

# ComputerEdge™ Online — 05/07/10



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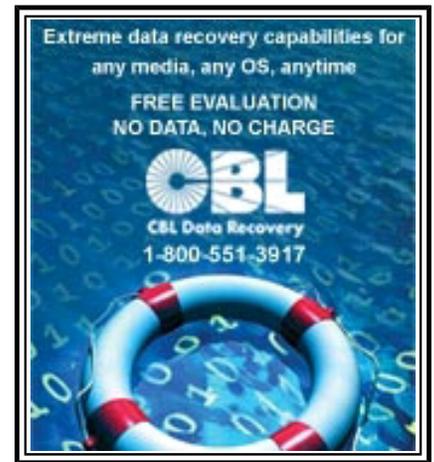
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## Digital Dave

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

What's the best way to change a keyboard to utilize Spanish?; a reader seeks information on keylogging programs; a reader has an issue with a "phantom" e-mail attempting to be sent.

*Dear Digital Dave,*

*I have a friend who just purchased a Toshiba Satellite L455D-S5976. He only speaks Spanish. He has changed the language to Spanish. The laptop has Windows 7. I cannot get the keyboard to change to the Spanish version. I was told AllChars was a great program to change language and keyboard. It is not compatible with Windows 7. Do you have any suggestions?*

*Thank you.*

*Lynne  
Magnolia, Tx*

Dear Lynne,

You should be able to change your keyboard to your language of choice in Windows 7 without resorting to a third-party program. Although it is a separate procedure from changing the language, it is similar.

Open the Region and Language settings in the Control Panel. (If you type "language" in the Search programs and files field in the Windows Start Menu, it will appear on the list.) Select the Keyboards and Languages tab and click the "Change keyboards..." button. Figure 1 (top) will appear. Click the "Add..." button, and you will see a list of possible languages. When you open a language, you will be able to choose a keyboard and "Preview..." the keyboard layout. Choose the keyboard layout that works best for you.

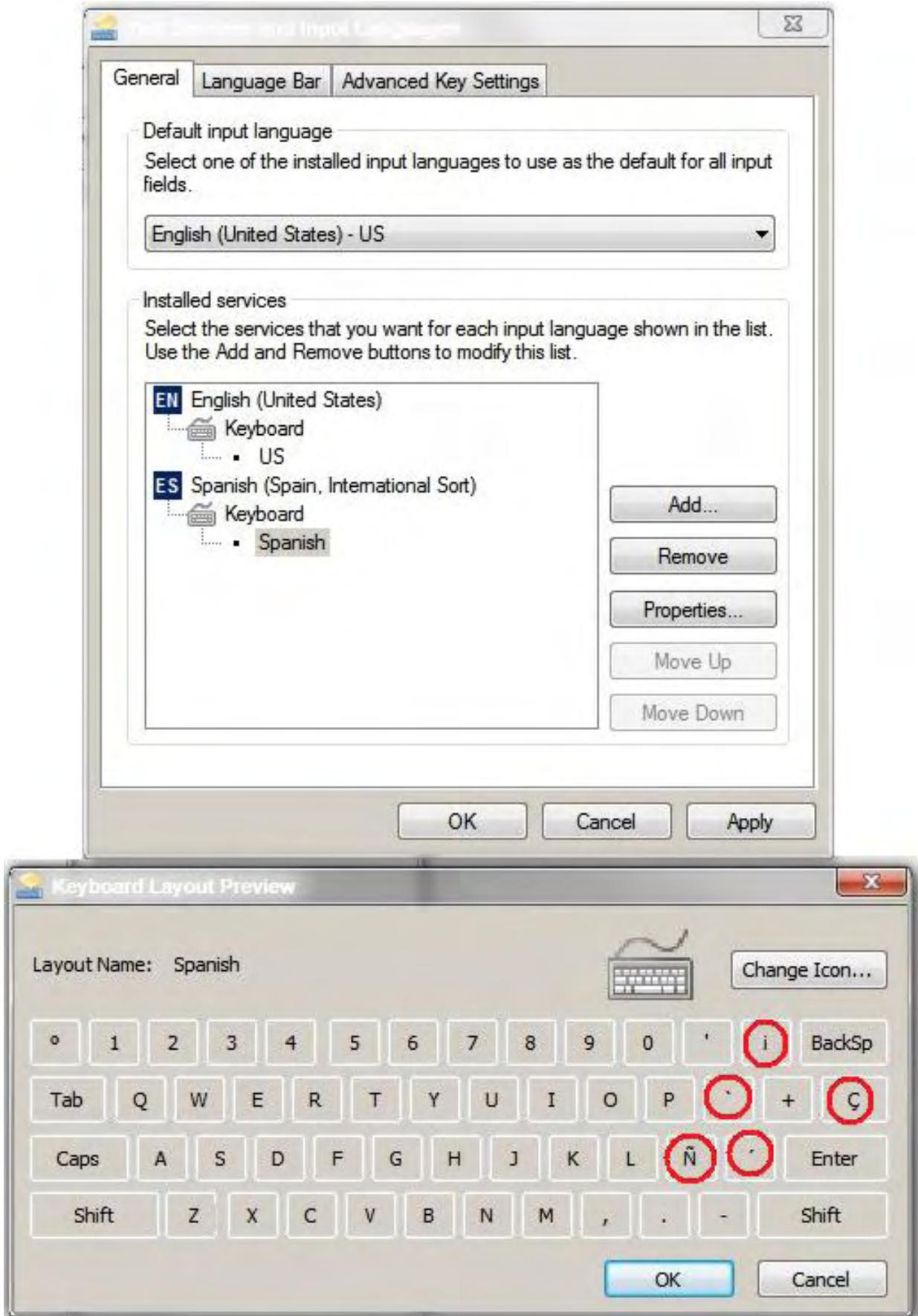


Figure 1. The Text Services and Input Languages window in Windows 7 for selecting language and keyboard layouts (top). Keyboard layout (Properties) for selected language (bottom).

If you choose multiple keyboards (languages) for switching between the layouts, the option will appear at the top of the desktop, in the taskbar, or hidden depending on the option you choose. You can quickly change between the various installed keyboards.

Figure 1 (bottom) shows one of the Spanish language keyboard layouts. This view is opened by clicking the Properties button when the particular keyboard is selected. The *ç* and *ï* characters are located in the same key as shown; using the Shift key will toggle between the two. To add one of the accent marks to an appropriate Spanish letter, depress the accent mark, then the letter and the accent will appear above the letter (á).

This feature is part of both Windows 7 and Vista. I didn't find it in Windows XP, which may be why AllChars has limited support beyond XP.

Digital Dave

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*Dear Digital Dave,*

*I read your articles all the time and think you are great. I don't know if I am asking a question that has already been asked, but I recently had a customer ask me about keylogging software. More specifically, the type that detects someone trying to hack your system and logging your keystrokes. I am unfamiliar with the software brands when it comes to this, and as I have never had to install this type of software before and am not experienced in this area.*

*Can you recommend a name, or a few that you are familiar with, so I can better inform my customer when he comes back?*

*Thank you.*

*Bob McPherson  
Howell, MI*

Dear Bob,

There are two primary types of keyloggers—techniques for recording the keystrokes on a computer: hardware and software. The primary use for keyloggers is to monitor a computer for keyboard activity. Often this is for nefarious reasons such as capturing passwords and sensitive information.

In order for someone to use a hardware keylogger, they would need to have physical access to the computer. Usually, it would be a device that attaches between the keyboard and the computer, but it could be as simple as a USB plug-in. Unless you're in an environment where many people have access to your computer, this is not the most likely scenario.

Most commonly keyloggers come in the form of a software program. It may be malicious and installed as a virus or Trojan horse. Many of the known infections are exactly that. They will record all the keyboard activity and periodically send the information to a remote address.

An installed keylogger program may also be the result of a diligent parent watching out for his or her kids. There are numerous keylogger programs found at CNET's Download.com ([download.cnet.com/1770-20\\_4-0.html?](http://download.cnet.com/1770-20_4-0.html?)

`query=keylogger&tag=srch&searchtype=downloads&filterName=platform%3DWindows&filter=platform%3DWindows`) that will help you track activity on your computer when you're away.

Detecting these programs may be as simple as reviewing Task Manager processes, although many of the malicious types are designed to be hidden by other system programs. It is possible to find them via logged activity, plus there are tools available at the same CNET Web site.

Most antivirus software should detect keylogger software and remove it. If you use antivirus software and, more importantly, practice safe computing by not downloading any strange programs or opening any attachments from strangers, then you should have little to worry about.

If you think that you are being monitored (by your boss?), then there are additional steps that you can take to obscure what you're doing. (Whether any of these techniques will work depends upon the sophistication of the keylogging.)

- Use a program that autofills your forms. If you are not using the keyboard, keystrokes won't be recorded.
- Use the technique in the letter above to change your keyboard to the Dvorak layout. While it would be a relatively simple code to break, most people wouldn't bother. Be sure to make a copy of the keyboard layout before you log off.
- Get an encryption program that will hide all of your activity.
- Don't do anything on your computer that could cause you problems.

Digital Dave

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*Dear Digital Dave,*

*My e-mail program can send and receive e-mail normally, but it keeps attempting every 30 seconds or so to send an e-mail message I did not generate. It reports the following error message under the taskbar:*

*Task roadrunner-sending report error (0X800CCC0F the connection to the server was interrupted). If this problem continues, contact your server administrator or ISP. The server responded 4214.4.2 server timed out.*

*Time Warner Roadrunner has told me their server is not at fault because it is sending and receiving e-mail correctly. Can anyone tell me the source and correction to this "phantom" e-mail error? If I click on the Stop Sending box, IE still keeps trying to resend the message.*

*Mike G.  
Cardiff by the Sea*

Dear Mike,

It sounds like you have an intermittent problem in your Internet connection. Most e-mail programs will periodically "check the mail" by connecting with the server. If the connection is

interrupted, you may get an error message similar to the one mentioned. Although the e-mail server may be working perfectly, Roadrunner is not necessarily out of the woods.

The problem could be anywhere in the Internet chain, including your network card, the router, the cable modem, any of the associated cables or even a bad connection in the cable from the house to the street. You will need to check or reset each one of these items. Sometimes the problem may be fixed by shutting everything down and restarting each device (modem, router and computer in that order). If you do this and swap out your internal cables to ensure that they are good, then it's time for the Internet provider to check the cables to the house and modem.

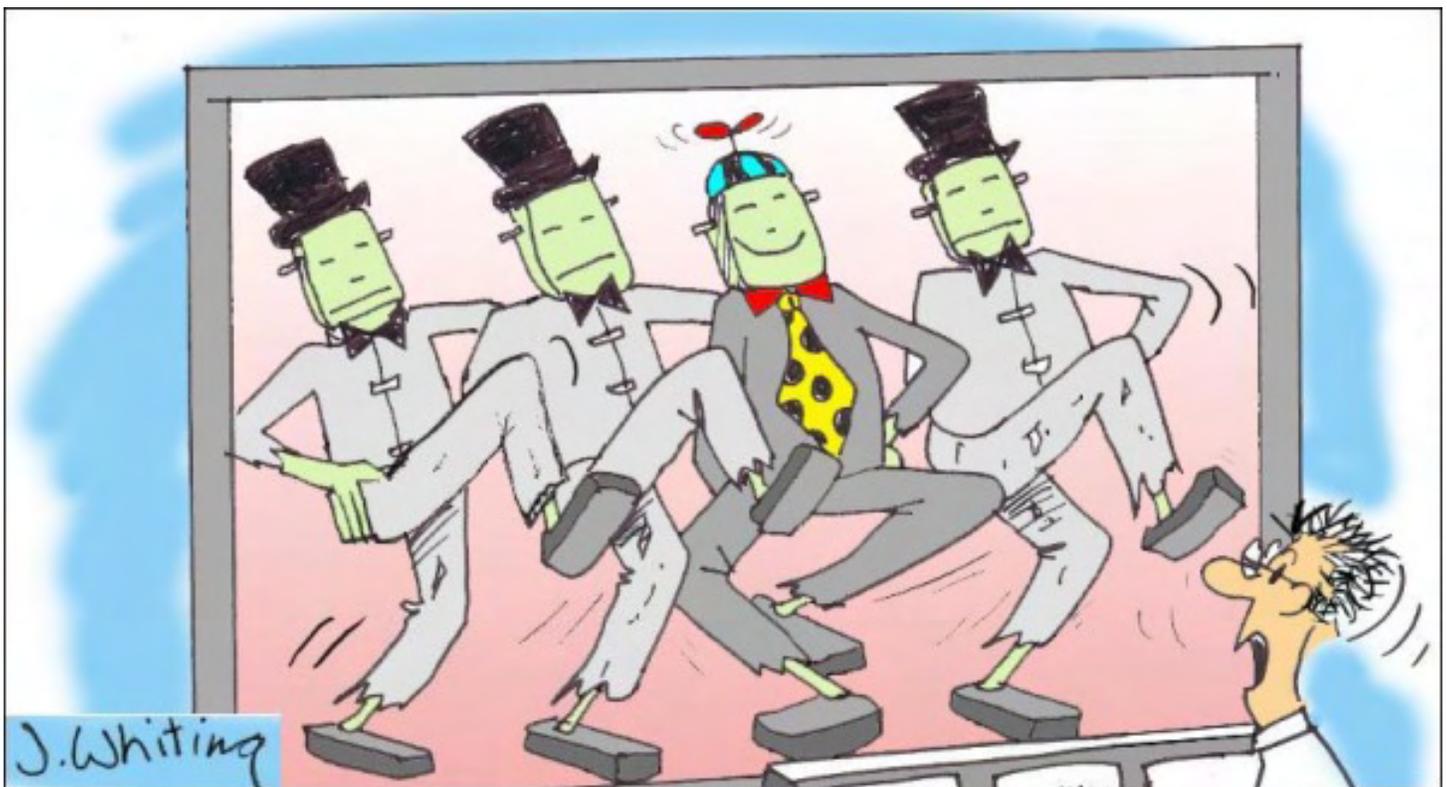
If others have encountered this specific e-mail error, please toss in your two cents.

