



This issue: Packing Your Laptop

The laptop computer, which now packs the punch of desktops, has become the computer of choice for many people. Here's a look at what you should take along with your new laptop, as well as a primer on netbooks. And don't miss "Digital Dave's Quick and Dirty Guide to Buying Laptops."

Table of Contents:

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

Digital Dave answers your tech questions.

A reader wants to know what the "People Near Me" icon is in Windows Vista; and Digital Dave has put together a quick guide to help you decide whether you can get by with a \$500 (or less) laptop, or if you need to spend a little more.

[Must-Have Laptop Accessories](#) by Wally Wang

Computing on the road made easier.

While laptops are made for portability, you actually need to take more than just your laptop when you want to compute on the road. Here's a look at cases, security measures and more.

[The Rise of the Netbook](#) by Dawn Clement

Small enough to fit in a purse, powerful enough for computing.

A netbook is a small laptop designed specifically for wireless communication and Internet access, and they have touched a chord with computer-buying consumers.

[Windows Vista Tips and Tricks](#) by Jack Dunning

Computer Management's Task Scheduler

If you are using Computer Management in Windows Vista, then you can check the Task Scheduler to see when and how long a program is running.

If you're running out of power, space or HVAC, contact Castle Access

SAN DIEGO'S EXCLUSIVE BANDWIDTH NEUTRAL COLOCATION FACILITY

castle ACCESS
Enterprise Data Centers

CLICK HERE TO SEE INSIDE THE CASTLE

(Click Banner)

chips and memory .com

AMD Athlon 64 LE1640

\$199

AMD Athlon 64 LE1640
2.6Ghz AM2
1GB DDR-2 MEMORY
20X DVDR/RW and
160GB SATA Hard Drive
SPECIAL WEB PACKAGE

(Click Banner)

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

Macintosh Laptops

If you want a Macintosh along with portability, Apple offers three choices. Also, a look at some more Microsoft woes, and a tip on pressing F11 to make all windows on your desktop temporarily hide from view.

[Linux Lessons: Tips and Tricks from Users](#) by ComputerEdge Staff

Linux users share ideas and ask for help.

Our request for more input from Linux users has yielded some interesting ideas for the evolution of the Linux column.

[Rob, The ComputerTutor Does VB.Net 2010](#)

VB.Net Files

by Rob Spahitz

Last week, we quickly created a VB.Net 2010 form that showed a calendar. This week, we'll explore the files that get created for a project.

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

The latest in tech news and hot product reviews.

Cause of Twitter Hacks in the Cloud—Some experts think rapid cloud deployments are to blame for such security breaches; iPod on Steroids—Rapid Repair has unveiled what it's calling the world's first 240GB hard drive upgrade for iPods; MacBook Pro, Spring 2009—The new MacBook Pro models have sparked considerable debate among product reviewers and users in the online community.

[ComputerQuick Reviews](#) by ComputerEdge Staff

Computer Product Opinions from ComputerEdge Readers and Staff

DEPARTMENTS:

[EdgeWord: Do Your Fingers Fit Your Computer?](#) by Jack

Dunning

Putting Portable Computing into Perspective

There are three primary types of mobile computers on today's market: laptops, netbooks, and phone computers. Each of these has distinct advantages and disadvantages.

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

ComputerEdge Staff

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

"Broadband Connection Problems," "Compatibility with Dragon NaturallySpeaking," "True Image 11"



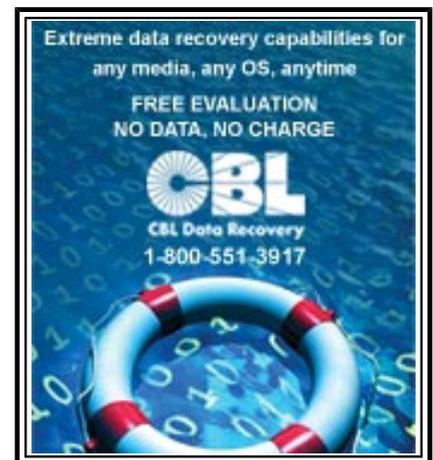
(Click Banner)



(Click Banner)



(Click Banner)



(Click Banner)





Digital Dave

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

A reader wants to know what the "People Near Me" icon is in Windows Vista; and Digital Dave has put together a quick guide to help you decide whether you can get by with a \$500 (or less) laptop, or if you need to spend a little more.

Dear Digital Dave,

I recently purchased a new laptop with Windows Vista on it. Vista is new to me. and I find a few things different from XP.

What is the "People Near Me" icon? The short, quick description says it is for activities, such as Windows Meeting Place. When I open it up it wants me to sign in; when I do this, nothing else happens.

I used NetMeeting years ago and I had to sign into a server, I think! How is "People Near Me" different, and just what is it for?

Thank you for any information here.

*Ronn Mathieu
San Diego, CA*

Dear Ron,

"People Near Me" is a Microsoft program designed to work on your local network for linking up with other people on the same network. When you log on, the name you pick is used for display to other people who use "People Near Me." Therefore, unless there is someone else signed in on the network—and you're using a program such as Windows Meeting Space in Vista that accesses "People Near Me"—you won't see anything. Rather than signing into a server, the connection is ad-hoc between two or more computers—peer-to-peer.

NetMeeting was the program offered before Vista, and it was designed to work with groups over networks or the Internet. Its replacement was Meeting Space.

The situation is even more confused in that Windows 7 does not include Windows Meeting Space. I think that Microsoft wants everyone to move to the Web by using Microsoft ShareView (connect.microsoft.com/site/sitehome.aspx?SiteID=94), which is part of Windows Connect, or Microsoft Office Online Meeting (office.microsoft.com/en-us/livemeeting/default.aspx). Not everyone is happy about this—most people are just confused by it all.

Digital Dave

Digital Dave's Quick and Dirty Guide for Buying a Laptop Computer

If you buy a laptop off the shelf, you get whatever is in the package. You can special order a laptop with those features you want most, but often you will get everything you need plus more through buying a prepackaged computer. But, what do you need? I've put together this quick guide to help you decide whether you can get by with the \$500 (or less) laptop or if you need to spend a little more.

You see prices for laptop computers varying from \$500 to \$1,200, depending upon their configuration. (If you get every possible upgrade, a laptop may cost \$5,000-\$6,000.) Looking at laptops can be pretty confusing, so I decided to take a look at what may be standard in a laptop computer costing \$500 to \$600 dollars, and highlight the features that will increase the price. I used HP laptops for these purposes, but most other laptop brands, except Apple, will be competitive with these numbers.

This is meant only as a guide for how to compare computers and to understand how much a computer with a certain configuration may cost you. I have deliberately omitted netbooks from this discussion. Things are confusing enough, although many of the same principles apply. If you compare the specs of netbooks to the laptops, you will see why netbooks are so much cheaper.

The Standard Laptop

Laptop computers have a number of features that are now considered standard. It's unusual to find one without these capabilities. Therefore, any \$500 laptop should include these:

- Built-in speakers and microphone
- Integrated webcam
- ExpressCard/54 Slot (for expansion card)
- 5-in-1 integrated digital media card reader
- Three or four USB 2.0 ports
- RJ-45 (LAN) 10/100 Ethernet (hardwired network)
- Wi-Fi 802.11 G (wireless network)

Laptop may also include HDMI (high-definition connector for Hi-Def television) and IEEE 1394 FireWire (for devices that require FireWire connections). While I have these features available, I have never had an occasion to use either one. Most connections to other devices are now being made by USB ports. If you need one of these, you probably already know it.

Most laptops are now coming with Microsoft Windows Vista Home Premium with SP1. There should be no price difference between 32-bit and 64-bit. However, to get Vista Ultimate will be about \$125 extra.

I don't care about software that comes with the computer (Norton, Microsoft Works or Office, etc.). There are too many free software packages available to worry about bundled software. I usually will remove it all anyway.

The size of the laptop dictates the size of both the screen and the battery. Both have physical limitations. If you are doing graphics work, then you may need a larger screen. However, if

you go with an 18-inch monitor, the computer may not fit in your computer carrying case. Naturally, larger computers are heavier and more cumbersome to tote. If the laptop will replace your non-moving desktop (very common today), then by all means, go with the bigger laptop.

Processor (CPU)

There is a great range of CPU power available, but most CPUs are plenty fast enough for the usual type of computing. Generally, more expensive laptops will carry more powerful CPUs. For example, the Intel T4200 may be found on lower-priced models. Upgrading to the dual-core P8700 will add about \$250 to the bottom line. Unless you're doing intensive graphics work or you're a gamer, your buying decision is likely driven by other factors.

Memory (RAM)

Many models come standard with 4GB of RAM. If not, it will cost you about \$25 per gig to bring it up to 4GB. Some models will use the newer DDR3 memory modules. If so, there is not much price difference from the DDR2-type RAM. If the laptop is capable of 8GB of RAM, it will cost about \$430 to take it there from the more standard 4GB (DDR2 or DDR3).

Hard Drives

To speed up from a 5,400rpm SATA Hard Drive to 7,200rpm will add about \$100 to the price of the computer. To add storage capacity from 320GB to 500GB, it will be another \$50.

Optical Drives

A DVD drive is standard on a laptop. To add a Blu-ray drive adds \$150. Unless you're watching Blu-ray movies, I don't feel the Blu-ray drive is worth the price. (I know I don't need one. Better to get an external drive if you're looking for backup media.)

Graphics and Video

Some laptops are now offering 18-inch displays. I'm not sure that they will fit in most computer bags. Although difficult to calculate, I estimate that it costs about \$50 per additional diagonal inch of screen on a laptop—rough guess based upon comparing models.

Independent of the size of the screen is the resolution expressed in pixels by width and length (i.e., 1,366x768). The higher the resolution, the higher the price. I've seen different-size screens (i.e., 15 and 16 inches) with the same resolution. In that situation, the larger computer doesn't offer much over the smaller in visual quality—it's possibly even blurrier.

If you want the better-than-standard graphics capabilities, the addition of a separate 512MB Nvidia GeForce 9600M GT graphics is about \$150. It's important to remember that laptops are not built to be game machines. They have been optimized for portability.

Communications

While Wi-Fi 802.11 G is today's standard wireless, you may want to upgrade to wireless-N for

an additional \$25. It will come in handy in a couple of years, or if you get a wireless N router at home. If you get Wi-Fi N, then a gigabit Ethernet LAN connection will probably be included. Check the specs to be sure. If not built-in, Bluetooth will cost another \$25.

The prices I mention are not the prices for adding the capabilities at a later date, but rather the additional cost that you are likely to see on the tag. Make a list of the features that are most important to you, then compare them to the computer's specifications. You will likely end up with a little more than you think you need, but that's how they package laptops these days.



Must-Have Laptop Accessories

“Computing on the road made easier.” by Wally Wang

While laptops are made for portability, you actually need to take more than just your laptop when you want to compute on the road. Here's a look at cases, security measures and more.

With a laptop, it's easy to pack up and go anywhere you want and write, check e-mail, or browse the Web. While some laptops are obviously more portable than others (compare a netbook with a 17-inch laptop that weighs close to eight pounds), you actually need to take more than just your laptop when you want to compute on the road.

The first and most obvious item you need is a good laptop carrying bag. The standard business laptop bag looks like a briefcase that gives you the option of carrying it by the handle or slinging a strap over one shoulder. These types of laptop bags might look nice for business travelers, but because they put weight on one shoulder at a time, you'll need to switch shoulders frequently or risk tweaking your body out of whack as you constantly place the weight of your laptop on a single shoulder time and time again.



Figure 1. The standard laptop carrying case resembles a briefcase.

