

ComputerEdge™ Online — 04/02/10



This issue: The Many Faces of Facebook

Social networking site Facebook is an Internet phenomenon. Here's how Facebook is being used by millions of people.

Table of Contents:

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

Digital Dave answers your tech questions. Is it worth the extra money to pay a higher price for a computer when cheaper ones are available?; a reader's Clipboard won't purge itself without a reboot; a computer has been put into sleep mode, and now won't wake up.

[Facebook Ins and Outs](#) by Dawn Clement

Facebook is a social phenomenon and a goldmine for marketers. It's clear that Facebook is extremely popular. But who are these people, and what are they doing on Facebook? Here's a current "status update" on the world's most beloved social network.

[Game Playing on Facebook](#) by Andrea Dunning

Online fun for the casual gamer. Sure, Facebook can help you keep in touch with friends, family and long-lost elementary school classmates, but it is also an online gaming platform, perfect for the casual gamer.

[Windows Tips and Tricks: Windows 7 HomeGroup](#) by Jack Dunning

Share and share alike—with HomeGroup Windows 7 has made sharing with other Windows 7 users much easier through the implementation of Windows HomeGroup—and Windows Libraries are integral to how HomeGroup works.

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

The Coming of the iPad With the imminent arrival of Apple's iPad on April 3, expect Apple to continue making a profit while its competitors struggle to keep up. Also, programming the iPad; if you're in the market for a Macintosh laptop, wait; advice on buying Apple stock; and a tip on moving the cursor by holding down the Command key and pressing one of the arrow keys.

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[Linux Lessons: Samba](#) by Jack Dunning

Making Linux Look Like Windows to Windows Computers
A program called Samba makes a Linux computer look like a Windows computer over a network, solving compatibility dilemmas.

[Rob, The ComputerTutor: Technology Solutions](#) by Rob Spahitz

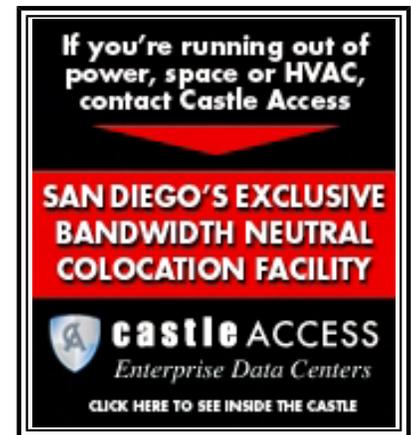
JavaScript in Action
Last week, we created an HTML form. This week we will use JavaScript to validate the data that a user enters into the form.

[ComputerQuick Reviews: Pretty and Pink](#) by Marie Loggia-Kee

Exploring the Dell Inspiron Mini 10 Netbook
Dell's Inspiron Mini 10 netbook, in pink, is a lightweight machine that can do just about everything as a full-size laptop. That's more than tempting!

[Spam of the Week: The Apple Store](#) by ComputerEdge Staff

The latest in annoying and dangerous e-mail currently making the rounds.
This week, a faux e-mail seemingly from the Apple Store aims to tempt users into downloading malware.

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DEPARTMENTS:

[EdgeWord: A Note from the Publisher](#) by Jack Dunning

The Era of Ultra-High-Speed Internet Is Upon Us
Google is testing an ultra-high-speed Internet fiber-optic system. There is only one problem with bringing about this new, faster future—it's expensive to lay fiber-optic cable.

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

Staff

Computer and Internet tips, plus comments on the articles and columns.
"JavaScript and Java," "What's a Cloud Service?," "Cloud-Computing Security," "Video Streaming," "Beginning of a New Era," "Linux Thoughts"

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[Return to Table of Contents](#)



Digital Dave

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

Is it worth the extra money to pay a higher price for a computer when cheaper ones are available?; a reader's Clipboard won't purge itself without a reboot; a computer has been put into sleep mode, and now won't wake up.

Dear Digital Dave,

I've noticed that some new computers cost twice as much as others, yet when I look at what's in them, they look very similar. Is it really worth the extra money to pay the higher price?

*Randy Johnson
Santee, CA*

Dear Randy,

Maybe yes—maybe no. It really depends upon your situation. The more expensive computers are worth the money, but possibly not to you. There are a number of steps that manufacturers take to reduce the cost of a computer so that two similar machines (Windows 7 Home, 64-bit, four gigs of memory, 320GB hard drive, monitor, keyboard and mouse) can have a huge difference in price—\$500 to \$1,000. Following are some of the differences. You can determine which are important to you.

The more expensive computer will generally have a faster processor (CPU). However, unless you are doing some high-end computing, today's processors are so fast that you will never see the difference when browsing or word processing.

The cheaper computers will include DDR2 memory, while the more expensive rivals will offer the newer DDR3 memory. DDR3 memory is faster and has more future expansion potential, but for most uses DDR2 is fine and less expensive when adding more.

The motherboards in the economy machines usually have less expansion slots available. However, since USB ports, video and network support are all built into the board, the average user will not need much in the way of expansions.

The network port in the low-cost computer will generally be 100 megabit rather than the newer one-gigabit bandwidth. Unless you are running a gigabit network, 100 megabit will suffice. Also, the more expensive computer may include the higher speed 802.11n Wi-Fi standard. If the scaled-down computer includes wireless networking at all, it is probably the 802.11g standard.

There is probably no separate video card in the low-price computer, plus there will only be one expansion slot for the latest gamer video cards, which may need two slots. The motherboard will only offer VGA input for your monitor.

The monitor, although probably just as capable, will be a little smaller in the less-expensive computer. The keyboard could seem like a toy keyboard, and the mouse may be mechanical (roller-ball on the bottom) rather than the laser type (no moving parts).

There may be some minor differences in the drives (hard and DVD), but in most cases these will not be significant. There could be a better power supply in the more expensive one. More power, quieter, etc., plus high-end video cards have special power requirements. There might also be an included warranty or service agreement driving up the price, although the

machines I was looking at all had the same warranty.

Some computers are just overpriced because they depend on the brand name to sell it.

For many people who plan to use much of their current hardware (monitor, keyboard, mouse, video card, etc.) in the new computer, the bargain package could be a much better way to go. The other option is to buy a barebones computer without those extra pieces, but it will still cost about \$300 for a low-end package with four gigs of memory, hard drive and DVD drive.

Digital Dave

Dear Digital Dave,

I have a computer with XP, Service Pack 2. This computer has never been on the Internet. For some reason, the Clipboard will not purge itself unless I reboot the computer. This is awkward. Any remedies? If you have answered this question before, please give me a reference.

*Richard
Palm Desert, CA*

Dear Richard,

I have discussed the Clipboard before, but not in your exact context. As mentioned in the previous article, the program clipbrd.exe will allow you to view the contents of the Clipboard and—as pointed out by a *ComputerEdge* reader—it will allow you to delete the contents of the Clipboard without restarting the operating system.

Fortunately you have Windows XP, which was the last version of Windows to include the program. However, if someone has Windows 7 Professional or Ultimate, they can get clipbrd.exe by installing Windows XP Mode and running it in the Virtual PC—both free downloads (www.microsoft.com/windows/virtual-pc/). The Clipboard viewing program is located in the same folder in Windows XP Mode as referenced in the previous answer.

I'm trying to think of the last time I needed to delete the contents of the Clipboard—no, never! I'm sure there are good reasons to delete Clipboard contents—maybe it holds an inappropriate image—but there are quicker ways to clear it. All you need to do is highlight any space character (hold down the left-mouse button and drag over the blank space) in any window and hit CONTROL+C. That will replace the contents of the Clipboard with the copied space. Albeit, the Clipboard still holds the blank space character, which, technically, is not an empty Clipboard, but that would be good enough for me.

Digital Dave

Dear Digital Dave,

I have a friend who has an HP computer running Windows Vista 32-bit OS. She always puts the PC in sleep mode, at least three or four times a day from what I can tell.

This past month or so, she hasn't been shutting it down at night like normal—she has been putting it in sleep mode overnight. (I myself don't like the sleep mode option. I feel it runs down the video card and the power supply. Not sure on this, though, it's just my personal feeling.)

Well, the other morning she went to use her PC, and for whatever reason she could not get it out of sleep mode. Usually a keystroke or a mouse movement would do the trick, but not this time.

Any suggestions as to how to remedy this? We have tried turning the PC off and waiting a minute before turning it back on, but nothing. We've also tried unplugging the power supply with the same results—nothing.

*Tony
San Diego*

Dear Tony,

I, too, am not particularly fond of the sleep mode in Windows Vista, but not for the reasons you specify. The sleep mode will have very little impact on either the video card or the power supply. In fact, turning the computer on and off could theoretically do more damage to either.

When a computer is turned on, there is a minor power spike absorbed by the power supply and other components. Systems are built to withstand the impact of these small surges. When you leave a computer on, the components do deteriorate over time and use more power, but it is difficult to determine whether it is better for a computer to leave it running or turn it off every night. By putting the computer to sleep, you are reducing the wear and tear on components—many devices will be turned off—and reducing the use of electricity.

I might use sleep mode, except that it goes to sleep even if I leave the computer working on something like a download or long compile or query. Sleep only seems to care about user input. This is unacceptable.

Another issue I've had with the sleep mode in Windows Vista is that sometimes it does not respond to a wake-up call. It occasionally crashes. I find this more annoying than turning off the computer, because it will take that much longer (system checks) to boot up again. If I want to keep my computer running, I will usually modify my power options to turn off the display and drives without going into standby. I also avoid the hibernate mode, which is an even deeper sleep.

Having said all that, I don't think the problem your friend is having with her computer has anything to do with the sleep mode. She has a basic power problem—either the power supply, power switch, or power cord. If you restart a computer and get nothing—no noises, no lights—then it's a basic power problem called the "dead computer syndrome." Unless you're comfortable with working on computers (i.e., replacing power supplies, power switches, etc.), get some help from the kid next door.

Digital Dave

[Return to Table of Contents](#)



Facebook Ins and Outs

“Facebook is a social phenomenon and a goldmine for marketers.” by Dawn Clement

It's clear that Facebook is extremely popular. But who are these people, and what are they doing on Facebook? Here's a current "status update" on the world's most beloved social network.

Social networking sites are all over the Internet, and it's no surprise. Human beings are social by nature and feel a primal urge to connect with other people. By any account, Facebook is the most popular social networking site on the Internet right now. Founded in the spring of 2004 by Mark Zuckerberg (while he was still a student at Harvard University), Facebook has more than 400 million active users worldwide. Compare that to the number-two site, MySpace, which has only 200 million users.

It's clear that Facebook is extremely popular. But who are these people, and what are they doing on Facebook? The average Facebook user is a 31-year-old, college-educated, Asian woman living in New York. She uses Facebook to keep in touch with her friends, share photos and play Farmville. You may be a 19-year-old Caucasian boy living in Vancouver, but odds are high that you also have a Facebook account. With more than 400 million active users, there are an infinite number of types of possible users.



Just as in any form of social interaction, there are unspoken rules of etiquette when you use Facebook. Etiquette is a catchall term for rules that govern social behavior. On Facebook, a breach of etiquette can get you "de-friended." The most common faux pas is posting something private on a friend's wall. There are several ways to communicate on Facebook, and the most misused is the wall. When you post something on someone's wall, it is visible to everyone. If something is overly personal, it's more polite to send a message (Facebook's version of e-mail) instead of posting it on your friend's wall. This is such a common problem that there are entire Web sites devoted to embarrassing wall posts. To get an idea of what constitutes an embarrassing post, check out "My Parents Joined Facebook (www.myparentsjoinedfacebook.com)."