Digital Dave

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## File-Synchronization Programs

**“Keep your data files organized, with help from synchronization software.”** by Michael J. Ross

The tedious and detailed work of synchronizing files is best relegated to a computer, specifically to a quality synchronization application—many of which are free.

With the ongoing proliferation of laptops, palmtops, personal digital assistants (PDAs), smartphones and USB storage devices in our personal lives as well as in the business world, it is clear that people are moving a huge amount of information from one location to another, and for some data, always keeping it on hand. This trend is being magnified by a number of factors: We are seeing a continual blurring of personal and business lives, as employees are pressured into bringing work home, which in turn encourages people—some of whom resent the incursion into their personal lives—to respond by trying to accomplish even more personal work in the office. Another factor is the rise of freelancers and contractors, as well as telecommuters. Lastly, countless people are taking on additional jobs, and oftentimes need to bring professional information to their side jobs, in addition to the usual personal data that is part of managing a busy family.

As an unintended consequence of this increased movement of data, there are more situations in which any particular computer file can be present in multiple locations. In turn, this leads to an increase in the odds that these data files will get out of sync, and recent changes





**"There must be a bug in our synchronization program."**

to those files could be lost when one version of a file is overwritten by another. As an example, let's say that you connect your PDA to your laptop (which you are going to leave at home for the day) and copy your to-do list from the laptop to the PDA. As a result, there now exists two copies of that one file. More than likely, as you go about your business during the day, you will be accessing and updating information on your PDA, and so now the two copies of your to-do list are out of sync. When you

return home, it is far too easy to become distracted by all of your domestic duties and forget to copy the most up-to-date version of your to-do list from the PDA onto the laptop. Later, if you start working on your laptop and make changes to that list, each version has unique data not contained in the other. If you repeat this process the next morning, you will lose all of the previous day's changes that you had made to the PDA version.

The scenario described above is an example of "two-way synchronization," in which either version of the file might be modified at any time, and thus there's a need to synchronize the changes between the two versions, so that none are lost. As you might expect, there is also the idea of "one-way synchronization," in which a file is invariably copied from a source location to a target location, and never in the other direction. Perhaps the most common form of one-way synchronization, at least in the realm of personal computing, is the backing up of files. Let's say that you perform a nightly backup of all your changed files on a primary hard drive, over to a backup drive (a process that is highly recommended). The files on your primary drive constitute the source, because that is where you make all of your modifications. The files on your backup drive are the target, and you would never knowingly start making changes to those files, because those changes would be lost the next time you performed a full backup.

Clearly, two-way synchronization is more complicated than its one-way counterpart, because there is no way to know that one set of files is always the most up-to-date. Using our terminology from above, the two different locations could alternate roles as the source and the target. If both sets are modified independently, then in a sense both are now sources. The sooner that you synchronize them, the better, because otherwise the two versions start diverging, and it only gets worse with time.

You can perform such synchronization by hand, but that process is typically quite time consuming and risky. It is too easy to fail to realize that you had made changes to one or more files somewhere. Even worse, there is the possibility that one of the more up-to-date files has become damaged—perhaps you inadvertently deleted a significant part of its contents, or the file got corrupted because it was on a hard drive partition going bad. In these cases, copying these files over the other versions can result in loss of data, which you might not spot until much later, when it is too late to repair the damage.

This sort of tedious and detailed work is best relegated to a computer. More specifically, if you are trying to do file synchronization manually, then you definitely should switch to using a quality

synchronization application. In this article, we will discuss a number of highly regarded candidates, all of which you can utilize free of charge.

## Open-Source Options

We begin with some programs that are characterized as "open source," which roughly means that they are not only free to use, but you can download and peruse their source code—or hire someone else to do it for you, if you are not a programmer or not familiar with the language used to create the program. But what are the advantages of a program being open source? Firstly, the risk that the program is doing something dastardly (e.g., spyware) is greatly reduced. Secondly, if you would like to change the way that the program works or its appearance, you can do so on your own, rather than having to pay the original developers to make the requested changes for you. Thirdly, if you are interested in learning the programming language in question, or at least polishing your skills, or seeing the way that veteran programmers develop software, examining their code is an excellent way to do so.

A subset of the open-source synchronization programs only support Windows as the operating system, while others will run on multiple OSes. Let's examine software from both categories, beginning with the former. DirSync Pro (*directorysync.sourceforge.net/*) (Directory Synchronize Pro) is capable of synchronizing files on laptops, desktops, flash drives and PDAs. It supports the creation of incremental backups, i.e., only the changes are saved to disk, so unchanged data in a file is not duplicated each time a synchronization takes place. It can run on Windows, Linux and Mac OS X systems, because it was developed using Java, a popular multiplatform software language. Also authored in Java, KDiff3 (*kdifff3.sourceforge.net/*) makes it possible to show, merge and print differences among multiple versions of the same file, with changed lines identified. JFileSync (*jfilesync.sourceforge.net/*), as implied by the name, is also written in Java, and is capable of reporting conflicts among files, which are changes found in one and not in the other. It has a native file server, and as a consequence can perform synchronization through firewalls.

FullSync (*fullsync.sourceforge.net/*) can back up or synchronize files in local directories and FTP servers, and it lets you designate what files to include or exclude, depending on rules that you can define, singly or per directory. WinSCP (*winscp.net/eng/*) (Windows Secure CoPy) is capable of synchronizing files between local and remote servers, utilizing FTP (either regular or secure connections). WebSynchronizer (*websynchronizer.sourceforge.net/*) supports automatic and manual synchronization of files to FTP servers and network drives, and also supports Russian as well as English.

## Freeware Options

While a growing number of software projects are being released as open source, there is a sizable segment of the programming world that is bucking the trend, and still keeping their source code under wraps. Yet this does not mean that they are charging exorbitant fees to use their products. On the contrary, they make their programs available free of charge.

As may be expected, many of the file-synchronization programs for Windows are distributed by its parent company, Microsoft. It acquired some of its better products by acquiring the software vendors that created them. An example of this is Windows Live Sync (*sync.live.com/*), which was originally developed by ByteTaxi (and marketed under the name FolderShare). Unlike the

majority of Microsoft programs, Live Sync appears to support all operating systems, because it is Web-based. Unfortunately, it requires a Windows Live ID.

There are two separate but related Microsoft programs, more geared to the desktop: Windows Mobile Device Center ([www.microsoft.com/windowsmobile/en-us/downloads/microsoft/device-center-download.aspx](http://www.microsoft.com/windowsmobile/en-us/downloads/microsoft/device-center-download.aspx)) and ActiveSync ([www.microsoft.com/windowsmobile/en-us/downloads/microsoft/activesync-download.aspx](http://www.microsoft.com/windowsmobile/en-us/downloads/microsoft/activesync-download.aspx)) were intended for users who want to synchronize files, calendar entries, contact lists, and e-mail messages, between their home PCs and any sort of mobile devices that supports these two protocols.

SyncToy ([www.microsoft.com/prophoto/downloads/synctoybeta.aspx](http://www.microsoft.com/prophoto/downloads/synctoybeta.aspx)) is a Windows PowerToy, which means that it is free to download and use. SyncToy can be used to automate the synchronization of many files and folders; it can merge the contents of different versions of a file; and it can rename and remove files in a folder as already done in its pair folder. It supports a variety of devices, because the files and folders can be located on local hard disks, flash drives, network shares and digital cameras. SyncToy's graphical user interface (GUI) is straightforward, and it makes it possible to exclude files and folders based upon their names and file types.

In terms of free alternatives to Microsoft offerings, consider BestSync 2010 ([www.risefly.com/foldersynceng.htm](http://www.risefly.com/foldersynceng.htm)), which boasts a large number of capabilities. It can perform two-way synchronization of files on local disks, network drives, removable media, FTP servers (even supporting multiple time zones) and Microsoft Outlook (for those folks still using the biggest security hole in Windows). BestSync supports all modern versions of Windows, and its GUI can be used in at least half a dozen languages, including English. Synchronized files can be encrypted or compressed, which is particularly critical for sensitive information that you write to any removable media, such as a USB thumb drive. It can perform file synchronization automatically, because the application detects changes in the various versions of each file. It can also be scheduled to run at certain times (as a Windows service).

Another non-Redmond product, SyncBack ([www.2brightsparks.com/freeware/freeware-hub.htm](http://www.2brightsparks.com/freeware/freeware-hub.htm)), is available in three different versions. The free version handles one-way and two-way synchronization, on local disks, network drives, flash drives, optical media, Zip archive files and FTP servers. SyncBack can be downloaded and used without any sort of registration. Like all the best freeware programs, it is not infected with any spyware, nag screens, or advertising.

Note that the risk of losing your latest modifications to any files increases dramatically if for some reason the system times for the source and target locations are not identical, or they are close enough to be effectively equal. The reason for this is that all file synchronization software (even that between your ears!) will only work properly if the last-modified date and time stamps of the files under comparison are "on the same clock." If the system time for the different devices are not in agreement, then the comparisons of the modification times will be erroneous. For example, let's say that your laptop and PDA show the identical date and time. If you copy a file from the laptop to the PDA, then both copies of the file will show identical modification timestamps. But take the case that your laptop detects that Daylight Saving Time has ended, and it sets its system clock back one hour, but your PDA does not do the same. If you modify the file on your laptop within the next hour, then even though it is the most up-to-date version, it will have a timestamp older than the file on your PDA, and will be overwritten the next time you do synchronization.

Despite the additional complexity of having multiple copies of the same files on different platforms, the programs detailed above make it possible for you to easily keep your personal and business files synchronized, without having to spend any money on software license fees.

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Michael J. Ross is a Web developer ([www.ross.ws](http://www.ross.ws)), writer, and freelance editor. He creates Web sites that help entrepreneurs turn their ideas into profitable online businesses.

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## Windows Live Mesh: A Better Way to Synchronize

**“A new tool from Microsoft is about to go mainstream.”** by Pete Choppin

If you want an efficient system that not only stores your files, but also synchronizes between your work computer, home computer, laptop and other devices, you need to take a look at Windows Live Mesh.

Some time ago I came to the realization that trying to manage my e-mail on one computer was not only futile, but it was driving me insane. I downloaded all my e-mail to a simple client like Outlook or Thunderbird ([www.mozilla.com/en-US/thunderbird/](http://www.mozilla.com/en-US/thunderbird/)), and there it would stay —on my hard drive. If I wanted to access my e-mail, say at work or school, I had to remember to check the box that says "Keep messages on the server." If I remembered to do this when I configured my e-mail client, then I could access my e-mail from about anywhere. If not, then I had to go through the process of sending myself the e-mail I had on the one computer, assuming I had not deleted it.

This was my early attempts at mobile computing and synchronization, albeit inefficient, complicated and not very much fun. The result was having e-mail stored at multiple locations. I often found that I had lost or deleted messages.

Now I use a PDA, laptop and desktop computers at home and work. E-mail is only one of my dilemmas. What about my files? From maintaining Web sites to writing *ComputerEdge* articles, I often find myself going from one place to the next, trying to keep things organized, and confusion to a minimum.

It was driving me insane and I wondered, "Isn't there a way to easily and efficiently make my files available wherever I go?" Now, there is a way.

### Introducing Windows Live Mesh

Online storage services such as Box Net ([www.box.net](http://www.box.net)), Xdrive ([www.xdrive.com](http://www.xdrive.com)), and Mozy ([www.mozy.com](http://www.mozy.com)) are readily available and easy to set up. Microsoft has one called Skydrive ([skydrive.live.com](http://skydrive.live.com)). All of these services are nice for what they do. They simply provide storage space. But if you want an efficient system that not only stores your files, but also synchronizes between your work computer, home computer, laptop and other devices, you need to take a look at Windows Live Mesh.

### How Live Mesh Works

Mesh works by installing a small piece of client software on your computer that synchronizes your files with your online desktop. You can have it sync to multiple computing devices, but as of now you are limited to 5GB of space.

Also, you can specify the folders on your computer you want it to sync with your online desktop. This will make these files available via a Web browser and your Live Desktop.

Windows Live Mesh is still in beta testing for some of its full functionality. But if it catches on and people like it, we might see the ability to install applications to the online desktop in the future.

## Getting Started

First you need to go to the Live Mesh ([www.mesh.com/welcome/](http://www.mesh.com/welcome/)) Web site and login with your Windows Live ID. If you don't have a Windows Live ID, you will need to create one to continue.

Also, make sure you are using Internet Explorer, as some of the plug-ins don't function properly in other browsers yet.

Once you have created your Windows Live ID and signed in to Windows Live Mesh, you should now be at your online desktop.