If you're less concerned with style than with physical comfort, shop at a college bookstore and get the type of backpacks that students fling over their shoulders. Such backpack-style laptop bags evenly distribute the weight of the laptop between both shoulders. While this may look like an odd way to carry a laptop on a business trip while wearing a business suit, it's probably much better for you physically.



Figure 2. A backpack-style laptop carrying case.

Make sure you take your laptop's electric cord so you can recharge wherever you can find an electric outlet. If you find yourself in airports with limited electrical outlets, consider getting an extension cord or plug that converts a single outlet into multiple ones.

At airports, it's often hard to find an open electrical outlet that somebody else isn't already using, but if you offer to plug in your extension cord or a plug that provides multiple outlets, you can share a single outlet with others so everybody can recharge their gadgets before catching their flight. (Just make sure you remember to take your extension cord or plug with you when it's time to leave.)

The latest laptops have built-in Wi-Fi, but if you have an older laptop that lacks this feature, grab a Wi-Fi card that plugs into a USB port. This will allow you to tap into any Wi-Fi connection available, such as those offered in most airports and hotels.

Since Wi-Fi connectivity can be unpredictable, especially when you're in an unfamiliar neighborhood, you might want to invest in a cellular modem, which taps into a cell phone company's network so you can get

Internet access almost anywhere you can get cellular phone coverage.

Cellular modems require a monthly data plan, which might be worth the cost if you frequently travel. However, if Internet access on the road isn't as crucial, then you might skip the cellular modem and take your chances with Wi-Fi connectivity instead.

To protect your laptop from theft, get a cable that you can connect to any laptop and wrap around an immovable object like a table or a chair. A determined thief can cut through protective cables, but cables protect your laptop from becoming the victim of a crime of opportunity, such as when you take your eyes off your laptop momentarily at an airport or when you leave your laptop in your hotel room.



Figure 3. A security cable can prevent theft of your laptop.

For further protection against thieves who might try to steal your laptop while you're traveling, you can get an alarm that attaches to your laptop and wirelessly connects to a device connected to your keychain. The moment your laptop moves a certain distance from you, an alarm rings inside your laptop bag, letting you know that your laptop has nearly gotten away from you.

Finally, pack a USB flash drive with your laptop and store it on your keychain or anywhere separate from your laptop bag. Such a flash drive lets you easily transfer files to and from your laptop to another computer, and provides you with a way to back up your files.

For further protection against losing your data, get an online storage account so you can back up your files over the Internet. Now if you lose your laptop, you can still retrieve your data from your flash drive or online account.

Using a laptop requires a little more thought than using a desktop. With just a few simple accessories, you can make sure your laptop and your data remain safe and secure no matter where you might travel next.

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/).

The Rise of the Netbook

“Small enough to fit in a purse, powerful enough for computing.” by Dawn Clement

A netbook is a small laptop designed specifically for wireless communication and Internet access, and they have touched a chord with computer-buying consumers.

I'm using Google Documents to write this article on my newly acquired Acer Aspire One. These are important facts because five years ago I never would have deigned to use a computer that didn't have an internal optical drive of some sort. These days, I'm not so sure I need an optical drive at all on a regular basis. You see, the Aspire belongs to a new class of computers called netbooks. These computers are ultra-portable laptops designed specifically for wireless communication and Internet access. They don't need optical drives because it is assumed that the user will be accessing online services (i.e., Google Documents) instead of locally stored programs. Eliminating the optical drive and the PCMCIA slot results in a much smaller, much cheaper computer.



"The small one holds my little netbook computer. The other bag holds the cables, modems, hard drives, mice, adapters, power supplies, etc. I need for my netbook."

My Aspire has an Intel Atom N270 microprocessor with a speed of 1.6GHz, 1GB of RAM, a 160GB SATA HDD, came pre-installed with Windows XP, and cost \$299. For comparison, my Dell Inspiron 9400 (yes, the same shiny new Dell that had the nasty malware problems and is now a Linux box) has an Intel Core 2 Duo processor with a speed of 2GHz, 2GB of RAM, a 120GB SATA HDD, also came pre-installed with Windows XP, and cost \$1,700.

The Dell has all the bells and whistles, including an optical drive, a PCMCIA slot and an xD reader. When I got the Dell, I was instantly smitten, but you know what I use it for? I check my e-mail, surf the Internet, do some writing, and occasionally catch up on my Hulu queue. The Aspire can do all that—

and it cost a lot less (and fits in my purse).

According to the most recent report by Internet analyst ipoque (www.ipoque.com/), approximately half of Internet traffic is due to file-sharing, and approximately one-quarter is due to Web surfing. What this means is that 75 percent of Internet use doesn't require the local computer to have an optical drive, or a PCMCIA slot, or a dedicated video card, or any bells and whistles. The vast majority of people use their home computers to access the Internet, and if they're anything like me, they probably have more hardware than they need. Netbooks are therefore rising in popularity, and are beginning to take market share away from conventional laptops.

There were approximately 70 million personal computers sold worldwide in 2007, and the average cost of

a personal computer in 2007 was \$2,500. This seems like a huge number until you think in terms of the global population. In 2007, there were approximately 7,000 million people on this planet—that's only one computer for every 700 people! Since the people who don't have access to computers are generally those in developing countries, it follows that a group of big-hearted people came up with an ingenious idea. Their idea was simple—come up with a laptop that maximizes utility and minimizes cost. This computer would be sturdy, have built-in wireless capability, and most importantly, a relatively low cost.

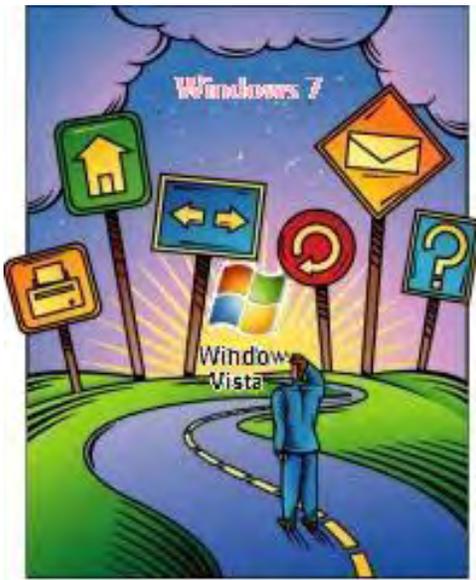
In 2007, the One Laptop Per Child (OLPC) Project, founded by Nicholas Negroponte, went live. OLPC is a non-profit organization whose mission is "To create educational opportunities for the world's poorest children by providing each child with a rugged, low-cost, low-power, connected laptop with content and software designed for collaborative, joyful, self-empowered learning." The idea behind OLPC was first made public in 2001, and the first XO laptops began rolling off the assembly line in 2006. Interesting from a human-interest perspective, but also interesting because the OLPC Project heralded the rise of the netbook. In 2009, netbook sales account for about 16 percent of worldwide laptop sales. Worldwide netbook shipments reached 10 million in 2008, with shipments expected to touch 22 million in 2009, according to IDC.

A netbook is a small laptop designed specifically for wireless communication and Internet access. They are intended for online applications and services that don't need a powerful local computer, and most don't even have a conventional hard drive. The pared-down hardware means that netbooks are extremely portable. They typically weigh less than three pounds and may be as thin as one inch!

I have lots of mobile technology that does what it's supposed to—sort of. What I really needed was one piece of mobile technology that does everything I need it to. Kind of like a home computer. Y'know, something that I can use to check my e-mail and calendar, look up maps, write my articles on and surf the Internet. The Aspire can do all that and more—it can download my favorite MP3s and stream my favorite TV shows.

I am a netbook convert. My netbook is small enough to fit in my purse, yet powerful enough to do everything I do on my home computer. The Aspire replaces my TomTom, my portable DVD player (I can stream movies), my notepad (yes, the paper kind) and my iPod. My husband liked it so much, he went out and got one for himself. In fact, my cute little Acer Aspire is such a success, I'm even thinking of ditching my BlackBerry!

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.



Windows Vista Tips and Tricks

(and some Windows 7)

Windows Vista Tips and Tricks

“Computer Management's Task Scheduler” by Jack Dunning

If you are using Computer Management in Windows Vista, then you can check the Task Scheduler to see when and how long a program is running.

There are times when people wonder if certain programs, such as backup and drive defragmenting software, are running too often or too long. If you are using Computer Management in Windows Vista, then you can check the Task Scheduler for when and how long a program is running.

To open Computer Management, select it from the list of Administrative Tools (see Figure 1). This may be on the right side of the Start Menu, or under All Programs in the Start Menu, depending upon the configuration of the Start Menu. You can also type "computer," "management," or merely "com" or "man" into the Start Search field, and select it from the top of the Start Menu. There may be a way to reach it through the Control Panel, but it wasn't immediately apparent to me.

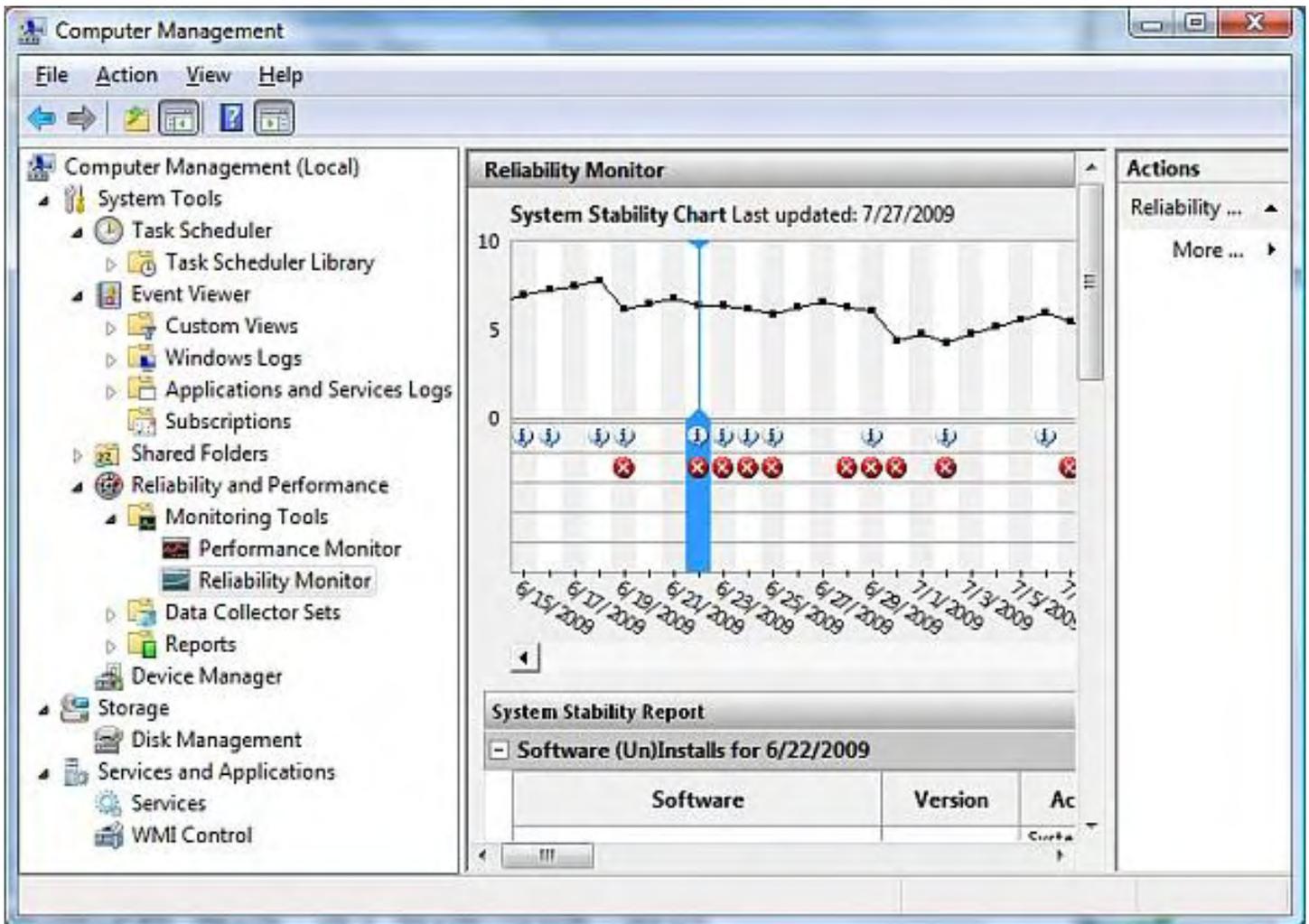


Figure 1. Computer Management window in Windows Vista (and Windows 7).

