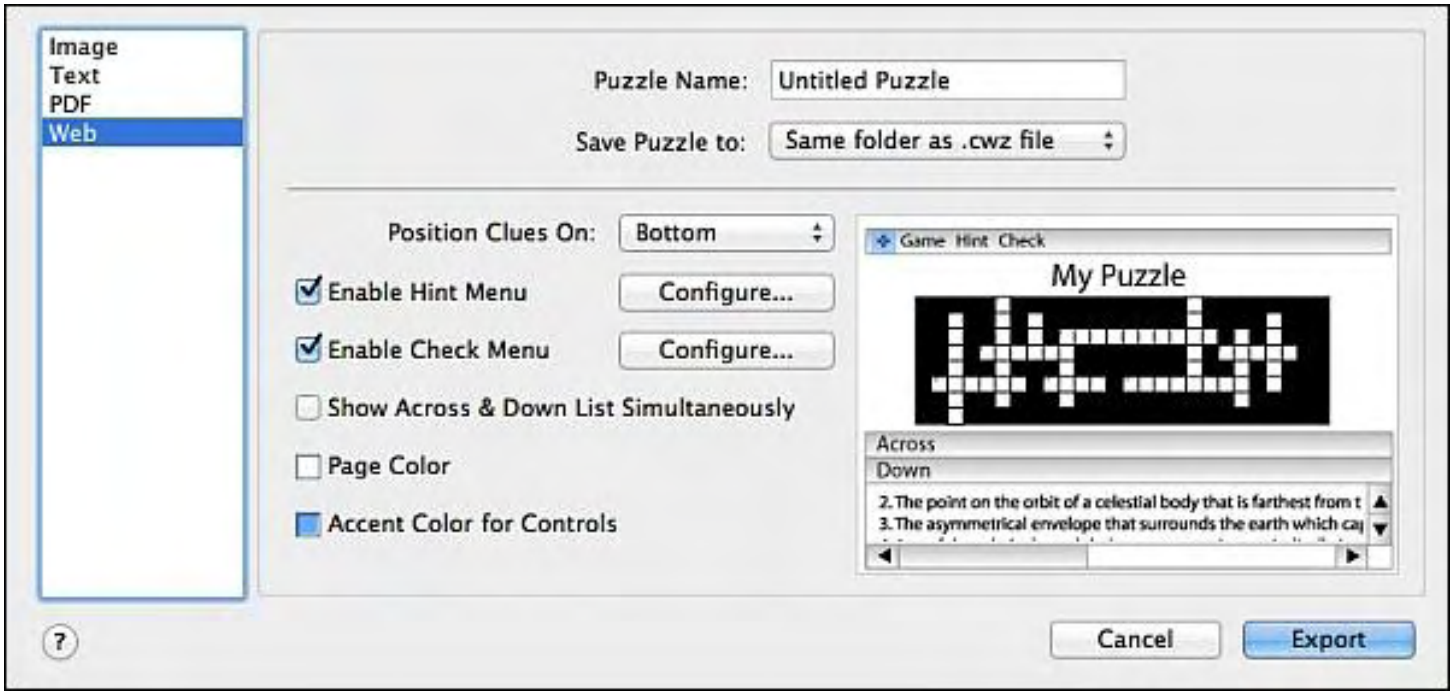

Figure 8. Crossword Forge lets you save and share your puzzles in a variety of ways.

Download a trial version and play with the program to see Crossword Forge's potential. Whether as a teaching or an entertainment tool, Crossword Forge can appeal to everyone from hard-core crossword and word search puzzle enthusiasts to anyone who just wants to have more fun playing with words.

After playing with Crossword Forge, you'll be able to create crossword and word search puzzles in minutes instead of hours or days. Crossword Forge is a marvelous entertainment and educational tool for adults and children. If the idea of making your own word puzzles sounds appealing, you'll love Crossword Forge whether you use Windows or Mac OS X.

* * *

When you're on a Web page, you can scroll up and down to read, but you might find it handier to search for specific text instead. In Safari, just select Edit => Find => Find. A search text field appears in the upper right corner of the Safari window.

Type a word or phrase and hit the Return key. If Safari can find your text, it appears highlighted on the Web page so you can see it easily.

Figure 9. Safari's Find feature can search for words or phrases on a Web page.

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 (*www.amazon.com/gp/product/1593271646?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1593271646*),
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 (*www.amazon.com/gp/product/1593272758?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1593272758*),
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*).
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/*) along with blogging about electronic publishing and how authors can take advantage of technology at his site "The Electronic Author." (*www.wallacewang.com*) Wally can be reached at *wally@computoredge.com*.

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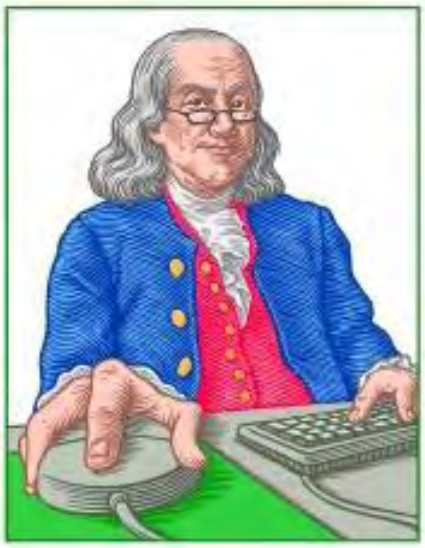

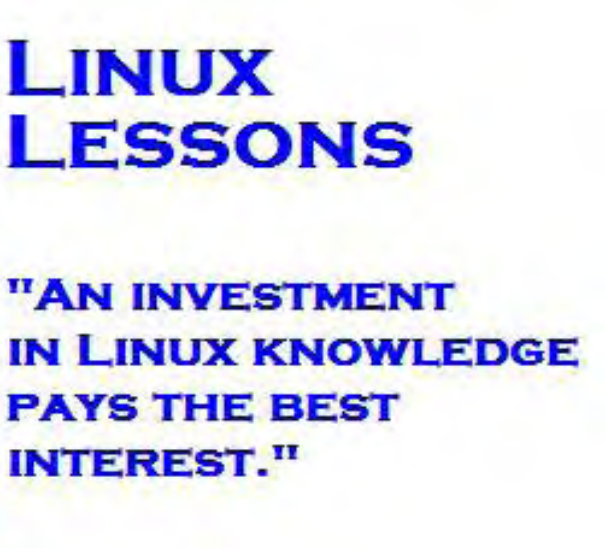

Linux Lessons: Tips and Tricks from Users

“Finding File Differences with diff**”** by Tony J. Podrasky

Tony shares a script that will find the differences between two files.