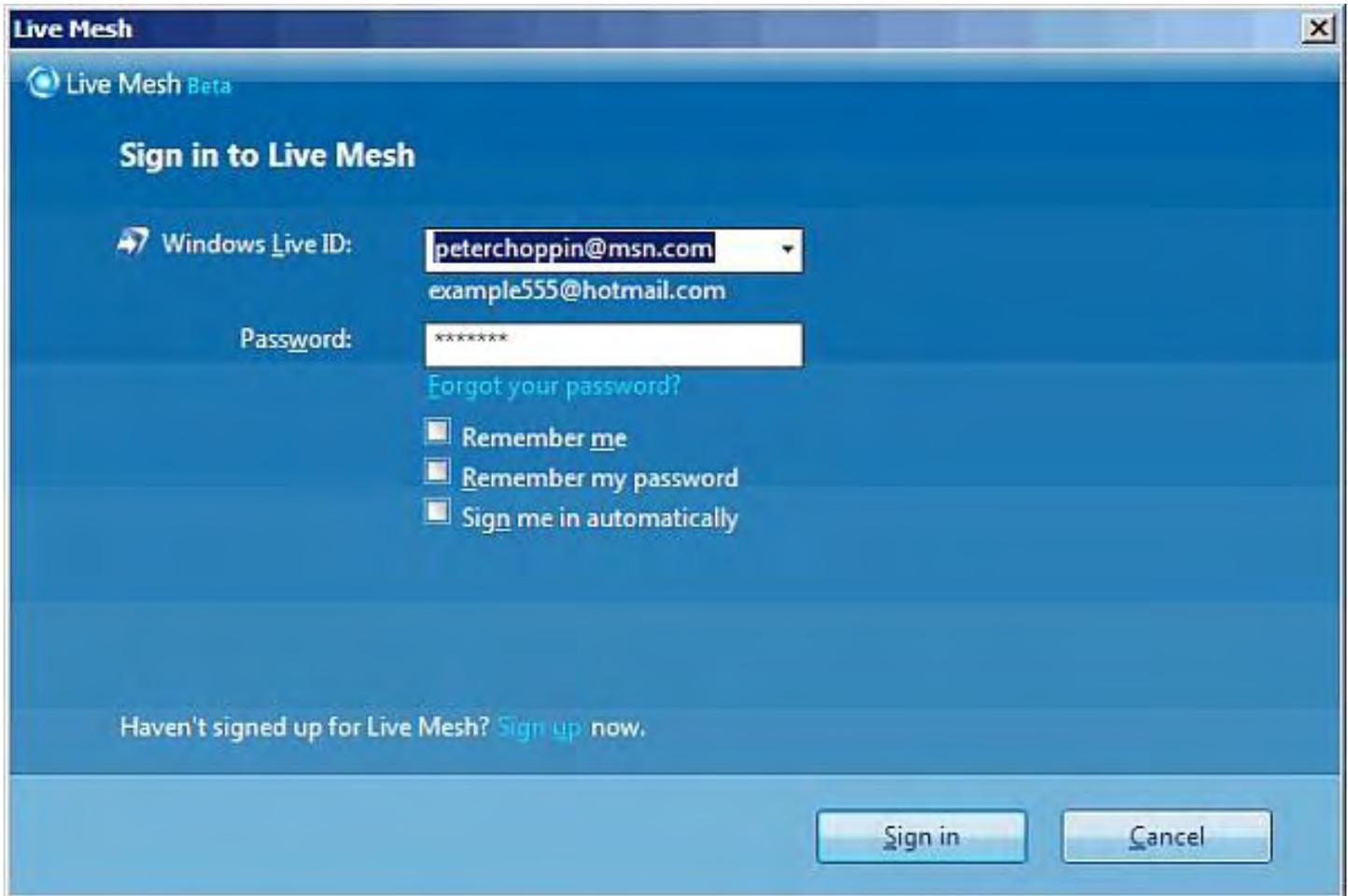


Figure 1. Windows Live Mesh sign in.

Here you can add new devices to sync with, and you can also upload files to your online desktop.

Let's start by adding a computer to sync with. Click on the orange Add button, choose your operating system, and then click Install.



Figure 2. Windows Live Mesh Add device for installation.

This will start the installation process for Windows Live Mesh.



Figure 3. Windows Live Mesh installation.

You will be prompted to enter your Windows Live ID and password into Mesh. You can also check the three boxes underneath to Remember me, Remember my Password and Sign me in automatically.

Now give it a friendly name so you can recognize it easily. You can use something like "home PC" or "work PC."

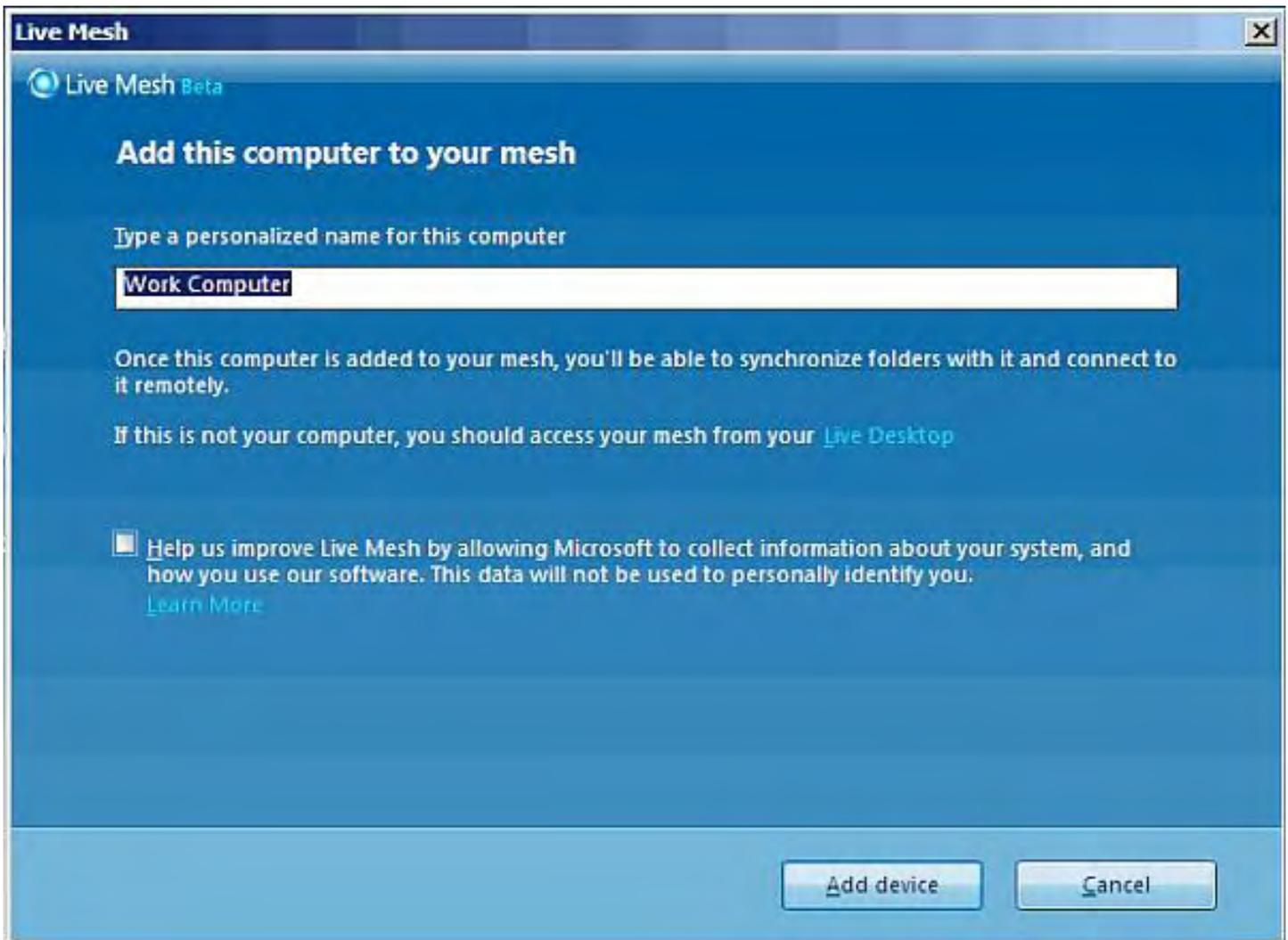


Figure 4. Windows Live Mesh computer name.

### Synchronizing Files and Folders

Now that we have everything installed, let's start synchronizing some important files and folders. The easiest way to sync a folder is to right-click the folder you want to sync, and choose Add folder to Live Mesh. In this example I'm using a folder called "ComputerEdge."



Figure 5. Windows Live Mesh Add folder.

This opens the Add Folders dialog box

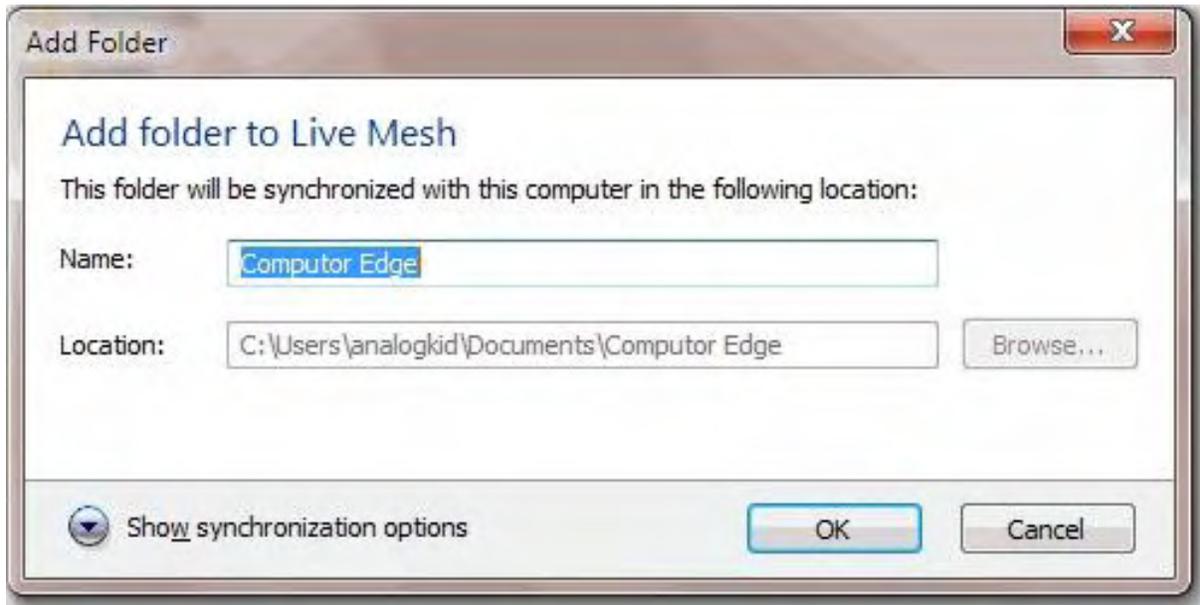


Figure 6. Windows Live Mesh Add Folder dialog.

You can also expand the synchronization options by clicking the down arrow in the bottom left corner of this window. This allows you to control how the folder you created synchronizes with your devices.

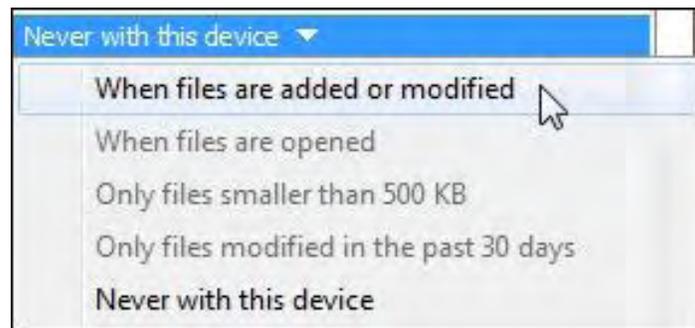


Figure 7. Windows Live Mesh sync options.

The folder will turn a light blue color, indicating it is a folder that syncs with Live Mesh. Any file or folder that I add to the ComputerEdge folder will automatically upload to my online desktop.

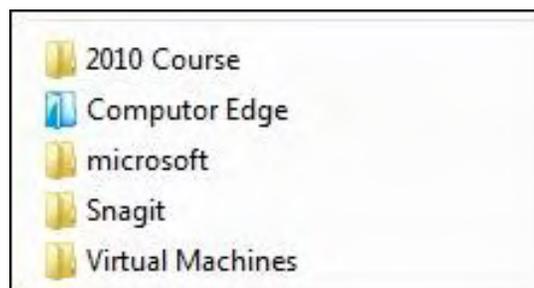


Figure 8. Windows Live Mesh synced folder in light blue.

### Accessing Your Files from a Web Browser

We have a folder setup to synchronize to the online desktop, so now what? How can you access

these files remotely?

It's pretty easy. Open Internet Explorer and login to mesh.com.

Once you login you should see all your devices and your Live Desktop. Click Live Desktop to view your synchronized folders.



Figure 9. Windows Live Mesh devices.

Your folders that have been set to synchronize will be displayed on the Live Desktop.



Figure 10. Windows Live Mesh desktop.

Notice the ComputerEdge folder I created earlier is on my Live Desktop. When I open the folder I can see the files that it synchronized.