Select System Tools/Task Scheduler/Task Scheduler Library/Microsoft/Windows. Here you will find a list of the Windows Tasks that may (or may not) be scheduled for regular execution (see Figure 2).

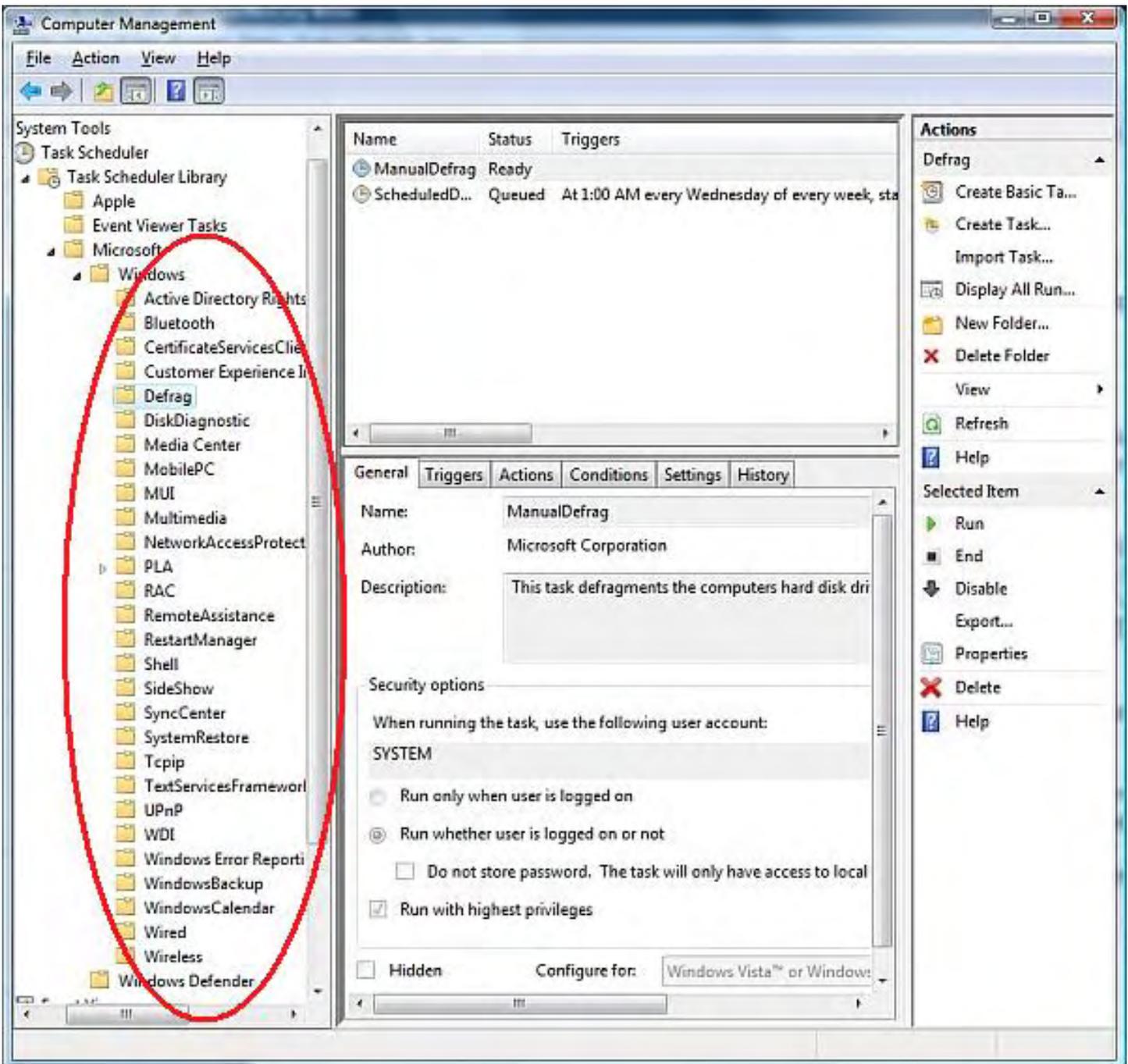


Figure 2. Task Scheduler in the Computer Management window shows the Windows programs' schedule.

As can be seen, there are quite a number of schedule items under Windows, but for the purposes of this column, we will concentrate on two of the most maligned—Defrag and Windows Backup. These are a couple of programs that are often suspected as the cause whenever the computer slows down. Windows will tell us exactly what they've been up to.

First we click on Defrag, as was done in Figure 2. In the top center pane, we see two entries for Defrag. The first is for manually running the program. The second line shows when the program is scheduled to run automatically by Task Scheduler. In this case, it is every Wednesday at 1 a.m. This is a normal setup for Defrag. (For more information on how Defrag works, see Vista Tips and Trick dated 2/20/09.) To defragment the drives every day would be excessive, whereas not defragging often enough would seriously increase the time required. But how long is it actually taking?

If we select ScheduledDefrag in the top pane and the History tab in the bottom pane, then we can see the last time that Defrag ran (see Figure 3). It appears that the last time the program ran was at 1 a.m. on July 29. It ran for two hours and 10 minutes. Unless I was up between one and three in the morning on that Wednesday, it's not likely to have caused me any problem.

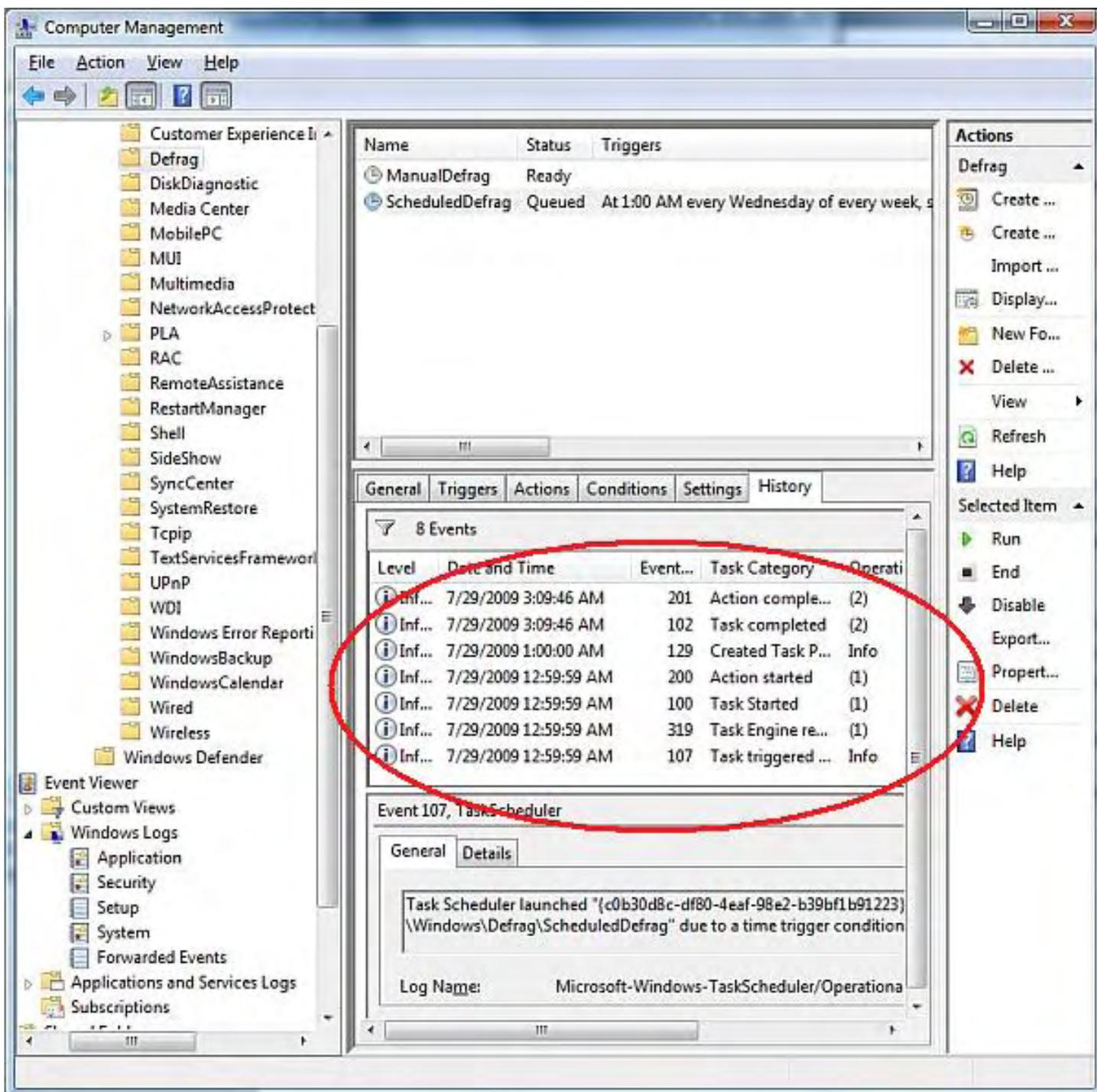


Figure 3. Task Scheduler in the Computer Management window showing the History of the Defrag program.

The defragmenting program is actually cleaning up a number of drives, including an external drive. The couple of hours doesn't seem unreasonable.

Moving on to Windows Backup, the History showed that the program was starting every morning at 1 a.

m., taking about eight or nine minutes to complete. This is a backup of the main drive to the external drive that I scheduled with Windows Backup and Restore Center. (This is not to be confused with System Restore, which will save the Windows system settings at a particular point in time. You can also check the History of your restore points by clicking SystemRestore in the same list of Windows programs.)

When programs are scheduled through Task Scheduler, you can see how they are working by checking their history. You don't need to use the Computer Management program to check Task Scheduler. Typing "task" into the Start Search field in the Microsoft Start Menu and selecting it from the list will have the same effect. However, the collection of tools in Computer Management makes it so much easier to navigate.

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



Wally Wang's Apple Farm

“Macintosh Laptops” by Wally Wang

If you want a Macintosh along with portability, Apple offers three choices. Also, a look at some more Microsoft woes, and a tip on pressing F11 to make all windows on your desktop temporarily hide from view.

Wally Wang's Apple Farm

In the old days, everyone bought a desktop computer, and laptops were considered a luxury. Nowadays, more people are buying laptops as a second computer or as their only computer altogether. While in the past, laptop computers cost a lot while offering weaker features than desktops, today's laptops still cost more than desktops, but the price difference is minimal and the features nearly comparable. If you want a Macintosh along with portability, Apple offers three choices.