Another common complaint from Facebook users is the ever-increasing number of status updates, notifications and game-related posts that clog our walls. One of the reasons why Facebook is so popular is the ease with which you can update everybody you

know with you-related news. The problem is that you can easily update everybody you know with too much you-related-not-news. For example, "I got accepted to Harvard!" is legitimate news, while "I dropped a sock!" is not. These frequent updates might be cute if only one person were doing it. However, the average Facebook user has 130 friends. If only half of those friends updated their statuses every hour, you would have 1,560 updates in your feed each and every day. Real items of interest would then get lost. If you want to be considerate of your friends, you will go easy on the status updates, and if this is one of your pet peeves, you probably want to update your application settings to limit wall posts.

A word of caution about "tagging" people in photographs that you have posted on Facebook. Facebook allows users to tag individuals in photos, making that photo appear on the individual's wall. For some reason, some people have a problem with this, and they may have a valid concern. The wrong photo or words can get you fired (moremoney.blogs.money.cnn.com/2009/04/21/fired-for-facebook-dont-let-it-happen-to-you/), get you dumped (news.cnet.com/8301-17852_3-10230530-71.html), get you evicted (www.dailymail.co.uk/news/article-1169709/Tenants-evicted-landlady-sees-pictures-Skins-style-parties-home-Facebook.html), and even killed (www.huffingtonpost.com/2010/02/19/woman-stabbed-by-jealous_n_467979.html). Of course, you may just be embarrassed by that picture of yourself bending over, picking your nose, or showing off your new Speedo.

If you post photos of yourself that get you in trouble, you have no one to blame but yourself. However, it's another matter altogether when someone else posts photos of you online. Before you post a photo of someone else, ask yourself a simple question: "Is this a flattering picture?" If it's not, don't post it. It's always better to err on the side of caution when it comes to posting photos online, and definitely ask before tagging anyone on Facebook. If you really want to post something and tag the people in it, e-mail the picture to the people who are in the picture first.

Besides keeping up with friends and posting embarrassing photographs, Facebook users like to play games. Games are extraordinarily popular on Facebook. There are more than 500 games available, and new ones are constantly being developed. Facebook has, in fact, become a gaming platform in its own right. More than 82 million people play Farmville and more than 30 million play Cafeworld. Zynga Game Network, founded in 2007 by Mark Pincus, has developed 42 of the games now on Facebook. Farmville, which won "Best New Social/Online Game" at the Game Developers Choice Awards last year, is a Zynga product.

There could be a couple of reasons why these games are so popular. They are browser-based, which means that they do not require users to download and install software onto their computer. In addition, most of the games can be played on phones and handheld devices (which are becoming more sophisticated and ubiquitous). They are also all games that can be played briefly without penalty in the game. This makes them ideal to kill time during, say, conference calls or other boring periods of the day (which may result in other penalties). Lastly, they appeal to women. This is hardly an insignificant demographic considering that approximately 60 percent of Facebook users are female!

Facebook is definitely a social phenomenon, and a goldmine for sociologists and marketers. It's about much more than whether you fit the "Average Facebook User" profile (and most of us don't). Whoever you are, and whatever things you like to do online, you can probably find a Facebook application to your liking. You can also learn a lot about human nature from observing how we use social networking sites with Facebook news and statistics from Web sites such as www.allfacebook.com and www.insidefacebook.com.

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.

[Return to Table of Contents](#)

Game Playing on Facebook

“Online fun for the casual gamer.” by Andrea Dunning

Sure, Facebook can help you keep in touch with friends, family and long-lost elementary school classmates, but it is also an online gaming platform, perfect for the casual gamer.

Sure, Facebook can help you keep in touch with friends, family and long-lost elementary school classmates, but it is also an online gaming platform, perfect for the casual gamer. Don't think of yourself as a gamer? You might be surprised at the variety of applications. There are four major categories: online versions of physical games, Facebook versions of video games, world-creation games and social networking games.

Scrabble is the first game that comes to mind when I think of board games on Facebook, but that is probably because the game was the focus of one of the plotlines of an episode of *Parks and Recreation* I watched recently. In truth, most classic board games are well adapted to Facebook. Players log in and make their move within the game application, at which point the game notifies the opponent that it is their turn. With some games, you can even set different rates of play, stretching out a game for weeks, if you so desire.

Card player? Facebook has poker in a variety of styles, blackjack, as well as tamer card games such as Uno and solitaire. Texas HoldEm Poker is the top card game application, which isn't surprising, considering the current popularity of the game. While not a good game to play with a few friends at a poker night, Texas HoldEm is an excellent game to play in short bouts or tournament style, so Facebook seems as good a way as any to round up some strangers to play against.

The screenshot displays the Zynga Poker interface for a Texas Hold'em game. At the top, a progress bar shows "Setup Progress: 20%" with a "Proceed to Next Step" button. The Zynga Poker logo is prominent, along with "6 friends online: Invite to play - Help - News (1 new)".

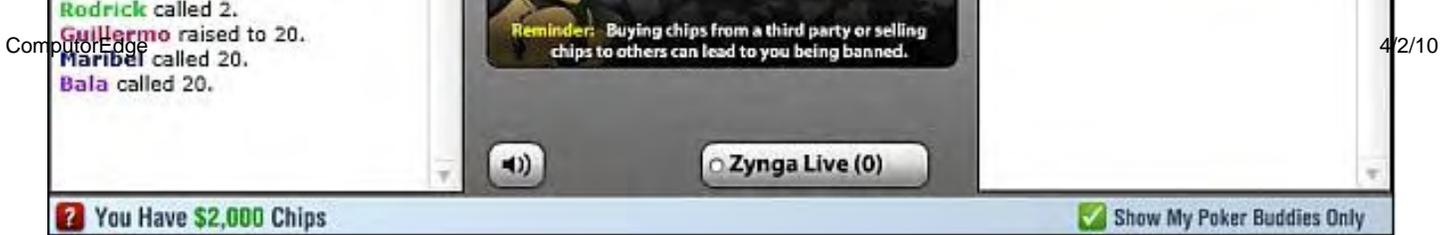
The main table area shows seven players around a green felt table. Each player's name, fish count, and current action are visible:

- 1-Fish Andrea: \$400
- 3-Fish Maribel: \$524 CALL
- 2-Fish Bala: \$2,199 CALL
- 2-Fish Murali: \$27
- 1-Fish Rodrick: \$398 CALL
- 2-Fish Tejnoor: \$200
- 2-Fish Guillermo: \$126 RAISE

On the left, a sidebar contains icons for Challenge, Gift Shop, Profile, Buddies, Get Chips, and Earn Chips. On the right, there are buttons for "To Lobby" and "Stand Up".

At the bottom left, a "Dealer Chat" window shows a log of actions: "Andrea joins the table.", "Andrea just earned the Welcome Wagon Achievement! 1,000 chips awarded!", "Rodrick called 2.", "Guillermo raised to 20.", "Maribel called 20.", "Bala called 20." Below this is a "Chat" window with a "MUTE" button and a "SEND" button.

A central pop-up message says "Please wait for the next hand" with a reminder: "Reminder: Buying chips from a third party or selling chips to others can lead to you being banned." The page number "8 of 38" is visible at the bottom.



Texas HoldEm

I may have played Tetris on my graphing calculator in math class, but most people probably remember playing it at the arcade or on a Gameboy. Now the arcade and classic game console experience is available on Facebook as well. Treasure Madness seems to resemble The Legend of Zelda, while Bowling Madness is a Wiimote-free version of Wii Bowling. There are, of course, several versions of Bejeweled, as the game could just about be classified as a narcotic.



Bejeweled Blitz

World-creation games run along the lines of SimAnything: You manage a virtual farm, fish tank, cafe, roller coaster park, etc., earning levels and points through the care and maintenance of your domain. Higher levels grant access to a greater variety of items for your world. Reciprocal gift-giving is also featured in most of these games. You give items to other players, and they in turn give items to you. FarmVille, the most popular world-creation game on Facebook, is a stripped-down version of the video game Harvest Moon. Gone is the crop watering; instead you just have to return in a certain number of hours to sell your harvest before it goes bad.

More unique to Facebook are the social networking games. Facebook calls them role-playing games, but in order to get ahead in these games you need to be part of a large social network within the game. Sorority Life and Mafia Wars are two of the more popular games in this category, and in both games your level and ability to battle other players depends on the number of friends you have who are also playing. On your own, you will be role *bckslsh*-playing a pledge or small-time thug. Ever since the birth of his second child, my brother-in-law hasn't had time for World of Warcraft, but lately Mafia Wars has been filling that craving (and saving him \$15 a month).

The world-creation and social networking games, specifically designed for Facebook as a platform, can only be played in short increments, perfect for coffee breaks. Both use regenerating statistics, such as character energy or animal hunger, to bring you back every few hours or days. Nothing is quite so depressing as signing back on after a week-long vacation only to find a tank full of dead virtual fish. They may not actually be alive, but you certainly feel responsible for their little digital fates.



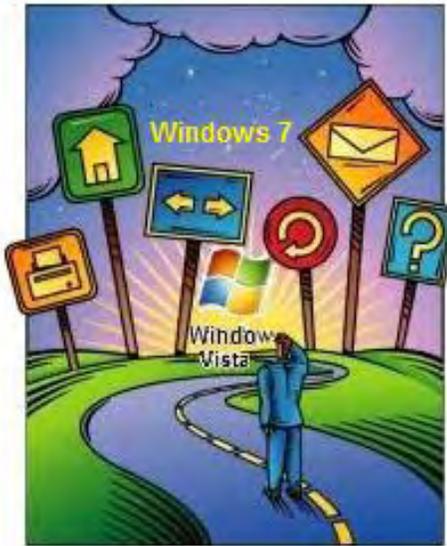
FishVille

World-creation and social networking games also share another aspect: paid content. The basic game can be played for free, but premium items are also available for purchase or by completing sponsored activities (such as filling out credit card offers). If you become entwined in a game, this adds a distinct element of frustration. Do you want to spend money to advance in an otherwise free game? Clearly some people do, and I appreciate their subsidizing my play time.

To start playing games, go to the Games tab, which can be accessed from the right-hand menu from your Facebook home page. The Games tab lists any games you have installed on Facebook in order of use; the games your friends have been playing recently; the three most recently played games by friends; and finally all Facebook games, organized by type and popularity. In order to play any game, all you need to do is click on the link and allow the application to access your profile.

Andrea Dunning is a digital cartographer, AutoCAD drafter, World of Warcraft player extraordinaire and blogger with a Master's in Education. She also serves as tech support for her less computer-savvy family members.

[Return to Table of Contents](#)



Windows Tips and Tricks

Windows Tips and Tricks: Windows 7 HomeGroup

“Share and share alike--with HomeGroup” by Jack Dunning

Windows 7 has made sharing with other Windows 7 users much easier through the implementation of Windows HomeGroup—and Windows Libraries are integral to how HomeGroup works.

When they wrote the code, the builders of Windows 7 were thinking about the future of home networking. If there are multiple computers in the home or office, each with its own set of documents, photos, music, or other files for entertainment or work, it's more practical to share those files than copy them back and forth between computers. Maintaining master copies is the purpose of a file server in the office environment. But rather than copy all the files to a central server, why not share them from their original location? With the explosive growth of digital music and photography, there is more demand than ever for this type of sharing.