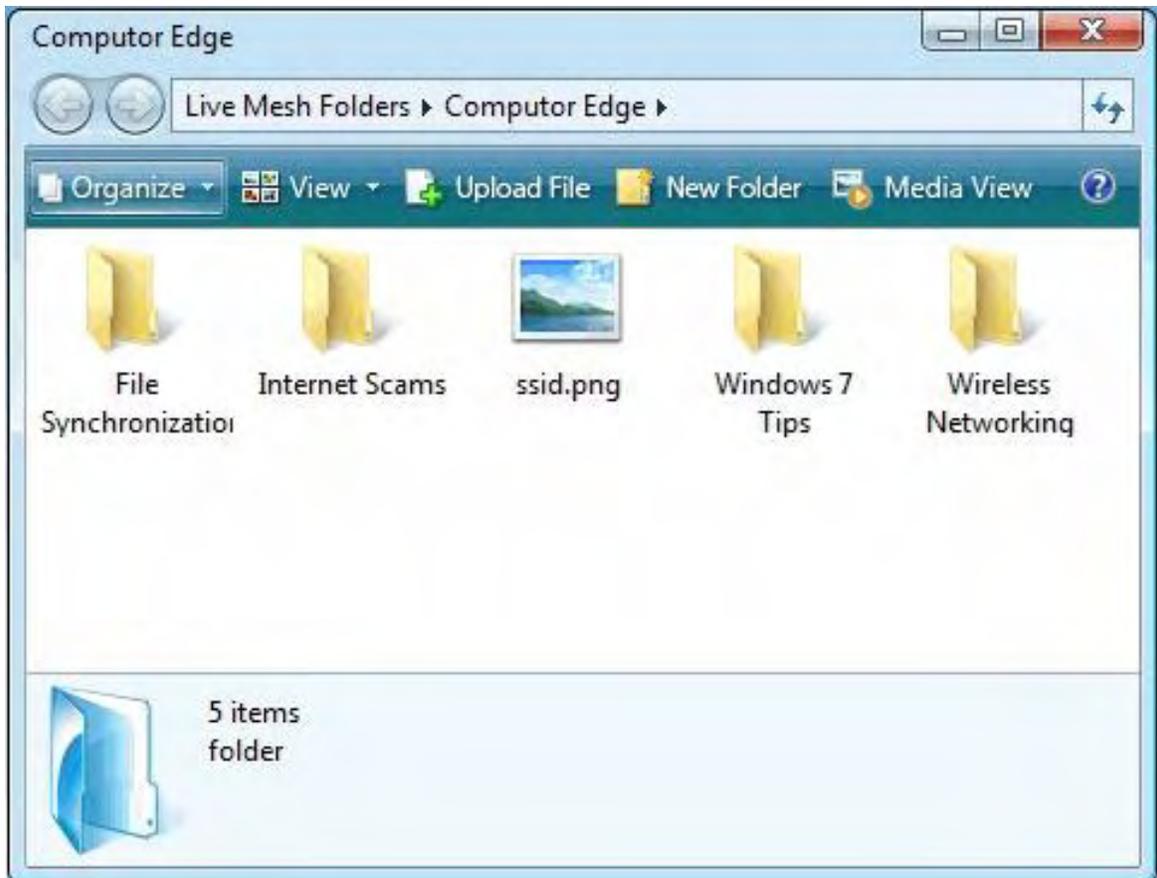


Figure 11. Windows Live Mesh folders.

## Remotely Controlling Your PC

In addition to synchronizing and storing your files, Windows Live Mesh also allows you to remotely log into your computer using a Web browser. While logged into your Live Mesh account, click Devices from the top buttons. This will take you to your home screen with your devices and Live Desktop.

Click the computer you want to remotely control and click Connect.

You will be prompted to install an ActiveX Control on your computer. If you don't allow this to install, you will be unable to remote into your PC. Click on the Information Bar and choose Install ActiveX Control.

You also might be prompted a second time to install the plug-in.



Figure 12. Windows Live Mesh Active X installation.

You will then be connected to the remote computer. An additional connection request box should appear. You can click the check box to disable this message in the future.

Now you should be remotely controlling your computer.

### What's in Store for Windows Live Mesh?

Windows Live Mesh is still in beta testing for now and has its limitations. Pretty soon you will be able to install Mesh on your Mac, and on your Windows Mobile phone. I'd also like to see applications run in Mesh through the Web browser, just as if you were using your computer.

Applications like Office would be great to see in Mesh. Even better would be a full-screen mode that fills your screen for easier usability.

Keep your eyes peeled on this new technology from Microsoft as it makes its way mainstream. More storage, more synchronizations options, and applications running on your Live Desktop should be coming very soon.

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Pete Choppin has been an IT Professional for over 15 years. He currently works as a network and systems administrator for a company called Albion based in Clearfield, Utah. He has experience in all types of hardware, software, and networking technologies. He is proficient in many operating systems including Linux, Windows and Macintosh. His interests include cooking, sci-fi, computers and technology, and Web design—a semi-professional endeavor, having

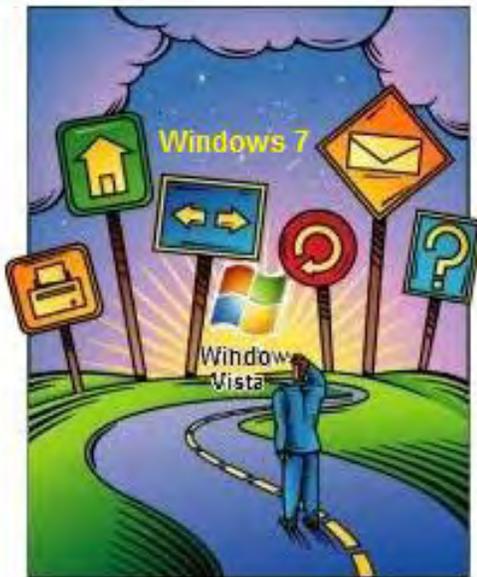
designed Web sites in the dental field, e-commerce businesses, and for the Boy Scouts of America.

Pete has been a devout reader of *ComputerEdge* since 1990 and contributes regularly to featured articles as well as the Linux Lessons section of *ComputerEdge*. He can be contacted at [pchoppin@comcast.net](mailto:pchoppin@comcast.net) but prefers to have comments on *ComputerEdge* articles submitted to the editor and posted for the benefit of all readers.

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# Windows Tips and Tricks

**Windows Tips and Tricks: Syncing in Windows 7 Professional Libraries**  
“Another Reason to Switch to Windows 7 Professional” by Jack Dunning

For some people, the simplicity and convenience of setting up files in Windows Libraries for copying and syncing with the "Always available online" option may be enough motivation to upgrade to Professional.

If it turns out that you need something that's only offered in Windows 7 Professional and above, the fact that Microsoft offers different versions of Windows 7 becomes an annoyance. For most people Windows 7 Home Premium may be all that they will ever need. In March I said that there were only two reasons for preferring the Professional version of Windows 7. I need to modify that number to three. The key ingredients in Windows 7 Professional that may be compelling enough for someone to pay more are: Windows XP Compatibility Mode, Windows Remote Control of the computer, and using Windows Sync Center for maintaining files on network drives—which includes working offline with network files via Windows Libraries or mapped network drives.

One of the benefits of using Windows 7 Libraries in the Professional version and above is the syncing that's included for remote devices. Ideally, all you would ever need is one copy of a file located on the original. In that situation, the dangers of having too many copies (not knowing which is the latest or master, overwriting a new file with an older one, etc.) would be minimized. By using Libraries in Windows 7, there is only one copy of a file made available to all libraries. It stays in its original location, although it is accessed as if it were on the computer holding the library. It can simultaneously be included in numerous libraries, each on a different computer. This relieves the user from needing to copy all of the files to the current computer, thus eliminating redundancy. (You will continue to want some type of automatic backup system for your files, such as copying them to another network drive.)

But, what if the time comes when the host device is not online and unavailable to the Library? Those files can no longer be found until the device is reconnected. This is not a problem if the only time you need a file is when it's shared by the network. However, if you want to keep working with the file, even when the source is down, you will need to make the included library folder available offline to your computer.

In Windows 7 Professional Libraries, a folder in a library can be made available for use even if

the source is not on the network. This is done by right-clicking on the folder in the library and selecting "Always available offline" from the drop-down menu (see Figure 1). Windows will then start making copies of all the files in the folder. (If you are using Windows 7 Professional or above, the "Always available offline" option will appear for any network folder in Windows Explorer, even if not included in a Library.)

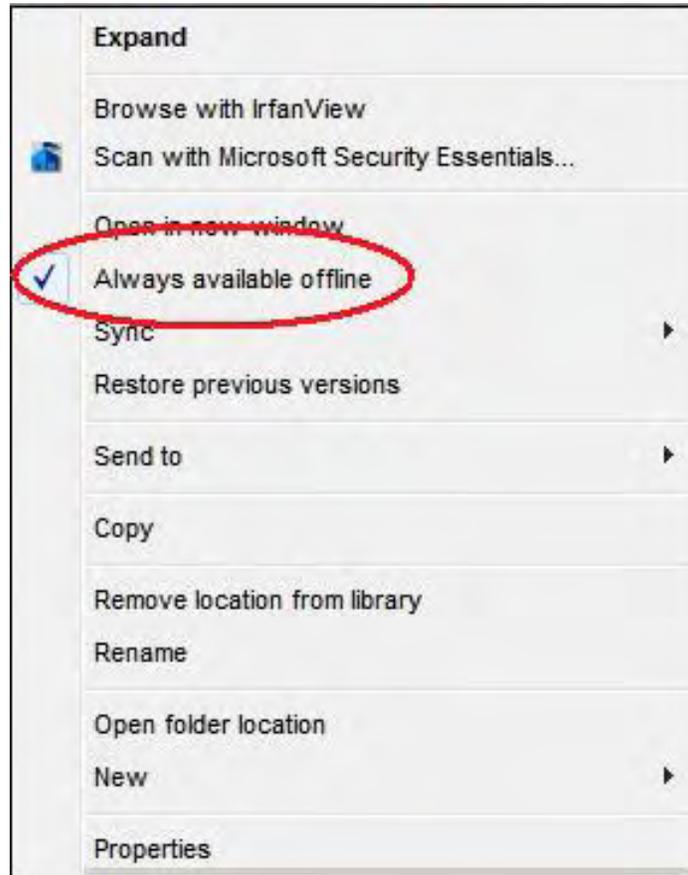


Figure 1. Right-click on a library folder and select "Always available offline."

The Always Available Offline window will open, displaying the progress or the file copying (see Figure 2). This is actually done in conjunction with the Sync Center. The two sets of files, the original set and the one that is now being created, will continue to be synchronized.

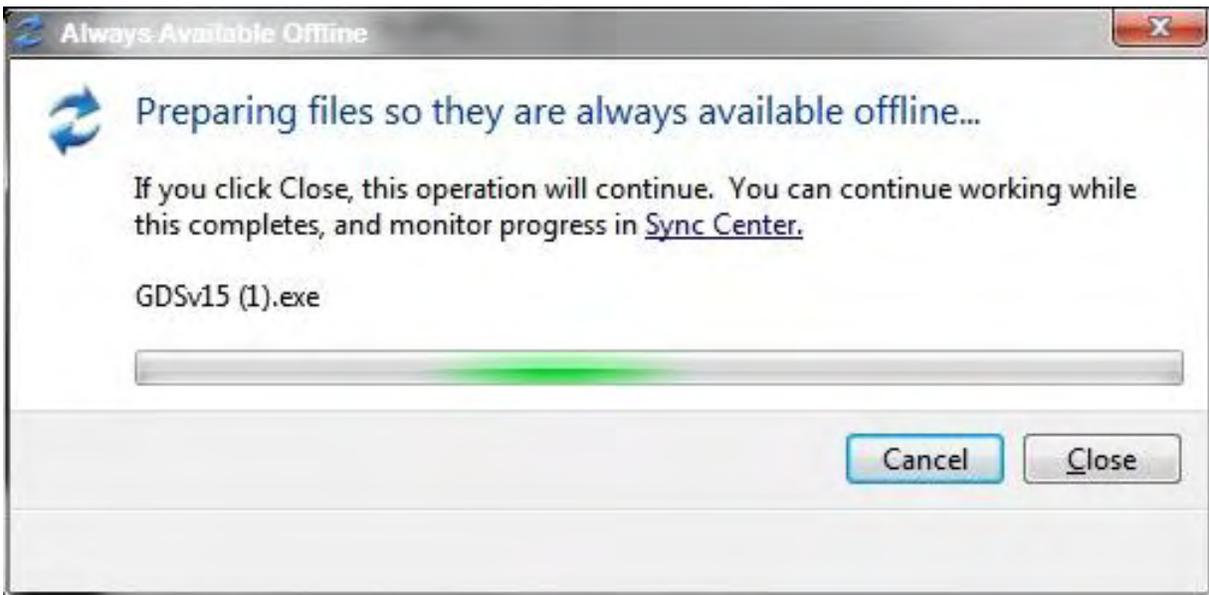


Figure 1. Copying the files to make them "Always available offline."

Windows 7 Professional stores a copy of each file in a folder called the Offline Files Folder. (To open the offline files directly, go to "Manage offline files" and click the "View your offline files" button. The easiest way to find it is to type "offline" in the Search field and select it from the Control Panel listing. It is also listed in the left-hand navigation panel of the Sync Center.) If you are disconnected from the primary source, you will automatically be able to work with an offline copy of the file. When you reconnect to the remote device, the files will be synchronized.