First is the all-white plastic MacBook for \$999, which is the lowest-priced Macintosh laptop available. This is a fine model for students or anyone who doesn't want to spend a lot of money on a laptop but still wants a Macintosh. For simple word processing or spreadsheet work, a MacBook will work just fine, but if you demand raw processing power, you'll need to pay a little more for the MacBook Pro model.

The MacBook Pro models are most notable for their solid aluminum construction and unique trackpad that doubles as a giant button in itself. This trackpad/button combination accepts multiple finger-gesture commands. Press one finger on the trackpad, and that simulates a left-mouse click. Press two fingers on the trackpad, and that simulates a right-mouse click.

Although the idea of pressing the trackpad as a mouse button may seem odd at first, once you get used to it, using ordinary laptops with one or two buttons suddenly seems antiquated and clumsy.

The lowest-priced MacBook Pro is the 13-inch model that retails for \$1,199. Although you can buy older aluminum MacBook and MacBook Pro models as refurbished computers, this cost savings may not be worth it. The earlier aluminum MacBook models lacked a FireWire port, while the latest aluminum laptop models include a FireWire port along with a longer battery life—up to seven hours. If you're looking at a Macintosh laptop, the latest aluminum MacBook Pro models are probably worth the added expense.

The third option for a Macintosh laptop is the MacBook Air. The biggest appeal of the MacBook Air is its low weight (3 pounds vs. 4.5 pounds of the MacBook Pro) and thin size. However, it's also the most expensive laptop model, starting at \$1,499.

For those on an absolute budget, get the \$999 plastic MacBook. For those with a little more cash, get the

aluminum MacBook Pro. For those who value light weight and small size, get the more expensive MacBook Air.

If you opt for the larger and more expensive 15- and 17-inch MacBook Pro models, you'll get a choice of using either the integrated graphics or the separated graphics card for faster and sharper graphics. For ordinary word processing, integrated graphics are fine, but if you plan on doing video editing or photo editing on the road, then getting the separated graphics card will simply make your job faster and easier.

With its trackpad/button that accepts a variety of finger gestures, the MacBook Pro models actually offer more features than their desktop counterparts. Naturally, you'll pay for the convenience of portability, but if you need a computer wherever you happen to be, you'll find a laptop Macintosh ready for you.



Figure 1. The variety of Macintosh laptops available.

More Microsoft Woes

If you use Microsoft Office on the Mac, you'll notice that it lacks several features found in Microsoft Office for Windows. Whether this is a deliberate ploy by Microsoft to nudge users toward Windows, or just the inability of Microsoft's programmers to duplicate their own program on another platform is debatable. What isn't debatable is that Microsoft recently offered an update to Microsoft Office for the Mac that actually broke compatibility with Microsoft Office for Windows.

For some odd reason, the 12.2.0 update to Microsoft Office for the Mac rendered the Mac version unable to open the .docx, .xlsx, and .pptx file format of Microsoft Office 2007. Microsoft hurriedly rushed a 12.2.1 update to fix this problem, but it does seem odd that Microsoft wouldn't test its own update to make sure it's compatible with its own software.

Toss this in with the latest revelation that Microsoft's search engine, Bing, initially displayed pro-Microsoft results, and you have to wonder if you can trust Microsoft at all.

Initially, if you typed in the query "Why is Windows so expensive?" into Bing, you'd simply get a list of links that answered the question, "Why are Macs so expensive?"

If you typed in the query "Why is Microsoft evil?" into Bing, Bing would supply you with links answering the question "Why is Google evil?"

Obviously, neither search turned up links answering the question of why is Windows so expensive or why is Microsoft evil. Upon this discovery, Microsoft immediately fixed these results, but you have to wonder how this could be an accident and not a deliberate act of deception. Just as I was beginning to like Bing, now it's hard to ever trust it again.

Add in Microsoft's attempts to kill DR-DOS back in the '90s by mysteriously making Windows 3.1 incompatible with it, Microsoft's killing of Netscape by releasing Internet Explorer and claiming that IE was an integral part of the operating system and unable to be removed, and Microsoft's half-hearted support for its Macintosh software, and it's no surprise that so many people are fervently anti-Microsoft.

A while back, Microsoft offered its Office Live service, where you could register a domain name and keep it free for life. Recently, Microsoft has said that it is now going to charge you an annual fee for your "free for life" domain name. Why bother making promises that you can't keep? Can you trust anything that Microsoft says anymore?

Microsoft has simply lost the trust of large numbers of people and seems unlikely to ever gain it back again. If you bought a used car from a salesman who ripped you off and deceived you, would you continue to buy used cars from that same salesman? Likewise, now that you know that Microsoft has proven time and time again that it can't be trusted, do you really want to continue supporting this kind of company?

* * *

If you press F11, you can make all windows on your desktop temporarily hide from view to reveal the desktop. Press F11 a second time, and all your hidden windows come back to life.

Of course, if you have one of the newer aluminum MacBook Pro models with its trackpad/button combination, you can swipe four fingers up on the trackpad to duplicate pressing F11. Now swipe four fingers down on the trackpad, and all hidden windows pop back up on the screen again.

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)

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)

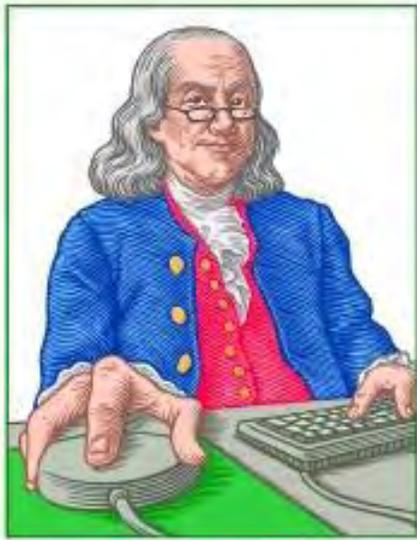
- My New iPhone (www.amazon.com/gp/product/1593271956?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1593271956)

- 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/).



LINUX LESSONS

**"AN INVESTMENT
IN LINUX KNOWLEDGE
PAYS THE BEST
INTEREST."**

Linux Lessons: Tips and Tricks from Users

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

Our request for more input from Linux users has yielded some interesting ideas for the evolution of the Linux column.

ComputerEdge is ready for this column to evolve to whatever you would like to see. Here are some of the responses to our request for more input from Linux users.

On the Linux Column

I think the toughest challenge for the Linux column is knowing who the audience is. For basic to advanced help on Linux, there are already a ton of online resources that Linux users can utilize. I've thought of writing tips aimed at newcomers to Linux, and maybe that would be the best aim of the column—something short and cool about Linux that others might not be aware of.

Most computer users use some open-source software here and there, but making the switch to using Linux as your operating system is much more involved. I'd guess that by then, most users would have found other sources for their Linux needs. I don't want to see the column go away, though.

Richard
Longmont, CO

An Agenda for the Future

Below, Jack Hamilton has given us a fairly comprehensive list of topics that would probably keep us going for a year or more. Now all we need are contributions to the topics. We will do everything possible to see to the organization and editing, but the tips, tricks and lessons can come only from your brain pan. Review Jack's list of topics. If anything strikes your fancy, then write it up, short or long, and send it to Linux Lessons (ceeditor@computoreedge.com). If we have any questions, we'll contact you. Please let us know if you are submitting beginning or journeyman-level information. We will develop a schedule and let you know when your submission will be published. At times, for continuity purposes, the schedule may change.

If you would like to include your business e-mail or a Web site link, please include it. We are happy to give you credit for your efforts.

Dear ComputerEdge,

Longtime fan (10-plus years), first time e-mailer. I read your article on the lack of Linux input for the

Linux column ("EdgeWord: The Linux Column and Searching ComputerEdge: Where Is the Linux Column?") and would like to offer ideas.

I'm an avid and advanced Linux/Unix user, and use it day in and out at home and as a programmer/analyst at my job. I've been using some form of Unix for over a decade and have come to realize that even with that much time I, nor others I know, can learn/remember every aspect of Linux/Unix commands, utilities and programs there is to know, especially with all the free software out there.

As such, here are some topics that I know I am deficient in (or forgetful about), and I would love to see tutorials, lessons, or even the basics covered as a refresher. I bring these up because I've had to crack open my Unix manuals every now and then to perform some kind of data manipulation for my job that basic apps in Windows cannot or cannot easily do. Here they are:

Basics of data manipulation with:

- grep
- advanced "find" searching (especially using "-exec {}*bckslsh*;", files of a specific or greater size with "-size")
- awk
- sed
- use of regular expressions

head copying/replicating data with:

- basics of cp
- basics of scp
- dd (advanced)
- rsync (advanced)

The cool networky stuff:

- SSH tunneling (OMG, so useful!)
- iptables firewall basics
- under the TCP/IP hood with netstat
- nmap
- network troubleshooting basics with: ping, traceroute, ifconfig

Common Linux scripting/programming:

- shell scripting (korn, bourne/bash, csh, etc.)
- Perl
- Python
- C, C++: gcc,gxx
- Java and the Eclipse IDE

Text editors:

- vi/vim
- pico
- emacs (yes, must cover emacs!!!)

Mail readers:

- pine
- mutt
- mailx

Admin basics:

- chmod/chown/chattr/lsattr
- fsck
- fdisk
- formatting with mkfs
- formatting a floppy and USB stick

Distributions comparisons:

- (k)Ubuntu
- Debian
- Red Hat
- SUSE
- Gentoo
- etc.

Window Managers:

- the basics, old-school and classics: twm, fvwm fvwm95, afterstep, etc.
- the mainstream flavors: KDE, Gnome
- the non-mainstream/advanced: blackbox, enlightenment, etc.

I know you probably don't want to reinvent the Linux-tutorials wheel, but I think even just pointing out the different tools/utilities that exist out there for the various subjects (as categorized above) will get Linux users and newcomers an idea of what's out there and the benefits of the more esoteric/advanced programs. For example, I'd start a newbie on Pico for text editing, but I'd stress why they need to learn "vi" and then the benefits of using "emacs" for all the useful features it has, especially for programmers/scripters.

And since Linux users always *always* range from newbies to advanced hackers, I suggest you make the column for both. You can break it up, and the first section will be a newbie topic and then the second section of the column is the hacker-advanced stuff. This way you don't have to sacrifice half your audience. Both sections don't even have to be on the same subject (but that might be a good idea when a relevant topic can be covered for both ranges).

Anyhow, I hope this helps. I've always got Linux topic ideas if more are needed. I'll keep an eye on the column in case you guys ask for more topic requests, or feel free to contact me, as it would be a pleasure.

Hope this helps,

Jack Hamilton
Systems Analyst/Programmer

P.S. I love that you guys are online now (albeit I do miss the days of going to the library just to get my periodic hard copy dose of CE), and am one of those people who has his mail filter file away all the CE e-mails to a folder for future reading and reference.

* * *

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@computoreedge.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 *ComputerEdge* 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@computoreedge.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
ComputerEdge

ComputerEdge always wants to hear from you, our readers. If you have specific comments about one of our articles, please click the "Tell us what you think about this article!" link at the top or bottom of the 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 "ComputerQuick Review", or yell at us, please e-mail us at *ceeditor@computoreedge.com*.



Rob, The Computer Tutor

Rob, The Computer Tutor Does VB.Net 2010

“VB.Net Files” by Rob Spahitz

Last week, we quickly created a VB.Net 2010 form that showed a calendar. This week, we'll explore the files that get created for a project.

Last week, we quickly created a VB.Net 2010 form that showed a calendar. This week, we'll explore the files that get created for a project.