We've already seen how sharing between two computers can be done in Windows 7 through Libraries, but if there are a number of computers in the network, the setup for each computer can become awkward. Windows 7 has made sharing with other Windows 7 users much easier through the implementation of Windows HomeGroup—and Windows Libraries are integral to how HomeGroup works.

You may have noticed the "HomeGroup" link in the navigation pane of Windows Explorer (hold down the Microsoft Logo key and press the E key) just below the "Libraries" link (see Figure 1). HomeGroup is a way of sharing your Windows Libraries with other Windows 7 computers. Every version of Windows 7 is capable of using HomeGroup and making the Windows Libraries available. All that is required is for HomeGroup to be set up and the specific libraries be shared. There is password protection that prevents unwanted explorers. (HomeGroup is not available with previous versions of Windows, since Windows Libraries are not supported in Windows Vista or Windows XP.)

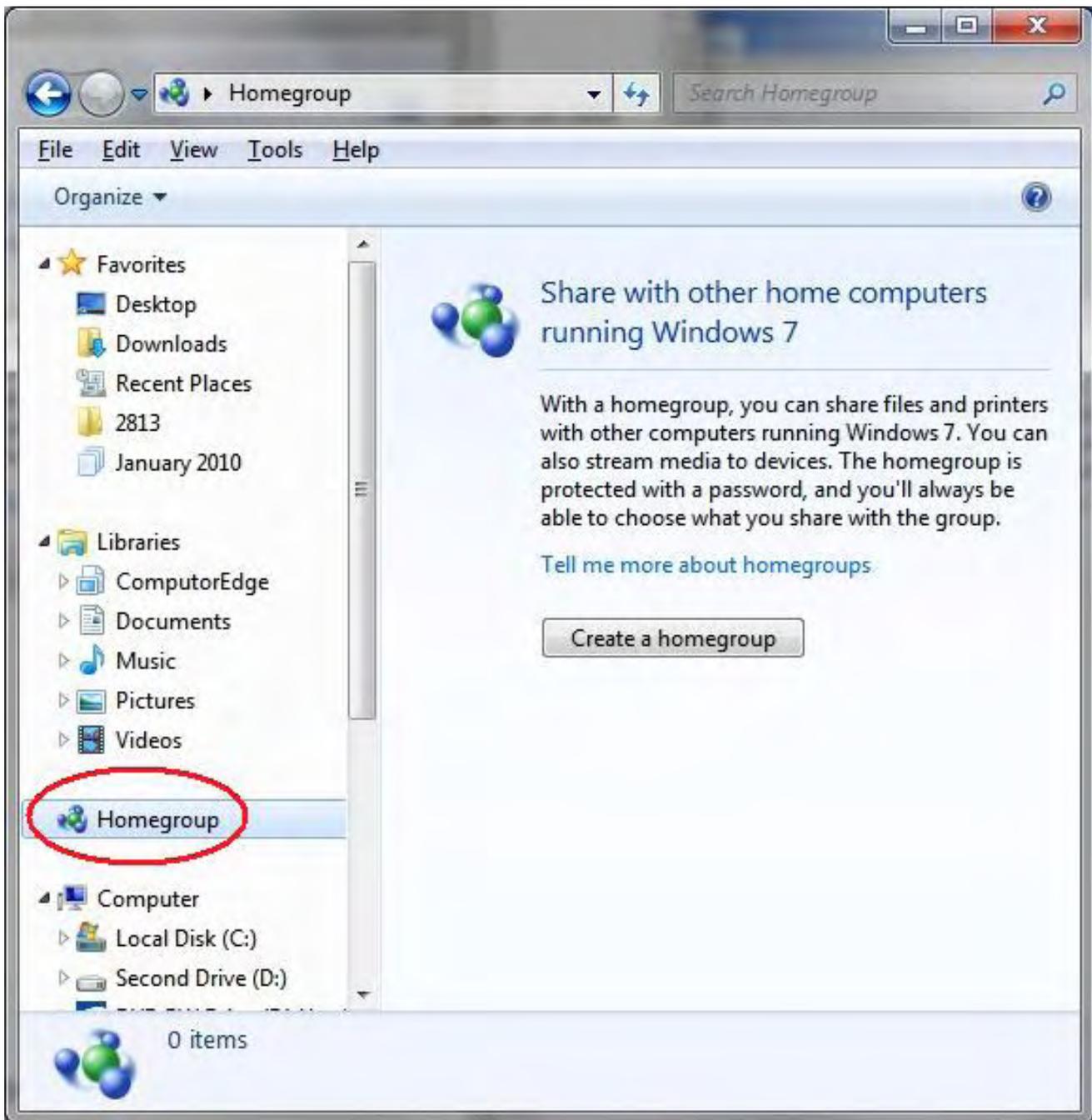


Figure 1. Window Explorer in Windows 7 includes a link for HomeGroup. HomeGroup allows the sharing of Libraries with other Windows 7 computers.

Using HomeGroup saves the need to create a new library on each Windows 7 computer to include files from other computers in the network. If a HomeGroup has been created and libraries shared, other Windows 7 computers on the same network will automatically recognize that there is a HomeGroup available. After logging in with the password, member computers will have access to libraries created and shared on other HomeGroup members.

Joining a HomeGroup is as easy as entering the password established by the first user of the HomeGroup. (Any member of a HomeGroup can change the password, but other members will need to log in again with the new password.) The shared libraries on the members' computers then become part of the Windows Explorer HomeGroup. Once a computer has joined the HomeGroup, its own shared libraries also become part of that same HomeGroup. Therefore, every computer in the HomeGroup is capable of seeing everything that's available on all of the member Windows 7 computers on the network. Windows Library settings can be used to restrict access to files for certain member computers and/or limit read/write capabilities.

When you first activate the HomeGroup, a password will automatically be generated for you. This password is easily changed after the HomeGroup is created. As a member of the HomeGroup, you do not need to remember your password since you can view it at any time. After you first create a HomeGroup, you will see instructions for how other Windows 7 computers can join the HomeGroup (see Figure 2).

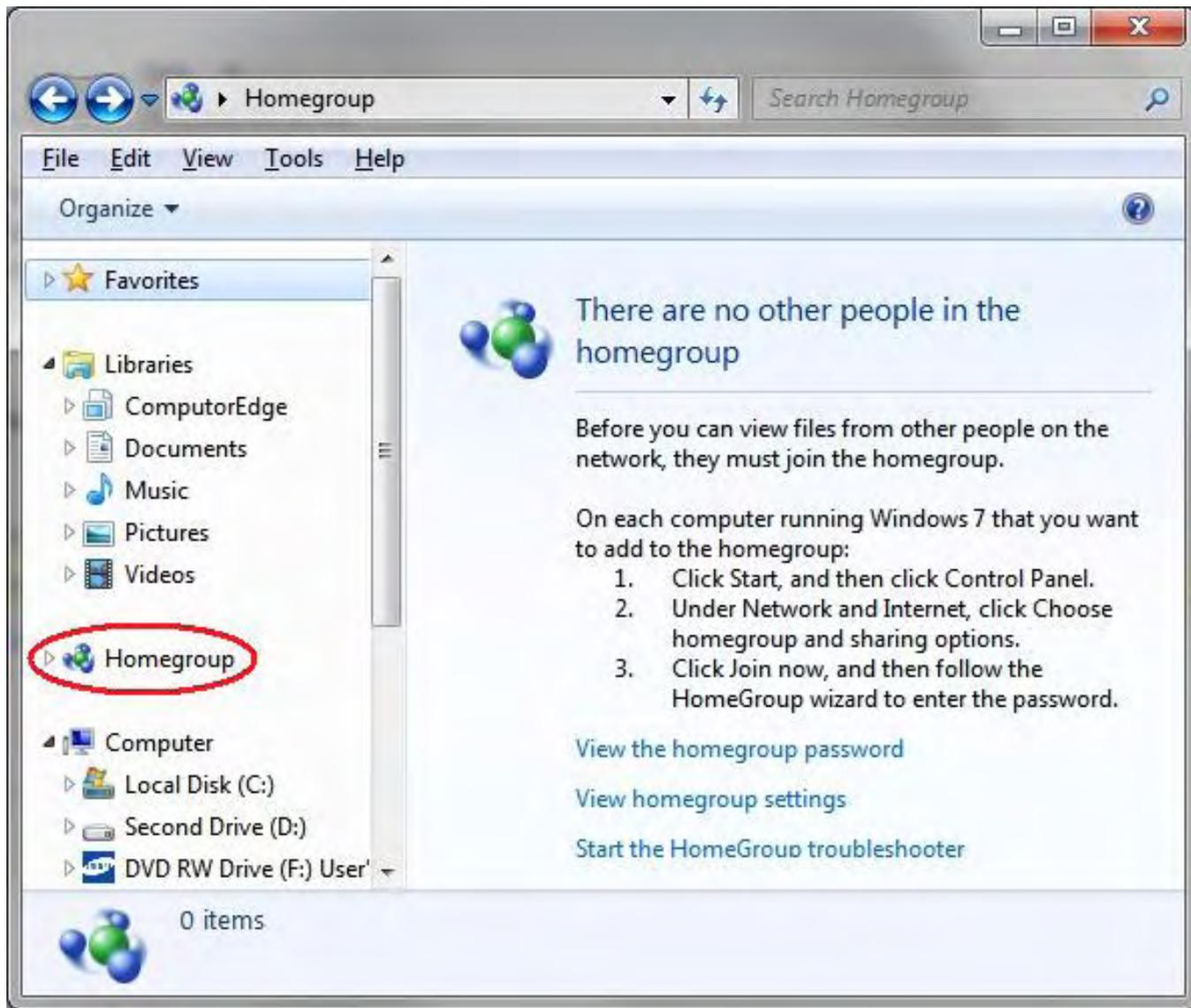


Figure 2. Windows 7 HomeGroup after it's been created, but before it is joined by another Windows 7 computer, displays in Windows Explorer instructions for joining the HomeGroup.

Note that you can access HomeGroup settings at this point by clicking a link in the viewing pane; however, once another computer has joined the HomeGroup, you will need to access the right-click menu to change settings. Open HomeGroup settings by clicking the link shown (or right-clicking the HomeGroup link and selecting "Change HomeGroup settings"). See Figure 3.

You can also open the settings by typing "home" into the "Search programs and files" field in the Start Menu and selecting "HomeGroup" from the top of the list. HomeGroup settings allow you to designate which type of libraries (and printers) you will share in the HomeGroup, plus a number of more advanced options.

