ComputorEdge™ Online — 05/08/09

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Digital Dave

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

A reader's Internet browser is loading cached Web pages instead of current information; Can you access your Web site Favorites list from the desktop?; a reader is frustrated with antivirus tech support.

Dear Digital Dave,

I'm using Microsoft's Internet Explorer with a DSL Internet connection. Once I am online and browsing, anytime I return to my home page, or open a new tab, the page loaded is a page from cache memory, not a fresh load. I get the feeling that the ISP (because when I signed on with the company, my IE became "branded") directs as many pages as possible to load from memory to make the connection appear faster.

Is there a way to force the browser to load every visit? The Internet Tools setting for "new page every visit" does nothing.

Jay
Cottonwood, AZ

Dear Jay,

I think that it is highly unlikely that your ISP is forcing your Web destinations to load only from the cached files. The cached files are actually temporary files written to your hard drive. When you first load a Web page, all files are written to a special folder for these files. This is done for your benefit (speed of loading), although it is true that the traffic will be decreased upon your Internet connection if you don't download the entire page each time you visit—particularly if there are graphics or animations involved. As a rule, cached files are a good thing for you.

The browser is supposed to check the Web page and compare with the cached files. If the page has more recent elements, then those elements should be downloaded again. However, I've seen times when I knew that there was a new file to be downloaded, yet Internet Explorer continued to load from the temporary file.

If you think that the site should have changed, then first you should try the Refresh or Reload button (usually circular arrow(s) or right-click and select from menu). This tells the browser to go out to the Web site and get the latest. If the site is still not reloading from the Web, then the next option is to check the settings for temporary files. Go to Internet Options under the Tools menu in IE, then select Settings from "Browser history" in the General tab (see Figure 1).

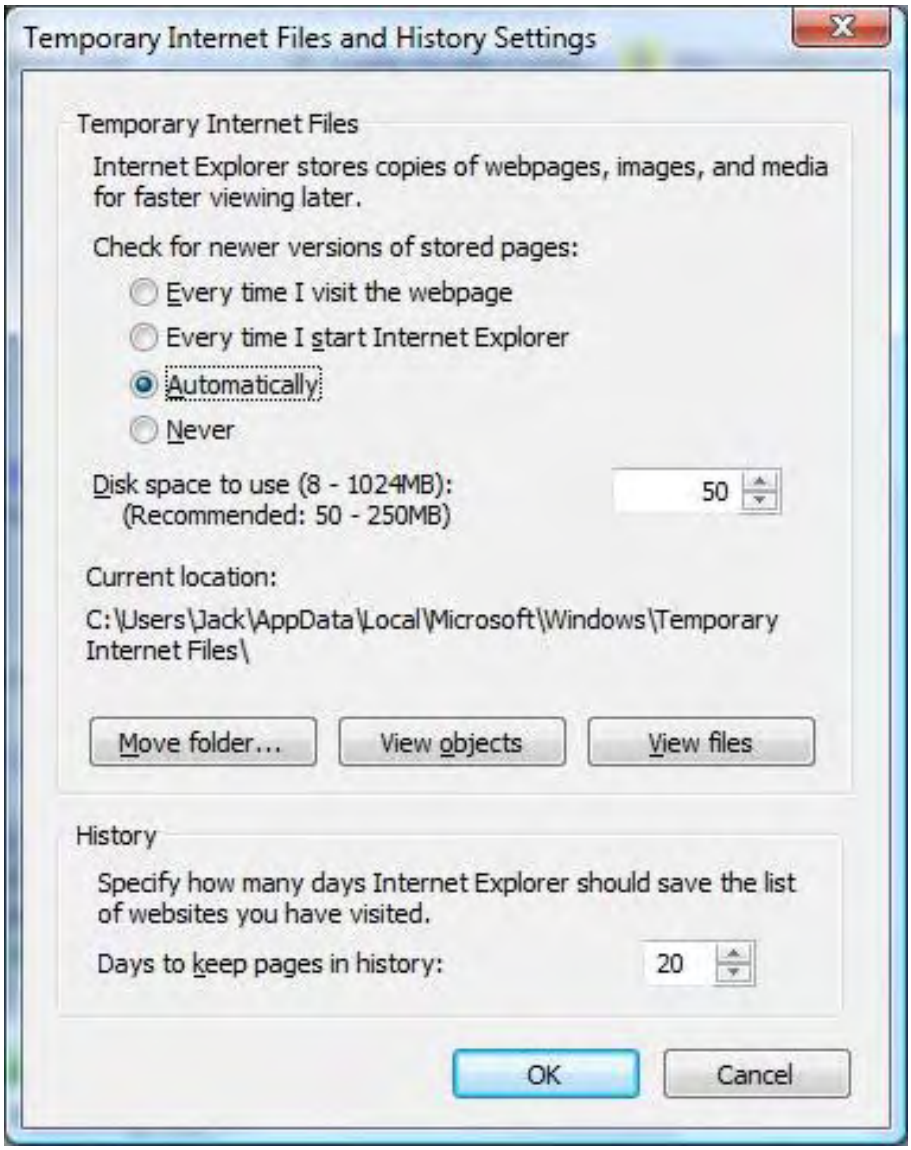

Figure 1. Temporary Internet Files and History Settings window.

You've stated that you've set Internet Explorer properly, I assume by selecting "Every time I visit the webpage" option shown in Figure 1. If this is not renewing pages when you need them, then you can force a reload by clicking the "View files" button, finding the files from the subject Web site, and deleting those files. The next time you refresh or visit, the site should reload from the Web.

Digital Dave

Dear Digital Dave,

I'm hoping you might have an answer for me regarding using the list of Web site Favorites. Is there any way to access the Favorites list without *first opening a page? Could I access the list* directly *from the desktop?*

Time would be saved if this were possible. Thank you for considering my question.

David
San Diego Calif.

Dear David,

Yes, there is! All of your Internet Favorites are saved as links in a folder called, not coincidentally, Favorites. You can find the folder by doing a search. In Vista, Favorites is located at c:/Users/<user name>/Desktop.

Once you've located the folder, you can create a shortcut by dragging (click and hold the left mouse button) the folder to the desktop, or the quick-launch area on the taskbar. Then your favorites can be opened with a double-click without first loading the browser (single-click on the quick-launch bar). However, when you double-click, if not already opened, your default browser will first need to load in order for the Web page to display.

If you are using Windows Vista, you can also access your Favorites directly by using the Start Search field in the Microsoft Start menu. Simply type in a portion of the name of the favorite site, and it will appears under the "Favorites and History" category in the menu. Select, and you will be sent to that Web page.

Digital Dave

Dear Digital Dave,

I have the XP operating system with the Norton 360 Antivirus program loaded, but I recently discovered a worm via its LuCallbackproxy.exe.

When I researched it on the Symantec site, it said the virus has been around since 2007. Yet, in talking with tech support, they said I had to pay a tech around $99 to help me get rid of it. They would solve the problem and guarantee it for seven days.

I think this doesn't make sense. I bought the program to take care of things like this. What am I missing? Have you heard of this type of thing before? Any suggestions?

Ron Pondrom
San Diego, CA

Dear Ron,

Unfortunately, customer support is one of the dilemmas of the software industry. On one hand, when a company supplies good, free support, it enhances their reputation and goodwill among customers. On the other hand, customer support can be quite expensive. The person providing the help needs to be paid. If the software cost only a small amount, it's not long before the company is in a losing position. (If they need to supply too much support, maybe they should be in a losing position.)

What you have encountered is quite common. The only way some companies can stop some users (the computer hypochondriacs) from calling every time their computer hiccups is to charge a fee. Unfortunately, this drives away those who may truly have a problem that needs their help—and in turn would help the company to develop better software.

LuCallbackproxy.exe is the part of the Norton program that monitors and applies updates. It can be a resource hog, but it is probably functioning as intended. It does sound like your problem was caught by Norton Antivirus, but for some reason the program is incapable of resolving it. It seems that it should be worth their time just to determine if their program is faulty.

All too often, companies institute policies that prevent their customers from getting reasonable help for problems that the company should want to investigate. If they know how to solve the problem, they should post it for you to do yourself, then refer you to that post.

Before I call a company, I check their Web site for support forums and other help sections. Often, the fix for common problem will be found there. Failing that, I do Web searches for similar problems. Solutions may be readily discovered.

If I'm dissatisfied with the product and/or the way a company treats its customers, I will generally switch to another products. There are usually plenty of options, many of them free.

Digital Dave

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Upgrading Your PC's RAM

"The fastest way to speed up your PC." by Dawn Clement

> The quickest and easiest way to improve performance on your computer is to upgrade the RAM. How much RAM you need depends on what kind of programs you use regularly, but the general rule is "more is better."

The earliest home computers began hitting the consumer market in the late 1970s. In 1981, IBM released the "personal computer," and the name became ubiquitous. The IBM PC cost $3,000 when it first came out, and had a maximum of 64K of memory. The memory in early computers was all RAM—none of these early home PCs came with built-in hard drives. All data was stored on cassette or floppy disks and accessed through external drives. As strange as it sounds today, this system of information retrieval worked just fine. It actually isn't necessary to have an internal hard drive as long as the computer has RAM.

"I think Grandpa ordered the wrong type of RAM for his computer."

RAM stands for Random Access Memory, and is volatile—meaning that it holds information only as long as the computer is turned on. When the computer is turned off, any data that was held in RAM is discharged and forgotten. This makes it useful for running programs, but not for long-term data storage. RAM is used by the computer system to store data for immediate processing, and every program your computer runs goes through the RAM.

Modern computers have self-contained long-term storage units called hard disk drives (HDD). The data stored on these drives is not as easily accessible as data stored in RAM. When you use a program that is stored on your

hard drive, the computer transfers large blocks of data to something called a swap file, and then transfers selected files to RAM where the processor can access it. If your system doesn't have enough RAM, then the computer will use the hard drive to perform some of its tasks. The problem with this is that hard drives don't process memory in the same way as RAM, and it's much slower to process memory directly from the hard drive.

As a result, the quickest and easiest way to improve performance on your computer is to upgrade the RAM. How much RAM you need depends on what kind of programs you use regularly, but the general rule is "more is better." This isn't difficult to do, and once you install more memory, you will notice an immediate, significant improvement in the overall performance of your computer.

The first step you will need to take is to gather information about your computer system. Specifically, you need to know what kind of motherboard and processor you have. There are many different types of RAM, and you'll need to know what kind you need before you go out and spend your hard-earned money on the wrong kind. The physical slots on the motherboard vary in size and quantity. Any RAM that you install needs to fit on the motherboard, and it also needs to be compatible with the processor. If you install the wrong kind of RAM, it either won't fit (and trying to force it in can crack your slots), or your computer won't recognize it. Installing the wrong kind of RAM will not fry your motherboard (however, installing the RAM upside down will definitely fry your motherboard).

If you don't have your system information handy, you can either physically open up the case and take a look, or run a benchmarking program that will tell you exactly what's inside. There are plenty of freeware programs out there, which you can download off the Internet. You may want to run several different programs and make sure they all say the same thing. Two to get you started are: Everest (*www.lavalys.com*) and PC Wizard/CPU-Z (*www.cpuid.com*). Another option is to visit one of the many Web sites that sell memory; most of these sites will benchmark your system for you and tell you exactly what kind of RAM to get. Yes, it's a marketing ploy, but it's a useful one! Check out *www.crucial.com*.