CHALLENGE

I'll continue with my challenges by asking readers to submit their solutions (hardware, software or Web-based) to the following (due 8/21/2009):

With laptops growing more powerful, they are more capable than ever to run applications. However, more complex applications (that take up more memory) come with that power. What three applications would you create, if you could, to replace some of the ones you use the most, and what features would you include?

SOLUTIONS

In a previous challenge, I asked you to submit ideas for how to share pictures from a camera.

David of King George, Va., suggested building a Web site using tools such as FrontPage or Dreamweaver and posting the pictures up there. He also offered some ideas on how to get some free Web hosting sites, such as *Angelfire.com*.

Arch of San Diego offered some ideas. You could use e-mail or a service like oPhoto where "shared photos there are displayed as Flash animations." You could also create your own server, but complex URLs can be a challenge.

Other ideas include using a photo-upload service such as *Flickr.com*, *PhotoBucket.com* or putting them on CD and mailing them, or placing them onto a USB memory stick (those portable "hard drives" that you add to your keychain) and sharing them with anyone who has a computer. One more idea is to create something similar to *YahooGroups.com* and upload the pictures there; with that you also get the benefit of a forum for friends to join and communicate. Of course, the modern-day version of that is Facebook, which also lets you upload pictures.

VB.Net Components

As we saw last week, when you create a new project in Visual Basic .Net, there are several components. As a refresher, let's recreate our Calendar project and save it.

Launch VB.Net. Although I'll be using the 2010 Beta edition, VB.Net 2008 and prior versions look and act very similar. Select New Project (or Create Project...) and choose Windows Forms Application, give it the name Cal2, and click the OK button.

When the blank form appears, click on the Toolbox link near the top-left corner, and locate and drag the MonthCalendar item from the Common Controls area to the top-left corner of the form, as we did last week.

Let's quickly explore what we're doing here.

When you create a VB application, you are creating what VB calls a Solution. Your goal is to solve a problem and the application, in theory, will solve it. That solution will, in turn, contain a collection of pieces that will help solve different parts of the problem. Typically, these are Forms and other containers (called Classes) of computer code that solve those different parts. In turn, each Class (whether it's a form, user-defined component, or collection of procedures) will contain other parts that help this container do its job.

So when we save our application, we will see a file for each of the major parts. The solution will have a file, each class will have a file, and you may have additional auxiliary files (like databases) that help create the complete application.

Before we go on, let's add a few more useful pieces to our application. Go back to the toolbox and locate a Button control, and place it in the bottom-right corner of the form. You may have to drag it around a bit to get it just right. This will be our Exit button. One more time in the Toolbox, drag a Checkbox out and place it in the lower-left corner of the form. When done, you should have something that looks similar to Figure 1.

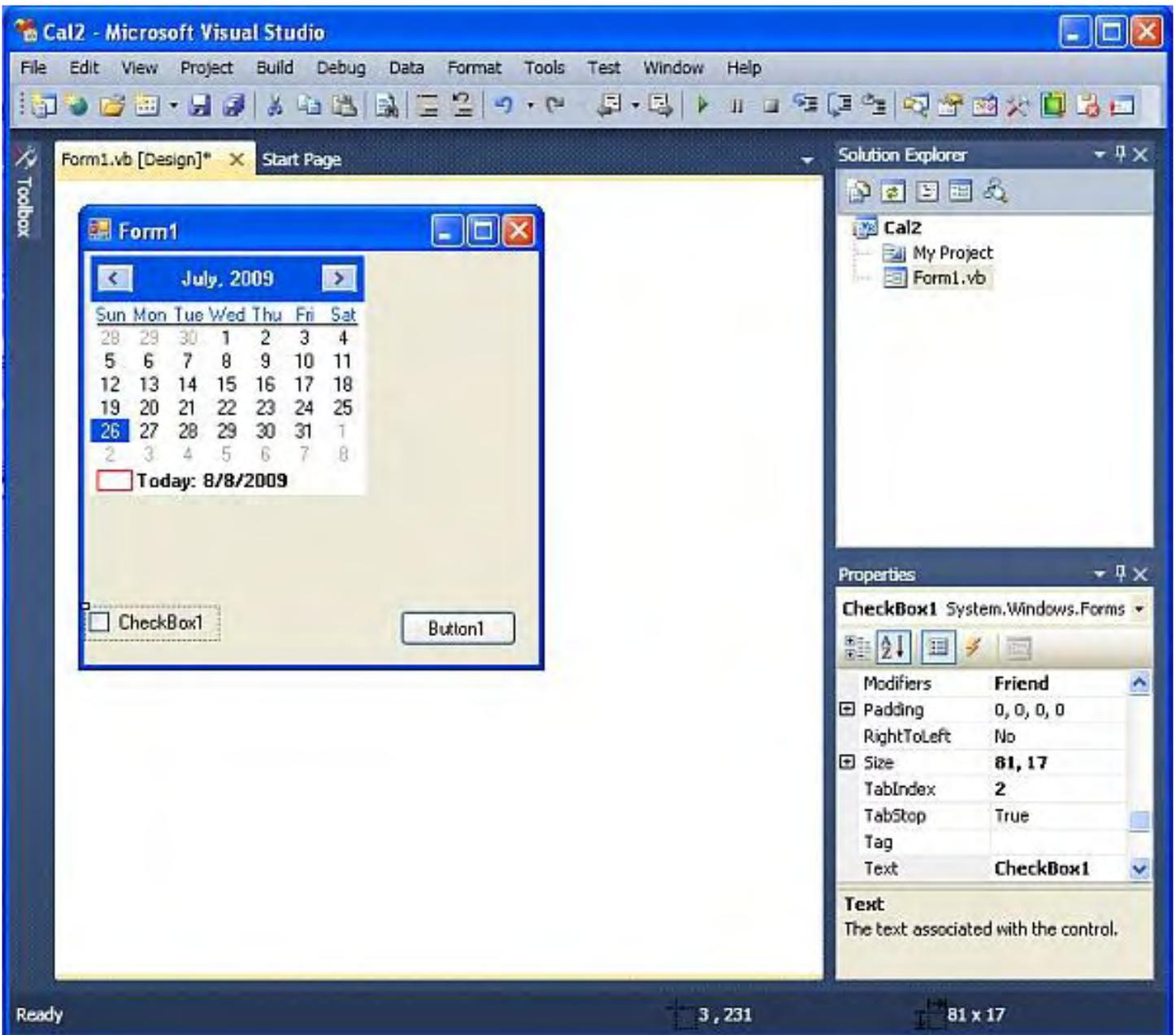


Figure 1. Sample Calendar Form.

VB.Net Files

If you run the above application, VB will convert the code into a Windows executable and run it for you. Eventually, you may want to send your completed application to a friend or possibly sell your work. To do this, you'll need to know where to find the pieces and how to package them for delivery. We'll go over that at a later time. For now, let's explore the various files created by your solution.

To ensure that all of the pieces are available, first make sure to save the solution. Try menu File/Save All, or Ctrl-Shift-S, or click on the picture of several stacked floppy disks in the toolbar. This will give you a Save window, as seen in Figure 2, where you can specify the name of the form to save, the folder where you want it saved, and the name of the solution that contains the form.

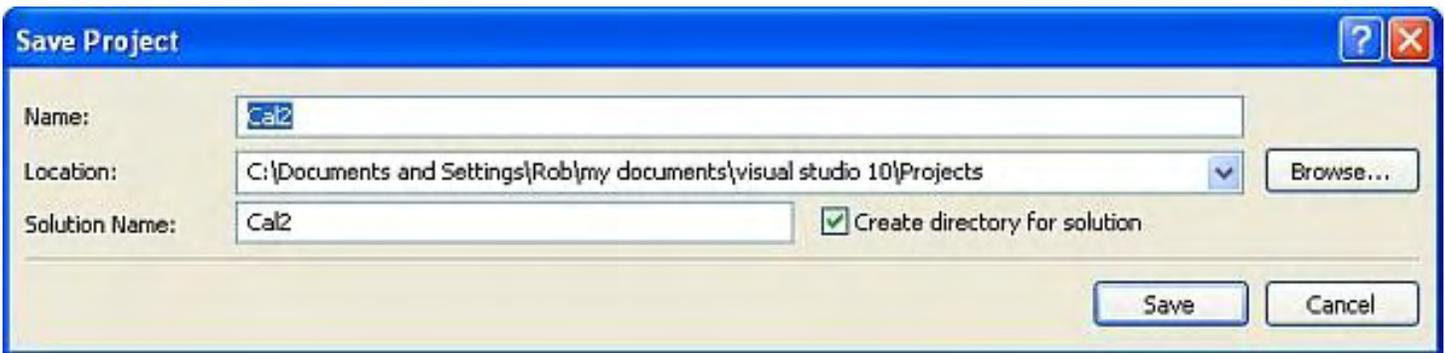


Figure 2. Save Project Window.

By default, the destination folder will be in My Documents for the current user, in the Projects folder of Visual Studio 10 (or Visual Studio 2008 or Visual Studio 2005 for earlier versions of VB). Press the Save button to save all pieces of the solution. Finally, run the application (F5 should do it), and then close it from the red X in the corner. This builds the application into the folders you just specified.

Now let's go see what was created. Go to that Projects folder from Windows (such as with the Windows-key-E to open Windows Explorer) and see what's there. When you open the Visual Studio 10 folder, you'll see a collection of folders that were set up when you installed VB.Net, as seen in Figure 3.