Filename: <diff>

Use: <diff> will find the differences between two files. For more info, run <man diff>.

Suppose you are editing a file. You make a change, save that change, and then go on to do something else. Later on, you don't remember which change you implemented. You can use <diff> and compare one file with another.

Example: I want to change an entry in a file called "QBF. The first thing I do is copy "QBF" to "QBF.bu" so I have a copy of the original file in case something goes wrong.

```
tonyp% cp QBF QBF.bu
```

Then I bring up the editor:

```
tonyp% vi QBF
```

1. THE QUICK BROWN FOX JUMPED OVER THE LAZY DOG'S BACK 1234567890 TEST DE W6ESE
2. THE QUICK BROWN FOX JUPMED OVER THE LAZY DOG'S BACK 1234567890 TEST DE W6ESE
3. THE QUICK BROWN FOX JUMPED OVER THE LAZY DOG'S BACK 1234567890 TSET DE W6ESE

In the file "QBF" the second line has "JUPMED" instead of "JUMPED".

I replace "JUPMED" with "JUMPED" and close the file.

Now some days later I remember I was working on the file but don't recall what changes I made. So I do a <diff QBF. bu QBF>. Note I put the original file (the backup) first and then the edited file. You can switch the order, but by doing it this way you can see what the line *was*, then what the line *is*. To me it makes more sense to see what it was and what it is now.

```
tonyp% diff QBF.bu QBF
```

```
2c2
< 2. THE QUICK BROWN FOX JUPMED OVER THE LAZY DOG'S BACK 1234567890 TEST DE W6ESE
---
> 2. THE QUICK BROWN FOX JUMPED OVER THE LAZY DOG'S BACK 1234567890 TEST DE W6ESE
```

Note the arrows at the beginning of the line. One points left and the other points right. To me it means: Left = was and Right = is.

Later on while I'm looking over the file I see that I spelled something else wrong: The third line has "TEST" spelled as "TSET".

I correct the spelling of "TSET" to "TEST". Then I run the <diff> command again:

```
tonyp% diff QBF.bu QBF


2,3c2,3
< 2. THE QUICK BROWN FOX JUPMED OVER THE LAZY DOG'S BACK 1234567890 TEST DE W6ESE
< 3. THE QUICK BROWN FOX JUMPED OVER THE LAZY DOG'S BACK 1234567890 TSET DE W6ESE
---
> 2. THE QUICK BROWN FOX JUMPED OVER THE LAZY DOG'S BACK 1234567890 TEST DE W6ESE
> 3. THE QUICK BROWN FOX JUMPED OVER THE LAZY DOG'S BACK 1234567890 TEST DE W6ESE
```

The <diff> utility works well with simple changes. It can handle some complex changes but the results are not always reliable. Adding extra lines to the edited file that the original file didn't have may cause what appears to be a complete difference, but it is really only that one file has an extra line in it. For more information of how <diff> works and optional flags, please see the man page.

```
Silly Signature Du Jour:
Tony J. Podrasky | During a recent trip to Phoenix
                 | I saw a place, Einstein Burger.
                 | The first thing that came to mind
                 | was that, they must be relatively good.
                 |                              -Vivek Datar
-:-ETX-:-
```

NOTE: I give my shell files uppercase names so that ***I know*** they are my shell files and not the system's binaries. For example, when I save the data (the commands between the "CUT HERE" lines, which is the actual shell file) I might call it "VI", which is ***not*** to be confused with the system's "vi" file—but I call it "VI" because it calls (or uses) the system's "vi editor."

Tony has been in the computer field since 1976 when he started working for Data General Corp as a field engineer. Later going on to design hardware interfaces, write patches for operating systems, and build networks. It was in 1995 while working with the military on several projects that he ran into a "spook" who showed him a laptop that ran a then-unknown O/S called "Linux." "A laptop running a form of UNIX tony = a marriage made in heaven!" Tony can be

reached for questions at Linux Questions for Tony (*hunybuny@netzero.net*).

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Buck's Blue Sky Advice and Cheap Tricks

"Got Sound?" by Buck Fadness

Buck answers a reader's question regarding a motherboard's sound jacks for speakers and the power to drive the speakers; connecting your computer to a stereo or powered speakers; a reader has trouble recording streaming audio.

A Question from Marcus

My question is this. I have a motherboard that has 5.1 sound jacks for front, rear and center speakers, but no instructions for how to connect plugs to the speakers. So where can I find that kind of info? It is a Gigabyte board with Realtek audio. Also, is there enough power to actually drive those speakers?

Marcus, Alabama

First off, as can be seen from last weeks issue, you can ask a question almost immediately after the magazine is published and the question will be included in that week's issue. I will answer by e-mail and include it in my next week's column. I do invite, and will answer all questions sent to me by readers and I will answer them in my future columns and/or by e-mail to you personally. Now for your question.

The simple answer to this is, no, the sound card on the motherboard doesn't have enough power to drive regular audio speakers and the info on how to hook up and use 5.1 surround sound speakers is contained in several tech oriented Web sites which address this issue in exhausting detail (read complicated). I have included links to two of the best sites: *5dot1.com*, How to Listen in 5.1 (*www.5dot1.com/how_to_listen_in_5_1.html*) and Tom's Hardware's Digital Coaxial output to 5.1 Surround system help (*www.tomshardware.com/forum/54262-6-digital-coaxial-output-surround-system-help—Audio-Technology-Audio*).

In the second link, scroll down to read the data in the fourth panel, headed by the name, REXTER, this is the important information. I warned you it is complicated, but there are many links and definitions provided. So if you are serious about wanting multichannel sound for games, DVDs or streaming audio then, "Go Boldly forth where few dare to venture."