Once you've armed yourself with your computer information, you can start looking at RAM. What kind of RAM you purchase will, of course, be subject to the limitations of your computer. The trick is to install as much RAM as your computer can handle without going over. Installing too much RAM can actually slow everything down. Any RAM that Windows cannot recognize will end up being treated like the swap file we mentioned above. A 32-bit operating system can address a maximum of 4GB of RAM.

[Editor's note: The theoretical limit for 64-bit computing is 16EB (exabytes—an exabyte is one billion gigabytes). However, the actual amount of possible memory is limited both by the hardware (processor and motherboard) and the software. For Windows Vista, the limits are as follows:

- Home Basic: 8GB
- Home Premium: 16GB
- Ultimate: 128GB
- Business: 128GB
- Enterprise: 128GB

For the Ultimate, Business, and Enterprise versions of Windows 7, the limits will be 192GB.]

RAM comes in so many varieties that it can seem daunting to someone looking to upgrade their system for the first time. It's not quite so intimidating if you break it down into smaller categories. There are three main types of RAM: SDRAM (Synchronous DRAM), DDR (Double Date Rate SDRAM) and Rambus DRAM. Each of these types has multiple form factors and multiple speeds. The form factor refers to the physical

shape of the RAM, and can be called SIMMs (Single Inline Memory Module) or DIMMs (Dual Inline Memory Module).

SIMM (Single Inline Memory Module) comes in 30-pin and 72-pin varieties, and is found in older computers (i.e., 286, 386, 486 and Pentium). DIMMs (Dual Inline Memory Module) have 168 pins, RIMMs (Rambus Inline Memory Module) have 83 pins, and are found in newer computers. DDR RAM comes in speeds of 1600MHz, 2100MHz, 2700MHz and 3200MHz. RDRAM comes in the following speeds: 600 MHz, 700MHz, 800MHz and 1066MHz.

You may mix RAM types (assuming that they have the same form factor), but it is not advisable to do so. For one thing, the RAM will run only at the speed of the slowest installed memory module. In addition, installing mixed RAM can make your system unstable and may even cause it to crash every couple of hours. The price of RAM has dropped so much in recent years that it doesn't really make sense to risk it. Splurge a little! Go out and get matching RAM modules! Your computer will thank you.

Dawn Clement is a freelance writer, domestic engineer, and mother of three with a Masters of Arts in Philosophy and over nine years experience in technical support.

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Memory for the Macintosh

“Unique concerns when upgrading memory.” by Wally Wang

A Macintosh may cost more than a typical PC, but with simple RAM and operating system upgrades, you'll find that they tend to remain useful far longer.

Here's the first rule of thumb for anyone thinking about buying a Macintosh. Never buy memory from Apple. There's nothing wrong with buying memory from Apple, but Apple typically charges way more than third-party merchants for basically the exact same memory chip. Buy memory from Apple and you'll pay at least 50 percent more.

Unfortunately, here's the dilemma. If you buy a new Macintosh, you can buy extra memory from Apple and have the company install it for you. Or you can take your Macintosh to a third-party merchant and pay them to install the extra memory for you.

The problem is that, if you buy a Macintosh and plan to upgrade its memory, you essentially have to toss the existing memory out the door (or try to resell it) and buy all new memory. You can't just leave your existing memory chips in the computer and just add more memory. It's either keep your existing memory or dump it completely and replace it with something better.

This means if you buy a Macintosh and pay Apple to install more memory, you'll be paying for only the new memory. If you pay a third-party merchant to install more memory, you'll be paying for the old memory on top of the new memory that you need to buy.

The least expensive solution is to simply buy a Macintosh, buy higher-capacity memory chips, and replace the existing memory chips yourself. Unfortunately, this isn't as easy as opening up a standard desktop PC, yanking out memory chips, and plugging new ones in.

Apple purposely makes its computers difficult to open. Obviously, it doesn't want people cracking open the case and messing around with the internal guts of their computer. However, if you're brave (or foolhardy) enough, you can open up a Macintosh and insert your own memory chips. Here are some links that can help you install your own RAM:

• Upgrading RAM for a Mac mini (*www.gizmosforgeeks.com/2007/11/19/mac-mini-ram-upgrade-tutorial*)
• Upgrading RAM for an iMac (*support.apple.com/kb/HT1432*)
• Upgrading RAM for a MacBook (*support.apple.com/kb/HT1651*)

The Mac mini is particularly difficult to open up, since you'll need a putty knife to wedge open the case. If the thought of hurting your Macintosh makes you squeamish, just take it to a third-party merchant and let them use their special tools to upgrade your Macintosh at a price far less than what Apple will charge.

Types of RAM Chips

The biggest headache in buying RAM is knowing the right chips to get. Generally, the latest Macintosh models use DDR3 (Double-Data Rate) RAM, while the previous generation models used DDR2 RAM. DDR3 RAM chips are much faster, typically running at 1067MHz, while DDR2 chips run at 667MHz or less.

Trying to figure out which type of RAM chips work in your particular Macintosh is actually pretty easy. Just

identify the type of Macintosh you have (iMac, MacBook, etc.), and anyone at any Apple store can tell you what type of RAM chips your computer can use.

The Macintosh uses two RAM chips. So if your Macintosh has 1GB of RAM, you have two 512MB RAM chips inside. If your Macintosh has 2GB of RAM, you have two 1GB RAM chips inside.

If you want to upgrade from 2GB of RAM to 4GB of RAM, you have only two RAM chip sockets in your Macintosh. That's why you have to toss your current RAM chips (the two 1GB RAM chips) and replace them with two new ones (two 2GB RAM chips). Unlike PCs, which can have an odd amount of RAM, such as 3GB, a Macintosh can have only 1, 2, or 4GB of RAM.

(Here's something you won't have to worry about with a Macintosh. If you use the 32-bit version of Vista, your PC can use a maximum of only 3GB of RAM. If your computer has 4GB of RAM, that extra 1GB of RAM essentially goes to waste. If you have 4GB of RAM with a Macintosh, you can access all 4GB of memory.)

Is It Worth It?

Perhaps the first question you need to ask yourself is, do you even need extra memory? Having a lot of memory is nice, but it's pointless if you don't need it, let alone use it.

To run Mac OS X 10.5 Leopard, at a bare minimum, you need 1GB of RAM. Obviously 2GB of RAM is better, but 4GB of RAM may be overkill.

If all you do is word processing and browsing the Internet to look at Web sites or read e-mail, 1GB should be plenty. If you use heavy-duty graphics programs like Photoshop or do audio editing with a program like Adobe's Soundbooth, then 2GB of RAM should be enough. If you do video editing with a program like Final Cut or run multiple operating systems (such as Vista) through a virtual machine program like Parallels or Fusion, then 4GB of RAM is probably what you need.

To find out how much RAM your Macintosh has and what type, just click on the Apple menu and choose About This Mac. This displays a dialog that displays the amount of RAM and the type of memory chips used (such as DDR3).

Figure 1. The About This Mac dialog identifies the amount of RAM in a Macintosh.

To keep an old Macintosh running as long as possible, just upgrade its RAM, since older RAM chips plummet in price after newer versions come out. That means you can happily buy a new Macintosh, use its (now standard) 2GB of RAM, and when your current Macintosh starts feeling old, boost its memory. With plenty of RAM, an old Macintosh should be useful for at least another two years or more, and by upgrading the operating system, your old Macintosh should feel almost like new again. A Macintosh may cost more than a typical PC, but with simple RAM and operating system upgrades, you'll find that they tend to remain useful far longer.

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:

• Microsoft Office 2007 for Dummies (*www.amazon.com/gp/product/0470009233?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470009233*)
• Beginning Programming for Dummies (*www.amazon.com/gp/product/0470088702?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470088702*)
• 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*)

• 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*)
• 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*)
• Visual Basic Express 2005: Now Playing (*www.amazon.com/gp/product/1593270593?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1593270593*)
• 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*)
• 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*)

Every Saturday morning from 9:00 am - 10:00 am in San Diego, you can hear Wally with fellow co-hosts Dane Henderson and Candace Lee, on the radio show CyberSports Today (*cybersportstoday.com/*), which covers the video gaming industry on ESPN Radio 800 AM. Wally covers the military history side of the video game industry.

When not performing stand-up comedy or writing computer books, he likes to paper trade stocks with the video game Stock Reflex (*www.plimus.com/jsp/download_trial.jsp?contractId=1722712&referrer=wwang*), using the techniques he learned from a professional Wall Street day trader.

Wally can be reached at *wally@computoredge.com* and at his personal web site (*www.wallacewang.com/*).

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Windows Vista Tips and Tricks

Windows Vista Tips and Tricks

"Vista Memory-Management Features" by Jack Dunning

A couple of little-known Vista features involve the computer memory and how it is used, and can help you tweak your computer toward better performance.

Although fairly well documented, there are a couple of features in Windows Vista that are overlooked to the point that most people are not even aware of their existence. This is unfortunate, since these features can help you to tweak your computer toward better performance. In some cases, you may experience great benefit. In others, you may see very little difference in the speed of your Vista machine. In still other situations, you may want to disable the features completely. In all instances, knowing what your Vista computer is trying to do with its available memory will help you to understand what's happening inside when computing (and answer questions such as why your computer boots slowly, or how to increase system performance). Both of these Vista features involve the computer memory and how it is used.

The first little-known feature is SuperFetch, a Vista program that preloads into memory the programs that you use regularly. SuperFetch is activated by default on all Vista computers. The second program is ReadyBoost, which allows you to designate memory on a flash drive as swap memory (in place of the hard drive). Both programs are standard on Windows Vista and are continued in Windows 7, although ReadyBoost is much more flexible in Windows 7.

SuperFetch

SuperFetch is a program designed to speed up the loading of your regularly used programs by preloading them into RAM (Random Access Memory). SuperFetch learns over time which programs you use most, then, on startup, loads them into memory. This process can add significantly to the startup time, since the computer is going far beyond the loading of the minimum number of startup items. This could be the source of the frustration felt by many Vista users during unusually long computer startups. For this reason, many people disable SuperFetch. However, for the average user, even though the computer may take more time to boot, there is a significant savings when loading programs, since they are loading from memory rather than the hard drive.

When using SuperFetch (the default mode is enabled), memory is being optimized at all times. Therefore, the memory always looks full, as shown by the Windows Task Manager Performance tab in Figure 1. (Figure 1 shows less than 4GB being used due to the addresses set aside between 3GB and 4GB for videos cards and other devices.) SuperFetch is why so many people question the memory looking full even when no programs are loaded. If SuperFetch is turned off (disabled), then the memory utilization will drop significantly depending upon which programs are actually loaded.