There are times when you may want to work with the offline file even when you are connected to the remote device. If you are using a slow Internet or VPN connection that substantially impacts the performance of your application, you can switch to the offline files by clicking the "Work offline" button that now appears in the Windows Explorer top menu bar.

To visit the Sync Center and adjust settings, such as the schedule for automatic syncing, type "sync" into the Search field of the Start Menu and select "Sync Center" from the menu (see Figure 3).



Figure 3. Windows 7 Sync Center."

There are so many alternative ways to synchronize files between two devices that it almost seems silly for Microsoft to leave "Always available offline" out of the Home versions of Windows 7. However, for some people, the simplicity and convenience of setting up the files in Windows Libraries for copying and syncing with the "Always available online" option may be enough motivation to upgrade to Professional.

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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](http://www.computoredge.com). He can be reached at [ceeditor@computoredge.com](mailto:ceeditor@computoredge.com)

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## Wally Wang's Apple Farm

### Wally Wang's Apple Farm

“File Synchronization and the Mac” by Wally Wang

MobileMe makes it easy to synchronize your appointments and contact information between multiple devices such as an iMac, MacBook Pro laptop, iPhone and iPad. Also, the "iPad killers" are all quickly dying; novices create new ways to compute with the iPad; and a tip on filtering out junk mail by customizing the Mail program.

If you have both a desktop and laptop Macintosh computer, the simplest (and potentially most troublesome) way to keep your files synchronized between the two machines might involve simple copying and pasting. Copy files from one computer to a flash drive, plug the flash drive into the other computer, and paste the files to the second computer.

Of course the problem is that you may soon find duplicate versions of multiple files and not know which file contains the most recent data. Even worse, two files can both contain updated data, so now you have the headache of figuring out where your current data might be stored so you can consolidate it all into a single file again.

One solution is MobileMe, Apple's \$99 offering that provides an e-mail account, Web site, photo gallery and online file-storage facility. You can probably find much cheaper online storage options (many of them are free), but MobileMe makes it easy to synchronize your appointments and contact information between multiple devices such as an iMac, MacBook Pro laptop, iPhone and iPad.

The iDisk feature of MobileMe provides online storage so you can share files with others and access your files from all of your computers. You'll still need to worry about multiple copies of your file if you download them to your computer, modify them, and then forget to upload them back to MobileMe again.

If you're strictly interested in synchronizing files between your computer and your iPad, you can skip MobileMe altogether and just rely on the iTunes program instead. By loading the iWork office suite (Pages, Numbers and Keynote) on both your iPad and your computer, you can seamlessly share files between the two devices every time you connect your iPad to your computer through its included USB cable.

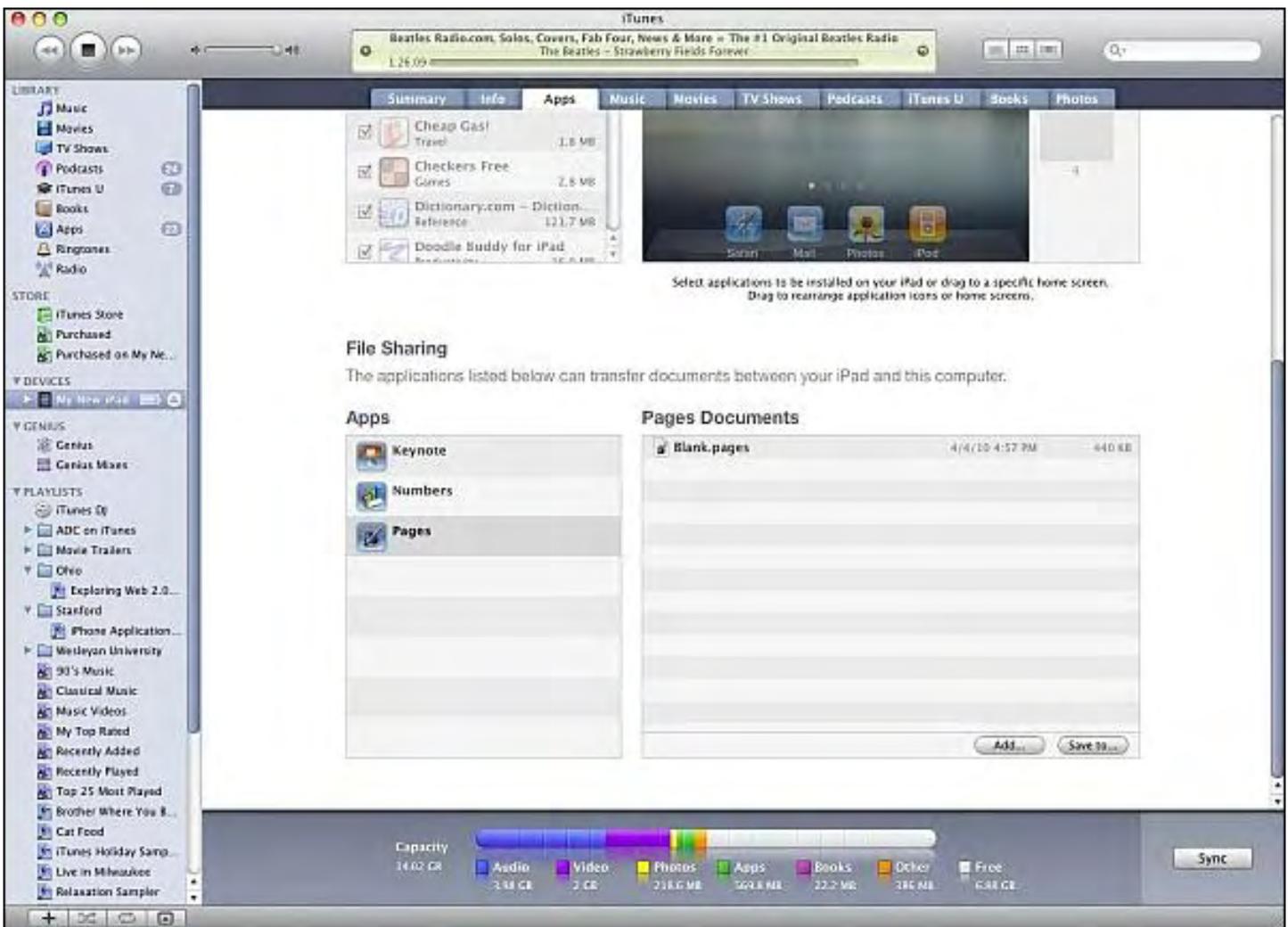


Figure 1. You can share iWork files between an iPad and a Macintosh through iTunes.

If you really want to keep your file synchronization headaches to a minimum, just use one computer. Otherwise MobileMe is just one way to keep all your devices current with whatever files are most important to you.

## The iPad Killers Kill Themselves First

Before Apple introduced the iPad, Hewlett-Packard and Microsoft proudly displayed the HP Slate PC at the Consumer Electronics Show (CES) in January 2010 as an example of innovation with Windows 7 ([news.bbc.co.uk/2/hi/8444672.stm](http://news.bbc.co.uk/2/hi/8444672.stm)). This gave Hewlett-Packard bragging rights that it had been first to the market with a tablet device, so Apple's iPad was obviously copying the HP Slate.

Even after Apple revealed the iPad, anti-Apple critics gleefully pointed out the iPad's shortcomings. "No Flash support!" they cried. Of course, such critics conveniently avoided looking at the facts, which are that until the recent beta version of Flash 10.1, Flash didn't support touch gestures.

Without touch gesture support, no one with an iPhone, iPod Touch or iPad could control a Flash-based Web site since Flash expects a mouse pointer. If Flash had been allowed on an iPhone, iPod Touch or iPad, people would be able to see a Flash Web site, but they wouldn't have been

able to choose any of the Flash-based menus. To most people, this would appear as if the touchscreen wasn't working when it was actually the fault of Flash not responding to touch gestures. Thus, Adobe's Flash would be the culprit, but Apple would get the blame. To avoid confusing and frustrating users, Apple simply kept Flash off its touchscreen devices.

Other anti-Apple critics pointed to the iPad's lack of a USB port and the inability to multitask. The iPad actually can multitask, but only with its built-in apps and not with third-party apps. Anti-Apple critics conveniently ignore this fact and prefer to claim that the iPhone and iPad can't multitask at all.

When Hewlett-Packard leaked details of its upcoming Slate computer, the anti-Apple enthusiasts proudly claimed, "Now this is what people should be talking about! It runs Windows 7 so it multitasks and can run all my Windows programs, it has a USB port, and it has a built-in camera. In other words, it has everything the iPad lacks, so this is sure to be a winner!"

After Apple officially released the iPad on April 3 along with the first iPad TV commercial, Hewlett-Packard quickly followed it with its own commercial for the Slate, parodying the iPad commercial ([www.youtube.com/watch?v=e3gEczuGzaM](http://www.youtube.com/watch?v=e3gEczuGzaM)).

Then a Mexican tech site, Conecti.ca, got its hands on an HP Slate review copy and harshly criticized the Slate for being too slow with low battery life ([www.geekosystem.com/hp-slate-review-leak-slate](http://www.geekosystem.com/hp-slate-review-leak-slate)).

Almost immediately after this review, Hewlett-Packard contacted this Web site and made it take down its harsh review of the Slate. Some of the criticism of the HP Slate focused on the lack of responsiveness of the Windows 7 touch gestures and the slow speed of Windows 7 running on limited hardware. The main problem was the HP Slate's reliance on Windows 7.

Not surprisingly, Hewlett-Packard recently agreed to buy out Palm for its webOS operating system. Also not surprisingly, Hewlett-Packard reportedly canceled its Slate device without even selling one copy. Apparently, Hewlett-Packard realized that its Slate couldn't compete against the iPad, so the company killed the Slate before it could embarrass it even further.

Now armed with Palm's webOS, a real touch-gesture operating system, not a desktop operating system with touch gestures pasted on like Windows 7, Hewlett-Packard is reportedly redesigning the Slate device to run Palm's webOS ([blogs.techworld.com/war-on-error/2010/04/why-did-hp-buy-palm-to-escape-the-dead-end-of-windows/index.htm](http://blogs.techworld.com/war-on-error/2010/04/why-did-hp-buy-palm-to-escape-the-dead-end-of-windows/index.htm)) instead. With webOS, HP's Slate might finally make it to market by early next year. For those who thought that running Windows 7 on a tablet device with USB ports and Flash support would be a winning combination, guess what? An avalanche of features is far less important than a seamless user experience right from the start.

A second casualty of the iPad is Microsoft's Courier device ([arstechnica.com/microsoft/news/2010/04/courier-no-more-not-that-it-ever-was-a-post-mortem.ars](http://arstechnica.com/microsoft/news/2010/04/courier-no-more-not-that-it-ever-was-a-post-mortem.ars)), a book-like tablet with dual screens that fold over one another. Initially rumored to be available by 2011, Microsoft reportedly killed this project because it couldn't keep costs down, couldn't create a device with a long battery life, and couldn't create the seamless user experience that its concept video promised ([www.youtube.com/watch?v=UmlgNfp-Mdl](http://www.youtube.com/watch?v=UmlgNfp-Mdl)).

With the HP Slate and Microsoft Courier surrendering the tablet market to the iPad for now, the

only iPad killer left is Dell's Streak, which will reportedly run the Android operating system and be available sometime this summer. If Hewlett-Packard and Microsoft had to dump their so-called iPad killers, does anyone expect Dell to succeed against the iPad?

What all these rival tablet makers forget is that the iPad may not include every possible feature crammed inside its case, but what features it does offer work exactly as you expect them to behave. Instead of getting in your way, the iPad and other Apple products get out of your way so you can focus on doing something rather than wasting your time caring for and maintaining a computer.

For those still convinced that shoving Windows 7 on an anemic tablet device along with Flash support, a built-in camera and USB ports is the magic formula for success, take a look at this review of the Archos 9 Tablet ([www.laptopmag.com/review/tablets/archos-9-pctablet.aspx](http://www.laptopmag.com/review/tablets/archos-9-pctablet.aspx)) by Laptop Magazine. The first line of this Archos 9 tablet review is priceless.

## Uses for the iPad

When Apple introduced the iPad, many people couldn't figure out why they might need one. While these skeptics were busy scratching their heads and doing nothing, early adopters let their creativity run wild and came up with interesting ways to take advantage of the iPad's small size and intuitive user interface.

WFXL-TV in Albany, Georgia, found that by replacing printed news scripts with iPads ([www.poynter.org/column.asp?id=2&aid=182192](http://www.poynter.org/column.asp?id=2&aid=182192)), they could save approximately \$2,000 a month on paper and printer costs. The producers save scripts in PDF files and then e-mail them to the iPad. The television newscasters simply read from the iPad rather than fumble with loose sheets of paper. The swiping motion makes it easy for newscasters to navigate their script, eliminating the need for any special computer training.

Although this television news station could have just used any laptop to do this (the screens of netbooks would probably be too small to read comfortably), the iPad's small size means less clutter and easier positioning practically anywhere on a desk.

Virginia, a 100-year-old woman with impaired vision who had never owned a computer in her life, bought an iPad because she could see how easy it could be to use ([www.youtube.com/watch?v=ndkIP7ec3O8](http://www.youtube.com/watch?v=ndkIP7ec3O8)). After using it for a short time, Virginia even composed a simple haiku-type poem on her iPad.

If Virginia had bought a Windows 7 PC or even a Macintosh, it would likely have been too complicated and confusing for her to learn right away. (Try explaining the concept of left and right-clicking to a novice, or how to drag with the mouse, and you'll see how confusing these tasks can really be.)