Here is what I did when I experienced the same problem. You can buy a Digital Coaxial cable (from Radio Shack, Circuit City or online) and plug one end into the S/PDIF/Digital jack on the back of your PC, it could be labeled, in very small print, either with a paper label on the case or stamped into the housing around the jacks on the rear panel. On my PC it is the black colored RCA jack. Some PCs may have a 3.5mm mini jack labeled Coaxial or Digital that is also used for the front speakers of an analog surround speaker system. The other end is either plugged into your home theater or "5.1 surround sound system" (usually to an orange-colored single RCA jack usually labeled "Digital" or you

can plug the cable into a standalone 5.1 surround sound speaker system). In either case you will need to do some tweaking of the Windows sound output settings in Control panel and the settings in the Realtek sound driver program will need to be set correctly.

Buck

Connecting Your Computer to a Stereo or Powered Speakers

In the first section of this column I will address how you can connect your desktop or laptop computer to a stereo or home theater receiver or a set of powered speakers.

First, with a laptop you may be surprised to learn that many newer, low to mid price range laptops have a sound card plugged into the motherboard. Depending on the model and original purpose of the laptop you can connect via the earphone jack to a device that is able to interpret a S/PDIF (Sony Philips Digital Interface) signal. Therefore, with a coaxial cable and an audio program (i.e. Windows Media player, Winamp or a free or inexpensive program to play DVDs) which can output a high-definition signal to your home stereo or home theater receiver or a set of standalone digital 5.1 (front, rear, center and a sub woofer) speakers you can get a good to very good audio experience Isn't that what life is all about, *experiences?!* (Though I admit, some are better than others.) S/PDIF can carry two channels of PCM audio (*en.wikipedia.org/wiki/Pulse-code_modulation*) or a multi-channel compressed surround sound (*en.wikipedia.org/wiki/Surround_sound*) format such as Dolby Digital (*en.wikipedia.org/wiki/Dolby_Digital*) or DTS (sound system) (*en.wikipedia.org/wiki/DTS_(sound_system)*). Your sound system must be Dolby Digital or DTS capable in order to take advantage of high-definition audio being output from your computer and you must have a source that has been encoded with Dolby Digital Surround Sound or DTS to hear True 5.1 or surround sound. You will only get stereo or simulated surround sound out of regular digitally encoded music files or stereo CDs and DVDs. But at the very least you will get excellent stereo sound.

If you are sending S/PDIF to your receiver, then in the Realtek or another sound card driver settings you should set it as S/PDIF or digital out. If you set it for 5.1 or 6.1 speakers you are telling the sound card driver to not use the digital out option and instead to send sound out through the normal analog individual outputs. Also set your Windows default playback device to S/PDIF out, and make sure your playback programs (PowerDVD, Winamp, Media Player, etc) are set to S/PDIF and not to a speaker number configuration. That would tell those programs to pass-through audio untouched, and to not decode it, but to send out an analog speaker signal, which a receiver will not understand and only picks up the front two channels. Here is a link to a site that deals with the Realtek sound drivers (*www.tomshardware.com/search.php?s=Realtek+manual+for+Win+7*).

The above holds true for a Desktop PC also, but this goes back to my answer to Marcus about the audio jacks on the back of your computer. See the links to very comprehensive tutorials on how to connect your computer to a sound system.

Question from Vic Garcia, Monument, Colorado

Hi, Buck,

Big question. Have a brand new HP Elite desktop that I purchased from HP through Costco. Sound has always been a problem, but now I am so frustrated. I cannot record any streaming audio, cannot record from WinAmp, cannot record any audio through the input. When I called HP Tech Support I was lectured for 13 minutes by tech adviser why I should not be recording streaming audio, etc, etc, etc.

I called and asked the manager, then supervisor, on up. Their solution was to give me a $125 gift voucher. But I still cannot record streaming audio. I can with my other four computers but I work on the desktop.

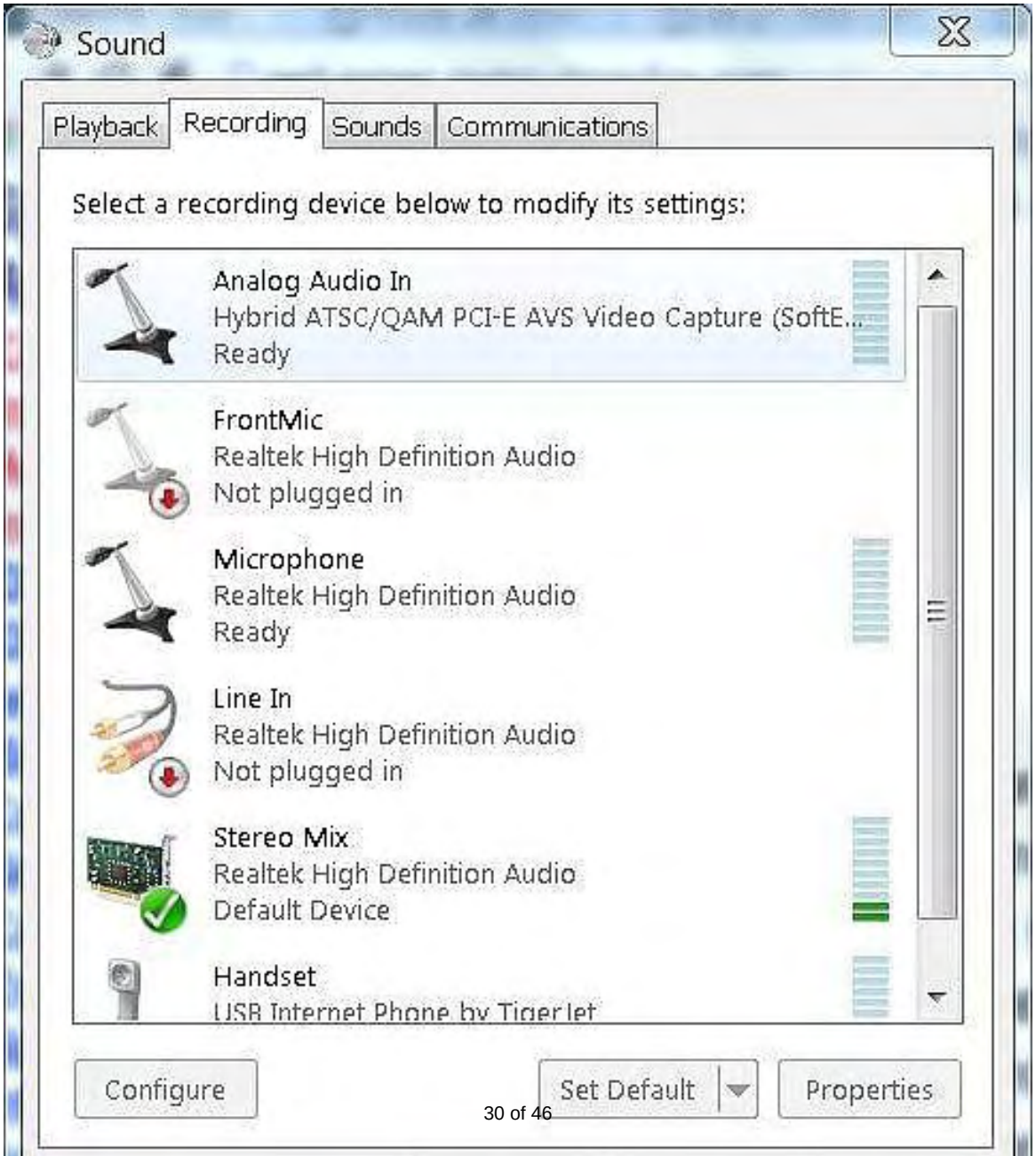
I have a Realtek High Definition Audio. I have tried to change settings—still nothing. I have gone on the net and still nothing. I have gone to Realtek Manager and manual. Nothing.