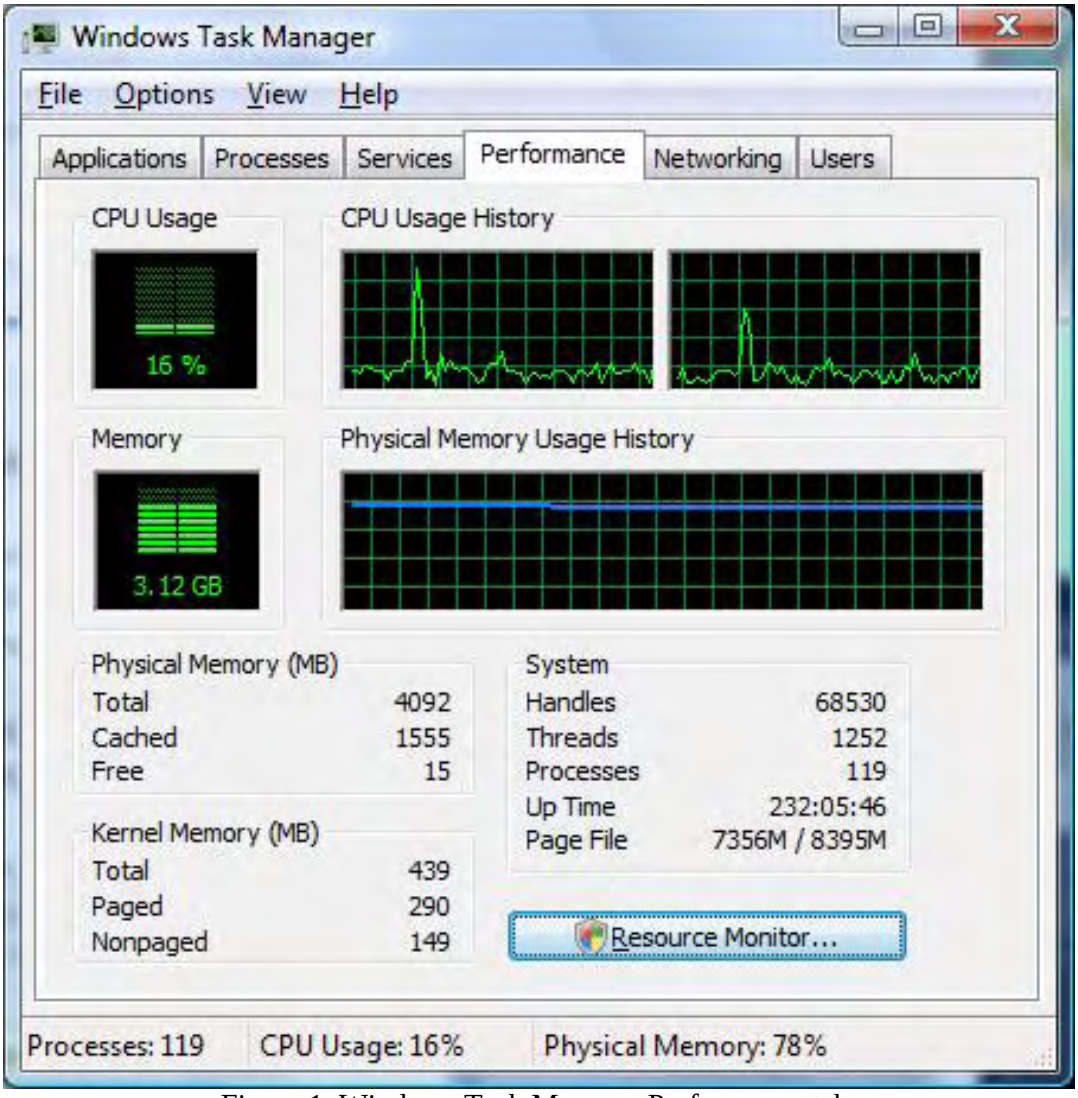

Figure 1. Windows Task Manager Performance tab.

While in most cases, it's not desirable to disable SuperFetch, gamers will often do so to leave the memory free for their more intensive applications and remove some latency that may slow down reaction time. If you do want to disable SuperFetch, type "services" into the Start Search field of the Microsoft Start Menu and select it from the menu. The services window can also be opened via the Administrative Tools in the same menu. Scroll down the service list and right-click on SuperFetch, and then you can either stop/start the service, or select Properties for more "Startup type:" options, including disabling the service. The SuperFetch program can also be disabled by running the msconfig program (enable/disable only) and finding "SuperFetch" in the long list.

SuperFetch is designed to not only preload the programs that you use the most, but to change the mix according to what time of day you use those programs. This is one of the reasons that, at certain times, you may see a great deal of hard drive activity. Programs are being swapped in and out of memory. This feature is aimed at optimizing the use of the installed RAM in the computer. Without this type of program, a computer with ample memory could spend a great deal of time with memory sitting empty, unused.

ReadyBoost

ReadyBoost is a Windows program that allows you to use the memory in a flash drive, or another removable

memory chip, as a swap drive or virtual memory. While the memory in a flash drive is considerably slower than RAM, it is much faster than the usual hard drive—although the speed gap seems to be closing between hard drives and flash drives. For a random-access read, the flash memory is faster, while for sequential reads and writes, the hard drive has an advantage. ReadyBoost is supposed to differentiate and act accordingly. Most sources say that unless there is a relatively small amount of RAM in the computer (512MB to 1GB), using ReadyBoost doesn't actually speed up operations much, but it could save wear and tear on your hard drive. (Plus, on a laptop computer, using ReadyBoost could save battery life, since a flash drive draws much less power when swapping memory than the hard drive.)

To implement Windows ReadyBoost, select "Speed up my system" when you first insert the flash drive (if your Autoplay is set on; see Figure 2). The Removable Disk Properties window will open with the ReadyBoost tab on top (see Figure 3). If the memory meets the required speed standard, the system will offer a recommended amount of memory to be used for the swap drive. (Any memory set aside for the swap drive cannot be used as regular flash memory for saving other files.) Click "Use this device," select the amount of memory, and Apply.

Figure 2. Autoplay window for removable media.

You can also open the Properties window by right-clicking on the removable drive in the Computer window of Windows Explorer and selecting Properties. Select the ReadyBoost tab.

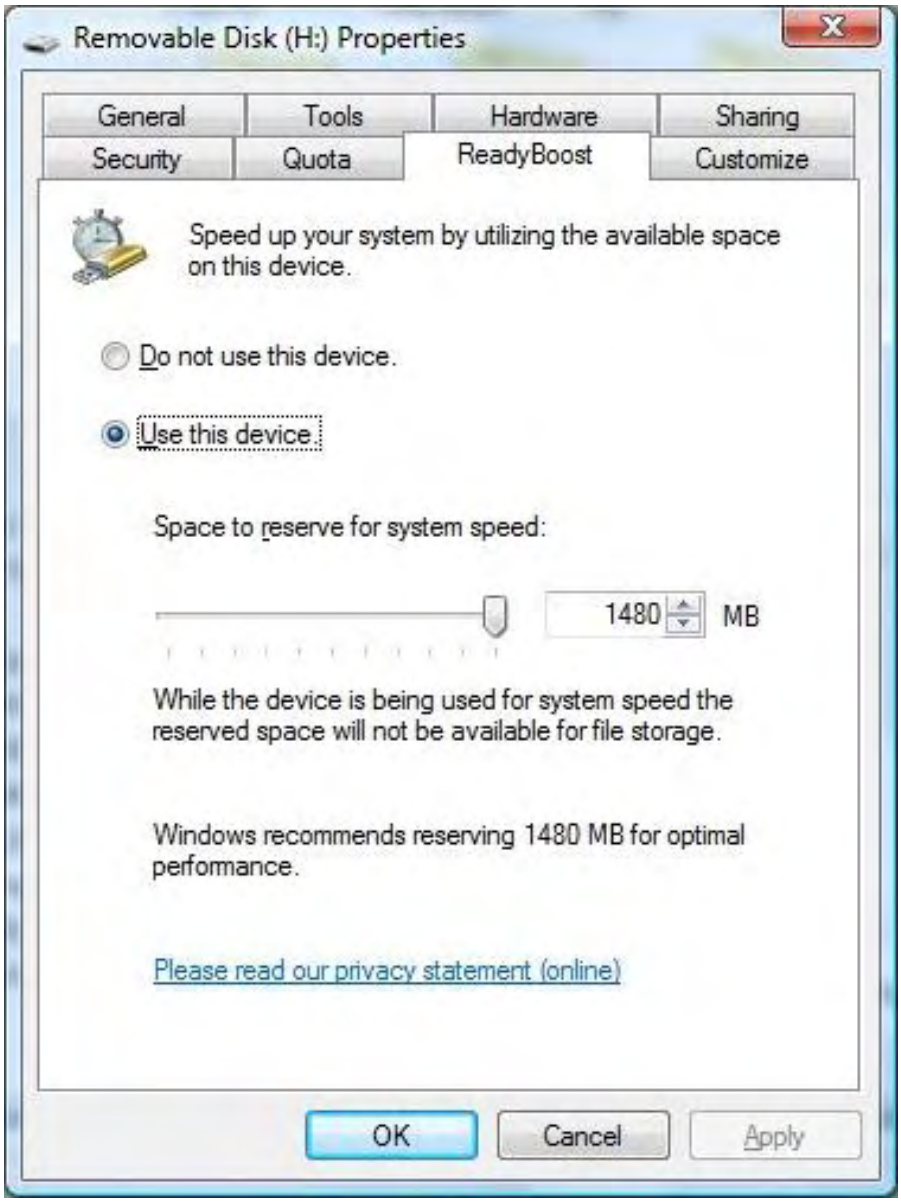

Figure 3. Removable Disk Properties window.

Once set in motion, it's difficult to tell how much good the flash smart drive is doing. I did notice that the hard drive appeared to be working much less. I found a program called ReadyBoost Monitor (*area-71.net/rbmon/*) that monitors ReadyBoost and reassures you that it's doing some good (see Figure 4).

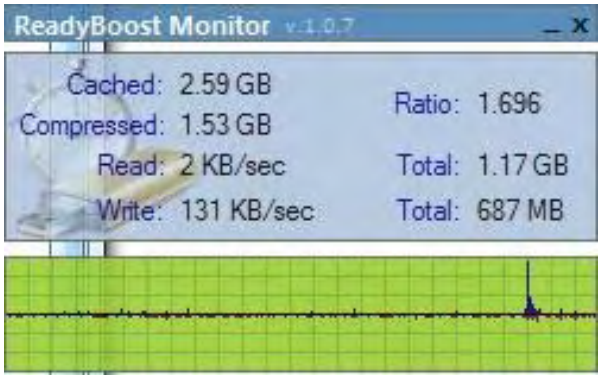

Figure 4. ReadyBoost Monitor.

At first, I used a USB flash drive I had laying around for ReadyBoost. Then I remembered that I had a Secure Digital (SD) slot on my laptop. I disabled the flash drive ReadyBoost by reversing the above process, then plugged in an SD chip. (In Vista, only one media source can be used for ReadyBoost at one time, but in Windows 7, this will be extended to multiple sources including RAM on other network computers.) The ReadyBoost option came up in the Autoplay window for the new chip, and I set it up. The advantage of using the SD chip in the built-in reader is that I can leave it in place when traveling. The protruding USB flash drive would probably break off if I didn't remove it when packing up.

ReadyBoost works in conjunction with SuperFetch, extending the preloading capabilities of the program as well as substituting as a memory swap drive for the hard drive.