However, the iPad's touch interface makes it simple for anyone to understand and use without requiring training classes or learning frustrating maintenance tasks like how to defragment a hard drive or how to optimize the Windows Registry to keep a PC from slowing down over time. The reason why people like Virginia instantly recognize the potential of the iPad is because they're looking at it through the filter of "How can I use it?" More experienced computer users look at an iPad through the filter of "How can the iPad be equal to what I already know and understand?"

As a result, these experienced computer users ignore the potential of the iPad as badly as Western Union ignored the potential of the telephone.

Companies are no different than individuals in their vision (or lack of vision). To learn more about why some companies thrive (Apple), others stagnate (Microsoft), and still others collapse and die (Digital Equipment Corporation), read *How the Mighty Fall* ([www.amazon.com/gp/product/0977326411?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0977326411](http://www.amazon.com/gp/product/0977326411?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0977326411)), by Jim Collins. After reading this book, you may gain insight on how people also thrive, stagnate, or get overrun by change.

The problem lies in how people react to change. One person might see change as threatening and automatically belittle and criticize change to avoid having to adapt to it. In the short term, this strategy appears to work (witness Kodak focusing on its film business for so long before switching to digital photography), but in the long term, this strategy always leads to its eventual dead end.

A second person can look at change and see opportunities. This is how companies like Netflix can thrive and prosper over established giants like Blockbuster Video. Given the choice between adapting to change or ignoring it, which choice do you think will be more helpful for your future?

\* \* \*

If you're getting overwhelmed by spam in your e-mail account, you can customize the Mail program to define your own rules for filtering out junk mail. Just load the Mail program, choose Mail/Preferences to open a Preferences window. Click the Junk Mail icon and select the Perform Custom Actions radio button.



Figure 2. To create your own junk mail rules, select the Perform Custom Actions radio button.

Click the Advanced button, and a bunch of options appear, letting you define different rules for identifying and routing junk mail.



Figure 3. The Mail program provides plenty of ways to identify and route junk mail.

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](http://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](http://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](http://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](http://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](http://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](http://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](http://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](http://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](http://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](http://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/](http://www.15minutemoviemethod.com/)) Wally can be reached at [wally@computoredge.com](mailto:wally@computoredge.com).

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## Rob, The Computer Tutor

### Rob, The ComputerTutor: Technology Solutions

“Word Processing 101” by Rob Spahitz

It's time to start a new chapter in the tutorials and go back to the basics. Rob will now be discussing computerized word processors, focusing on the Windows side, but also sharing a few things about other systems.

It's time to start a new chapter in the tutorials and go back to the basics. I'll now be discussing computerized word processors, focusing on the Windows side, but also sharing a few things about other systems.

### Writing Beginnings

I'm sure you all know the stories about ancient man deciding to communicate with others by etching pictures in cave walls. And, of course, you've seen the Egyptian hieroglyphics. Mankind is special in the animal world in that we have a very sophisticated, far-reaching and long-lasting system of communication not found anywhere else in the universe (as far as we know, although many hope we'll eventually find something).

Why do we have this urge to talk to friends, writing them letters, firing off text messages while driving, sending them Twitter Tweets, and adding Facebook messages, sometimes every few minutes? My theory is that we are social animals, and the communication allows us to feel important, learn things, and find solutions to problems using the power of "the collective." Those who rarely communicate lack the understanding that the world offers. Conversely, those who communicate constantly and never listen never get to experience much outside of themselves, but that's for another article.

So communication is important to us humans. Initially we just talked to each other, as many animals seem to do. Eventually we started to draw maps to show others where something was located. Apparently bees and ants do something similar to share information about food. Not to be outdone, we created a language that consisted of verbal parts and written parts. One or more sounds was associated with one or more symbols. Obviously, if you are reading this, you are familiar with one of those communication tools that we use: the English language.

What does this have to do with word processing? Well, communication has changed over the years (and centuries). There has recently been some controversy in schools about whether cursive writing (script) should be taught anymore since so many kids know how to communicate through computerized devices. As a teacher of adults, I don't have to worry about that topic, but it's certainly an interesting discussion. My opinion is that cursive will eventually fade away and only historians will know how to read it effectively. That said, I've also done some extensive research on cursive and found that each letter is really just derived from its non-script counterpart, even if it looks strange. Even the uppercase script letters are really just slight variations of their counterparts, even though things like capital "F" and "G" look bizarre. (It's really

a fancy upper case "F" or lowercase "g"!)

I go into this because some computer tools are trying to decipher people's handwriting. Some early Apple products had a tool that worked really badly, but there was really nothing else out there to compete. I guess it was bad enough that people never used it. (Actually, I think the problem was that people's handwriting was really bad so the products had a hard time interpreting it.) And now tools like the iPad are offering virtual keyboards to allow people to enter information more effectively than handwriting. I personally see the future as being what we use every day: verbal communication. I wait for the day that the software companies decide to do it right, instead of this stupid training concept that they keep applying...but I digress.

OK, so people started writing and perfecting the alphabet. When the computer came along, it was natural that we would want to start using computers for these letters, rather than just numbers. Some early systems only allowed upper-case letters, and different systems stored the information in different ways. Eventually just about every computer adopted the current system called ASCII, which has variations, but the core is located in about 96 positions of a "map" that tells you how the computer will interpret the letters. To see this map in the Windows world, go to the Start button, select "run" and enter "charmap" (for Character Map). One version is shown in Figure 1.

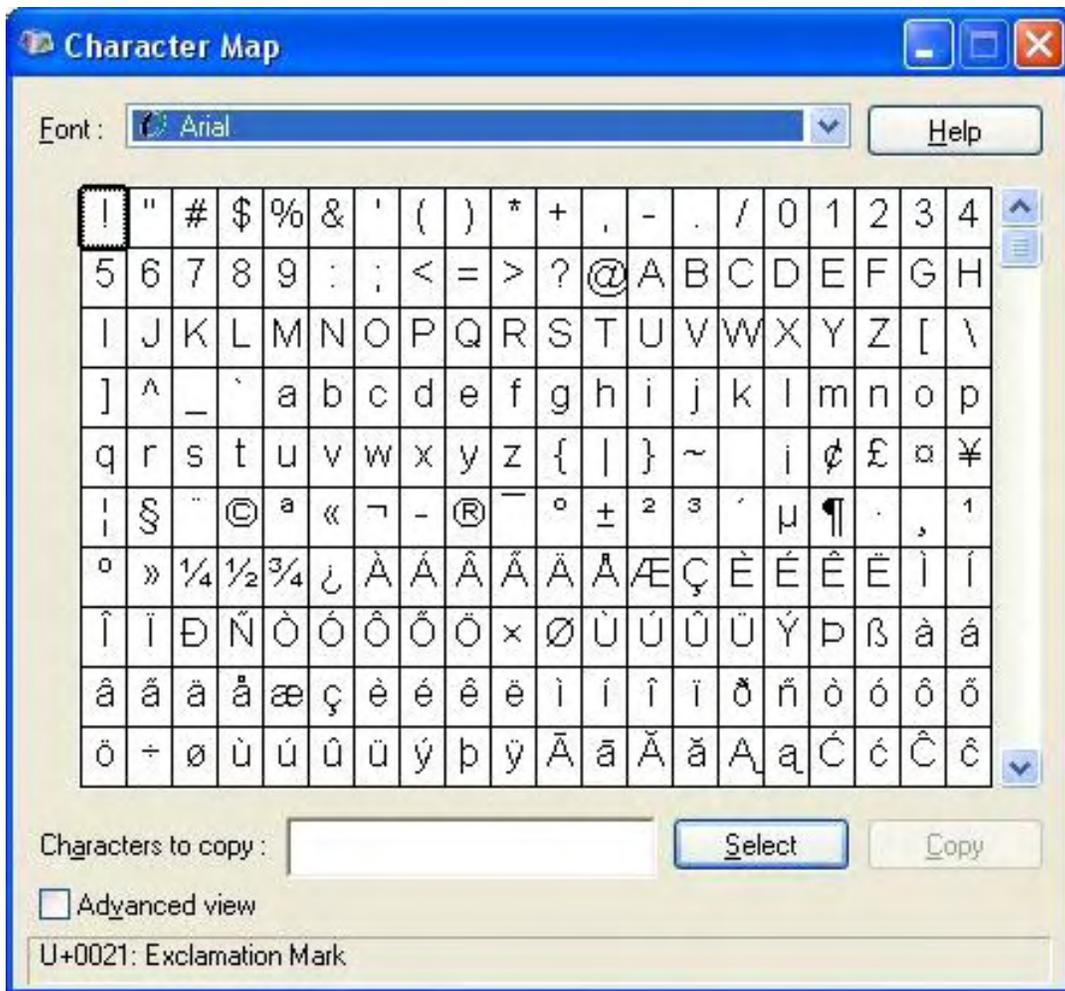


Figure 1. Windows Character Map.

The exclamation mark (!) is stored in the computer as code 33, the space (not shown) as code

32, the double-quote as 34, etc. And one interesting one, code 8, represented the backspace. With this standard system, computers were ready to start sharing information.

Meanwhile, developers began to create tools to assist with entering information. These were the early "text editors." Each system had a collection of these to use, each with various features (much as we see today).

## Your Own Word Processor

So imagine for a moment that you want to create your own tool to manage text. You would probably create a box that shows the text being entered. At some point, you'd want to allow the information to be saved. The early computers didn't have a mouse to jump up to a toolbar and click on a picture of a floppy disk or a menu entry for Save. Instead, they used key combinations like the Control (Ctrl) key combined with the S key. Or, more likely, they had some cryptic collection of things like the Esc key followed by T (to transfer information, like in the early versions of Word) followed by E for export.

Now back to your own editor. Aside from this box for entering text, you'd probably want to allow people to remove text. How would you do that? You could use something like Ctrl+E to erase a character...or how about the Backspace key? Well, since that's just another ASCII character (see above), your system would simply add that to the end of the block of text showing whatever symbol it decided was right for that. Well, I guess now you need to start creating some intelligence to interpret every key that is typed. If it's a "standard" character (letter, number or symbol), then show it; otherwise send it to an interpreter.

Again, why am I discussing this? At some point, I want to show how communication can have many obstacles. If we ever move to good voice-recognition technology, we still have the problem of managing pieces of a document: "this article is really bad now oh!computer: back up one word and replace it with 'excellent'; return to the end of the document; let me continue to dictate." Things like this are what I see as the future of computerized documents. However, let's continue.

So you add features to let people update text. Then you may want to allow users to navigate around with the cursor key or a mouse click. Maybe they can paste some text from somewhere else or remove a large block of text.

Most of these features were missing or inadequate in early text editors. On the Unix side, a popular text edit was/is know as "vi" (which I've heard stands for "view" but I'm not sure. This powerful editor lets you manage text in small or large documents by switching between two different modes: entry mode and edit mode. When you enter text, pretty much everything you type shows up in the text box (usually the whole screen). Even if you press Ctrl-E, it shows up as the up arrow accent mark plus E (two characters, but will be treated as a single character). Backspace and the Return key (now known as the Enter key) worked as expected. However, if you want to modify something in the text, you need to switch modes by pressing the Esc key. Now things like X will delete a character and J will move the cursor (current typing position) left, while K will move the cursor right.

While complicated, vi is very powerful. However, other competitors eventually emerged such as SlickEdit. This is also very powerful and works in a much more intuitive way than vi, but die-hard Unix people rarely stray from the fold of vi.

Meanwhile, in the DOS (pre-Windows) world, simpler editors emerged and offered features that let the average computer user work with text in an effective way. But this was still just geared toward throwing text into a file somewhere.

So along came word processors. The idea was that these were intended to process words rather than just manage text. When processing words, you wanted to have faster ways to jump from word to word, line to line, sentence to sentence, paragraph to paragraph, page to page, etc. The master of this was WordPerfect. It not only offered all of the above, it was also offered on Unix machines, DOS machines, and eventually Windows and Macintosh machines. It offered many powerful features and an interesting way of handling underlines, bold and italic text—something that was rarely used in text editors. Amazingly, WordPerfect began to fade as people learned other tools on other platforms (like Windows) where this terrific tool wasn't competitive until it was too late.

## **Modern Word Processing**

So here we stand, with modern systems using more modern word processors. On the Unix side, vi still rules; on the Windows side, the upstart Microsoft Word rules; on Macs, I think the verdict is still out, although many there use Word because it is convenient for transferring data to Windows systems. I will focus my efforts on the Windows tools.

Windows comes with two different word processors: Notepad and WordPad. Notepad is really just a text editor. It doesn't support multiple fonts; it doesn't have any spell-checker built in; it doesn't handle special features for find and replace (just some basic features). However, it's fast! As you may have seen in my recent articles on JavaScript, I recommend Notepad because of its simplicity and how it launches in a split second. You're immediately ready to go. This is great for basic text entry, such as making a note for yourself, to hold the contents of a Web page (from copy/paste) until you figure what to do with it, or to collect a bunch of lines that you want to save for later reference—oh, and for building simple Web pages.

What if you need more? Many people have Word available, but what if you just don't believe in giving Microsoft more money than the price of your operating system and you still want some fancy word processing? Then maybe WordPad will work for you. On Windows XP (yeah, yeah, I'll upgrade when I upgrade my computer later this year), you can find WordPad under the Start button's All Programs/Accessories section. It looks pretty similar to Word, as seen in Figure 2.