Should I just live with it and use my laptops to record any streaming audio?

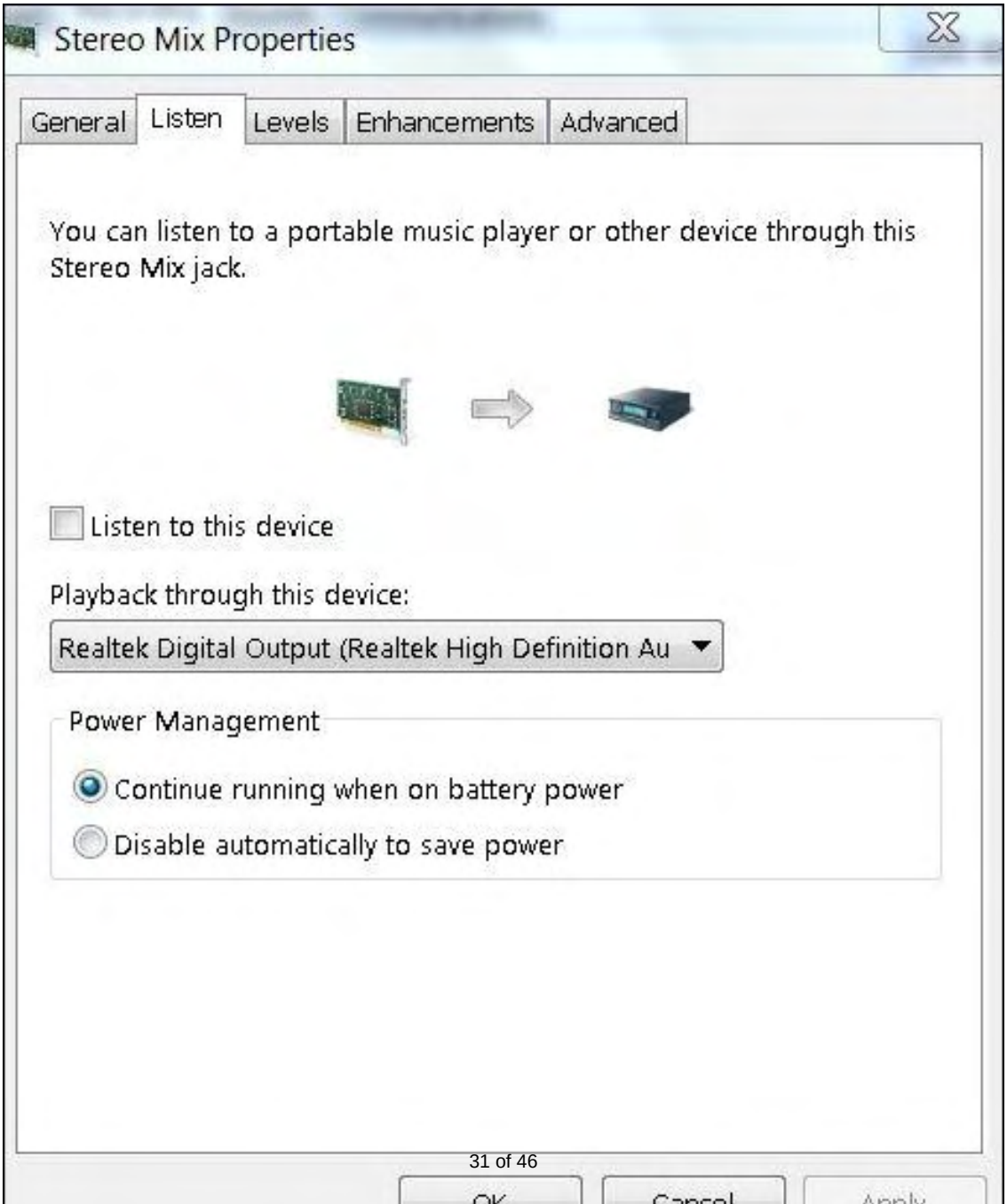
Thanks!

Hi Vic,

To answer your question on recording streams, two questions first. 1. What program are you using to record the stream? 2. Do you have Stereo Mix enabled in the right-click menu of the speaker icon on your task bar? I'm including two screen shots showing the settings for Stereo Mix that I use on my desktop. This also allows recording from line in on the sound card. The links in the first part of this column apply to this answer as well, as you will want to listen to this recorded music on a good sound system.



Click on Stereo Mix then click on properties to get to the next menu. If you can't see Stereo Mix then right click in a blank spot on that window and click Show Disabled Devices. You can also click on Show Disconnected Devices and see all sound devices available to you. Now, right click on Stereo Mix and click on Enable. Then click on properties, then click the Listen tab. Looking at the next screen shot, make sure that your Stereo Mix Listen menu looks the same. Also, in the next screen shot (in the Levels menu) you should set the recording level at a little less than half as the default is the top of the scale. This is too high for good recording. (If "Listen to this device" is checked, then you will get a hum through your stereo whenever you don't have music or a movie playing.) Here's another link on how to do this (*www.howtogeek.com/howto/39532/how-to-enable-stereo-mix-in-windows-7-to-record-audio/*). Read the entire article before making any changes.