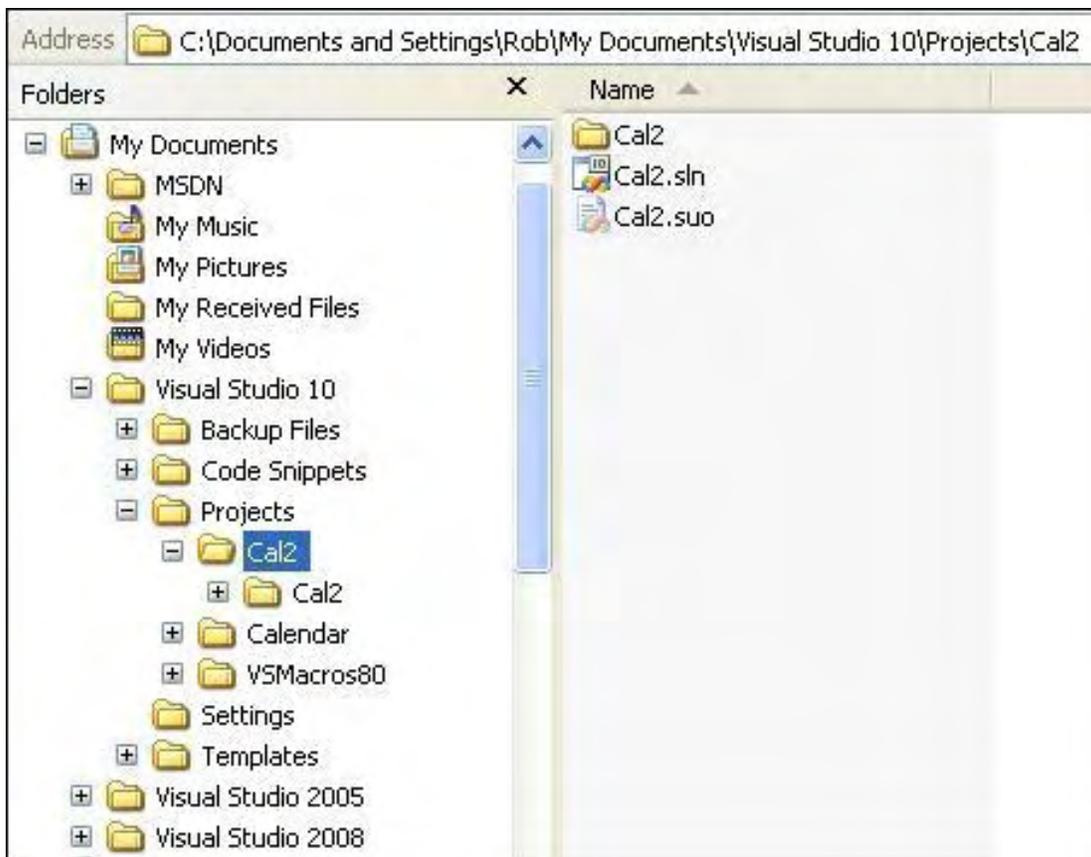


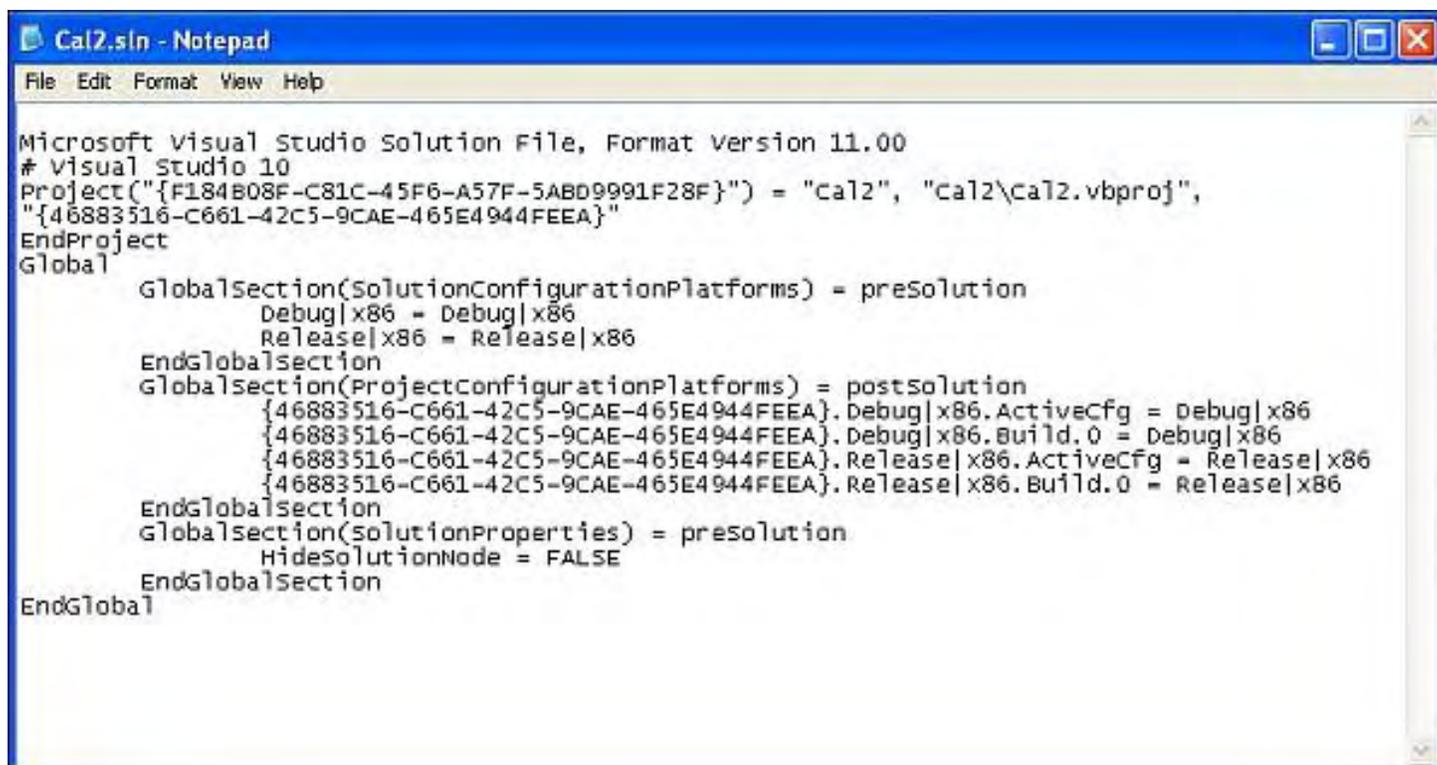
Figure 3. VB Solution Files.

Inside the Projects folder (or wherever you decided to save the solution), you'll see a folder with the name of the solution (Cal2) that contains three things: another Cal2 folder, Cal2.sln and Cal2.suo. If you have extensions hidden on your system, you may see Cal2 appear three times with different icons next to them.

Anyway, this Cal2 folder is the Cal2 *project* folder. This is different from the Cal2 *solution* folder. Since solutions can contain multiple projects, each project has its own folder. For relatively small projects, the solution name and the project name will be the same, so it looks like the folders are duplicated.

The other two files contain information specific to the project. Cal2.sln is the main file, while Cal2.suo is a file that keeps track of which user is accessing the solution. Since VB.Net is intended to be a shared work environment, multiple people can work on the same project at the same time. This file helps keep track of who's accessing what parts at any given time. In our case, we won't be sharing our projects, so this file is irrelevant.

If you open Cal2.sln in a text editor, like Notepad, it will look something like Figure 4.



```
Cal2.sln - Notepad
File Edit Format View Help

Microsoft Visual Studio Solution File, Format Version 11.00
# Visual Studio 10
Project("{F184B08F-C81C-45F6-A57F-5ABD9991F28F}") = "cal2", "cal2\cal2.vbproj",
"{46883516-C661-42C5-9CAE-465E4944FEEA}"
EndProject
Global
    GlobalSection(SolutionConfigurationPlatforms) = presolution
        Debug|x86 = Debug|x86
        Release|x86 = Release|x86
    EndGlobalSection
    GlobalSection(ProjectConfigurationPlatforms) = postsolution
        {46883516-C661-42C5-9CAE-465E4944FEEA}.Debug|x86.ActiveCfg = Debug|x86
        {46883516-C661-42C5-9CAE-465E4944FEEA}.Debug|x86.Build.0 = Debug|x86
        {46883516-C661-42C5-9CAE-465E4944FEEA}.Release|x86.ActiveCfg = Release|x86
        {46883516-C661-42C5-9CAE-465E4944FEEA}.Release|x86.Build.0 = Release|x86
    EndGlobalSection
    GlobalSection(solutionProperties) = presolution
        HideSolutionNode = FALSE
    EndGlobalSection
EndGlobal
```

Figure 4. Solution File.

Notice that VB.Net 2010 uses version 11 (a new file format). Aside from that, the line starting with "Project" identifies the only project in our solution, Cal2 (the VB name), which is located in the folder Cal2 with the name Cal2.vbproj (the Windows name.) The other parts of the file help identify various other pieces that help Windows uniquely identify your project from other projects that might have the same name. For this reason, your numbers will likely be different, since you are creating your own unique version (even if it looks and acts the same as mine.)

Note that the "suo" file is encrypted, so you probably will not be able to interpret it in a text editor.

Digging further, inside the Cal2 project folder, you see files related to the project, as shown in Figure 5.

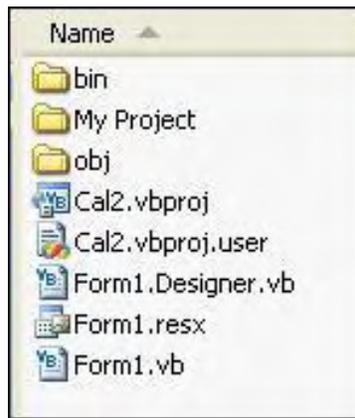
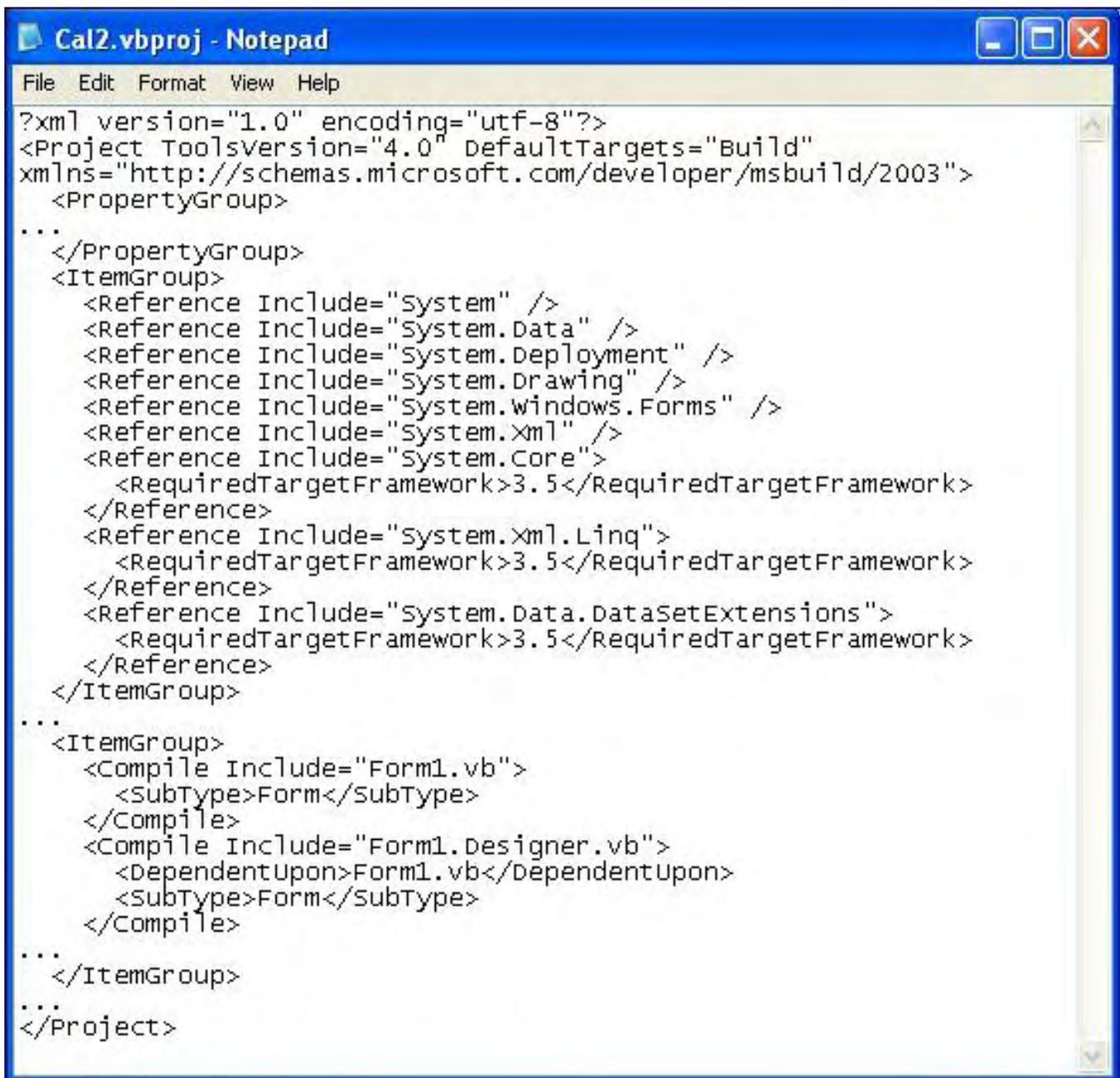


Figure 5. Project Files.