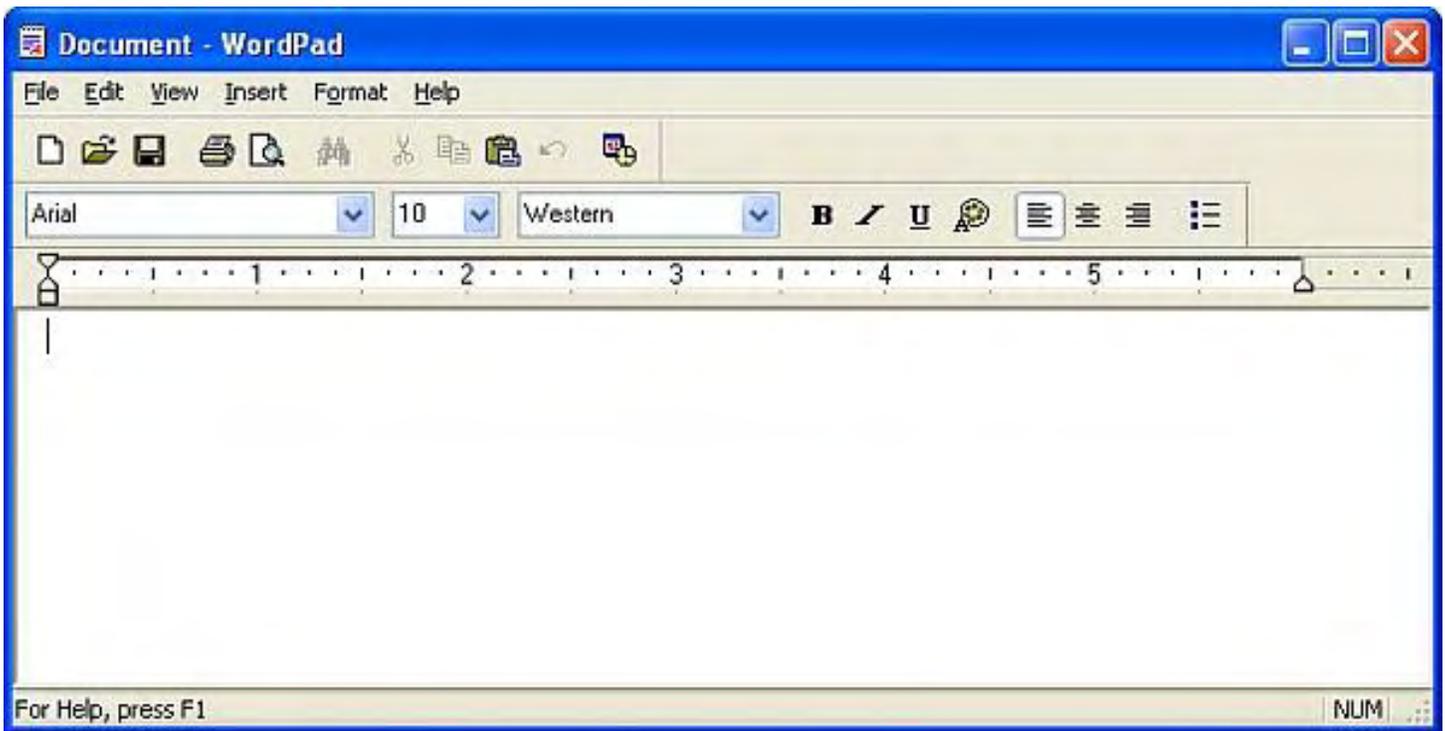


Figure 2. Microsoft WordPad.

WordPad offers most of the common features used by larger word processors, and can even read Word documents. Aside from standard text, you can add different fonts, sizes and colors on each character. In Notepad, you can apply any of these, but they apply to the entire document. WordPad also allows text alignment, bullets, indents and embedded objects (such as pictures). That should cover most of your word processing needs.

If that's not enough for you, you may want to consider other free options. One that I've used in the past and like is a product called TextPad ([textpad.com](http://textpad.com)) for text editing. There is a free trial in addition to a version you can buy. It offers multiple file editing (like Word), split views of each document, spell-checker in 10 languages, multi-file text drag-drop, macros (scripted commands), and customizable toolbars, among other things. It also works in Unix and Macintosh systems in addition to DOS and Windows. Current price is about \$25 if you decide to buy.

### Word for Word

And now, the moment you've been waiting for: word processing using Microsoft Word. Word for Windows is much better than the old Word for DOS. And over the next few weeks I'll explore some of the more common features, many of which are probably intuitive, many of the useful features that are either not used or misused, then some of the advanced features that make your word processing experience more fruitful. Let's start with the basics.

If you've used any Windows text editor or word processor, you probably know the basics, but let me quickly go over them.

Unlike a typewriter, computerized word processors offer features that let you easily manage an entire document as it's being written. When you type, the text appears as you type (as expected). Backspace will immediately erase the character just to the left of the blinking vertical line (called the I-bar cursor) and, if relevant, pull any text to its right back to the left with it. In addition, when

you get to the apparent end of a line, you don't have to determine if there's enough room to type the rest of the word—Word will automatically wrap the entire word to the next line if it doesn't fit. Similarly, when you get to the apparent end of a page, Word will automatically handle the end-of-page spacing.

Now for the other common features: tabbing, margins, alignment and fonts. We'll go over these in details next week.

**Tabbing:** Apparently some people don't realize that Word (and most text editors) supports the Tab key to create indented text, typical of the first line of paragraphs in older books. To use it, simply go to the beginning of a line (and a new paragraph) and press the Tab key. Word will indent the paragraph. If the sentence eventually wraps past the end of the line, the next line will return to the original starting position, leaving the first line indented from the rest of the paragraph. However, tabbing goes much further in Word. If you hit the Tab key again, you get an additional indent. This is especially nice if you are trying to get things on multiple lines to align, such as things within a grid. In addition, you can set the tab position at the location of your choice.

**Margins:** Similar to tabs, margins define spaces—in this case the space around the left, right, top and bottom of the document. It even works with your printer to let you know if the edges will go outside of the bounds of the printable page.

**Alignment:** Any paragraph is left-aligned by default. It also supports right-alignment (right edge is straight and left is jagged) and centered (both edges are jagged). However, you can also make it "justified" so that the spacing between the words allows the left and right edges to align with the margins. You also have the ability to adjust the spacing between lines (like double-spacing, or 1-1/2 spacing or other settings). Beyond that, you also have the ability to indent the left or right edge of entire paragraphs (often used in books for quoting another document or speech.)

**Fonts:** As expected, you can adjust the font "face" (style) to anything supported on your machine. You can also adjust the size, italics, bold, underlining, foreground color and background color. You also have some lesser-used features like strikethrough, subscripting, shadowed text and small-caps.

With all of these basic features, what more do you need? Well, maybe you'd like to add page headers and footers, page numbers, pictures, bookmarks, bullets, tables, newspaper-style columns, page watermarks, page breaks and numbered or bulleted lists. That's not enough? Maybe you need a spell-checker, Web page-style view, table of contents, input fields (like a data-entry form), style sheets, custom functions (via macros) and maybe the ability to use speech recognition to enter the text through a microphone rather than a keyboard (but don't expect miracles).

We'll start going over all of these in more detail in the next few weeks. Stay tuned.

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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](mailto:RSpahitz@Dogopoly.com).

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



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## Worldwide News & Product Reviews

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



Recession Hits the Cell Phone Business—  
Two out of three new wireless subscribers in U.S. go prepaid; PDF Is Format of Choice for Document Archive—An association survey pretty much confirms what most of us already knew; BlackBerry Curve 8520 from T-Mobile—  
The new, lower-end model that nonetheless gives you a huge bang for your buck.

### Recession: Two Out of Three New Wireless Subscribers in U.S. Go Prepaid

According to the New Millennium Research Council ([www.thenmrc.org](http://www.thenmrc.org)) (NMRC), an independent telecommunications and technology think tank:

Penny-pinching U.S. consumers struggling to make ends meet in the ongoing recession are shunning contract-based (also known as "postpaid") cell phones in favor of less expensive prepaid cell phones, as was correctly forecast a year ago by NMRC.

The fourth quarter of 2009 marked the first time that the number of new prepaid wireless customers in the U.S. outnumbered new contract-based cell phone providers, according to industry data from both Ovum/Datamonitor and IDG. Based on the ongoing recession and the recent surge in attractive prepaid phone deals, NMRC expects the trend in favor of prepaid cell phone use to be evident again when industry subscription data is reported for the first quarter of 2010 and throughout the rest of the year.

According to the most recent available quarterly data:

- New prepaid cell phone subscribers accounted for nearly two thirds (65 percent) of the 4.2 million net subscribers added by U.S. phone carriers in the fourth quarter of 2009.
- The prepaid segment of the wireless market grew by 17 percent in the fourth quarter of 2009 to 54.4 million subscribers, up from 46.3 million in the same quarter in 2008. By contrast, contract-based cell phone service grew only three percent over the same period of time.
- One out of five cell phone subscribers is now using prepaid phones. The prepaid segment represents a larger proportion of subscribers in the U.S. than ever before, hitting 20 percent in the fourth quarter of 2009, up from 18 percent at the end of 2008.
- Overall, there were 285 million wireless subscribers in the U.S. at the end of 2009.

Jose Guzman, project coordinator at the New Millennium Research Council, said: "We stand by what we forecast a year ago: The era of cell phone penny pinching is officially here. Thanks to the recession, the U.S. cell phone marketplace continues to undergo fundamental changes that will just get bigger as the economic downturn deepens. What is different from a year ago is the

explosion in new 'all-you-can-eat' and unlimited prepaid deals as low as \$30 and \$45 that will remain attractive to consumers long after the current recession is over."

Telecommunications analyst Mark Lowenstein, managing director at Mobile Ecosystem, said: "Customers want greater flexibility in the relationship with their wireless operator. Prepaid services have become more mainstream—available at attractive prices, on the best networks, and with a competitive array of devices and features. We're also seeing the growth of various flexible pricing options with regards to data services."

Guest expert John Breyault, vice president, public policy, telecommunications and fraud at the National Consumers League, said: "We believe that in a tough economy, consumers are increasingly on the lookout for ways to cut costs to help make ends meet. In recent years, there has been a proliferation of affordable prepaid cell phone plans, with plans including unlimited voice, text and Web access for as little as \$45 per month. Consumers are comparing these offerings to the outrageous early termination fees, expensive bandwidth-capped data plans, and ever-increasing pay-as-you-go text messaging rates on traditional postpaid plans. As such it is little wonder that consumers are turning to prepaid in ever-greater numbers, while postpaid subscriber growth remains essentially flat."

### **Research: PDF Is Format of Choice for Document Archiving**

The Association for Information and Image Management ([www.aiim.org](http://www.aiim.org)) (AIIM) pretty much confirms what most of us already knew:

Ninety percent of organizations are using the PDF file format for long-term storage of scanned documents, and 89 percent are converting Office files to PDF for distribution and archiving. Not surprisingly, paper is currently used by 100 percent of organizations, but when asked to predict the situation in five years time, use of paper for long-term storage dropped to 77 percent, whereas PDF rose to 93 percent.

Time-honored storage on microfilm or fiche is still used by 43 percent of organizations, but this is expected to drop to 28 percent over the next five years. At the other end of the media spectrum, 34 percent of organizations are archiving digital video, rising to a projected 47 percent in five years. Digital audio archiving will rise from 30 percent to 37 percent.

According to Betsy Fanning, director of standards at AIIM, the rapid acceptance of the PDF standard is partly due to the development of PDF/A as a dedicated archive format. PDF/A files need to be entirely self-contained, with no links to external fonts or hyperlinks. For scanned images, PDF provides a wrapper for a number of alternative compressed formats. "PDF/A became an ISO standard in 2005, and we have seen a further boost this past year with the release of PDF itself as an open ISO standard," says Fanning. "PDF/A is a good option for archiving electronic documents and is far better than archiving native files from any specific application."

The AIIM Market IQ report: "Content Creation and Delivery—The On-Ramps and Off-Ramps of ECM" ([www.aiim.org/Research/MarketIQ/Content-Creation-Delivery-Capture.aspx](http://www.aiim.org/Research/MarketIQ/Content-Creation-Delivery-Capture.aspx)) is available online.

## BlackBerry Curve 8520 from T-Mobile

For the past few weeks I've been reviewing the BlackBerry Curve 8520 ([www.t-mobile.com/shop/phones/Cell-Phone-Detail.aspx?cell-phone=BlackBerry-Curve-8520-Black](http://www.t-mobile.com/shop/phones/Cell-Phone-Detail.aspx?cell-phone=BlackBerry-Curve-8520-Black)) using the T-Mobile service (free with a two-year plan) and, boy, is it a great phone. Although this phone is not the highest-end BlackBerry model, it is an excellent way to introduce yourself to the BlackBerry world. The Curve 8520—nicknamed the Gemini—is a new, lower-end model that nonetheless gives you a huge bang for your buck. Let's start with the basics.



Roughly the size of a deck of cards, the Gemini has a high-resolution 2.46-inch screen that is easy to view. It has a very sleek and elegant design, yet I also found it to be quite durable—and I'm tough on phones. The side of the phone has a rubberized-feeling coating that has easily absorbed more than one fall from my hands. A full qwerty keyboard is located right under the screen, and takes very little time to get used to.