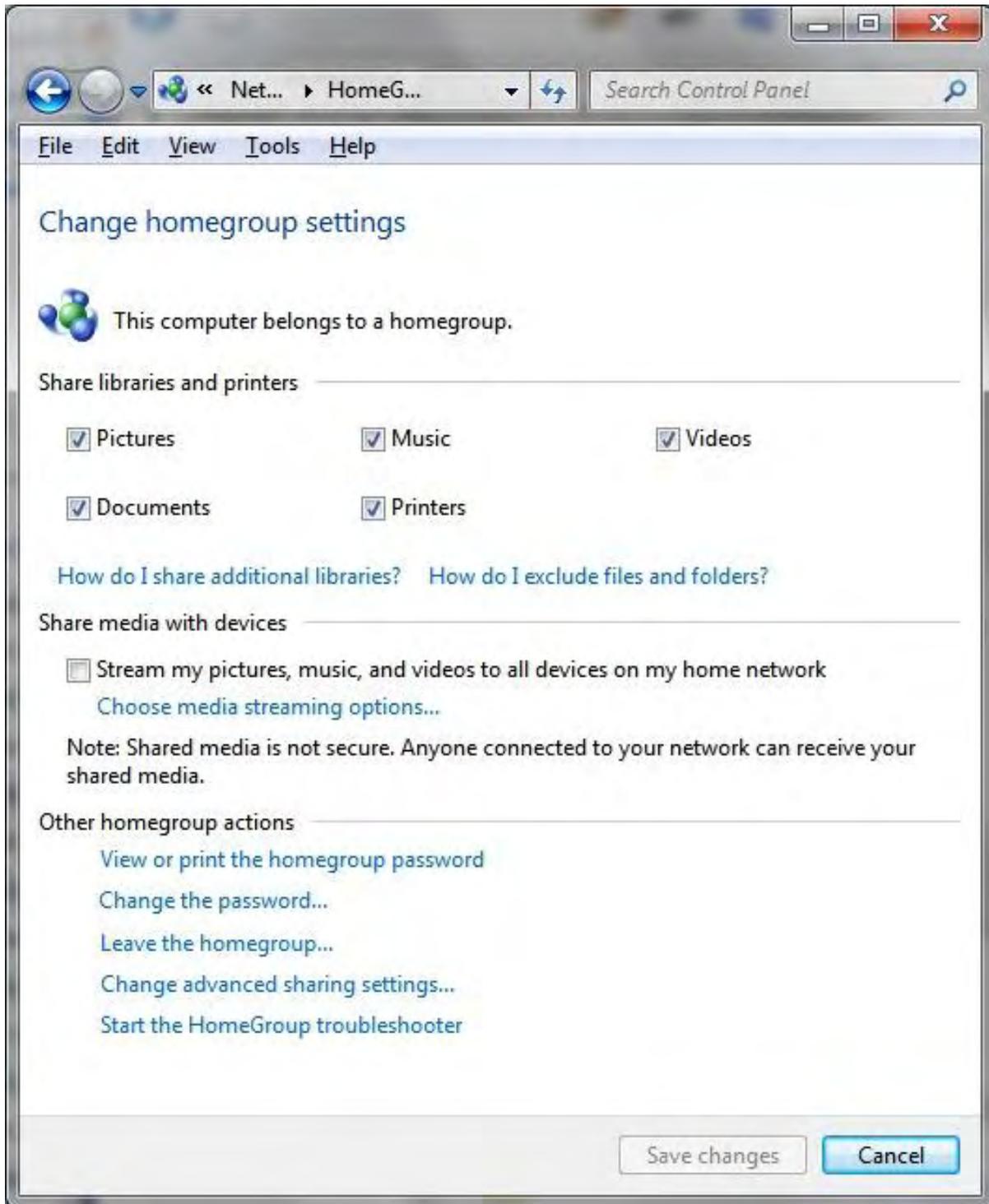


Figure 3. Windows 7 HomeGroup settings window.

I fired up the old laptop on which I had installed the soon-to-be-defunct Windows 7 RC (Release Candidate) version of the operating system last year. It was the only other Windows 7 computer that I had available for testing this feature. Once I joined the HomeGroup with the older laptop, I was able to access the files on my Vista laptop via the *ComputerEdge* library on the Windows 7 desktop (see Figure 4). (I discussed setting up and using this *ComputerEdge* library in the past couple of Windows Tips and Tricks columns.)

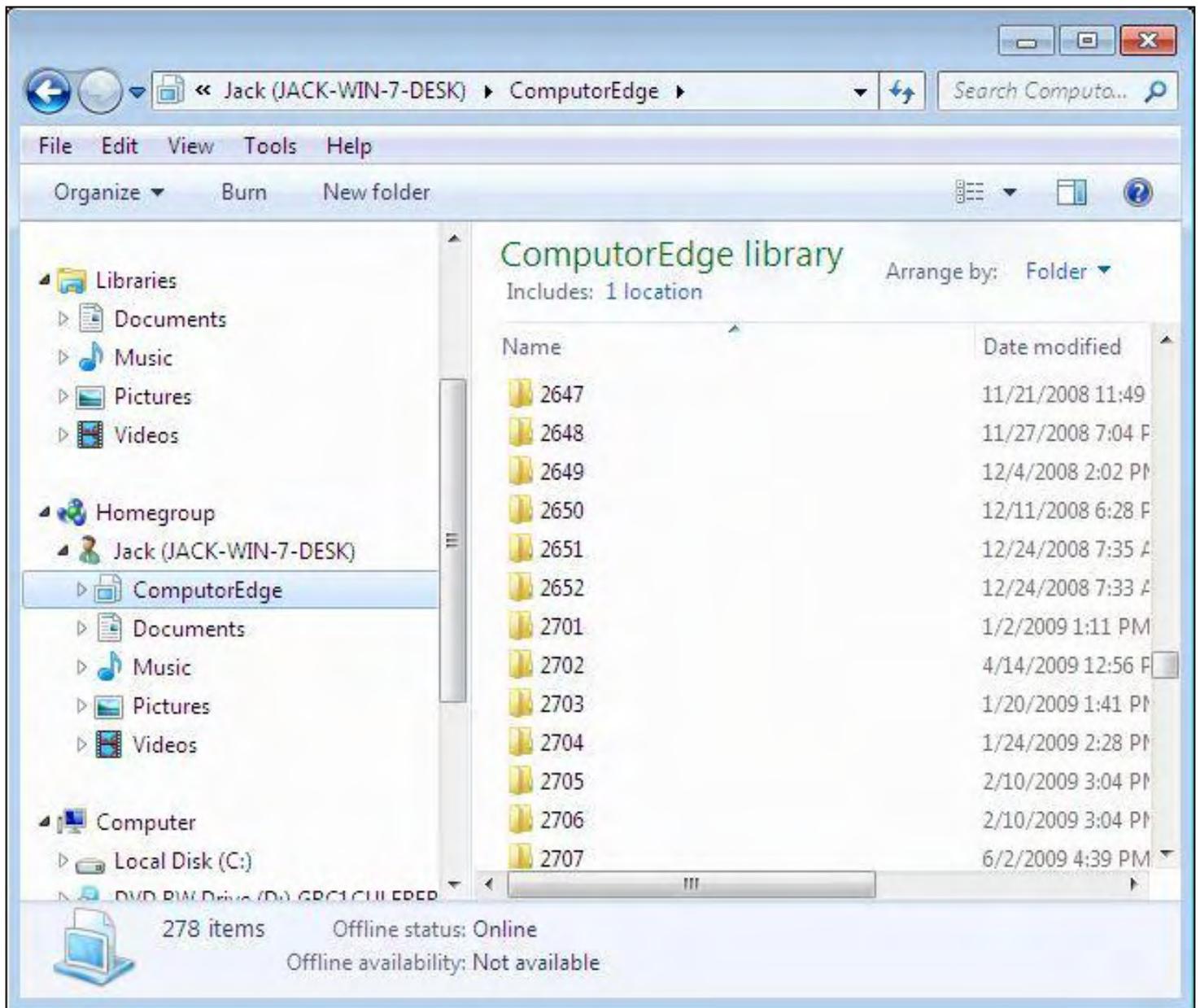


Figure 4. Windows 7 laptop using HomeGroup to access the ComputerEdge Library on a Windows 7 desktop, which is accessing the files on a Windows Vista laptop.

This may seem a little confusing, but HomeGroup is remarkably easy to set up and use—but you will need at least two Windows 7 computers to get any use out of it. Once you set up a library, it can be included in the HomeGroup by right-clicking on the library link and selection "Share with." You then have the option to share with "Nobody," "HomeGroup (Read)" (view but not change files), "HomeGroup (Read/Write)" (view and change files), or "Specific people..." If you don't want to share specific folders or files, the same technique can be used to block sharing.

If you have multiple Windows 7 computers in your home network, then HomeGroup combined with libraries is a powerful way to share your media and files. While you could set up libraries on each computer to remotely access files, using HomeGroup allows you to set up one library on one of the Windows 7 computers and access it from any of the other Windows 7 computers.

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[Return to Table of Contents](#)



Wally Wang's Apple Farm

“The Coming of the iPad” by Wally Wang

With the imminent arrival of Apple's iPad on April 3, expect Apple to continue making a profit while its competitors struggle to keep up. Also, programming the iPad; if you're in the market for a Macintosh laptop, wait; advice on buying Apple stock; and a tip on moving the cursor by holding down the Command key and pressing one of the arrow keys.

Wally Wang's Apple Farm

A recent issue of Newsweek (photo.newsweek.com/2010/3/how-luxury-brands-fared-in-recession.html) listed various luxury brands that have either thrived or suffered during the current recession. Two luxury brands that have thrived included Burberry and Hermès.

According to Newsweek, "Burberry has kept customers loyal by redoubling their focus on what they do best—raincoats based on a World War I template."

Note that Burberry simply defined a niche and made sure they stuck with doing it right. Since it's always easier to sell to existing customers than to find new customers, Burberry ensures that its existing customer base will likely continue buying from the company.

Here's what Newsweek had to say about Hermès:

"Hermès is one of a handful of luxury brands that have not only weathered the global financial crisis but thrived. Most fashion houses slumped last year, but Hermès managed to increase sales by 8.5 percent. Rather than slash prices, follow fashion, or go downmarket, Hermès ignored trends and focused on what it does best: produce expensive but timeless classics with unimpeachable quality that will last a lifetime."

Once again the pattern is clear. Hermès didn't panic, lower its prices to attract more customers, or chase the latest fad. It simply focused on what it did best and thrived while its competitors floundered.

Now look at Apple's steady growth, selling more Macintosh computers and iPhones than the previous year, while its competitors blame weak sales on the recession, which didn't seem to affect Apple's profits in the same time frame. Whenever companies announce record profits, they often boast that their strategies and business decisions were directly responsible, but whenever those same companies announce record losses, they rarely blame those same strategies and business decisions. Instead, they point to current economic trends (the recession) and weak consumer spending as the real culprit.

Maybe these companies should just admit that it's easy to make a profit in a market flush with cash, but hard to make a profit when you don't sell something people really want.

Apple, like Hermès and Burberry, simply focuses on what it does best while the rest of the competitors trade lower profit margins for greater market share and often wind up getting neither.

With the imminent arrival of Apple's iPad on April 3, expect Apple to continue making a profit while its competitors struggle to

keep up. Two trends will likely emerge. First, competitors will try to create copycat me-too products that emphasize features that the iPad lacks, such as built-in USB ports or support for Adobe's Flash, two selling points that Hewlett-Packard (www.youtube.com/watch?v=-p-RZAwQq0E) is planning to promote for its Slate PC device.

The real problem with any competitors isn't the amount of hardware features they cram into their device or whether it can run Flash or not, but how well the device responds to the user. After all, having the best, smallest, lightest and fastest computer in the world is useless if it doesn't work.

MOTO Labs (www.funkyspacemonkey.com/robot-touch-screen-accuracy-analysis-video?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+FunkySpaceMonkey+%28Funky+Space+Monkey%29) tested the touchscreens of various smartphones and concluded that Apple's iPhone offered the most accurate touchscreen. From a user's perspective, that simply means that when you try to control your iPhone through touch gestures, it works as expected.



Figure 1. MOTO Labels' comparison of touchscreen accuracy of smartphones.