There are several folders and files. For the folders, "bin" holds binary information, "My Project" holds settings for the project, and "obj" holds object settings used to build the project into a Windows executable. For files, Cal2.vbproj and Cal2.vbproj.user hold project-specific information, while Form1.Designer.vb, Form1.resx and Form1.vb hold form-specific information. As we add more things to our project, we may see other files appear in this folder.

If you open Cal2.vbproj in a text editor, you'll see things similar to Figure 6. (Note that I edited out some text and replaced it with a "...")



```
?xml version="1.0" encoding="utf-8"?>
<Project ToolsVersion="4.0" DefaultTargets="Build"
xmlns="http://schemas.microsoft.com/developer/msbuild/2003">
  <PropertyGroup>
    ...
  </PropertyGroup>
  <ItemGroup>
    <Reference Include="system" />
    <Reference Include="System.Data" />
    <Reference Include="System.Deployment" />
    <Reference Include="System.Drawing" />
    <Reference Include="System.Windows.Forms" />
    <Reference Include="System.Xml" />
    <Reference Include="System.Core">
      <RequiredTargetFramework>3.5</RequiredTargetFramework>
    </Reference>
    <Reference Include="System.Xml.Linq">
      <RequiredTargetFramework>3.5</RequiredTargetFramework>
    </Reference>
    <Reference Include="System.Data.DataSetExtensions">
      <RequiredTargetFramework>3.5</RequiredTargetFramework>
    </Reference>
  </ItemGroup>
  ...
  <ItemGroup>
    <Compile Include="Form1.vb">
      <SubType>Form</SubType>
    </Compile>
    <Compile Include="Form1.Designer.vb">
      <DependentUpon>Form1.vb</DependentUpon>
      <SubType>Form</SubType>
    </Compile>
  </ItemGroup>
  ...
</Project>
```

Figure 6. Project File Contents.

Among other things, you see References (which allow VB to find things like a Windows MessageBox without you having to dig around to find it) and the various parts (Forms) of the project. Also notice that this is an XML file, an open-source file format that is used to define groups of information.

As for the other files, Cal2.vbproj, as you might expect, contains information about the current user working on the project; Form1.Designer.vb contains code added by VB to make the window and controls appear; Form1.resx is a resource file for holding picture information and other large blocks of data used by the form; and Form1.vb contains custom code that we'll add at a later time. Each of these can be viewed in a separate text editor, but be careful if you decide to change something, or VB.Net may not be able to recognize your changes and may not let you use its fancy features to work on the project.

Let's wrap things up by looking in the bin folder, which will be very similar to what's in the obj folder. In bin you see a Debug and a Release folder. While we're creating, things go in the Debug folder. If you later

decide to create an official release, you can have things go into the Release folder, although that's often not needed. So open the Debug folder, and you should see four files: Cal2.exe, Cal2.pdb, Cal2.vshost.exe and Cal2.xml. The important file at this point is Cal2.exe. If you double-click this, you run the application from Windows (rather than from VB.Net). If you deliver this one file (mine is 20K) to a friend who has the proper DotNet Framework installed (but not necessarily VB.Net), your new application will launch. However, if the DotNet Framework is *not* installed, your friend will get an error. At some point, we'll show how to create an installation package to overcome this problem.

Next week, we'll explore some of the more useful items in the VB.Net toolbox. Meanwhile, keep sending your answers to my weekly challenges.

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 *ComputerEdge* since 1990 and can be contacted at *RSpahitz@Dogopoly.com*.

Looking for a great boardgame? Grab a copy from DOGOPOLY.com (*dogopoly.com*) and have a dog-gone great time.



Worldwide News & Product Reviews

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



Cause of Twitter Hacks in the Cloud—Some experts think rapid cloud deployments are to blame for such security breaches; iPod on Steroids—Rapid Repair has unveiled what it's calling the world's first 240GB hard drive upgrade for iPods; MacBook Pro, Spring 2009—The new MacBook Pro models have sparked considerable debate among product reviewers and users in the online community.

Cause of Twitter Hacks in the Cloud

Andy Cordial, managing director of storage systems-integration specialist Origin Storage notes that news Twitter has been hacked yet again "comes as no surprise, given the fact that many IT staff and managers are being pushed into adopting cloud computing services on a fast-track basis.

"Our observations suggest that a number of companies and their staff are being forced down the cloud computing route and are having to adapt their IT security systems on the fly," said Cordial. "We have had concerns about this rate of change in the business sector for some time and, with all the data breaches occurring on the cloud front, it's obvious that the chickens are now coming home to roost."

According to Cordial, this latest Twitter hack appears to be the result of the password of a company co-founder being guessable on the GoogleApps service, which then allowed the hacker access to his personal information, including details of his wife's computer.

"It is," he noted, "a common problem in IT departments, but one that can be solved by applying a sizeable slice of common sense and adding a selection of encryption technologies plus policies to the mix. Adding encryption to a company's data storage—whether in the cloud or not—will ensure that data at rest, as well as on the move, is protected from prying eyes. And if a secure password best practice is applied on top of corporate encryption policies, the resultant multiple layers of defense can help prevent human error causing a faux pas like the latest Twitter hack.

"Applying effective security is all about planning and then applying that planning, backed up by a set of solid security policies with encryption at its heart," he added. "If Twitter had had this strategy operating at all levels of its hierarchy, rather than apparently going for user growth at any cost, it wouldn't be in the embarrassing situation it is now."

For more on the latest Twitter security lapse check out FT.com (www.ft.com/cms/s/0/21d018e6-7190-11de-a821-00144feabdc0.html?nclick_check=1).

iPod on Steroids

Kalamazoo, Michigan-based Rapid Repair (www.rapidrepair.com/shop/ipod-hard-drives.html) has unveiled what it's calling the world's first 240GB hard drive upgrade for iPods. The company uses a

Toshiba 1.8-inch drive, currently compatible with only fifth-generation (5G) iPod Video devices, to turn the iPod into a portable entertainment powerhouse capable of holding up to 60,000 songs, 300 hours of video, or 50,000 photos.

"The original iPod Video shipped with 30GB, 60GB or 80GB hard drives. For owners of these units, the 240GB upgrade drive is an incredible upgrade," said Rapid Repair CEO Aaron Vronko. "Rapid Repair has done extensive testing to ensure the compatibility and reliability of this 8mm Toshiba 240GB hard drive."

According to the company, Toshiba's 1.8-inch 240GB hard drives use an exclusive mechanical and firmware design for enhanced durability. Additionally, specific technologies have been implemented to deliver a 33 percent overall improvement in energy efficiency over previous Toshiba models, making the drives ideal for longer play.

Rapid Repair says it is currently in the process of conducting compatibility tests to extend the use of the Toshiba 240GB drive to more iPod models, as well as Microsoft's Zune 2G. The \$294.99 upgrade is available as either a user install or as a depot install by the company.

MacBook Pro, Spring 2009

The MacBook Pro (www.apple.com/macbookpro/) (MBP) models that Apple introduced during the Worldwide Developers' Conference in June 2009 represent the second version of the aluminum unibody design. These models possess several lightning-rod features that have sparked considerable debate among product reviewers and users in the online community. I have a somewhat different view of these features after having switched from a previous generation (2007) entry-level MBP to the new intermediate (2.66GHz Intel Core 2 Duo) model.



Figure 1. The MacBook Pro features an ultra-glossy screen, single FireWire 800 port, multimedia card slot, latchless lid (left), and aluminum unibody design (right).

Battery. Perhaps the most controversial new feature is the MBP's battery. It cannot be replaced by the user. If your on-the-go activities are energy-intensive (e.g., gaming, digital video editing, MP3 conversion) and you drain the MBP's battery, you're stuck until an electric outlet becomes available. Furthermore, when the MBP's battery permanently kicks the bucket, you need to bring the MBP to an authorized Apple service center and pay for a technician to install a new battery.

I, for one, am thrilled that Apple has made the MBP's battery non-removable. This relieves the user of

responsibility for properly and safely disposing of spent batteries; instead, Apple now shoulders the burden and becomes a single point-source. Computer batteries are so bad for landfills and the environment that it is well worth the minor inconvenience of having to include efficiency as a factor in planning your usage of the MBP during travel.

As an aside, Apple officially claims that the new battery lasts up to seven hours on a single charge, and that it can be recharged up to 1,000 times before its capacity begins to diminish. This claim should not be taken literally. The reason is that real-world values are highly dependent upon the usage model—energy-intensive tasks such as gaming and digital video editing will deplete the MBP's battery more quickly than reading e-mails and entering data in spreadsheets.

In my experience, the new MBP's battery does indeed last longer. Its charge level typically is 80-90 percent at the end of my daily commute, while my 2007 MBP's battery charge level routinely was only 60-70 percent under comparable conditions.

Card reader. The new MBP comes with a slot for certain digital media cards (Secure Digital and Secure Digital High Capacity; other formats require an adapter). This could be a convenience for digital photographers while out in the field. However, the downside is that Apple carved out space to accommodate this slot by eliminating the ExpressCard/34 slot that was standard in previous generation MBPs. This means that users who depend upon an ExpressCard/34 slot for expansion purposes (e.g., eSATA, extra FireWire and/or USB ports, network interfaces, RAID) will be out of luck.

Apple responded to the resulting pile of criticism by 1) claiming that the absence of an ExpressCard/34 affects less than 10 percent of users, and 2) including an ExpressCard/34 slot in the top-of-the-line (17-inch) MBP.

I view the debate about this feature as somewhat ironic. In the olden days, when Macs possessed built-in grayscale screens and floppy drives, a common criticism was that these computers had hardware features (e.g., built-in speaker, SCSI port, etc.) that few (if any) users would possibly want. This meant that buyers were required to pay for hardware that they did not want or use. We seem to have come around full circle; the current criticism about the ExpressCard/34 slot suggests that we now are more willing to pay for features that a minority of buyers will actually use.

Speed bump. The new MBPs, regardless of screen size, now have faster Intel CPUs than any previous generation.

Q: What's so controversial about that?

A: Most of the published benchmark values show "only" up to 10 percent improvements over the corresponding first version unibody models.

I might be the only person on the planet who has given up on using benchmark values in making a purchase decision. Notebook computers have become so fast during the 21st century that, for users other than gamers and graphic artists, comparing benchmarks in justifying a purchase is like comparing 0–60 mph benchmarks between the Accord, Camry and Malibu.

Other controversies. The new MBPs retain the following lightning-rod features that were introduced in the first-generation unibody models: a highly glossy screen (Apple offers a custom \$50 matte screen, but only on the 17-inch models); only two USB ports are included, and both are on the MBP's port side (rather than divided between port and starboard); the trackpad consists of a single big button rather than two smaller

ones; the on-off button is very small; and the keyboard has a different feel attributable to a different mechanism than in previous-generation MBPs.

Yes, the screen is exceptionally glossy, and I'd be just as happy not to see my own mug in it. (Note: I scarcely notice the glare when I'm focusing on what I'm doing instead of focusing on the screen, even while working outdoors.)

Yes, it's annoying that Mac OS X (Leopard) requires a restart after switching between the integrated Nvidia GeForce 9400M and the dedicated GeForce 9600M GT card.

Despite these controversial lightning-rod features, however, I'm more satisfied overall with my new unibody MBP than my previous-generation one. The latter was highly user friendly, good quality and met my needs. However, the new one is even more usable. For instance, it feels and runs cooler, is more environmentally responsible (I still wish the MBP were manufactured in the U.S., however), the optical drive is silent during bootup and restart, the latchless lid is much more convenient to open and close, and the keyboard is recessed sufficiently to prevent contact with the screen.