I am also supplying a link to StreamRipper (*streamripper.sourceforge.net/*) from SoundForge. This is what I use to record in Winamp. It works well and is almost seamless. You only need to tell it where to put the ripped music. There also will be links to Help and tutorials on this site. Let me know if this helps. It worked for me.

(Vic e-mailed me back a few hours later saying that he had done everything the way I instructed, but he still couldn't record from his PC.)

Since I can't remotely troubleshoot this PC, I would suggest buying a sound card from an electronics store near your house and plug it in. Then install the drivers that come with it. You may need to disable the on-board sound chip in the PCs' BIOS set up. If this solves the problem, then you can either go with the sound card or return it to the store and get HP to fix your PC.

Buck

One final note on connecting your laptop or PC to a stereo or home theater system regards *noise*. A 60 cycle hum or a whistle is often heard when you connect directly to a sound system. The explanation for this is covered well in the advertisement for a device to prevent the noise (*www.dak.com/reviews/2045story.cfm?Ref=G&PM=PCtSterol&type=GSrch&Srh=pc_and_stereo&gclid=CPaC0-rC7aoCFUkZQgodBxAeNw*). You can read the whole ad or just scroll down to the pink panel for full explanation.

Buck Fadness is a Boomer, who has done editing and writing of business forms and text books in the past, but is new to tech writing on the Internet. He has been a computer user and has built or upgraded numerous PCs since he first got interested in computers around 1988. Buying, selling and trading computers, reading about them and trying out low cost hardware and free software on Windows XP and Windows 7 laptops and desktop computers are some of his hobbies. He says he's frugal, not cheap, but he can make Lincoln "EEEK" when applying Penny Pinching hardware and software fixes to computers.He can be reached by e-mail, *buck-o@cox.net* or by using the comments links in at the top or bottom of this column.

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Worldwide News & Product Reviews

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

Football Analysis Leads to Advance in Artificial Intelligence; When Your Cloud Strategy is a Bad Strategy; Striking Gold With Data Mining.

Football Analysis Leads to Advance in Artificial Intelligence

David Stauth writes in this week with news from Oregon State University's College of Engineering:

Computer scientists in the field of artificial intelligence have made an important advance that blends computer vision, machine learning and automated planning, and created a new system that may improve everything from factory efficiency to airport operation or nursing care.

And it's based on watching the Oregon State University Beavers play football.

The idea is for a computer to observe a complex operation, learn how to do it, and then optimize those operations or accomplish other related tasks. In this project, the goal is for the computer to watch video of football plays, learn from them, and then design plays and control players in a football simulation or video game.

As it turns out, football is very complex, and computers struggle to see and understand plays a coach or even an average fan would find routine.

The findings of the new study were just published in AI Magazine, a professional journal of the Association for the Advancement of Artificial Intelligence.

"This is one of the first attempts to put several systems together and let a computer see something in the visual world, study it and then learn how to control it," said Alan Fern, an associate professor of computer science at OSU.

"Football actually makes a pretty good test bed because it's much more complicated than you might think both visually and strategically, but also takes place in a structured setting," he said. "This makes it quite analogous to other potential applications."

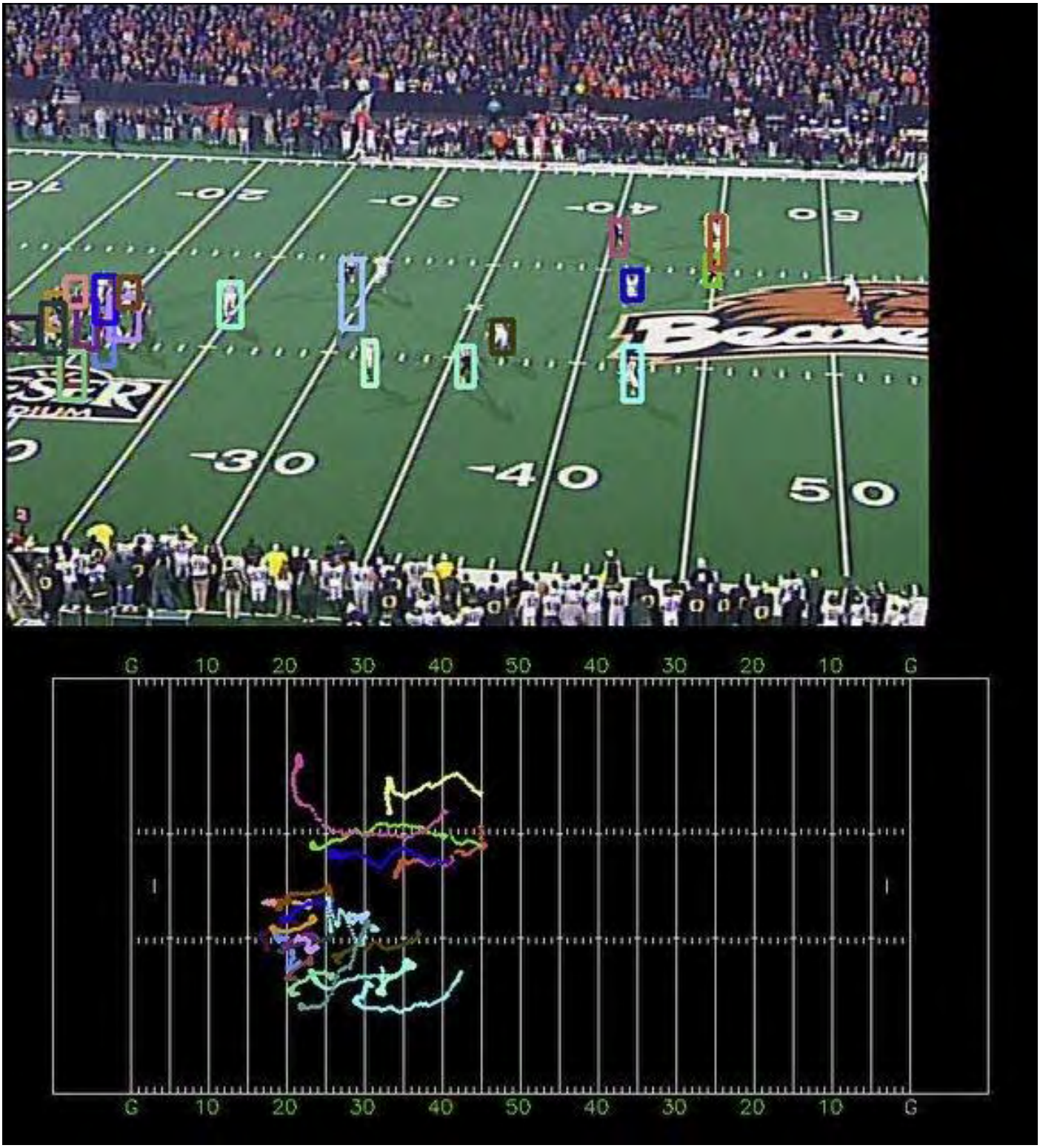
A complex game—The complexities of a successful pass in football—such as this reception by Oregon State University receiver Jordan Bishop—are very difficult for computer systems to "see" and understand. (Photo by Erik Dresser, courtesy of Oregon State University.)