The iPad will likely continue this touchscreen accuracy, but there's a good chance that any iPad rivals won't meet these same high standards. How much fun will it be to use any iPad competitor, such as the HP Slate device with a USB port and Flash capability, if it frustrates you every time you touch its screen to give a command?

The HP Slate relies on Windows 7's touch-gesture capabilities, but how successful will Windows 7 be on a device that lacks a keyboard and a mouse? Windows 7 isn't optimized for a touchscreen device like the iPad's operating system, so how will running your favorite Windows programs on an HP slate be when the menus and icons are too small for your fingers to control and the touchscreen itself doesn't always work as expected?

Toss in the need to install, update and run a firewall, antivirus program and anti-spyware program on any tablet device running Windows 7, and what limited memory and processor power the tablet device has will slow down the overall user experience.

Of course, this depends completely on the actual capabilities of the iPad and the HP Slate, since neither are available at the moment. Still, given a comparison between a device specifically designed as a touch-control device (the iPad) compared to a device cobbled together from existing pieces to mimic a touchscreen device (HP's Slate and other iPad rivals), which device do you think will provide the optimum touchscreen experience?

The second trend with the iPad will be rapid adoption in niche markets. Already hospitals and medical institutions are looking at the iPad (mobihealthnews.com/6265/apple-ipad-healthcare-industry-weighs-in), business users believe the iPad could help them work more productively on the road (industry.bnet.com/technology/10006432/zagby-poll-apples-best-ipad-bet-is-the-business-user), and teachers and schools are looking at how the iPad could be used in the classroom (thejournal.com/Articles/2010/01/27/Measuring-the-iPads-Potential-for-Education.aspx).

The people most likely to understand the iPad's benefits are those who already own an iPhone and find the iPhone's tiny screen too limited for viewing Web pages or typing on the virtual keyboard. Criticism that the iPad is nothing more than a bigger iPhone is exactly what iPhone users want.

Put an office suite like iWork (\$9.99 each for Pages, Numbers, and Keynote) on an iPad, and you'll have a lightweight, portable computer already capable of running the more than 150,000 apps available for the iPhone. As more companies release productivity apps for the iPad, such as OmniGraphSketcher (www.omnigroup.com/products/omnigraphsketcher), a program for creating graphs quickly and easily, and iMockups (www.youtube.com/watch?v=L0yIVqJcGfc), a program for creating visual prototypes of iPhone/iPad projects, the unique uses for an iPad will become more apparent to everyone.

The iPad represents a computer appliance that anyone can turn on and use without reading lengthy books or taking training classes. Nobody needs to read a book or take a training class to learn how to use a dishwasher or television set, so why should computers be so much more complicated?

Initial reports suggest that Apple has already sold out its initial batch of iPads. However, after April 3, we'll all know for sure how the iPad is selling and how happy people are with using it. What's certain is that despite any criticism against the iPad, there is already a large customer base willing to buy the product based on its promises alone. For those still unconvinced, visit your local Apple Store after April 3 and try one for yourself. Then you can make an objective decision based on first-hand experience on whether the iPad will work for you or not. To see more about what the iPad can do, watch Apple's iPad videos (www.apple.com/ipad/guided-tours).

Programming the iPad

If can you program the iPhone, you can program the iPad. If you sign up as an Apple developer (\$99), you can download the latest version of Xcode, which includes the iPhone/iPad simulator.



Figure 2. The iPad simulator lets you test your programs without an actual iPad.

There are no iPad programming books available right now, but you can learn iPad programming just by learning iPhone programming. I started and finished *iPhone Application Development For Dummies* (www.amazon.com/gp/product/0470568437?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470568437) .

Now I'm currently halfway through *Beginning iPhone Development* (www.amazon.com/gp/product/1430224592?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1430224592) , which provides more source code to examine than the "iPhone Application Development for Dummies" book.

Each book has taught me something different that the other book lacked. To get yet another perspective on iPhone programming, I recently started using *iPhone SDK Development* (www.amazon.com/gp/product/1934356255?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1934356255) by Bill Dudney

and Chris Adamson.

The "iPhone SDK Development" book helped clarify much of the programming terminology that the other two books glossed over and assumed you already knew. By going through the examples in all three books, it's easy to pick up iPhone programming. I'm not comfortable creating my own iPhone/iPad programs yet, but I'm definitely more comfortable using Xcode and Objective-C.

Programming the iPhone is like any skill. Just immerse yourself in it, keep learning something new every day, and gradually you'll learn far more than you ever thought possible. Eventually, you'll be considered an expert, or at least more knowledgeable than the average person.

Matt Morris, the author of *The Unemployed Millionaire* (www.amazon.com/gp/product/0470479817?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470479817), was once homeless and living out of his car. At one point when he was taking a shower by standing naked under a church rainspout in the middle of the night, he realized that he needed to turn his life around.

Matt started spending all his free time listening and reading inspirational audio programs and books rather than listening to the news or music on the radio. Matt also discovered that if you read just five books on any topic, you would know more than the average person on that topic.

Applying Matt's principles to iPhone/iPad programming means practicing and learning a little every day. Even if you've never programmed before, you can learn the basics of programming with a little persistence and a lot of patience. Obviously a class will help, but any way you learn will be better than just wishing you could write a program but never taking the time to do so. Action is always more productive than wishing, and certainly more productive than complaining about what the iPad is missing.

Don't Buy a Macintosh (Yet)

If you're in the market for a Macintosh laptop, wait. While other companies are already selling laptops with Intel's latest i7 processor, Apple is still using the now-ancient Core 2 Duo processor.

If you check the MacRumors Buyer's Guide (buyersguide.macrumors.com), you can see that the MacBook Pro, MacBook Air and Mac Pro are all due for an update. Apple just released the latest Mac OS X 10.6.3 update, so expect updated MacBook Pro, MacBook Air and Mac Pro models soon. Until then, it's best to wait on purchasing these models so you don't get stuck paying top dollar for the older models.

Also, if you didn't pre-order an iPad, you may not get one any sooner than April 12. On April 3, you can show up at your local Apple Store after 3 p.m., and any iPads that someone reserved but didn't pick up will be sold to the public. However, if everyone who reserved an iPad shows up to collect it, there won't be any left for anyone else.

Best Buy will also be selling the iPad, although each store may have as few as 15 iPads available. If you really want to get an iPad, order from Apple's online store now.

Don't Buy Apple Stock Either (Yet)

There's an old Wall Street saying, "Buy on rumor, sell on news." The idea behind this is that when a company is rumored to be announcing something positive, the stock price slowly climbs. As soon as a company officially announces something in the news, its stock tends to fall.



Figure 3. Apple's current stock price as of March 26, 2010.

At the time of this writing, Apple's stock is hovering around \$230, but watch out! After Apple officially releases any of its latest products, the stock price tends to drop immediately afterward as early buyers sell to take a profit and the gullible public rushes to buy the stock, only to watch it sink right before their eyes.

After April 3, Apple's stock will likely plummet as usual (probably to around \$205) and start climbing again when the rumor of the next iPhone arrives sometime in June. When Apple's stock drops, that's the time to buy again at the rumor of the next iPhone, and then sell right before news of the official iPhone announcement arrives.

* * *

When working with text in most Macintosh programs (except for Microsoft Word), you can quickly move the cursor by holding down the Command key and pressing one of the arrow keys.

Command+Left arrow moves the cursor to the beginning of a line.

Command+Right arrow moves the cursor to the end of a line.

Command+Up arrow moves the cursor to the beginning of the document.

Command+Down arrow moves the cursor to the end of the document.

(In Microsoft Word on the Macintosh, the Home and End keys move the cursor to the beginning or end of a line, and the Command+Home/Command+End keys move the cursor to the beginning or end of a document.)

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.

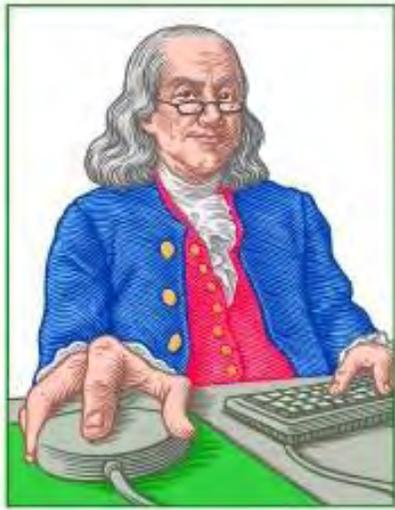
Wally is responsible for the following books:

- 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).

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.

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

[Return to Table of Contents](#)



LINUX LESSONS

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

Linux Lessons: Samba

**"Making Linux Look Like
Windows to Windows
Computers"** by Jack Dunning

A program called Samba makes a Linux computer look like a Windows computer over a network, solving compatibility dilemmas.

Since so much of the world is Windows, we often want to access our Linux and Unix-like computers with our Windows computers—especially since so many of our servers are Linux machines. Fortunately this is a problem that was solved long ago. There is a program called Samba (samba.org) that makes a Linux computer look like a Windows computer over a network. That means once Samba is installed on the Linux server, Windows users can access files on the Linux machine via Windows Explorer. There no need to worry about SSH (Secure Shell) and FTP (File Transfer Protocol) if you have Samba access. (To be fair, at *ComputerEdge* we use both Samba and SSH for transferring files to and from our servers since SSH gives us a little better control over rights restrictions.)

Its Web site reads, "Samba is Free Software licensed under the GNU General Public License, the Samba project is a member of the Software Freedom Conservancy." That means it's easy to get, free to use and will install in the usual Linux manner.

At *ComputerEdge* we use FreeBSD (www.freebsd.org) servers, which is one of the Unix-like distributions—this one developed at the University of California, Berkeley. (The operating system for the Apple Macintosh is based upon a version of FreeBSD.) Probably the most difficult part of using Samba was getting the Windows machines to see the Samba servers. The computers need to be on the same network and each Windows computer must be a user on the server with the appropriate rights.

Since *ComputerEdge* uses a virtual office (servers located at a remote location), our network was set up with an SSL VPN router. This router creates an internal network assigning an address (192.168.xxx.xxx) to each computer—even though they may be located anywhere in the world. This solves the problem of getting through the firewall via an external IP and keeps the servers a little more secure. Once the virtual office is hooked up, we can map drive letters on the Windows computers to key directories (folders) on the Samba-loaded FreeBSD servers (see Figure 1).