And prospective buyers (especially ones in the current economy) probably will be pleased that Apple cut prices across the MacBook Pro line so that the new models are more affordable than before (the 15-inch models now start at \$1,699, down from \$1,999; the 17-inch models start at \$2,499, down from \$2,799).

I was.

Reviewed by Barry Fass-Holmes



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

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

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

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

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

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

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

Learn more at www.charlescarr.com.



ComputerQuick Reviews

News and Reviews from Readers and Staff

ComputerQuick Reviews

“Computer Product
Opinions from
ComputerEdge
Readers and Staff”
by ComputerEdge
Staff

A reader is running
into an annoying
problem with
saving data to
networked hard
drives. Any input?

Using Network Hard Drives

I have been using the Linksys model LSLU2 network hard drive and the Buffalo network hard drive. One problem both have is linking a file with another doc. This problem exists in both Microsoft Office 2002 through 2007 Word, as well as OpenOffice 3.1.

Let me explain the linking with an example. We have a logo that we have on the top of all letters. This logo sometimes gets changed, so we link all the form letters to the logo file. That way, when we change the logo, all letters start with the corrected logo. We bring up the logo file for a new form letter, and then in Word do a Select All and Copy. In the new form letter, we do a Paste Special and do the link option. That works fine on the C drive. However, if the logo file is on a network hard drive, there is no update.

Thought you should know.

We Want Your Opinions About Hardware, Software and Web Sites

Over the years, *ComputerEdge* has had great input from our readers. In particular, people have submitted short reviews of equipment, software and Web sites that they really like. In some cases readers have offered tips (such as avoiding flakes on Craigslist). ComputerQuick Reviews is our column dedicated to highlighting those things that you most like and want to recommend to others. The problem is that if this column doesn't appear, it becomes forgotten and less likely to receive input from you.

We have decided to include this feature in every issue as a reminder that this is your magazine—even if we don't have any new reader reviews. If you would like to see the type of reviews that we have run in the past, then check out ComputerQuick Reviews (webserver.computoredge.com/sitemap.mvc?feature=Columns&columnedcode=persrev&column=ComputerQuick%20Reviews) in the *ComputerEdge* Site Map. You will find that they are quite varied. We would like to see more. Consider this column a gentle prod saying that we would like to hear from you.

You can send us an e-mail at ComputerQuick Reviews Submissions (ceeditor@computoredge.com).

The purpose of this column is to give our readers an opportunity to express their opinions about products and services that they have found particularly useful. If you have had experience with hardware, software or a Web site that made you say, "This is really great! I want to tell everyone about it," then this is a good place to do it. While we do want to post warnings, we are not interested in slamming the obscure bad products, because there are too many of them. We would like to hear about those things that you would recommend to your best friend. The only caution is to please use proper capitalization (do not use all caps) and complete sentences. If it takes us too long to edit the piece, it may be a long time before it's published on this site.

Please send your personal reviews to [ComputerQuick Reviews Submissions](mailto:ceeditor@computoredge.com) (ceeditor@computoredge.com).

ComputerEdge always wants to hear from you, our readers. If you have specific comments about one of our articles, please click the "Tell us what you think about this article!" link at the top or bottom of the 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 "ComputerQuick Review", or yell at us, please e-mail us at ceeditor@computoredge.com.

EdgeWord: Do Your Fingers Fit Your Computer?

“Putting Portable Computing into Perspective” by Jack Dunning



There are three primary types of mobile computers on today's market: laptops, netbooks, and phone computers. Each of these has distinct advantages and disadvantages.

Some people are predicting that netbook computers will replace phone computers, such as the iPhone or the Palm Pre. That's just silly. No one is going to want to carry around a netbook computer to use as a telephone. People have become too accustomed to carrying a cell phone in their pocket or purse. A netbook is too big to be anyone's constant companion. It is time to put all of these portable computers into perspective.

There are three primary types of mobile computers on today's market: The laptop computer, the netbook computer, and the handheld computer (usually in the form of a phone). Each of these has distinct advantages and disadvantages. In the long run, there may not be a place for all three types of computers, but for now they will coexist.

The overriding factor in designing computers is the size of human fingers. Whether designing a keyboard or a touchscreen, everything must be built in relationship to what we can do with our hands. This is a major limitation that must be considered in computer phones, netbooks and laptops. If we can't work it with our fingers, then we don't want it.

The Laptop Computer

One of the most important features of a laptop is the size of the keyboard. Our fingers need to fit comfortably. Keyboards have been condensed on the smaller laptops through the elimination of the numeric keypad. For most people, the keypad is not missed. As long as the basic keyboard layout is available, we can use the top row for numbers. The cursor arrows are available on most laptops.

Because the laptop computer is so easy to use in most work (and home) situations, it has started to replace the desktop as the computer of choice. It is self-contained and has as much power as most desktop computers. It can be set up in any situation and moved quickly if more space is needed on the desk.

The laptop generally comes with everything that you need in a computer. This makes the buying decision easier. As long as it has the basics and fits the right price range, it can be bought right off the shelf. You may end up with some features that you don't need, but trying to eliminate them usually won't save any money.

To compete with the desktop computers, the laptops continue to offer larger screens. Although if the screen becomes too large, it is no longer portable—rather, it's a luggable. The larger screen sizes have made it easy to reintroduce the numeric keypad to the keyboard.

A mousepad is a common feature added with the larger screens on today's laptops. Other than for emergencies, I consider the mousepad a space filler. (It's so awkward to use that I turn it off and plug in a

mouse or trackball.) Frankly, laptop designers don't know what else to do with the extra console space generated by larger screens.

If it's a Windows laptop, it will generally come with Windows Vista Home Premium—normally with the 64-bit version. This is fine for anyone who doesn't need the features found in Vista Business or Ultimate.

Now that laptops are taking over the desktop market, they have become heavier, losing one of their primary attractions—light weight. The netbook has been brought in to fill the gap left behind by the laptop. The netbook is stripped down to the bare essentials to make it light and ultra-portable.

Netbooks

The netbook is so named because its primary purpose is to get someone on the Internet, which is how most people regularly use their computer. It's stripped down to make it light and inexpensive. The screen size is 10 inches or less, which means that the keyboard is correspondingly compressed. (If you have large fingers, you may find it cramped.) The price is generally between \$300 and \$400. As a computer, the netbook is designed to be light (two to three pounds) and adequate.

The operating system is generally either Windows XP or Linux. For general uses, either one of these systems has plenty of software to support it. There is some question about whether Windows 7 will be put on netbooks.

The netbook is definitely more convenient for travel, but if you use your computer for any type of graphics work, the experience may be frustrating.

The netbook will not replace the laptop because physically it will never be as comfortable as a larger laptop. It may be great for road trips, but it soon becomes annoying for everyday use—even surfing the Web.

Phone Computers

The iPhone and Palm Pre are examples of phone computers. The idea is that, since we are accustomed to carrying a phone around in our pocket, the phone may as well double as a computer. The problem is that our fingers are too big. There are many tricks, such as flip-out keyboards and touchscreens that have made it easier, but our fingers will always be too big. This will prevent the phone computer from replacing even a netbook, much less a laptop.

There are many useful apps for the phone computers. They are small, quick and easy to use while you are on the go. That's why they are assigned the diminutive name "app"—rather than the more substantial term "application." Although there are many useful apps for their phone computers, people sit down to their "real" computer to do real computer work.

The advantage of the phone computer is that you can easily take it with you everywhere—and you do. For people who are in work that keeps them moving, I suspect that the handheld device is a godsend. However, I'd be willing to bet that when they get serious about computing, they sit down to either their desktop or laptop computer—either at home or in the office.

Many people may own all three types of computers. One will be for phone calls, playing games, and picking up e-mail. Another will be a light way to do a little real work while traveling—without injuring your back. The last will be the workhorse that does virtually everything that can be done with most

desktop computers.

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



Editor's Letters: Tips and Thoughts from Readers

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

"Broadband Connection Problems," "Compatibility with Dragon NaturallySpeaking," "True Image 11"

Broadband Connection Problems

[The following letters are in reference to Digital Dave's July 31 column, where a reader wrote in about frustrated with cable broadband and Internet experiences.]

They all promise to be as fast as Cox, but they're not. You get what you pay for. Excellent high speed, reliability and service. Yeah, from Americans right here. On-site support and all. The e-mail service is the best, with two-gig storage. All of the rest are slower, less reliable or have some other encumbrances. Why do they insist on being "cost-driven"? It's not that much more. I mean, *who* really needs to record four events simultaneously?

-Bob Coughlin, El Cajon

Couldn't agree more with Bob Coughlin regarding Cox Cable. I had Cox during the @Home years and beyond. I was also a tier II rep for its high-speed service, and customer satisfaction was always number one. Unfortunately, I had to move out of a Cox territory to one serviced by AT&T— just pathetic. What a lesson in appreciating what I had before.

-Gary Weinstein, Groveland, CA

I have had Time Warner Cable with Road Runner for years. Fortunately, I've got the experience to keep it running for my family and me. Many times I've had to Telnet into the POP server to find and fix problems with e-mail queues. Their telephone support is, in a word, awful. I don't know how a regular person would do it. I rarely use their Web-based client, but it seems no worse than Yahoo's or the quirky Web interface to Gmail.

One big negative to Road Runner, and I assume Cox and AT&T are the same, is that you can't SMTP mail to their server from off of their network. Road Runner has simply refused to provide secure SMTP or IMAP connections to get around this, so I use Gmail as my outgoing mail service when I'm using my laptop away from home or when I'm using my mobile phone. I could send my mail with their Web interface, but I've chosen not to use it for mail-archiving reasons and because it seems more prone to be hacked. (I can't substantiate that fear; just chalk that one up to perception.)

-Arch Hughes, San Diego

I have DSL service with DSL Extreme. I thought I was getting a very slow speed for my connection. I was trying to get 3MB speed, and I was getting just over 1MB.

I called DSL Extreme, and they actually sent an AT&T rep to my door in two days. They checked the phone line and verified that, in fact, I was getting 3MB at the house (they showed me the meter).

I later called again, repeating the problem, saying I would pay for an inside house check. Again, they sent an AT&T rep in two days. She checked my in-house lines, verified there was a problem, changed some lines, and voilà! I now have 2.5MB service, and am a happy camper! Then she said there would be no charge! Kudos to DSL Extreme. I have been with them for about two years and consider them very reliable, and support is great!

-Bill B., La Mesa

In response to J. Christensen's poor service with Time Warner, I think most cable companies have (usually exclusive) service agreements with the cities they serve. J should contact his city mayor and/or councilperson to complain. Unlike us regular customers, elected politicians at least have some clout to do something about it.

-Tom, Santee, CA

Compatibility with Dragon NaturallySpeaking

[Regarding Jack Dunning's June 19 article, "Google Wave Combines E-mail with Instant Messaging":] My only concern is whether Google Wave will be compatible with Nuance's speech-recognition software, NaturallySpeaking, which I must use for both e-mail and word processing, due to a clenched left fist.

-Richard Fletcher, San Diego, California

True Image 11

[This comment is in regard to the July 31 ComputerQuick Reviews column, where a reader wrote in about problems with True Image 11.0 reading an external backup drive.]

Yes, I had a similar issue. A different version of TI worked.

In any event, check your BIOS and ensure that if you have a line item like "Legacy USB" or "SCSI Devices" support, then ensure that its status is set to enable.

-Chris Romel, San Diego

ComputerEdge always wants to hear from you, our readers. If you have specific comments about one of our articles, please click the "Tell us what you think about this article!" link at the top or bottom of the 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 "ComputerQuick 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 cwebmaster@computoredge.com with questions or comments about this Web site.

Copyright © 1997-2009 The Byte Buyer, Inc.

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