Some people advise disabling both of these programs to improve performance, although it is difficult to see how that will help much in the long run. Disabling SuperFetch should make startup quicker, but loading programs later would be slower. If you have a computer that's a little low on memory, adding a flash drive or other external memory chip with ReadyBoost turned on could help quite a bit. For now, my laptop seems quieter and more contented while using an SD chip with ReadyBoost.

Jack is the publisher of *ComputorEdge* Magazine. He's been with the magazine since first issue on May 16, 1983. Back then, it was called *The Byte Buyer*. His Web site is *www.computoredge.com*. He can be reached at *ceeditor@computoredge.com*

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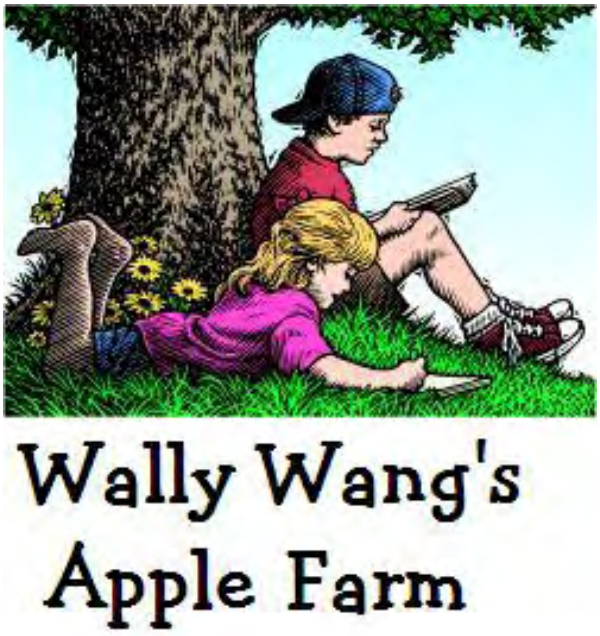

Wally Wang's Apple Farm

"The Latest Rumors About Apple" by Wally Wang

From a video-capturing iPhone and handheld Internet device to lower-cost Macs, here's a rundown of the latest Apple rumors. Also, a tip on creating a shortcut with your mouse.

Here's another feature to expect on the latest iPhone that Apple plans to reveal in June. Besides adding multimedia messaging, which allows you to send audio and picture files, the newest iPhone will reportedly offer video capturing.

For those of you with other mobile phones, this may seem like old news, but there's a big difference. Despite having video capturing available on most other mobile phones, when was the last time anybody actually used that feature on their phone? Chances are good that the majority of features on other mobile phones never get used because they're too clumsy to use on a regular basis.

The new iPhone will reportedly act like the popular Flip Video camcorders that let you aim and shoot. No more lugging around a clumsy video camcorder when your mobile phone can do it all.

Besides letting you capture video, the new iPhone will also reportedly include a simple video-editing app (similar to iMovie), so you can trim video clips before sending them out to others.

More Hints About a Bigger Handheld Device

While news about the new iPhone continues leaking out, here's another clue about what Apple may have in mind for the future. Ever since it allowed outside developers to write programs for the iPhone, Apple has always insisted that programmers make sure their software can run on different-size screens with different resolutions.

Since the iPhone screen probably won't change in size anytime soon, the logical reason for this is that Apple plans to use the iPhone operating system in other types of devices that may come in different sizes. The most obvious device may be Apple's long-rumored netbook or Media Tablet.

Steve Jobs himself is rumored to be testing this handheld device, which could appear as early as June during Apple's developers conference. Supposedly, this Media Tablet will be a larger version of the iPod touch, with the ability to run iPhone apps and possibly even ordinary Mac OS X programs.

The device may come with a detachable and removable keyboard along with a much larger virtual keyboard,

so you can touch type on its multitouch surface. Right now, every other netbook manufacturer offers computers that look like a miniature version of a laptop, but Apple is unlikely to create a low-cost netbook device. Instead, expect a larger multitouch screen in a device that combines the features of Amazon's Kindle with the power of a netbook, but without the sacrifice of a cheap and tiny keyboard and a slow processor with limited RAM and hard disk space.

Nobody knows whether Apple's netbook will revolutionize the industry like the iPhone did, or sink like a rock like Apple's old Newton personal digital assistant. The only sure thing is that whatever Apple releases will be heavily scrutinized and copied.

Low-Cost Macs on the Way?

The latest Microsoft ads emphasize the higher price of Macs compared to regular PCs made by Dell, Sony, or Hewlett-Packard. At least these new Microsoft commercials make sense. (Did anyone feel the urge to buy a Microsoft product after watching Bill Gates and Jerry Seinfeld appear in two nonsensical commercials?)

On the other hand, more than a handful of advertising and marketing experts claim that all advertisements should highlight the single-most important feature of your product, and that single-most important feature should never be price alone.

The reason for this is that people who focus solely on price are the least loyal and most troublesome customers. By advertising a low price as your only benefit, you're essentially training customers that you have nothing to offer beyond price. Even McDonald's emphasizes speed. Only Wal-Mart emphasizes low prices, but if someone else comes along and offers even lower prices, nearly every current Wal-Mart customer will likely flock to this competitor in a second.

That's why marketing experts emphasize that low prices should never be the sole distinguishing feature of your product. The moment people can afford something better, they'll have no loyalty to you and will just flock to a higher-price option (Apple). If someone comes out with a lower-priced alternative, these same customers will flock to that lower-priced option (possibly the upcoming batch of netbooks running the free Android operating system).

Microsoft's real strength isn't low price, but choice. You can choose to have a low-cost PC, or you can spend thousands to get a fully packed gaming machine with liquid cooling to keep its overclocked processor from blowing up, while hooked up to the most powerful graphics card available on the planet.

Nobody can argue that PCs don't offer more choice, but everybody can argue that low-cost PCs aren't always in the same class as higher-priced Macs. Despite this, Apple is now rumored to be readying price cuts on their laptops and iMac models.

Most likely, Apple will simply release newer, faster, and more powerful models, keep the existing price points, and sell the previous generation models for $100 or $200 less. That could bring the price of a new MacBook or iMac down to $799. If price were no longer an issue, guess which computer most people would rather buy?

* * *

Most shortcuts involve pressing a bizarre combination of keys, such as Command+Q (Quit) or Command+O (Open). For another way to create a shortcut, just use your mouse.

You can create a shortcut known as a "hot corner," which essentially means that when you move the mouse into one of the four corners of the screen, you can make your computer do something, such as start the screen saver or hide all open windows so you can see the Desktop.

To define a "hot corner," click the Apple menu and choose System Preferences. When the System Preferences dialog appears, click the Exposé & Spaces icon. Click the Exposé tab, and you'll see four pop-up menus that let you define each "hot corner." Click on this pop-up menu and choose the option you want.

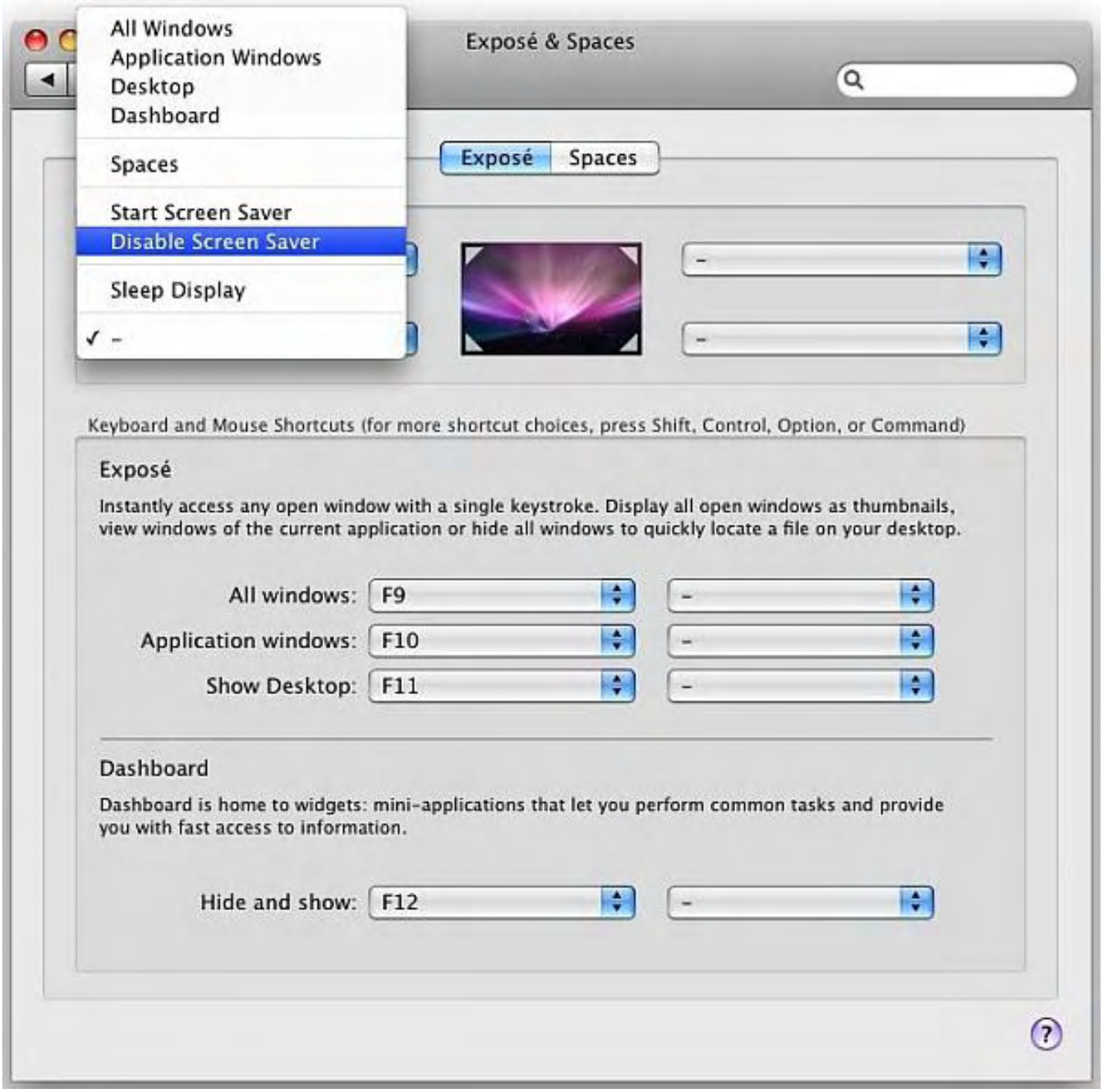

Figure 1. Defining a "hot corner."

After choosing an option, you can run that option just by sliding the mouse into your chosen "hot corner," such as the upper-right corner of the screen.

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:

- Microsoft Office 2007 for Dummies (*www.amazon.com/gp/product/0470009233?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470009233*)
- Beginning Programming for Dummies (*www.amazon.com/gp/product/0470088702?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470088702*)
- 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*)
- 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*)
- 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*)
- Visual Basic Express 2005: Now Playing (*www.amazon.com/gp/product/1593270593?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1593270593*)
- 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*)
- 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*)

Every Saturday morning from 9:00 am - 10:00 am in San Diego, you can hear Wally with fellow co-hosts Dane Henderson and Candace Lee, on the radio show CyberSports Today (*cybersportstoday.com/*), which covers the video gaming industry on ESPN Radio 800 AM. Wally covers the military history side of the video game industry.