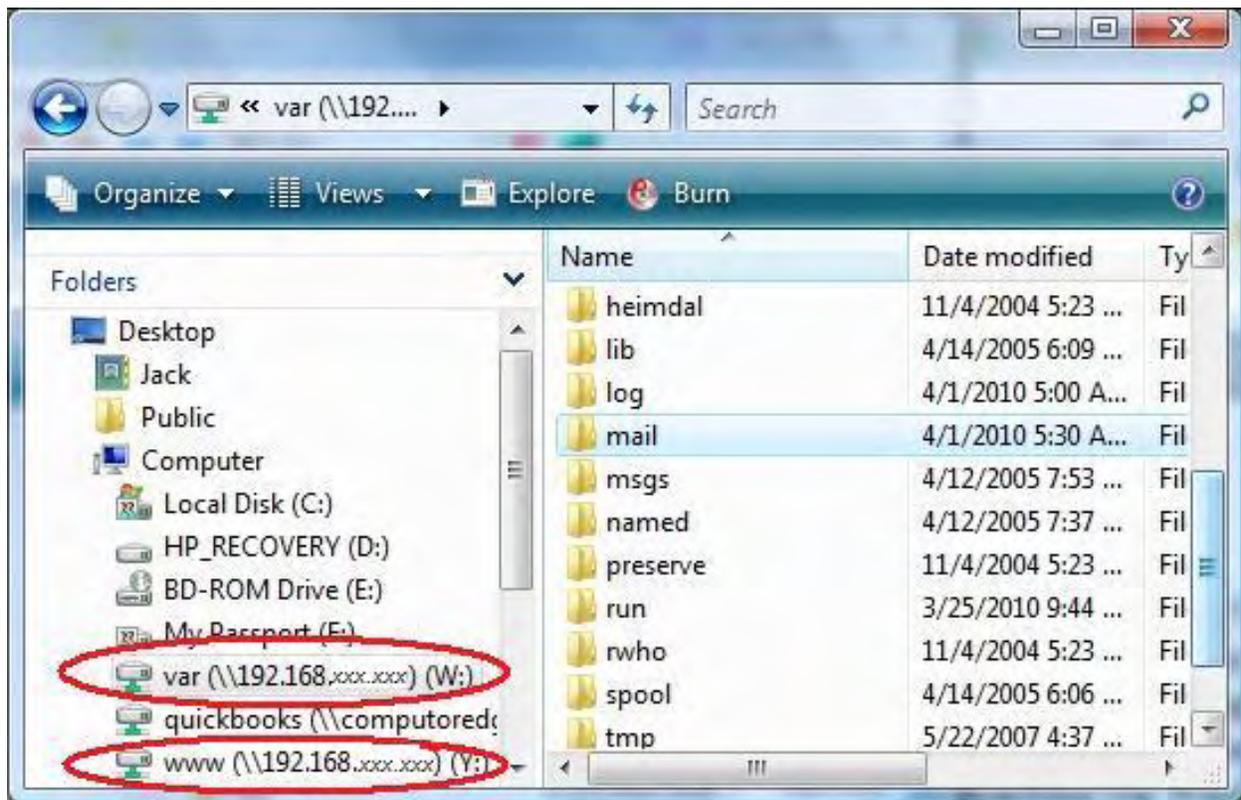


Figure 1. A Windows computer has mapped drives connected directly to remote FreeBSD servers using Samba. The directories shown on the right are those in the var directory on the server.

Both mapped drives (var and www) are connected to the internal network address (192.168.xxx.xxx) on the server. (The actual address has been obscured only because I don't like to give too much away.) Files can be dragged from one computer to another, or used directly on the server. In a world with so many Windows computers, Samba on a Linux server is a tremendous asset.

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

[Return to Table of Contents](#)



Rob, The Computer Tutor

Rob, The Computer Tutor:
Technology Solutions
“JavaScript in Action” by Rob Spahitz

Last week, we created an HTML form. This week we will use JavaScript to validate the data that a user enters into the form.

Last week, we created an HTML form. This week we will use JavaScript to validate the data that a user enters into the form.

Validating Web Forms

Here's a Web page with a form that we created last week:

```
<html>
<head>
</head>
<body>
<form action="processme.exe">
<p>Name: <input type="text" name="PersonName" size="25" /></p>
<p>Street: <input type="text" name="Street" size="50" /></p>
<p>City: <input type="text" name="City" size="25" /></p>
<p>State:
<select name="State">
  <option value="CA">California</option>
  <option value="CO">Colorado</option>
  <option value="NM">New Mexico</option>
</select>
</p>
<p>Zip Code: <input type="text" name="ZipCode" size="10" /></p>
<p>E-Mail: <input type="text" name="EMail" size="50" /></p>
<p>Website: <input type="text" name="Website" size="50" /></p>
<p>Message Category:
<select name="Message_Category">
  <option value="0">Select an option</option>
  <option value="1">1-Comment</option>
  <option value="2">2-Request</option>
  <option value="3">3-Order Inquiry</option>
  <option value="99">99-Other</option>
</select>
</p>
<p>Message:
<textarea name="Message" cols="20" rows="3"></textarea>
</p>
<p>Would you like a response?
  <input name="SendResponse" type="radio" value="Y">Yes</input>
  <input name="SendResponse" type="radio" value="N">No</input>
```

```

</p>
<p>
<input type="submit" value="Submit" />
<input type="reset" value="Clear" />
</p>
</form>
</body>
</html>

```

When run in a browser, it looks like Figure 1.

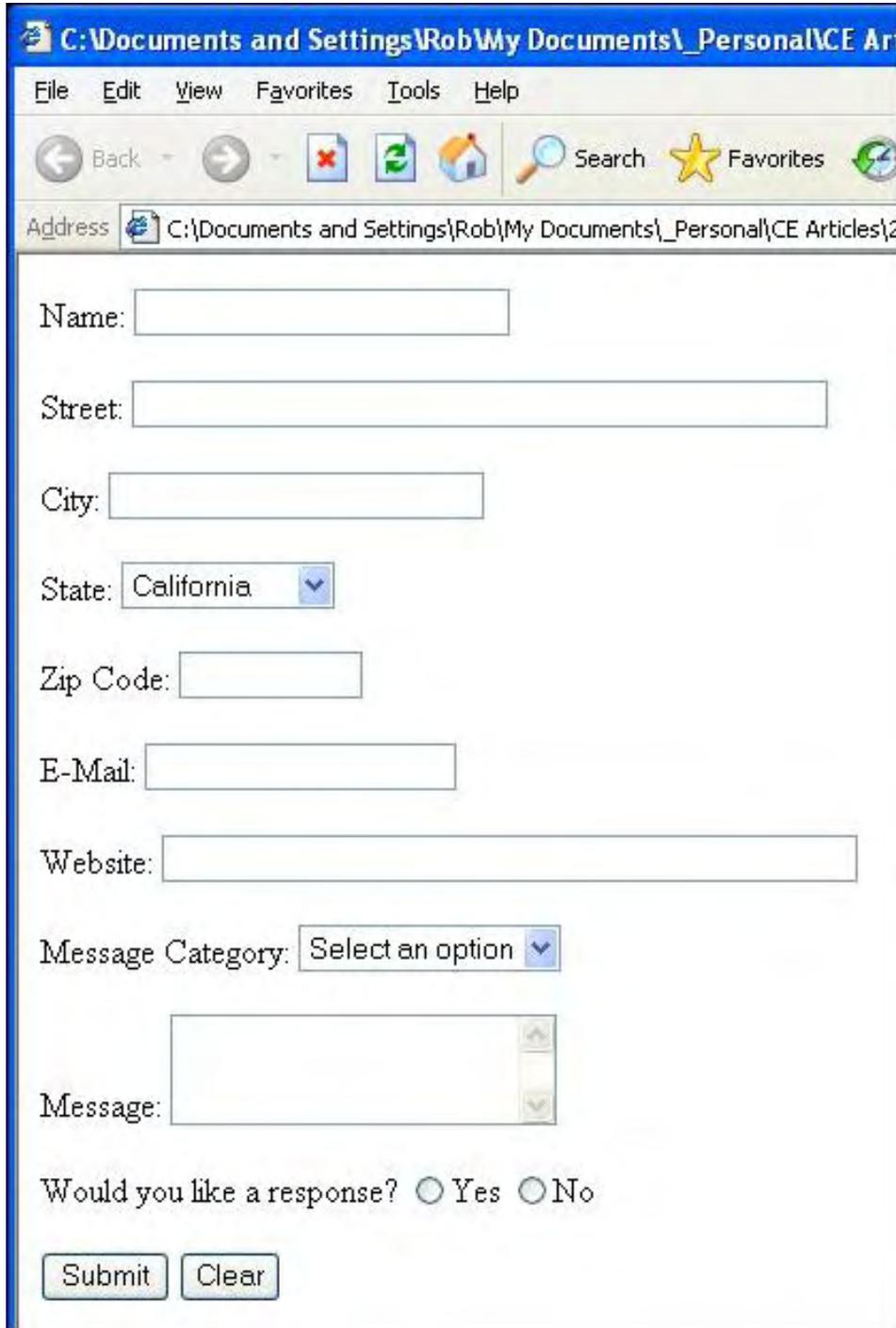


Figure 1. Web Page Form.

When To Validate

When validating a form, there are several things to consider. As data is being entered, you can ensure that all characters are valid. For example, in the ZIP code field, assuming that the address is in the U.S., only digits (and maybe a hyphen) are valid. You could check each character as it is entered to ensure that only digits are entered. When invalid information is entered, you have several choices: ignore (discard) the character entirely; show an alert message so that the user knows that the information was invalid; or allow the invalid data and worry about it later. Let's quickly explore the benefits and drawbacks of each.

If you decide to discard the invalid data, you will have only valid data in the field. That's great. However, if you understand the way people enter data, you realize that there are some drawbacks. Have you ever started typing some text into a box and immediately realized that you mistyped a character? At that point, most people immediately jump to the Backspace key and erase the errant character. If you had already ignored the bad character, the user has now erased the previous valid character and may not realize it until later.

For example, suppose you are trying to enter 98765 into a ZIP code field, and after the 8 your finger slips down on the keyboard and hits the "u" key? What you would normally see is "98u." Since you realize your finger slipped, you hit the Backspace key and continue typing to get "98765." However, if the "u" was ignored, you would see "98" and, possibly without noticing, hit the Backspace key, and then continue typing. You now end up with "9765."

One workaround for this anomaly is to make a noise (like ring a bell) to let the user know that something didn't quite go as expected and that you took some action. This will draw attention to the typing and would likely cause the user to look up and realize that the resulting data is not what was expected ("98u"). This solution is very effective, but may be overkill, especially for users who are not very good at typing and may get annoyed that the bell keeps ringing.

Looking at the next option, you could immediately put up an alert when an invalid character is entered. When the user is not sure what data belongs in the box, this can be very effective. For example, if the user tries to enter "abc" into a ZIP code field, there is a good chance that this person is not familiar with what is expected in the field and a message could be appropriate such as, "Please enter a 5-digit ZIP code into this field."

However, as with the previous situation, if you bring up a message box whenever a user enters invalid data, the user will quickly become frustrated with the interruption, start typing more carefully (which is good), and maybe become sufficiently annoyed, and then give up and go to another Web site (which is very bad).

The next option is to ignore the error as it's entered. This may sound like the worst option, but often it is the best option. It allows good users to correct their own errors as they are found without getting annoyed by possibly silly or intrusive messages.

The drawback of this option is that you will want to validate the data later. That later validation can, in turn, be done at any of several times. You can validate the data as the user leaves the field, when the form data is submitted, or as you process it (like store it in a database). Again, each of these has advantages and disadvantages.

If you validate data as the user leaves a field, you can attempt to correct the data automatically (such as stripping out non-numeric data from a ZIP code field). This might be nice if you can properly identify what makes the data valid. However, consider that the user entered seven digits rather than letters. What digits should be removed to make it a valid ZIP code? And will the remaining five digits actually be what the user intended, or did the user inadvertently enter a phone number in the field? Typically, the best option here is to simply notify the user that the data is wrong and should be corrected.

So that's good. Why bother with any other type of validation? The answer is that sometimes fields have dependencies. For example, if your form is sophisticated enough and the user tried to enter the ZIP code 12345 with a State code of CA, you would not be able to notify the user that the ZIP code is not valid in California since all of the ZIP codes there start with "9." The rest of the data is valid, but the combination of fields is not.

Another problem with validating when a user leaves a field is that good users will often type very quickly, trying to enter all of the data on the form, and submit the data. If you interrupt this user with every minor data problem, the user will get frustrated and may give up and go elsewhere.