Even everyday tasks that are simple for a human, Fern said, are a lot more complicated than they seem.

Consider driving home in your car, he said. What you actually have to do is walk to the parking lot, check for other traffic as you cross the street, select the correct key to put in the ignition, back it up, consider the anticipated traffic to plan a route home, slow down and move a little out of your lane to avoid the child wobbling down the street on a bicycle, make sure you have enough gas. And so on.

Fast action—Scientists at Oregon State University are making advances in artificial intelligence as their computer systems study fast football action such as this, OSU quarterback Ryan Katz dropping back to pass while blockers give him the fractions of a second he needs. (Photo by Ethan Erickson, courtesy of Oregon State University.)

Then consider designing an OSU Beavers passing play, which is very fast-paced, designed to confuse the opponent, and based on complex rules; the ball could be thrown to any of several receivers and it still only works about half the time. For a computer that initially has no concept of pass routes and blocking, that's difficult.



Computer analysis—As a computer tries to analyze this football play, the superimposed boxes show where the computer thinks the players are at the moment—and usually it's right. This type of analysis is helping to develop artificial intelligence systems that can see, learn from and eventually improve complex operations. (Graphic courtesy of Oregon State University.)

"Using football, we created learning algorithms that allow the computer to see the plays, analyze them and learn from them," Fern said. "Ultimately these systems should be able to see what is happening, understand it and maybe even improve upon it."

The work could have multiple applications. Control and logistics planning is hugely important in industry, and even

small improvements in efficiency could save billions of dollars. Computer vision and controls might be useful in hospitals or nursing homes to help monitor patients and see who needs care. Large operations such as an airport offer multiple control challenges, or the military could use such approaches to improve supply chains for troops in the field.

The research has been supported by the National Science Foundation and the Defense Advanced Research Projects Agency of the U.S. Department of Defense. It is a collaboration of OSU and the Institute for the Study of Learning and Expertise in Palo Alto, CA.

The research is still at a basic stage, the scientists said, but could have commercial applications within a few years. The new study outlines a clear "proof of concept" in action recognition, transferring that recognition into procedural knowledge, and adapting those procedures to new tasks, the scientists said in their conclusion.

"One thing I'd also like to do is return the favor to the football team," Fern said.

"The study of these football plays is helping us to create intelligent computer systems," he said. "When this is more fully developed, we should be able to actually apply it to football, maybe help coaches analyze an upcoming opponent, let the computer determine what they are doing and suggest a strategic nugget to the coach."

The study this story is based on is available in ScholarsArchive@OSU (*/hdl.handle.net/1957/22700*).

When Your Cloud Strategy is a Bad Strategy

The term "cloud" has become one of the most commonly used and most often misunderstood words in IT today. According to Logicalis (*www.us.logicalis.com*), an international provider of integrated information and communications technology (ICT) solutions and services, when a company doesn't fully define what the cloud can do for it, it leads to a less than optimized strategy that under serves the organization. To help IT pros avoid common pitfalls, Logicalis has identified five mistakes companies make in their cloud strategies.

"If you ask 10 people to define 'the cloud,' you'll get 30 answers," says Steve Pelletier, cloud solution architect at Logicalis. "Cloud is a buzzword; you hear commercials and advertisements all saying 'Cloud, cloud, cloud.' But it's not a well defined term and that leads to people not fully understanding the enormous opportunities that cloud computing can offer their businesses today. When business people—even the most experienced IT pros—have a limited view of this nebulous term, 'the cloud,' it's hard for them to make the best decisions for their companies."

Companies that fail to explore all the options may be leaving valuable services untapped and potential savings unrealized. Pelletier says there are five significant ways businesses today are missing out on the full potential of the cloud. And identifying and understanding these potential pitfalls is the key to avoiding them:

1. Looking only at the Short Term: When developing a cloud strategy, many organizations only look at their short-term objectives—what can the cloud do for me right now?—instead of developing a longer term cloud strategy. This limits their future capabilities and can lead to unintentional design limitations that could easily have been avoided with longer term planning.

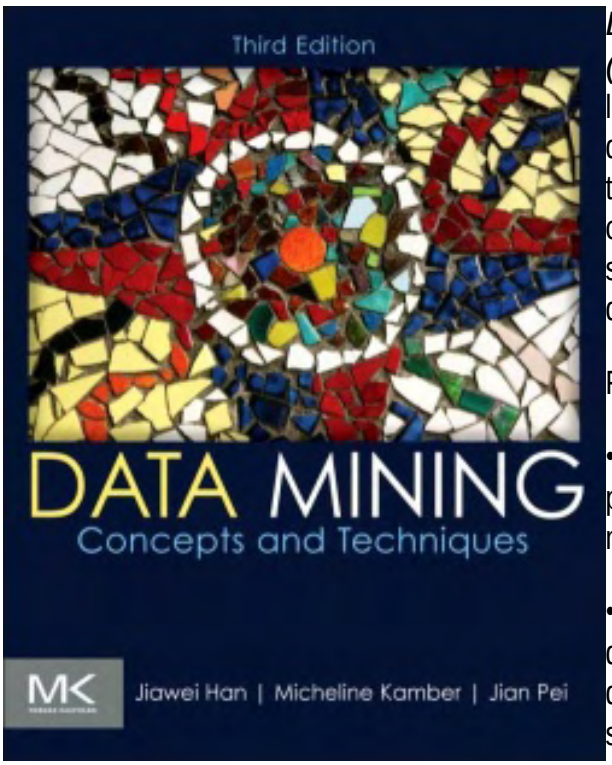
2. Using Colloquialisms: The "cloud" is really a generic term that condenses a broad spectrum of services and functionalities into a single word. Among these are platform as a service, infrastructure as a service, software as a service, backup and disaster recovery as a service—all of these functionalities and more can be a part of a well-planned cloud strategy. By looking at the cloud as a means to acquire a single service, people are pigeonholing themselves into an isolated strategy that may miss out on the myriad of additional untapped possibilities an expanded private, public or hybrid cloud option could offer them.