When not performing stand-up comedy or writing computer books, he likes to paper trade stocks with the video game Stock Reflex (*www.plimus.com/jsp/download_trial.jsp?contractId=1722712&referrer=wwang*), using the techniques he learned from a professional Wall Street day trader.

Wally can be reached at *wally@computoredge.com* and at his personal web site (*www.wallacewang.com/*).

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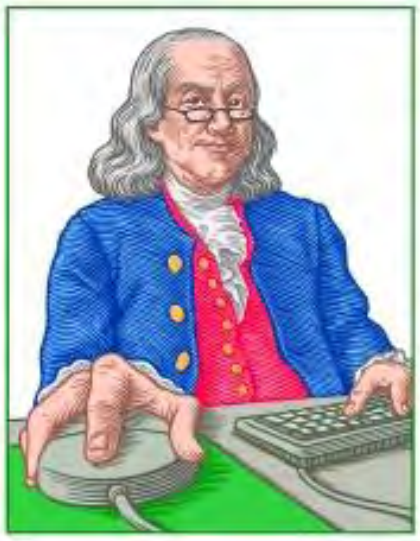

Little Linux Lessons: Tips and Tricks from Users

"Linux users share ideas and ask for help." by ComputorEdge Staff

A tip on using the find command to clean up a processing mess; does a Linux system need virus protection?; and a call for opinions and information for the June 12 Linux issue.

Using the find Command to Clean Up a Mess

In the course of managing Linux systems in various types of environments, I occasionally run into situations where I have to clean up the mess left behind by some out-of-control process. For example, let's say an e-mail campaign program goes berserk and starts generating all sorts of undesirable e-mails. Well, you've stopped your mail program from processing the mail queue (typically /var/spool/mqueue), but now you have to clean out the mail queue so that when you start up your mail program, it doesn't continue to process those undesirable emails.

You would think a simple:

```
# cd /var/spool/mqueue ; rm -f *
```

would do the job. But when you have a couple hundred thousand files in a directory, the '*' (asterisks) in the shell's file-globbing mechanism generate a file list that is too large for the shell to handle, and you get:

```
"Argument list too long"
```

So, what to do? Well, if you have masochistic desires, you can delete those files one by one. Otherwise, you can use the 'find' command to do it for you:

```
# find /var/spool/mqueue -type f -exec rm -f {} *bckslsh*;
```

By using the 'find' command, it is executing the 'rm' on each file it finds, one at a time. Oh, and if you're a control freak and want feedback from the 'find' program as it's doing the job of deleting several hundred thousand files (which can take a several minutes), just add '-ls' so that it lists the files it finds:

```
# find /var/spool/mqueue -type f -ls -exec rm -f {} *bckslsh*;
```

Bond Masuda (*bond.masuda@JLBond.com*)
Linux Consultant
JL Bond Consulting (*www.JLBond.com*)

A Question About Linux Without Virus Protection

I recently read a column by a well-known author saying that one never needs to worry about a virus or malware while using Linux on the Internet. Is this true?

Al
Tustin, CA

State of Linux and Unix-Like Systems

On June 12, *ComputorEdge* will be publishing an issue on the current state of Linux. Is it growing? Where does it fit in computing? How is it currently changing the world of computing? Is it only for nerds? How has Linux affected your life personally, if at all?

Quite frankly, we don't know! We need your help to tell us what's happening. Please send us your thoughts, no matter how short or long, concerning the state of the Linux community. Just e-mail your ideas to Linux Update Issue (*ceeditor@computoredge.com*). Be sure to put the words "Linux Update Issue" in the subject line. We will organize the ideas and publish them in a feature article on June 12. If you have strong opinions, or know and care about the direction of alternative operating systems, then we want to hear from you.

Give Us Your Linux Tips and/or Questions

*If you have an opinion on these or other Linux topics, then please let us know. Also, if you have another Linux tip that works for you and would like to pass it along (or have a question), please drop us a line at Linux Lessons (*ceeditor@computoredge.com*).*

This is a column for Linux and Unix-like operating system users. The goal is to give Linux users an opportunity to share tips, tricks and ideas with both fellow users and the *ComputorEdge* Linux newbies. Each week in this column, we will highlight the thoughts you submit to us. This is your column. As long as a submission is dealing with the Linux/Unix-like world, we want to share it.

The tips and tricks may be short or long, and can include graphics. If there is a little technique or program that you use on a regular basis, then we want to hear about it. You may also pose questions for other Linux users to answer. E-mail your ideas or questions to Linux Lessons (*ceeditor@computoredge.com*). Be sure to put the words "Linux Lessons" in the subject line so it won't get lost in junk mail. We depend upon you to make this column a success.

Jack Dunning
ComputorEdge

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Rob, The ComputorTutor Does Visual Basic for Applications

"VBA Testing" by Rob Spahitz

Last week, we explored a few more features of Access VBA. This week, we spend more time looking at the Visual Basic environment and some of the tools it offers to help ensure that we write more accurate code.

Last week, we explored a few more features of Access VBA. This week, we spend more time looking at the Visual Basic environment and some of the tools it offers to help ensure that we write more accurate code.

If you'd like to pull a previous database, there are some on my server at *www.dogopoly.com/ce* that let you use some existing tables and data. Today's lesson doesn't need them, but I'll work in a copy of the most recent so that you can find today's stuff there.

Coding

First, when you write computer code, no matter what language or what the task, you are likely to make a mistake. In addition, there can be issues beyond your control that can cause problems. Because of these things, most programming languages give you tools to assist with isolating problems and managing them in a controlled way.

There are typically three things that can cause your computer code to fail: syntax errors, logic errors, and system failures. Let's quickly explore each of these.

Syntax Errors

A syntax error is a structural problem, where you break the rules of the language. For example, in English we typically assemble sentences with a noun and a verb. If you leave out the verb, you have a sentence fragment. And if you misspell a word, the sentence is syntactically incorrect.

Fortunately, in computer languages, the language structure is so well defined that the computer can tell you if something is not right before you send it out to customers (or users). In Access, you can confirm that your VB code has no syntax errors by going to the VB area (Alt-F11), then selecting menu Debug, Compile {DBName}. If you get no messages, the syntax is fine. Otherwise, you may get a message like Figure 1 or Figure 2.

Figure 1. VB syntax error, command assembled wrong.

Figure 2. VB syntax error, unrecognized code.

In the first case, this can occur if, for example, you want to assign a value to a variable and leave out the value (or calculation to create a value) like this:

```
strSomeField =
```

The structure is missing a value at the end, so you have a syntax error, since the value is required. You would also get this if you were trying to add two fields and left out the plus sign or used a function and left out the parentheses.

In these cases, the line will often turn red (and you may get a warning message) when you leave the line.

In the second case, this (or a variation) can occur if you started a sentence and didn't finish, like:

```
strSomeField
```

This is a bit less obvious. VB thinks you're trying to run a subroutine named strSomeField, so it tells you it can't find it. If this is supposed to be a variable, it means that you really forgot the rest of the command.

In these cases, the line will not turn red since it doesn't check to see if the subroutine exists right now. It assumes that it either exists or will exist before you run the code.

You can also get problems by putting valid code in the wrong place. For example, if you put x=1 outside a subroutine, you may get something like Figure 3.

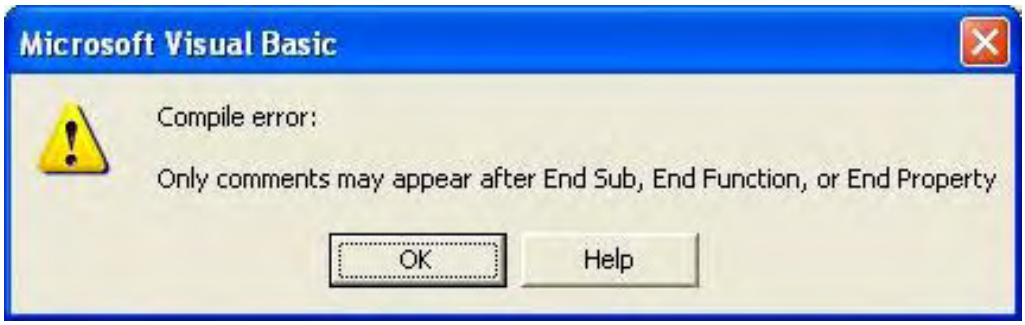

Figure 3. Code in the wrong place.

Syntax errors are typically the easiest to fix because the computer basically tells you that the code will fail if you don't fix it before that part of the code gets run. And with a bit of experience, you can squash these problems within a few seconds of getting the message.

Logic Errors

The next type of problem is the logic error. These are things that the computer will probably never be able to identify. This means that you gave the computer the wrong instructions. Since it doesn't know what you want to do, it really can't determine if it's right or wrong. A real-world example of a logic error is when you give a friend a party invitation with directions to your house, and you inadvertently said to turn right instead of left, or you left out a turn entirely. And if you put the wrong party time on the invitation, that also counts as a logic error.

In the case of the computer, you may have asked it to save a value before you calculated it. Or you may have asked it to delete something in the wrong order. Or you may have simply forgotten to tell it to calculate something. For example, if you wrote your own calendar routine, you may have thought that November has 31 days or forgotten to include the calculation for leap years or leap centuries.

Because logic errors are typically not detected by the computer, there are tools available to help you find these "bugs." By the way, the term computer bug comes from a classic story dating back to the early days of computer programming, when the machines were very large and had open panels to work with the circuitry. The story goes that a moth got into the circuitry and caused a short-circuit to cause a miscalculation. The moth has since been moved to a display in the Smithsonian Institution. So now a logic error in the computer is called a software bug. If Windows crashes, you have a software bug because some condition was not programmed the way you expected it.

We'll explore tools to help with logic errors shortly, and more in coming weeks.

System Failures

System failures are conditions that can occur in the computer world. When we write programs, we'd like to think that we can eventually write perfect code, with no syntax errors and no logic errors. Good luck with that. It's never been done for anything beyond the simplest code. However, there are wizards out there that can write perfect code based on answers you give. If you give the correct answers, it can write perfect code. But these are limited in capabilities.

Anyway, even if you were able to write perfect code for a large project, there can be other problems. Imagine that you are trying to read the contents of a Web page to update your database. You wrote perfect code to perfectly grab the data from a Web page, split the pieces apart exactly the way you need, and transfer them into your database. You even took into account the fact that sometimes the data you receive in a number field sometimes comes in as text, so you intercept those and put them into a separate review table.

Can anything go wrong?

Well, your connection to the Internet could be broken. No matter how hard you try, the file will never get loaded since you can't get to it. Similarly, your ISP or the Web site's ISP could have a problem. Furthermore, the Web site page may have relocated, leaving a void where the page used to be. And certainly the entire Web site could have simply gone away. Furthermore, your computer could have failed, leaving you without access to the database. There's just no way you can write code to get that file if any one of these system problems occurs.

Some of these, of course, can be fixed. You can fix your computer, or use a different Internet connection that works. Others cannot be fixed. If a Web site is gone, the file will never be accessible to you until that status changes.