One more issue is that you may have some fields that you would like the user to always enter: a required field. Since users can take the mouse to jump to any field, it's possible that a mandatory field is never accessed before the user tries to save the data. You won't be able to force an entry in a field as the user leaves that field if the user never got there in the first place.

That brings us to the next place to validate. You can validate data when it is submitted. For this to work, you'll need to check every single field when the save process is launched, typically when the user clicks on the Submit button. This will allow you to examine every single character of every single field as well as the interaction between fields.

This sounds like a lot of work, and it is. However, it's not really any more work than validating every field as the user enters text or leaves it. The main difficulty is that it's a bit more difficult to organize the steps and notify the user about problems. Do you check each field one at a time and notify the user about the problem? If there are 10 problems, do you only notify the user about the first problem, wait for it to be fixed, and then notify about the second problem on the second submit? And the third problem on the third submit? Or maybe you gather all of the problems and put them into a nice (and complex) report of all of the issues? This may sound better, but it can also mean that the user remembers only the first few problems, and then has to resubmit to get the rest. And, of course, creating an elegant, complex report is not an easy thing.

The other problem with validating at this point is that your validation routine may be quite complex and, if put into JavaScript, can mean a relatively slow process in validating the information. In addition, you may be exposing some sophisticated code that you would like to keep confidential. JavaScript really doesn't afford you that option at this point.

The final validation would be on the receiving end. In the Web world, this would be on the server side rather than the client (Web browser) side. This is often a well-controlled environment with a lot of control, a lot of options (validation with JSP, ASP, PHP, a database or many other options) and a lot of potential resources to handle the task. The main drawback of this is that the browser would have to collect all of the information (which it will do anyway), submit it to the server, wait for the transmission to occur, wait for the server to process the data, and retransmit it in a way that the user can understand and determine how to manage. You often see this where the server will send a new Web page showing the incorrect or missing fields highlighted in red or with another identifier.

Now that we've explored the many ways to validate, all of which are valid and each of which has drawbacks, let's pick one and use it for validation. For our purposes, I will use field validation, where we check the data when the user leaves the field. Obviously, this means that we will not be able to check for missing, required fields, but we can handle that as an additional level of validation. After all, there's no reason you can't mix-and-match different types of validation.

Character Validation

Let's look at the name field. We'll start by simply making sure that the field contains at least three characters and a space (to ensure that a first and last name is there).

The field currently looks like this:

```
<input type="text" name="PersonName" size="25" />
```

To add validation, we can simply call a validation routine such as "checkName" when the user leaves (by checking the onBlur event):

```
<input type="text" name="PersonName" size="25" onBlur="checkName()" />
```

Now we can write a function in the header section, something like this:

```
<script language="JavaScript">
function checkName()
{
    if(document.forms[0].elements["PersonName"].value.length < 3
    || document.forms[0].elements["PersonName"].value.indexOf(" ") == -1)
    {
        alert("The Person Name field should contain a space
                and must be at least 3 characters.");
        return(-1);
    }
    return(0);
}
</script>
```

[Two lines containing alert command are intended to be one continuous line.]

This will set up a function named checkName using JavaScript. It will then check some conditions using the "if" function and, if the conditions result in a true condition, an alert appears and the function returns a value of -1. If the condition is not true, the function returns a value of 0.

First, let's explore the "return" function. Although it is not needed here, it is common to have functions return a value so that anything that calls the function can determine if it was successful or not. In this case, a value of zero indicates that there were no problems, whereas a negative value indicates that there was a problem. This is passed back to the onBlur event procedure, which promptly ignores it because we really don't care about it. If we wanted to make this process fancier, we could skip the alert inside the function and let the calling procedure decide what to do based on the return value. For example, zero could mean no problems, -1 could mean that the field does not contain a space, -2 could mean that the field is not long enough, and -3 could mean both errors. Again, we'll keep it simple and just return -1 to indicate that the function found a problem.

Now let's examine the complex part: the "if" function:

```
if(document.forms[0].elements["PersonName"].value.length < 3
|| document.forms[0].elements["PersonName"].value.indexOf(" ") == -1)
```

We could have checked for the two conditions one at a time and either generate just one message, the other message, or both. However, I decided to combine them and, for readability, put the two checks on two separate lines.

The first check is checking to see if we have at least three characters. That's performed with this:

```
document.forms[0].elements["PersonName"].value.length < 3
```

Notice how I access the document object so I can get into the form. Since there's only one form, and it has no name attribute, I can reference it using the index within the page. Since it is the first form, it gets index number 0. Within the form, I look at the elements collection to examine the fields within the form. I could then reference index number 0, the first field (the Name field);

it's better to reference the name in case I ever decided to rearrange the fields. If the field order changed, I'd have to synchronize the index numbers within my JavaScript or the functions would apply to the wrong fields. Once I've accessed the correct field, I can check the value (the contents of the text box) and check the length of the text. If it's less than three characters, the condition returns the value of "true." Otherwise it returns the value "false."

The second condition looks to see if the name contains a space:

```
document.forms[0].elements["PersonName"].value.indexOf(" ") == -1
```

As with the length, we check the value of the text box. But this time we use the `indexOf` function, which lets us check to see if a character is found within a block of text. If found, the function returns the index of the position where the text was found; if not it returns a value of -1. Notice how we compare to -1 using two equal signs (`==`), which is the way to compare for equality in JavaScript. If you inadvertently leave out one of the equal signs, you are actually trying to assign a value of -1 to the `indexOf` function, which is not allowed, so the Script will produce an error and either ignore the script or mark an error in a separate browser window area.

Finally, we combine the two conditions with the "or" function, which is "`||`" (two vertical bars) in JavaScript. Technically, you can use one vertical bar, but it has a slightly different meaning. I leave it to the reader to check search engines for more information. Meanwhile just use two bars. Also note that if you wanted an "and" function, you would use `&&`.

One quick tutorial on "and" versus "or." When using Boolean conditions (those that return true and false, such as the two conditions above), there are four possible combinations: true-true, true-false, false-true and false-false.

When using the "and" function, the only way to get a true result of the two conditions is to have both conditions true. That is, true `&&` true will result in true; anything else results in false.

When using the "or" function, the only way to get a false result of the two conditions is to have both conditions false. That is, false `||` false will result in false; anything else results in true.

In our check above, if either (OR) condition is true, that means we have a bad value, so we want to show the alert. If we changed that to `&&`, the message would only appear if *both* conditions were true, i.e., we had less than three characters and there were no spaces.

Well, we've run out of space again. We'll continue this next week by validating the e-mail address. If you'd like to try it on your own, check to see if it contains an @ symbol and a period (.). Also, the @ symbol must not be the first or last character of the text.

See ya next week.

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.

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[Return to Table of Contents](#)



ComputerQuick Reviews

News and Reviews from Readers and Staff

ComputerQuick Reviews: Pretty and Pink

“Exploring the Dell
Inspiron Mini 10
Netbook” by Marie Loggia-
Kee

Dell's Inspiron Mini 10 netbook, in pink, is a lightweight machine that can do just about everything as a full-size laptop. That's more than tempting!

Less than \$500 for a computer that comes with Office, full Web access and is lightweight and portable? It's pretty hard to imagine in a mini-laptop. As the technology person at the family business, most of the systems I order cost right under \$2,000, which includes an extended warranty and Office Professional. So when I saw the customizable Dell Inspiron Mini 10 netbook, in pink, I was amazed.

Although I want this precious electronic family addition for myself, it's actually for my 7-year-old daughter. Some may blanch at purchasing a computer for a "child," but with two techophiles for parents, Cassie had been playing on refurbished computers for years. I grew sad seeing her click on the icon for Disney's Club Penguin, and having her sit there—too patiently—with the hour glass circling, waiting for the page to load. She didn't know any better. And, really, shouldn't she?

The Good

With a 1.66GHz Intel processor, and a 160GB hard drive, the little wonder possesses more than enough power to run all the sites and games Cassie desires, and then some. When she recently had a presentation on the country of Slovenia to put together for International Culture Day, we used the netbook to do the research. With the addition of Microsoft Office, as she grows more proficient, she'll be able to write simple papers.

Further, seeing her with an extreme lightweight mini-me laptop rather than an eight-pounder makes me feel better. I worried about her lugging around a full-size relic.

Dell has figured out the long-lasting battery with this machine. Cassie can play for hours upon hours without it being plugged in. So, the 56WRh lithium-ion battery works like a champ.

The Bad

Let's face it: A 10-inch screen is small ... no matter how small the person using it is. I've seen Cassie peering closely at the screen, and I've asked her if she liked the bigger laptop better. She assures me, "no." Also, all the Web pages load *big*, which, after bringing up the tool bars leaves little space to navigate.

Right now, it's perfect that the computer is self-contained. Maybe I'm old school, and old-fashioned, but at some point I think we're going to need an external CD/DVD player and/or a hard drive; however, in today's work of the quick, easy and portable flash drives, it probably won't be an issue.

With the lack of a drive comes an issue of software installation. When I originally ordered the netbook, I requested no Office installation. (We figured we'd buy it when needed.) The rep told me, though, that unless it's preinstalled, the user needs an

external drive to load the software. For ease of use, I decided to pay the extra \$100 and change to preinstall the Office works.

On a total aesthetic side, the shiny surface acts as a magnet for a child's greasy fingerprints.

Decisions, Decisions ...

The Inspiron Mini 10 netbook comes stock in Obsidian black. Any other colors cost an additional price, and usually an additional wait time. Supposedly, the pink, with a \$5 donation to the Susan G. Koman Foundation, is one of the most popular models.

Now, for an additional price, the netbook can be ordered with a TV tuner. Curious about this add-on, I asked my rep and was told that she'd tried it, and it wasn't worth it ... so a word to the wise. I haven't actually tried it, though.

Overall, the pluses outweigh the minuses. Gotta admit: It's just too cute. Now I'm debating pulling out that faculty discount for myself ... a lightweight machine that can do just about everything as my full-size laptop? That's more than tempting.

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*.

[Return to Table of Contents](#)



Spam of the Week

Spam of the Week: The Apple Store

“The latest in annoying and dangerous e-mail currently making the rounds.” by ComputerEdge Staff

This week, a faux e-mail seemingly from the Apple Store aims to tempt users into downloading malware.

We received a few of these (see Figure 1) last week, supposedly from the Apple Store. If you're an Apple Store patron, then you may have been tempted. However, a closer look at the link reveals an odd collection of letters for an address (<http://casa.de.copii.nu.este.home.ro/sus.html>). Maybe Apple is now operating out of Romania—*not!* It's odd that the spammers didn't even try to make the address look like an Apple address.