3. Viewing the Cloud Simply as an IT Evolution: When businesses think of the cloud as an evolution in technology, they may miss out on the bigger picture; cloud, Pelletier says, is really more of a change in business strategy than in IT functionality. The cloud allows businesses to consume IT resources as a service, which has a lot more reach into process than into actual technology and requires a deeper connection between IT and a company's business units as a result.

4. Engaging in Tech Talk: The cloud is not something that the IT department should implement in a vacuum. Getting end users—and that means the users inside a company as well as clients—what they want, when and where they want it in terms of IT functionality requires a new way of thinking on everyone's part. Because the cloud means the company is buying the services it needs most, this is a solution that should be defined and designed by the entire business as a whole. IT pros need to know what each business unit needs in terms of services before they can build a cloud solution that will give users the what, when and where of IT services that they demand.

5. Trading Performance for Dollars: What to put in, what to leave out? Businesses often make the mistake of choosing inappropriate applications to move into public clouds. In a public cloud, businesses are taking their internal IT assets—oftentimes their users' desktops which are huge consumers of IT resources—and moving them into another provider's service to save money. The problem is, they are moving the end user experience farther away from the user. It may well save the company money, but at what price? IT pros must remember to consider the impact on performance and user experience as well as the bottom line in every cloud decision they make.

Striking Gold With Data Mining



Data Mining: Concepts and Techniques, Third Edition (mkp.com/news/data-mining-concepts-and-techniques-3rd-edition), looks at the problems associated with the ever increasing amount of data and information modern businesses and institutions are having to deal with. To address this digital tidal wave, the book makes the case that the science of data mining is constantly in need of more sophisticated tools and techniques to enable users to transform this data into meaningful knowledge.

Features (from the Web site):

• Presents dozens of algorithms and implementation examples, all in pseudo-code and suitable for use in real-world, large-scale data mining projects.

• Addresses advanced topics such as mining object-relational databases, spatial databases, multimedia databases, time-series databases, text databases, the World Wide Web, and applications in several fields.

• Provides a comprehensive, practical look at the concepts and techniques you need to get the most out of your data.

Other reviews:

We are living in the data deluge age. Data Mining: Concepts and Techniques show us how to find useful knowledge in all that data. This third edition significantly expands the core chapters on data pre-processing, frequent pattern mining,

classification and clustering. The book also comprehensively covers OLAP and outlier detection, and examines mining networks, complex data types, and important application areas. With its companion Web site, it would make a great textbook for analytics, data mining and knowledge discovery courses.

—Gregory Piatetsky, President, KDnuggets

Jiawei, Micheline, and Jian give an encyclopaedic coverage of all the related methods, from the classic topics of clustering and classification, to database methods (association rules, data cubes) to more recent and advanced topics (SVD/PCA , wavelets, support vector machines)… Overall, it is an excellent book on classic and modern data mining methods alike, and it is ideal not only for teaching, but as a reference book.

—From the foreword by Christos Faloutsos, Carnegie Mellon University

I really liked that this new edition of the book laid out the advances that have been made in data mining. You will come away with a thorough understanding of the useful patterns that are there for the taking in large data sets.

Note: This is really intense and comprehensive stuff—easily a full year of college-level work. Be sure you are have already laid a solid groundwork for yourself in such subjects as databases, Linear Algebra, and strong enough programming chops to be able to understand complex pseudo-code, the text-based language used to outline the structure of a computer program.

Book Info:

Written by Jiawei Han, Micheline Kamber, and Jian Pei
$74.95 list, hardcover
ISBN-10: 0123814790
Published by Morgan Kaufmann (*mkp.com/news/data-mining-concepts-and-techniques-3rd-edition*)

Review contributed by Kevin Mallion

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 *www.charlescarr.com*.

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EdgeWord: The Passing of an Era as Steve Jobs Steps Down

"One of The Last Self-Made Garage Tinkerers" by Jim Trageser

Jim reminisces about Steve Jobs' influencial impact on technology from the '70s and "workstations" to current Apple products such the iPod and iPad.

Long before the Mac:Windows feud, I was on the Atari side of the Apple:Commodore:Atari (and Tandy:Ti:Timex-Sinclair) feud. I was never an Apple guy. Even though I briefly owned an Apple IIc, my Atari was always my main axe until I could fight the tide no more and switched to Windows in the mid-90s. (And I've still got an Atari Falcon 030 and an Atari XE Game System around here somewhere.)

And yet I feel a little like I'm in mourning over Steve Jobs' retirement. He was the last of the self-made garage tinkerers still going strong in a major leadership role, the only guy to be as prominent on CNET as he was in *Compute* or *Kilobaud* magazines a couple of decades ago.

Really, he was the only major figure to survive from the era of the hobbyist user group to the dominance of the Web, the last link in popular culture to the dawn of the home computer in the mid-70s, when having a computer seemed a bit like owning a unicycle or accordion: Sure, it's cool, but what will you *do* with it?

Jobs had as big a role in framing discussions about technology as anyone. When people were building home computers from kits, he and Steve Wozniak sold the first widely available pre-assembled home computer. When CP/M and DOS were the dominant operating systems, he brought out the Lisa and then Mac with their point-and-click environments. He left Apple, started NeXT, and suddenly "workstations" were all the rage for a good half-decade. (And if you just nodded at that, you've marked yourself a real geek. A real old geek ...)

Jobs then comes back to Apple, rolls out the iMac, and suddenly case and monitor design matter. Updates his NextSTep operating system as OSX, and now we come to expect stability in a personal computer. Gets Pixar rolling, and digital becomes the animation vehicle of choice.