So assuming that your code tried to read a file on a site that didn't respond, what happens? Your code is perfect, but it simply can't process something it doesn't get. So it sits there and waits and waits and waits. Or, more likely, the system times out and send a message that there was a problem.

Your code is perfect at reading the data, but the problem case is different. This is not a simple data error that you can try to manage (like text in a number field). This is what is typically called a metadata problem, or a problem beyond the data.

Fortunately, VB has a relatively simple way to manage these errors (and even most logic errors). It is called error-trapping. With this process, rather than the system error being intercepted by Access or Windows (the old "blue screen of death"), it typically lets your VB code manage it any way you want. This lets you put custom messages that can be sent to your users to let them know what has happened and how to manage it (like "Web site not available to collect data. Please try later or contact our help desk at 1-800-555-1212 for more information").

Error-Trapping

So let's explore how error-trapping works. First, open a new form or use frmExport from last week's column. On the form, add a button and cancel the button wizard. In the properties, create an Event Procedure for the On Click event. You should get a block of code similar to this:

```
Private Sub Command1_Click()
End Sub
```

Since dividing a number by zero is not allowed in math, we can quickly create an error situation. Technically this is not a bug, since we are doing it on purpose, but the computer doesn't know that and couldn't handle it either way. So let's ask VB to show us what 5 divided by 0 is. It can't do this, so it will generate an error.

Add the code: MsgBox 5 / 0

If you switch to Access and put the form in Form view, and then click on that button, a bad thing happens. You get something like Figure 4, a "run-time" error, i.e., an error that occurs when you run the code.

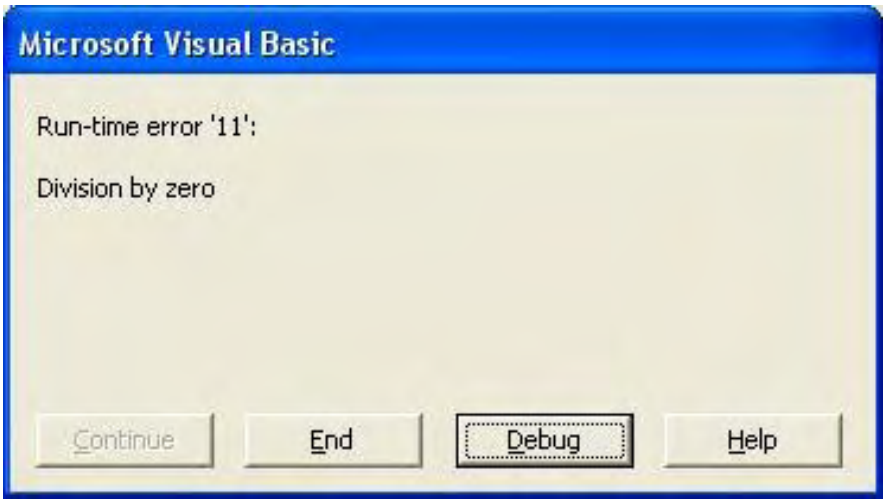

Figure 4. VB Run-time Error.

This is not a syntax error because division is allowed, numbers are allowed, and all the parts are assembled the right way. We just used a calculation that it cannot perform.

When you get the above message, you can stop the code with the End button. This often has side effects and can cause memory leaks. You can also try the Debug button to see if you can get rid of the bug that was discovered. Try Debug and notice that you are sent back to VB with the troublesome line highlighted, as seen in Figure 5.

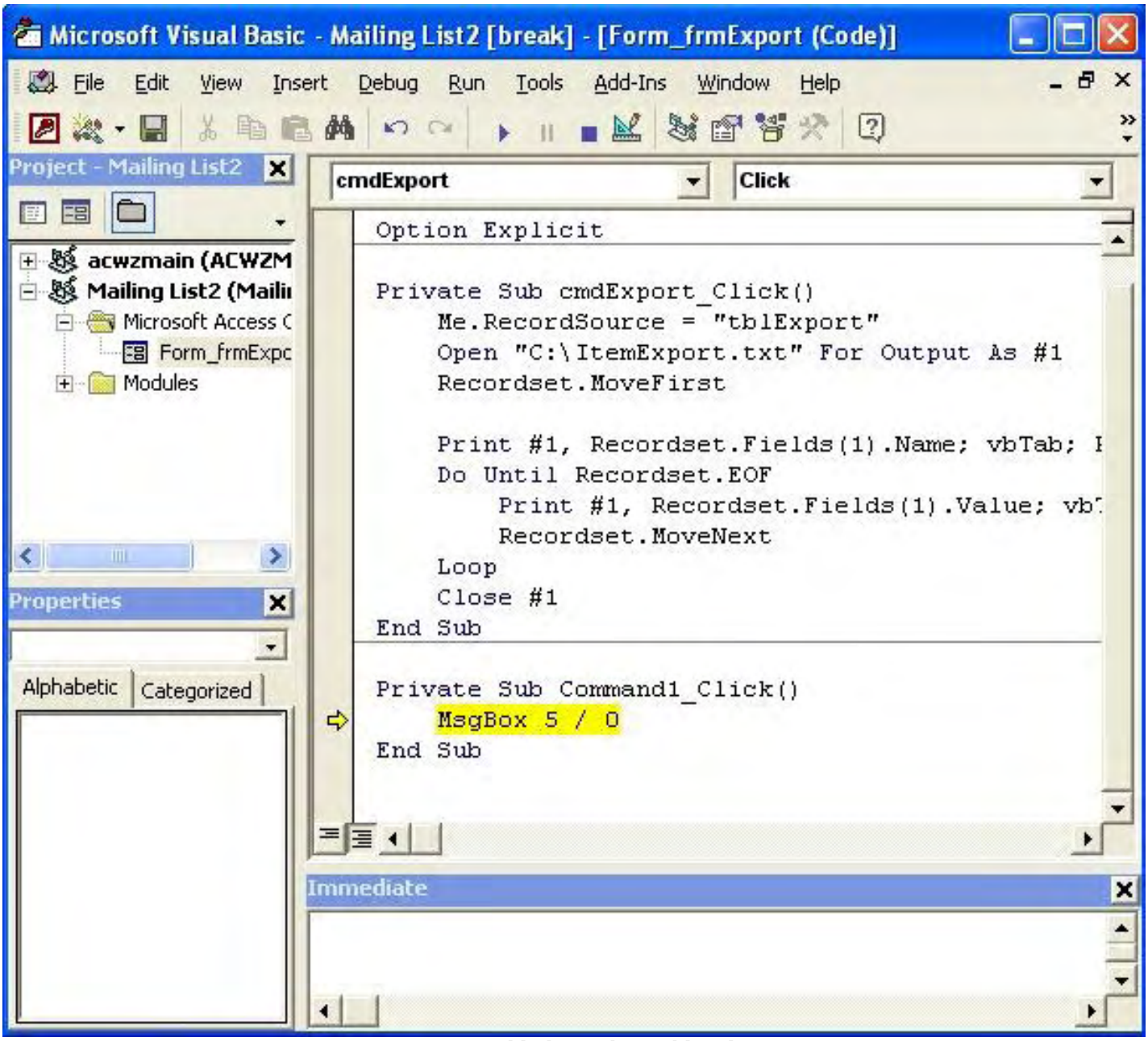

Figure 5. Highlighting the problem line.

Often, this is enough to let you know how to fix the problem. However, sometimes the problem occurred before this line and you have to do some investigation. In future columns, we'll look at those techniques.

For now, we see the problem line highlighted in yellow and a yellow arrow pointing to the line. VB allows us to fix the problem here (although there's an Access bug that sometimes causes it to crash if you try that when it's doing certain things—that I haven't yet determined). Instead, we're going to stop the process and write code to manage that problem.

Use menu Run, Reset to stop the code (or click on the blue box in the "VCR-controls" next to the Design Mode button in the toolbar). Given code we have here, there should be no memory leak, so we should be safe.

Let's use some VB to better manage this. Update the code to look like this:

```
Private Sub Command1_Click()
    On Error Resume Next
    MsgBox 5 / 0
End Sub
```

When you run it again, there will be no error, but also no message. Next week, we'll rewrite this the *proper* way and learn more about the error-trapping features.

Rob has been in the computer industry for over 25 years and is currently a part-time teacher, offering classes in Excel, Access, Visual Basic, and a variety of other technical tools. He has loved *ComputorEdge* since 1990 and can be contacted at *RSpahitz@Dogopoly.com*.

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Worldwide News & Product Reviews

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

Google Your Way to the Top—A few simple ways even small companies can top the page in their next potential customer's Internet search; Top Five Tips for Keeping Passwords Safe—Useful advice for creating passwords that will stymie the crooks; iGo everywhere MAX and USB-2-iGo Charging Cable—A review of products for charging laptops/netbooks on the go; Canon Power Shot A590 IS Camera—A glowing review of the low-cost digital camera.

Google Your Way to the Top

Scott Wilson, CEO of RankHigher.ca, a search engine optimization company, writes in this week:

In this economic downturn, people are using their Web site as their storefront. Making your company stand out on the Internet can seem like a daunting task. With well over a billion Internet searches per day and billions of pages to choose from, how is one company's Web page able to come out on top?

The Internet is filled with fantastic content that no one can find. I call these Web sites "billboards in the forest" because no matter how attractive or great your Web site content is, it's not going to help you gain business if it doesn't show up on a simple Google keyword search. Here are a few simple ways even small companies can top the page in their next potential customer's Internet search.

Get Read: It's important that search engines are able to read your site content. Create content that is easily read by creating your Web page in HTML. Avoid creating sites entirely in Flash, as search engines like Google have difficulty reading the content, and it may not appear in search results.

Gain Trust: Until the Web site has earned the trust of the search engines, it will not rank in search. Earn trust for your site by receiving links to your site from other trusted Web sites. Getting a trusted Web site to post your link is like getting an academic citation; the more citations (links), the more trusted your content will become.

Get Focused: Often a single Web page will contain information on many different products or services offered. This can pose a problem; if the Web page is about 10 different things, then the search engine will rank it for all 10. For example, the first product could appear on page 100, product two could be ranked 1,000, and so on. This keeps your Web page from appearing on the first page of a search result. To avoid this, each page on your Web site should be dedicated to a specific product or service, as it will attach a specific keyword to your page and result in better search results.

Top Five Tips for Keeping Passwords Safe

Another CEO, Nick Forcier of Large Software (*www.largesoftware.com*), publisher of PC-tuneup and password management software, has some useful advice for creating passwords that will stymie the crooks.

1. Keep 'em Guessing

Never use personal information to create a username, login or password (i.e., names of pets, relatives, nicknames, dates of birth, birth location, etc.). In this day and age, where information is often finding its way onto the Web and identity theft experts have become ever-savvy at ferreting out these details, it is *crucial* to choose usernames and passwords that are disassociated from your personal history. Does it make it harder to remember? Yes, but you'll be thankful when you're spared the potentially hundreds of hours and thousands of dollars it often costs to fix a stolen identity.

2. Keep it Fresh—Diversify

Avoid using the *same* login and password across multiple sites and/or cards and accounts. If a thief gains access to one, it will be like a house of cards, allowing them to quickly wreak havoc across your entire financial portfolio. Are you the type who says, "I never share my pin?" It's amazing how often those "unshared" digits are misused by a jilted lover or a nosy housecleaner.