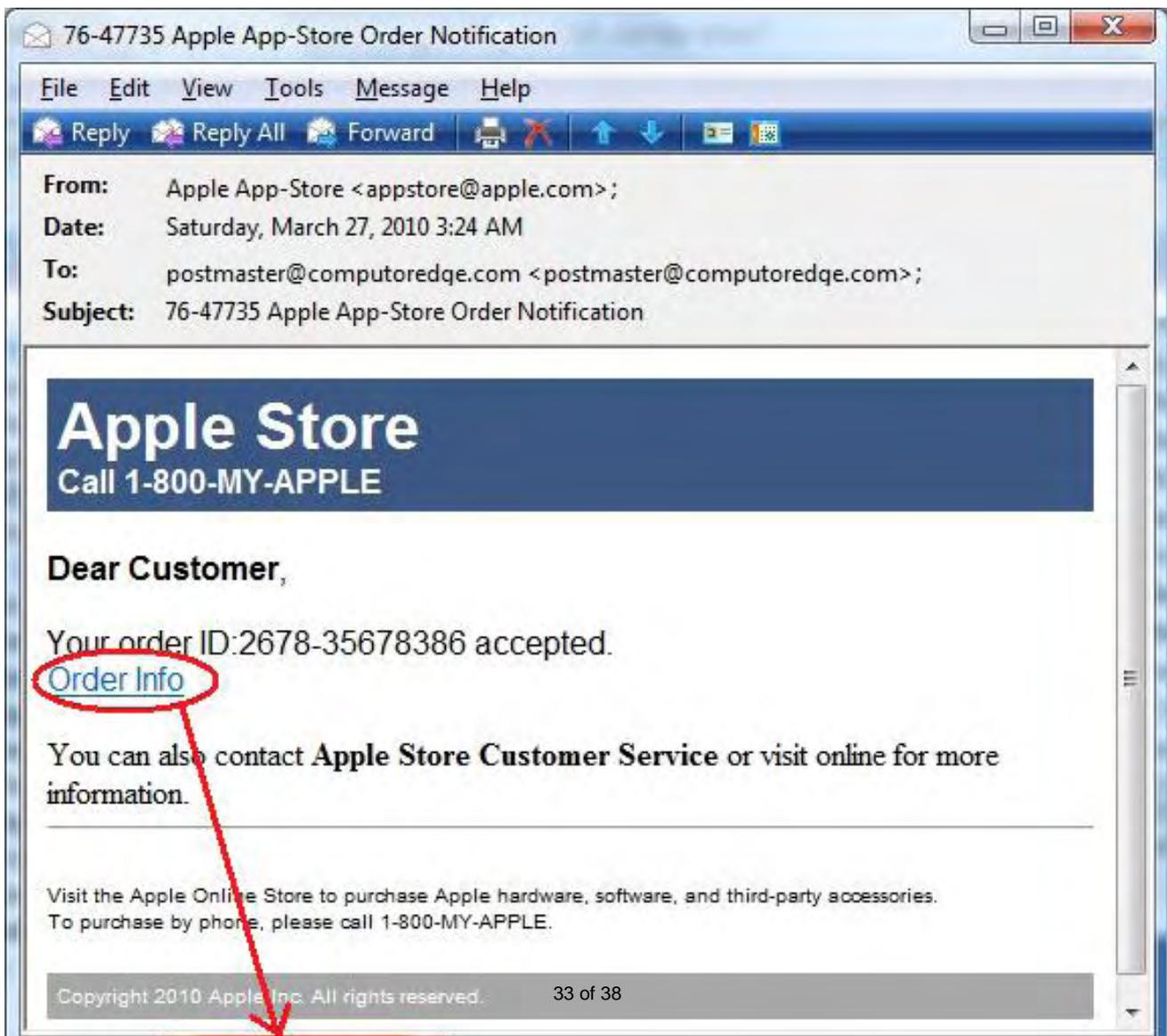




Figure 1. This e-mail is not from the Apple Store.

If you get one of these, just delete it.

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.

[Return to Table of Contents](#)

EdgeWord: A Note from the Publisher

“The Era of Ultra-High-Speed Internet Is Upon Us” by Jack Dunning



Google is testing an ultra-high-speed Internet fiber-optic system. There is only one problem with bringing about this new, faster future—it's expensive to lay fiber-optic cable.

I recently read that Missoula, Montana was applying to be part of Google's ultra-high-speed broadband Internet pilot program (www.google.com/appserve/fiberrfi/public/overview). While I did note that Missoula was not planning on changing its name to Google—as Topeka, Kansas had (temporarily) in order to incur favor with the search engine giant—there was no mention as to how fast ultra-high-speed Internet actually was. I needed to check it out for myself.

How Fast Is Fast?

I was thinking that maybe Google was envisioning 10-megabit bandwidth. That would be many times faster than the current cable service. But no—the fiber-optic system Google wants to test would deliver one-gigabit bandwidth to homes. That's about 100 times faster than most of today's connections. Today's home (and business) internal networks are operating at 100 megabits (some less). Gigabit routers have become commonplace in only the last year. Google is talking about about Internet access that is 10 times faster than most internal networks. The Internet would no longer be the bottleneck it is today. That would completely change the environment for Internet applications. The idea of getting all of your entertainment and business services (high-def television, telephone, Internet) from anywhere in the world becomes a reality. The cable companies are already sweating with systems such as Verizon FiOS stealing their core business.

There is only one problem with bringing about this new, faster future—it's expensive to lay fiber-optic cable. That's why Google will be doing only a few test communities. The technology is here, but digging up the streets and burying the lines hasn't gotten any easier. It's just plain hard work. The question is, "Will it be worth the installation cost in the long run?" That's an excellent question considering technology is one area where prices usually drop year over year. Will the network builders be able to recover their installation costs?

Other High-Speed Options?

It's not as if fiber-optic cable is the only option for ultra-high-speed. Admittedly, performance-wise the fiber cable is the best solution, but for many people there will be viable (and probably cheaper) alternatives. Wireless Wide Area Networks (WAN) are another promising approach. It's less expensive because building towers at set intervals that will cover large communities is cheaper than going up and down neighborhoods digging up the roads. It is more difficult to get the higher speeds with wireless technologies. There are transmission and reception problems, plus the threat of electromagnetic interference. But the engineers have gotten pretty good at cramming data into tiny radio packets, and the speed of light is pretty much the same whether flying through the air or in a fiber underground.

While there are more latency problems with getting your Internet from outer space via satellite, the folks who do satellite will not be giving up any time soon. If you're not a high-powered gamer, then the orbiting tin cans may be all you need for your future Internet.

What happens when the bottleneck is no longer the Internet, but your own internal network? I guess we just go out and buy gigabit routers and network cards. My thought is that it will be quite a while (decade?) before gigabit-speed Internet is commonplace. But it sure is exciting to think about the possibilities.

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

[Return to Table of Contents](#)



Editor's Letters: Tips and Thoughts from Readers

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

"JavaScript and Java," "What's a Cloud Service?," "Cloud-Computing Security," "Video Streaming," "Beginning of a New Era," "Linux Thoughts"

JavaScript and Java

[Regarding the March 5 Rob, The ComputerTutor: JavaScript Programming column:]

It is a myth that JavaScript was derived from Java. See the History section of the article at Wikipedia (en.wikipedia.org/wiki/JavaScript). There are citations so the assertions can be verified.

-Philip Merritt, Carlsbad, CA

What's a Cloud Service?

[Regarding Pete Choppin's March 5 article, "An Overview of Cloud Computing":]

Are Web services and CORBA also cloud computing?

-Ijaz Ul-Haque, Bethlehem, PA

Ijaz,

I must apologize, but I am not familiar with the CORBA standard, so I am unable to provide much in the way of advice there. Most Web services are provided in the cloud. I will refer back to the definition in my article: In general, any service or program sent over an Internet connection can be considered a cloud service. I would say that, based on this general definition, a Web service would be cloud computing.

-Pete

[Regarding the March 5 EdgeWord: Build Your Own Virtual Office column:]

According to Pete Choppin's introductory article this week, this is not a cloud, just a virtual office. Or did I misunderstand what cloud computing is?

Choppin said, "Cloud computing, on the other hand, is moving an in-house service to a third-party company on the Internet, which then hosts these services for you—for a fee."

Your third-party company is just a location for your hardware, and they are ensuring connectivity.

-Marcus, Alabama

Cloud-Computing Security

[Regarding Michael J. Ross' March 5 article, "Cloud Storage Basics: Entrusting Your Data to the Ether":]

Right on! Information system security professionals must keep the CIA principles at the forefront of our mind: Confidentiality, Integrity and Availability. The issue becomes multi-dimensional when supply and demand standards are considered. So from the demand side (businesses that want CC), there are cases where CIA doesn't have to be 100 percent, and one would guess that groups leveraging CC would be very small. In contrast, when the quality of CC supply raises the bar on CIA closer to 100 percent, CC could very well be the new paradigm of the 21st century!

-CISSP, Colorado Springs

An old friend suggested an "Earth bound" data-security system to me several years ago. His engineering credentials and career path supported his credibility. He used pairs of removable hard drives on each computer in his business office. He provided his own on-site and off-site storage, carrying some hard drives out of the office each night. He also sequestered copies of the really critical data out of state. He was very cautious.

-Cicero, Colorado Springs, CO

Video Streaming

[Regarding the March 5 Digital Dave column:]

Dave,

I have a suggestion in regard to Stephen Chan's video-streaming problem. Lots of different opinions and suggestions were made, but I did not see anyone recommend the simplest one—trying to stream from YouTube.com or even better, CBS and ABC. This should shed some light on the root cause of the issue: hardware (less likely) or software/codec (more likely). Hope this helps.

-Zrinko Modrusan, San Diego, CA

Beginning of a New Era

[Regarding Wally Wang's January 29 article, "The Beginning of a New Era: Apple's New iPad":]

Sounds like Wally is a shill for Apple. I have no interest in reading e-books on a screen nor in listening to or collecting a bunch of MP3 music files. I already spend too much time Internet browsing and would prefer to both do that more efficiently and to reduce it. I have a limited-hours cell phone contract and think many rude cell phone users should do the same. I don't travel enough to need a GPS. (I almost fear these make me un-American.) So, my question is, why should I want to have an iPad?

-RB, Deadwood, Confusion 80226

Linux Thoughts

[Regarding the March 5 Linux Lessons: Tips and Tricks from Users column:]

This may not be relative to this article. However, just wanted to add my two cents' worth. I love Linux Ubuntu, and dual-boot XP on my laptop. I do 95 percent of all my work with Ubuntu, and 99 percent when on the Web. Also, I have an Asus Eee PC 1005HA netbook dual-boot with Win 7 and Ubuntu Remix. It's a charm. All docs and pics get saved to my Broadband Mobile Sprint Data Card and from there backed to a 4GB SD card.

Thanks for keeping Linux alive here on Tips an Tricks.

-Harry, Big Bear, CA

Well, I doubt that I'm alone, but I really appreciated your articles on scripts. I loved the batch files in DOS. Like scripts, things

would be much harder to accomplish without them.

-Dan

I am coming from a mainly Windows background where I relate to physical/partitioned drives with drive letters, but mount points seem to be very different. How about a tutorial on how mount points map to physical drives? As an example of my confusion, is it true that you can add additional physical drives to a mount point to add capacity? Can you split up a physical drive into multiple mount points?

The second area that was confusing until reading the Fedora Bible was startup. I am sure a simple tutorial on what files are run at startup would be helpful.

Another confusing area coming from MS Windows is, what takes the place of services? I work with Oracle and I can create an Oracle service, and I can start and stop it from the Services window. In Linux it appears I have to create scripts and put them in the right places, but I have not found anywhere in the Oracle literature about where to put those scripts and how many scripts are needed.

-Marcus B, Alabama

Marcus,

These are all great suggestions and may well be topics in future Linux Lessons.

Your tips and recommendations would also be welcome. If you would like to contribute tips of your own, such as the startup topic, you might consider submitting something to Linux Lessons (ceeditor@computoredge.com). I am only suggesting this because you mentioned that you have done some reading on this already, and you may have some insights that could benefit the Linux Lessons readers.

Keep visiting Linux Lessons for great topics like these.

Thank you for your suggestions.

-Pete

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