The last decade he was even more influential—iPod, iTunes, iPhone, iPad—and grew Apple from a company that had seemed on the verge of joining Atari, Commodore and Tandy on the scrap heap of PC history to the second richest company in the world, with more cash on hand than the U.S. government.

The idea of a "personal" or "home" computer now seems quaint, like a foot-powered sewing machine or a soda vending machine dispensing bottles. The idea of a small microprocessor-powered machine that would replace your typewriter, store simple spreadsheets and databases, and, if you had a modem, communicate with other computers over the telephone system, has grown up and become as ubiquitous as the TV. In fact, for many people, it has replaced the TV.

The DARPANet became the Internet, and with the Web running atop it is now the most influential and pervasive communications system ever developed, with more information now available to the average citizen than kings, popes and presidents had at their command even a half century ago. As we've seen in the Middle East this summer, tin-pot dictators can no longer control what their people see or hear, and even the major national media outlets are held accountable by average citizens using this information pool and the power of the 'Net to disseminate their arguments.

(Ask Dan Rather how it went when he tried to dismiss bloggers as little people who could be ignored.)

The thing is, we're still so early into the computer revolution, still hurtling forward so fast, that none of us know what it means. It will be decades, maybe centuries, before people can really grasp how the personal computer changed society—the same way it took us several centuries' experience and perspective to get a handle on what Gutenberg's press meant.

Change is the only constant in history, characters come and go in every era, and nobody's act lasts forever. But for those of us who grew up in the '70s with the first generation of computer technology available to the average citizen and experienced, briefly, that period when there was a sense that anyone with an idea had a chance to succeed, Jobs' retirement will serve as a sort of marker in our own lives—the moment that the initial revolution finally settled into the next period of stability, when we all paused to catch our breath.

Jim Trageser can be reached via his Web site (*www.trageser.com*). Jim is the Publisher/Editor of *Turbula.net*, an odd little online publication to which truly talented people seem strangely compelled to send interesting works for others to enjoy. Visit *www.turbula.net*.

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Editor's Letters: Tips and Thoughts from Readers

"Computer and Internet tips, plus comments on the articles and columns." by ComputorEdge Staff

"The Other Social Networking Sites," "BIOS Access Keys," "Fiber Optic Wiring," "Thank You!"

The Other Social Networking Sites

[Regarding Marilyn K. Martin's August 19 article, "The Other Social Networking Sites":]

Excellent! One of the best articles *ComputorEdge* ever published on this topic.

-Lynn Manning Ross, San Diego

Thanks, Lynn. I try to research computer/Internet topics or aspects that haven't been covered a hundred times.

-Marilyn, Texas

BIOS Access Keys

[Regarding the August 12 Digital Dave column:]

The F8 key is OS specific and is only available after the BIOS post (Power on self test) routine. If the OS (Windows) thinks that the improper shut down was caused by the blue screen of death, i.e. a driver conflict, memory error or a corrupted/missing file, it will then offer the F8 menu before it completes start up. You can access F8 menu only just before the Windows logo appears at boot up or during reboot.

-Buck, El Cajon, CA

Fiber Optic Wiring

[Regarding the August 19 Digital Dave column:]

Dave,

Although I agree with many of your thoughts on the computer related aspects of signal transmissions in your response to Skip's question, I believe he is correct in wanting to pursue an upgrade to the existing wiring for at least the video and audio portion of his entertainment system. In a new house it's a no brainer; the walls are open. In an existing house it takes a little more work (I've been through it) and costs more, but the results are phenomenal. We haven't reached the totally wireless audio/video system yet and in an older house the wiring can really degrade the signal strength.

The best way is to Google a CEDIA certified installer/s and at least discuss what his goals are with the wiring and see what the choices are. One big consideration with fiber is not just the installation cost, but the TX/RX equipment cost is

also high and service will also be a consideration. Cat 5e/6 is still not a bad way to go.

-John H, Encinitas, CA

No! No! No! You will be going to too much trouble and *expense* for the *latest*, but not in this application the greatest!!

With the run lengths encountered within a house or an area for a residence the difference between fiber and coax is very little and way beyond Dr. Brown's astonishing GigaHertz!!

- Michael J. VIehman, Julian, Ca

A better solution might be to run conduit to each room then you can upgrade to new cable technology when it becomes available. I am not a fan of wireless (too slow and unreliable) so to future proof my new house I installed 34 Cat 5e and Cat 6 cable runs. If I had got to the house before it was completed I would have used conduit.

-Harry Massaro, Loveland, Co

Very good answer, I think you are right on the mark. Keep up the good work.

-Bruce Raeburn, Spring Valley

The more, the better. Let's see... Remember Gates made the comment "640KB would be all you need."

From this *Cray network engineer* standpoint, running fiber optic cable (F/O) would be a good investment. Yes, F/O has to be handled a bit more delicately (no hard right angle bends), but you get the fantastic bandwidth and the possibility of multi-mode transmission to increase bandwidth. You don't even have to find the $700 termination kit, as you just get standard pre-made lengths and loop the excess length at the termination box. Video (and especially HD video) will use up that bandwidth. I have distributed GHz based copper and the cables and boxes for an existing 3000 sq. foot house. The servers supply heating as well as video throughout the house.

Since I was one of the people involved with the beginnings of TCP/IP and the original DARPAnet, I may be able to clarify a few things. Cray supercomputers were heavily involved. We were looking for connections to move data faster than the RS-232 link that was becoming common. Think RS-232 => modem => modem => RS-232 for *everything* including satellite. The IEEE RFC created a standard which both academia and the government used to create interoperability specs. If you wanted to be a "player," interfaces were about $10-50k plus $1k/month. Designing "physics packages" used a lot of bandwidth, and the US government/academia often "borrowed" our CPU cycles. Then UUNET (yes, I had purchased a dial-up UNIX based account, no M$, yet) and others saw the business potential of this "extra" bandwidth. The rest is history. My online "handle" reflects my user ID @cray.com.

-Art Blackwell

Thank You!

[Regarding the August 19 Wally Wangs Apple Farm column:]

Much good advice. Thanks a lot!

-William Thomas, 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 ComputorEdge.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 "ComputorQuick Review", or yell at us, please e-mail us at *ceeditor@computoredge.com*.

Send mail to *ceeditor@computoredge.com* with questions about editorial content.
Send mail to *cewebmaster@computoredge.com* with questions or comments about this Web site.

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