3. Bigger Is Better!

Cliché but true. Studies have consistently shown that a large fraction of all user-chosen passwords are readily guessed automatically. Shorter passwords are more susceptible to commercially available password-recovery tools. Such software is capable of testing 200,000 passwords per second. To improve the cipher strength of your password, longer passwords are better. Include a minimum of eight characters—using both upper and lower-case letters and a mix of letters, numerals and symbols. Do not use words found in the English dictionary.

4. Think Like a Thief—Don't Make it Easy on Them

Put yourself into a thief's shoes—don't even think about using an overly simplified password such as "12345678," "222222," or "abcdefg." Avoid sequential passwords or using passwords derived from the use of adjacent letters on your keyboard; this will not make your password secure. Also, avoid using only look-alike substitutions of numbers or symbols. Criminals and other malicious users who know enough to try and crack your password will not be fooled by common look-alike replacements, such as replacing an "i" with an "1" or an "a" with "@," as in "L@rgeSoftw@re" or "P@ssw0rd." But these substitutions can be effective when combined with other measures, such as length, misspellings, or variations in case, to improve the strength of your password.

5. Consider a Password Manager

There are many decent applications on the market that will digitally safeguard your various passwords (including one from Forcier's own company, Password Manager). Avoid using the free ones "built-in" to browsers, as these have been widely exposed for their security flaws. Find one that memorizes and securely stores each username and password that you enter on a Web site. It should also automatically complete your login information and click the Submit button and include a password generator in case you're having difficulty coming up with a secure login on your own. All accounts and passwords should be encrypted and protected with a single master password, keeping your confidential information secure. This offers the added benefit of minimizing the number of logins and passwords that you have to readily remember on a day-to-day basis.

iGo everywhere MAX and USB-2-iGo Charging Cable

iGo everywhere MAX is a product I ran across at CES last January. It is a universal charger for most portable computers. The unit consists of the charging unit, which has two input jacks at one end and two output jacks at the other. The input jacks are for a 110v AC power cord and a 12v DC power cord for use in an automobile or airliner. The two output jacks are for the notebook/netbook charging cord and the iGo dual power accessory used for charging cell phones and Bluetooth units.

The product comes with 10 notebook/netbook tips, which are all numbered. There is a chart that tells you which tip is used on which computer. This info is also available at the iGo Web site (*www.igo.com*). Tips for the cell phone/Bluetooth charging cable are sold separately for $9.99 each.

Figure 1. iGo everywhere MAX.

The iGo everywhere MAX unit lists for $139.95. The package includes a carrying case. While this product does allow you to charge your laptop virtually anywhere, it seems to me that this unit would better serve a laptop repair shop. I do have one colleague, let's call her Ilene, who at one point had five laptop/netbook computers. Most folks, however, have one or two. But, if you do a lot of traveling and need to charge your computer on an airplane, in your rental car, and in your room, it may be for you.

iGo does makes another product called the USB-2-iGo Charging Cable. This cable is much like the iGo dual power accessory mentioned earlier. It is for use with cell phones and Bluetooth units. There is a male USB connector at one end, and a plug that goes into a variety of charging tips at the other end. The cable itself is only $6.99. Again, the tips are $9.99, and the tip needed for a particular phone or Bluetooth unit can be found at the above iGo Web site.

Figure 2. USB-2-iGo Charging Cable.

In case you want to charge your cell phone and Bluetooth at the same time, there is a splitter cable available for $9.99. This would be quite handy for any traveler who brings his notebook on trips. You could leave your cell phone and Bluetooth chargers at home. Remember, computer USB ports are not powered unless the computer is turned on, so you would have to leave it on while the devices are charging.

 (for both)
Review contributed by Joe Nuvolini

Canon Power Shot A590 IS Camera

On a recent Sunday morning, while perusing the Sunday paper, I came across an ad for the Canon Power Shot A590 IS camera. It was on sale for $109.99. The normal price is $129.99. My primary digital, an Olympus C-5050Z, is a bit bulky to carry around, so I was looking for a second camera with a small footprint. This was just what I was looking for.

Figure 3. Canon Power Shot A590 IS Camera.

It is an 8-megapixel, 1/2.5 CCD unit that requires two AA Alkaline or NiMH batteries and uses SD/MMC memory cards. I like a camera that uses standard batteries and popular, inexpensive memory. It has 4x Optical 16x Digital Combined zoom and, most importantly, Optical Image Stabilization.

I found this last item to be most important. In low-light conditions, when you shoot a photo of a distant object using the flash, the aperture tends to close down, and the photo comes out quite dark. Without the flash the brightness is fine, but without a tripod, it is usually a bit blurred. The results of using the latter technique are far better with a camera with image stabilization.

It has a 2.5-inch TFT viewing screen. It also has a real image optical zoom viewfinder, a feature that seems to be disappearing recently in low-end cameras. The maximum aperture is f/2.6(W) - f/5.5(T) with shutter speeds of 15-1/2000 sec. Other features include numerous shooting modes; exposure compensation of +/-2 stops; built-in flash; white balance; normal, fine, and superfine image compression; a self-timer; and it will shoot video with monaural sound. It has a mini-B USB interface jack and is PictBridge compatible via this cable. I have been very pleased with this camera's performance. It fits nicely in my jacket pocket, and I carry it with me at all times.

There are many more features that space does not allow me to cover here, but may be found at the Canon Web site (*www.usa.canon.com*). Enter A590 in the site search window, and when you arrive at the next screen, click on the camera for detailed information about this excellent product.

Review contributed by Joe Nuvolini

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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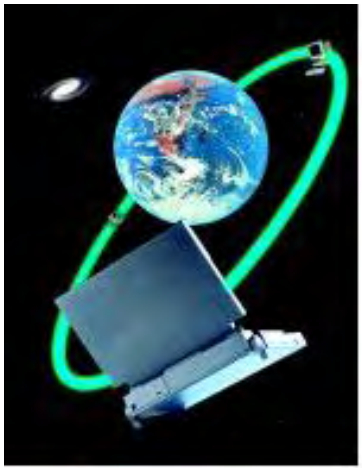

Techno Talk

Techno Talk: Digital Photography 101

"Advanced Lighting" by D'Artagnan Fischer

The basic concept of lighting is to remove shadows. It isn't rocket science, and no one is really a born expert on the subject, so don't hesitate to play and find out what works for you.

The concept of advanced lighting is hardly advanced. However, since everyone tends to use everyday flash photography as their normal understanding of lighting, the information in this article will prove to be much more advanced than that.

Now, anyone who has happened to see behind the scenes of either movies or TV shows will note the fact that there are certainly a lot of lights used.

The Purpose

The real purpose of advanced lighting is to eliminate shadows. If you take a lot of flash pictures with your camera, look closely for shadows. They'll be there, but if you aren't looking for them, you might miss them. As you move forward with your understanding of this concept, you may find that you don't want to have shadows in your pictures either.

The Concept

The concept behind advanced lighting is surprisingly simple: to have light hit your subject from at least three different angles. There are variations called for in every situation, but the basic concept is more like a triangle. Put your subject in the middle of the triangle, and then put your lights at the corners of that triangle.

Lights and Reflectors

The best results can be attained by using expensive photo-light systems. However, most of us are not rich, and even in current economic times, we just don't want to spend a lot of money. In this case, good cheap lights can be found on sites like eBay. A lot of the materials might be made in China or Taiwan, but they will certainly do the trick! Lights that come with stands tend to be the best bet. But, if you are blessed with an infinite budget, then just head straight to the photo-supply store and buy what you need there. Personally, since photography is more of a cherished hobby for me, rather than an occupation, the cheap Chinese lights I found on eBay are more than good enough.

If you want to take some spur-of-the-moment family pictures, then nearby lamps and such will certainly do the trick. However, take careful note of the fact that normal household lights can change the coloring of the photos. Some lights will make a photo rather pinkish, whereas fluorescent lights can add a yellow-green tint to them. Fortunately, this can be compensated for in many of the better photo-editing software applications.

The last type of light is not a light at all: It's a reflector. And even if you use desk lamps and such, you might

still want to splurge and buy yourself a reflector. They come in many shapes and sizes, and the bigger the better. However, *any* reflector is better than no reflector, so start small and grow as your wallet permits, and your feel for the lighting concept grows. Inexpensive reflectors can also be found on sites such as eBay, as well. The best types to look for are ones that have more than one reflective surface. This is sometimes done by the reflector being something of a springy pouch with a zipper. There are two different sides, but inside the pouch might be two other surfaces to choose from. The surfaces can be silver, white, gold, and several other colors. Some even add texture that contributes to how light is reflected on the subject. If the concept is a bit difficult to follow, go to one of your local photo stores and ask them to show you a reflector.

The most typical use of a reflector is to remove shadows from a subject's face, or to add a warming glow (using a gold surface). It can also be used anywhere within that triangle of light we spoke of earlier. The biggest thing to note about using reflectors is that they are typically a softer light and certainly not as strong as an actual light. One exception to this is when using a reflector outdoors, and using the sun to illuminate your subject with the reflector. Remember, the bottom line in using a reflector is really to eliminate shadows, and not to create them somewhere else.

Camera Flash

The flash of a typical digital camera is designed for a flash from the front only. This is essentially why the subject tends to be brightly lit in the main portion of the picture, but with shadows surrounding that subject. Some newer digital cameras offer a feature to tilt or move the flash to a different angle. This is certainly a lot better than the older stationary flash. Now, you might be thinking that because you are using all this other lighting, that your camera's flash should not be used. If the rest of the lighting is sufficient intensity, there is no problem at all in using your camera's flash as a fill flash. This simply means that you will be adding to the overall light, which should provide an even better result. However, bear in mind that the normal camera flash can also contribute to washing out your subject, too, because of too much light.

Newer digital cameras offer the ability to adjust the flash. Some even have an option to make the flash a "fill flash." If you are fortunate enough to have these features, either select the fill flash option, or at least reduce the amount of flash. If you have none of these features, you can reduce flash intensity by taping a small piece of wax paper over the flash. If you follow the wax paper method, be very careful to be clear of the lens itself. Nothing should ever contact the lens, with the exception of light, but that's a subject for another day.

Don't Be Afraid to Play!

Like anything else in digital photography, you will get better at it the more you try it. For the most part, play with settings and light positions, and just try out all sorts of combinations and positions. After all, it is digital media, and taking pictures really doesn't cost a thing, so don't be afraid to play and experiment. You might even find that various shiny surfaces provide a unique coloring for your subject that you really like. Just feel free to try anything you can think of. However, remember the basic rule and follow that "triangle" concept. You can certainly light more than three points, but three points is the minimum for this rule.

* * *

The basic concept of lighting is to remove shadows. It isn't rocket science, and no one is really a born expert on the subject, so don't hesitate to play and find out what works for you.

D'Artagnan Fischer has been a Technology Manager for a major accounting firm, a senior systems administrator, an Enterprise Consultant, has worked for DHS, the Navy, and even San Diego City Schools. His main interests are computers, technology, and digital photography. He also enjoys writing Science Fiction stories, and dreams of one day having one of his stories made into a movie. He lives with a menagerie of animals, and is in the process of growing a family.

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ComputorQuick Reviews

News and Reviews from Readers and Staff

ComputorQuick Reviews: Fast & Fruity

“A look at buying fruit trees on the Internet.” by Marie Loggia-Kee

Where to order fruit tress online? And how would they get here? After a detailed search, the author happened upon Clifton's Flower and Garden Center for a "green" e-commerce success story.

What he says: "Tell me what you want, and I'll pick it up this week."

What he means: "Maybe I don't have to buy those blasted fruit trees yet."

Over the years, I haven't shied away from buying through the Net. Everything from traditional purchases such as books, electronics, clothes and toys, to more obscure items such as customized Littlest Petshop Pets on eBay (if you have children, you understand), to a male leopard gecko as a mate for our female (don't ask). For marketing with work, I've sent designer chocolates during the hot season to Barbados, wine to Australia, and holiday baskets to Japan.

Yet, fruit trees?

I'm not talking about bulbs that ship easily. Literally, I mean an avocado tree housed in a five-gallon container. After years of wondering, "How am I going to get it home?" I hit the Net.

Specialty Items

Sure, this year even Costco sold orange, lemon and lime trees, but a Tarocco blood orange? Although the citrus is considered an Italian delicacy, they'll grow in California. After reflecting upon what type of fruit we'd use the most, and what we want, I decided upon a blood orange, a Meyer lemon and a dwarf avocado. But, where to find them?

After a detailed search, I happened upon Clifton's Flower and Garden Center, which is located in San Joaquin Valley in central California. When considering purchasing from an unknown site, I always look at the About Us information. Clifton's said that it had been in business for about 20 years. The company also provided a valid number for verification. The nursery linked to information about where some of its trees were grown. Although the company is called Monrovia Nursery Co., it's not located in nearby Monrovia. (If it were, I would have considered a 45-minute trip to pick up the trees.) Little did I know that attaining them would be oh-so-much easier.

Safe and Sound

So how do trees get shipped through the mail? Well, express delivery for one. Ever worried about the live plants, I researched Clifton's shipping methods. And, the company lays it all out:

"Featured in the package design, is a 6" foam insert in the bottom of the box that not only anchors the plant firmly in place, but also serves to absorb any vibrations the plant may receive in shipment."
As a professor at Cal State University, Fullerton, where yearly they hold an egg-dropping contest where aspiring engineers freefall eggs in contraptions from the Humanities building, all in hopes that some actually make it, I was particularly inspired to know that the trees had been "drop" tested:

"In this test, a box containing a plant was dropped from a height of 2 feet on each of it's [sic] sides, as well as being dropped on the box corners. No damage to the contents was noted."

After continued internal debate, and a consult with aforementioned husband, I decided to delve further into the unknown, and made the purchase. The cost of the trees was $69.98 each, and the shipping was less than $30, which combined was comparable to similar trees that I had been shopping for at local nurseries.

Fast Delivery

The order was placed late on a Sunday night, probably around 11 p.m. All the order information said that shipment would take between two to three days. The next day, I received a FedEx notification. The new family additions were on their way. And, they arrived two days later. I came home from work one day and was greeted by several cardboard boxes on the far driveway.

After a bit of finesse, we were able to get the trees out of the shipping containers. In fact, the outside of one box arrived crushed open, and the tree inside remained in good condition. The only downfall is that there has to be an easier way to open the packages, but we weren't able to figure it out.

Each tree also came with detailed planting instructions, so we were able to prepare the ground, add in needed soil, apply mulching around the tops and fertilize appropriately. Now, let's just hope they take.

Much faster than husband-turnaround time, and we didn't have to worry about getting soil all over the car. Too bad that the company also doesn't ship someone to plant the trees!

For more information, visit Clifton's Flower and Garden Center (*www.buyplantsonline.com/*).

In addition to writing and being a mom, Marie teaches at Cal State Fullerton, the University of Phoenix and National University. A former chapter leader for Webgrrls Orange County and Los Angeles, Marie continues to keep her technical edge. She can be reached at *info@marieloggiakee.com*.

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EdgeWord: A Word About Memory

"Memory is not to be forgotten." by Jack Dunning

We don't really need to know how memory types differ, we just need to know which type of memory—and how much, at what price—will fit into our machine.

It's been pointed out to me that computer memory is now a commodity, and that everything that can be said about it has been said. Either I don't believe that there is nothing more to say, or I enjoy beating a dead horse—or a little of both. That's why we are doing memory again—although I don't remember when we last did it.

Memory is one of the most important considerations when buying a computer—not the type of memory, but the amount. Within limits, the more the better. Generally, adding more memory will improve the performance of a computer—especially if, like me, you always have 15 to 20 programs open at one time—not including tabbed windows inside Web browsers. I like having the maximum amount of memory in my computers. Unfortunately, this is becoming more difficult (not to mention the expense).

I noted that Wally says that the maximum amount of memory you can put in a Mac is 4GB. (See Wally's "Memory for the Macintosh" article in this issue.) I'm sure there are plans in the works to increase that with 64-bit processors in the not-too-distant future. Wally points out that the 32-bit Windows Vista machines will only support the same 4GB of memory, of which a good portion of 1GB is unusable because of video card (and other) set asides. He's right about that, but he fails to mention that 64-bit Vista machines are now becoming the standard for the PC. (Vista will be rapidly replaced with Windows 7 in the not-too-distant future, and those new machines will almost all be 64-bit computers.) Even the basic version of 64-bit Vista will support 8GB of memory. The higher-end versions will support from 16 to 128GB (Windows 7 up to 192GB), although I don't know if there are reasonably priced motherboards and/or processors that will support that much.

My laptop computer (64-bit) came with 4GB of memory. It consists of two 2GB SODIMMs. There are only two slots with maximum capacity of 8GB total, in spite of the fact that the Home Premium version of Vista is rated to support 16GB. The point is that even if the operating systems will use more memory, the hardware will not necessarily support it. If you're looking at upgrading the memory in your computer, desktop or laptop, check the hardware manufacturer's specifications to make sure that your computer will handle more. Software is not the only limit on memory upgrades.

I looked at what it would take to upgrade my laptop to 8GB of memory. In order to do that, I would need to replace the two 2GB SODIMMs (about $20 each) with two 4GB SODIMMs (currently about $200 each). I would like to do it just to see if there is a noticeable difference, but the market isn't quite right yet ($400 total). The improvement may not be much different from adding a 4GB flash drive with ReadyBoost (see the current Vista Tips and Tricks column).

Yes, memory is a commodity. That's why I'm waiting for the price of 4GB SODIMMs to drop. We don't really need to know how memory types differ, we just need to know which type of memory—and how much, at what price, will fit into our machine.

It is more important to know how the memory is used. After the operating system and applications are loaded, how much capacity remains for caching and swapping? That is where we find the performance issues. Possibly, in a couple of years, all computers will have so much memory at such a low price that no

one will need to think about buying more memory and upgrading. Maybe, but no matter how much we add to our computers, we always seem to find a way to use it all up.

Jack is the publisher of *ComputorEdge* Magazine. He's been with the magazine since first issue on May 16, 1983. Back then, it was called *The Byte Buyer*. His Web site is *www.computoredge.com*. He can be reached at *ceeditor@computoredge.com*

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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

"File Synchronization," "Printing Really Big E-Mails," "Ubuntu User," "Acer Aspire One"

File Synchronization

[This letter is in regard to Michael J. Ross' April 24 article, "File Synchronization for Free."]

As you know, synchronization requires knowing when you update a file, calendar, schedule, etc. The best method is to update in the "cloud" every time you make a change. This way you can update whatever machine you happen to be using. [Something like Apple's MobileMe] lets you update wherever you are.

The important thing is to update at the time of change to a central location, and then update from there.

-Bob D., Vista, CA

Printing Really Big E-Mails

[The following letters are in regard to Digital Dave's April 24 column, where a reader wrote in about receiving too-large e-mails he was unable to print.]

One possible solution is to copy the whole e-mail into some text-editing software (i.e., MS Word, Notepad, etc.), then when you are ready, go into your Printer Properties and check the box that says "fit to page." This should force the software to format the e-mail to the printer standards that you have set.

P.S. Sure miss picking up a copy of CE at the local bookstore like I used to when I was stationed in San Diego.

-Dave, Fredericksberg, VA

I would like to comment on the question posted by Bob regarding printing out long e-mail messages.

We have received similar requests in the IT department where I work. To date, our IT department has not found any real solution. Microsoft has an article (*support.microsoft.com/kb/924141/en-us*) that essentially states that Outlook 2007 has no such functionality. It does, however, provide three workaround methods that are similar to what you have already described.

We have found no other solution for our users except to use the methods in the article above. There are, undoubtedly, third-party solutions for formatting e-mail messages for print. Our IT department tends to stay away from third-party utilities in our corporate environment simply because of the labor required to manage those installations. However, there may be an acceptable third-party application for a home user.

In answer to your question regarding why a user might have such a long e-mail message, this can be a

situation where there may be several replies to a message, creating an electronic thread to follow, in which case a user may want to print out only a portion of the message. According to Microsoft, this functionality is not native to Outlook 2007.

-Pete, Roy, Utah

I think I successfully got around the outsized message problem once by creating a "forward" copy, then changing it from HTML to text, which eliminated the graphics, but reformatted the text, and then changing that back to HTML and putting the resized graphics back in place. I probably then sent the message to myself to make sure it looked good, but if the graphics are very large memory-wise, even though they are smaller, maybe it's not the thing to do.

-Frank, Carlsbad, CA

I got one myself just the other day *from my ISP*?!? My suggestion is to "pretty" Print with a PDF printer. Most oversized graphics, etc., will all get scaled with this, unless it is something X-worded together, like I used to do with oversized graphics before proper scaling became very commonplace!

-Michael J. Viehman, Julian, CA

Michael, you're absolutely right! I don't know why I didn't think of it. (Duh!) This is yet another use for PDF files. Once the PDF is created, it can easily be printed. —Digital Dave

Now that Michael has made his great suggestion about using a PDF printer to reduce the size of a print page, will you please describe how to set up a PDF printer?

-Don, San Diego, CA

I noticed that Michael Ross did a great job on the topic in "PDF-Creation Programs" dated 4/17/2009. Once you set up one of the PDF programs as a print option, print the oversized e-mail with the PDF option. —Digital Dave

Ubuntu User

[This letter is in response to the April 17 Little Linux Lessons: Tips and Tricks from Users column.]

Thanks for the articles. I read them faithfully. Sorry, I'm a novice, so I can't be much help to others using Linux. I use Ubuntu on a dual boot. If I need to do e-mail or browse, I use Ubuntu. Ubuntu is usually ready to shut down before Vista is ready for the operator.

-Ted, Poway, CA

Acer Aspire One

[This letter is in regard to the April 24 review of the Acer Aspire One in the Worldwide News & Product Reviews column.]

I'm actually reading the review of the Aspire One using an Aspire One! I agree that it is a very good choice for a netbook. Although I have tried Windows XP versions, I found the best balance between speed and features was the EEEBuntu Linux distribution, which is designed for the Asus Eee PC, but runs great on the Aspire One. It won't boot as fast as the Linpus Linux that came with the Aspire One, but it has all the

features that have made Ubuntu a popular choice.

-Richard, Colorado

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 article/column. 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*.

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