I was surprised how soon I was typing without even looking at the keyboard—of course, it might take some people longer. On most other BlackBerrys a trackball is used to navigate around the screen, but the Gemini uses an optical trackball instead, which took me about two seconds to fall in love with. You can fly all over a page with it, yet it is still very accurate. The phone is charged via micro USB cable, which can be hooked up to a computer to upload music, pictures, or to even back up your phone info—which I recommend you do as soon as you get a bunch of people in the phone. I put some music on this puppy, and wow, the speaker is unreal for a unit this small. I played a few songs for my dad (Charles Carr) and he could not believe they were coming from the Gemini.

There is also an external memory slot for microSD cards, which is easy to access near the battery. It even comes with a 1GB card. The phone's battery life is quite good. I took it to a friend's house for the weekend and it lasted me the entire three days (they estimate about 4.5 hours of talk and 17 days of standby). Finally, the phone is equipped with a 2.0-megapixel camera that takes some very satisfying photos.

The Curve 8520's software is quite easy to understand. I could tell BlackBerry put some time into the programming. Carrying it around is like carrying a little world in your hands. Literally at my fingertips I had texting, e-mails, Wi-Fi, Bluetooth, my music, my pictures, my contacts, my dates, Facebook, instant messaging, Internet radio and tons more. One of my favorite experiences with the phone was when I would enter my house after coming home from school. The moment I entered the front door, the phone would automatically connect to our wireless Internet. I'd walk up to my room and flip the power switch on my Bluetooth speakers and the phone would automatically connect. I'd start up the Internet radio on the phone (which is just one of thousands of apps easily available to download right from your BlackBerry) and there would be music going through my whole room.

The 8520 also has loaded on to it a very cool built-in media center with six different types of instant messaging, PowerPoint To Go, Word To Go, Sheet To Go (like Windows Excel), a maps program, and tons more you can download from the Blackberry app world.

Now, just a couple of negatives: The Gemini's camera doesn't have a flash, which most phones nowadays do. And the text messaging system can be annoying at times, because you cannot organize the messages into conversations, or group them all to one contact. Instead they are organized by time, which can get a little confusing. Also anyplace there is no Wi-Fi and you hook up to the Internet through cellular can be quite slow since the Gemini does not feature 3G. I also thought I would like a touchscreen, but they implemented the keys and mouse so well, it really wasn't that big a deal after a while.

All in all I have to say this has been one of the best phones I've ever reviewed. It has a sleek, elegant design that is also durable, with lots of great programs and features. If the Gemini is a low-budget BlackBerry, I can't wait to get my hands on one of the high-end models!



Review contributed by Alex Carr

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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](http://www.charlescarr.com).

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## Spam of the Week

### Spam of the Week--Permit for Retirement

“Who doesn't want to retire?” by ComputerEdge Staff

This week's spam appeals to those who may want a little extra money in retirement. But who ever heard of a retirement contract?

It's difficult to tell how effective this spam might be (see Figure 1). It appeals to people who might want to retire and get some free money, but who's expecting to receive a retirement contract? We received one from Marilyn Bacon, as well as Earline Morrow and Jeanne Kiser.

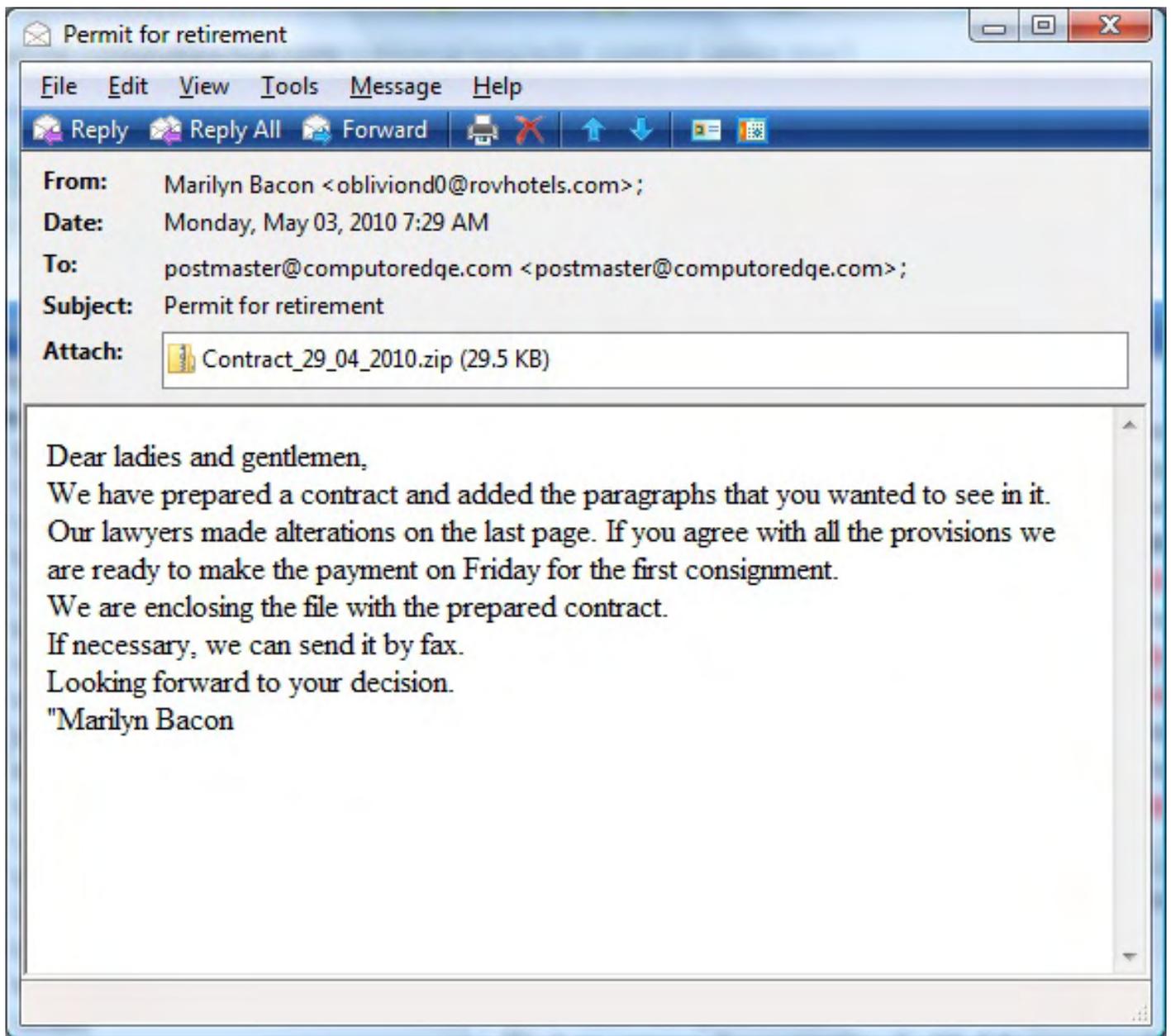


Figure 1. Time to retire?

The only thing that's really dangerous about the e-mail is the attachment. If you download and open the file, it will place a Trojan on your computer. Not good! Just delete it!

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*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](mailto:ceeditor@computoredge.com).

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## EdgeWord: A Note from the Publisher

“For File Management, Less Is More” by Jack Dunning



Windows 7 Libraries can be a tool for file management, helping minimize the chaos of multiple files in multiple locations.

If a person owns only one computer and has no need to share data with another device, such as a cell phone, music player or tablet computer, then there is probably no reason to worry about synchronizing files. All that is really needed is some type of regular backup of important files, whether it is an external USB drive, online backup, flash drive, or another of the many ways to protect your data. However, it is becoming much more common to find situations that are complicated with multiple computers and numerous handheld devices—all of which need to be coordinated. This situation usually devolves into many copies of files in many locations with no way of knowing which is the original.

The ideal solution is to have only one copy of a file (and one backup at another location). This is why businesses use file servers over networks. By limiting file use to only the original, many problems are solved, especially if there is file and/or record locking to prevent people writing over each other. Prior to the home network, the only alternative was to make a copy of a file for the other computer or device and later synchronize it with the original.

Even if you have excellent file synchronization, two people should not be working on the same file at the same time—in spite of the fact that one is a copy. If both people make changes to the file, the problem of including all of those changes is greatly complicated. There is software designed to compare two different files and allow decisions to be made on each noted difference. This type of system still requires active intervention and decision making—always subject to human error. If possible, the best solution is to maintain one original in one location. While anyone who has access would be able to use the file (read-only), changes should be allowed by only one person at a time.

This is where a feature such as Libraries in Windows 7 is helpful. It combines capabilities such as Windows Explorer tree structures, networking, indexing and including folders (without mapping drives), to eliminate the need for making multiple copies of files. The goal is to maintain only one original of each file. (As mentioned before, automatic backup of important files will need to be part of the system, but having a copy of each file on each computer is not a requirement—or even desired.) Any Windows 7 computer can include any folder on any other networked computer or device as long as the folder is shared on the network. This has the same effect as mapping that folder as a drive to the computer. That means there is no reason to copy the files to each computer as long as the original location is on the network.

Nor is it necessary to keep all similar files on the same computer or one network hard drive. For example, if Fred, Jim and Sally each have their own music collection on their individual computers—and they are all on the same network—each can maintain their own collection while sharing it with the other two. No copying is needed. It is an individual choice as to which collections will be

included in a library.

Note: If you have only one computer at home, then you may not be compelled to use Windows Libraries. The easy inclusion of network drives will not be important. However, if you have different applications on your computer with dispersed folder locations for data files, such as graphics, then a library will give you a virtual location for combining all those similar files in one place—without making copies or moving the files.

The ultimate goal in file management is to maintain only one up-to-date original of each file (and one external backup). This may not always be possible in situations where files need to be accessible without a network (including the Internet) connection. Limiting the number of copies will save disk storage space, but more importantly it will allow people to know where to find that original and give them confidence that they are viewing the latest version. Windows 7 Libraries is merely a tool for doing just that.

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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](http://www.computoredge.com). He can be reached at [ceeditor@computoredge.com](mailto:ceeditor@computoredge.com)

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## Editor's Letters: Tips and Thoughts from Readers

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

"ComputerTutor Scores Again," "Thoughts on Wireless Networks," "Reinstalling MS Works," "Single-Clicking Benefits"

### ComputerTutor Scores Again

[Regarding the April 18 Rob, The ComputerTutor column:]

Great article!

Screen shots make it all come together.

Another tool in the toolbox; thanks for the lesson.

-Bob, Chula Vista, CA

### Thoughts on Wireless Networks

[Regarding Pete Choppin's April 16 article, "Setting Up a Wireless Home Network":]

I loved your article in *ComputerEdge*, but what if your computer will not recognize your router that connects to the wireless router? Before I installed Windows 7 Professional, my computer recognized I had an older Com21 router, and it then connected to the wireless router with no problem. It even worked with Windows 7 Release Candidate. Now when I connect, the device manager shows it is there, but when I connect to the Network and Sharing Center and click on the link for "connections," it shows I am receiving, but not sending.

Any ideas?

Thanks,

-Larry

Larry,

*Thank you for your kind words. I am sorry to hear your equipment appears to not be functioning.*

*I took the liberty of looking up the company name you are referring to. A company called Com21 Inc., based in California, used to make telecommunication equipment several years ago, including cable modems. The company filed for bankruptcy in 2003 and went out of business, according to what I found. Also, it appears they never did go beyond their line of cable modems, nor do I see any evidence that they ever branched into the Wi-Fi field. I am not sure about your router. Modems and routers are two very different devices. These are also typically external, and*

*therefore your computer would not really "recognize" them as an installed device. You may be referring to the detection of a wireless signal by a receiver installed in your computer. Just going by the information you provided, it is difficult for me to tell what equipment you are referring to.*

*I have some thoughts about your situation. You mentioned that you could get a connection using a release candidate version of Windows 7, and then you were unable to connect to the device with your current version of Windows 7. It would be very difficult to determine why there is a difference; however, I can tell you that there are several changes from a release candidate to a final version of any operating system. Any number of things, including driver updates and changes, could have affected what will operate with your system during the release phases of Windows 7.*

*Unfortunately, since the original manufacturer of your equipment has been defunct for over seven years, finding any support for it will be difficult at best. It may be better for you to just replace your network equipment entirely. My suggestion would be to talk with a networking specialist that can assess your needs and advise you as to what equipment you actually need to set up a home network for your particular situation. The good news is that Windows 7 actually operates quite well with modern wireless networking equipment. Microsoft actually makes this easy and intuitive. It should be no problem to get everything connected with some up-to-date equipment.*

*I hope this helps. Good luck!*

*-Pete*

I wanted to write to you to say that was a great wireless article that [Pete Choppin] wrote, and add a few caveats of my own regarding wireless security and wireless settings.

Most new consumer-level routers today (Linksys, Netgear and Apple AirPort Extremes are the three I'm most familiar with currently) offer an "automatic" wireless setting for the radio channels. This will help to find channels that aren't currently in use, and if need be, will change to a different channel. I had a conflict initially when I first set up my router because I set the channel at 6; turns out one of my neighbors in my apartment complex had a 2.4GHz cordless phone that operated on the same channel. Every time they would get a call, my wife's wireless computer would drop connection. Changing it to Automatic solved that problem.

As for wireless security, I HIGHLY recommend the WPA and WPA-2 standards. I work for a local ISP setting up wireless routers every day with customers, and we usually start customers off on WPA2, then back them down to WPA if they have older hardware—we've found that some older network cards and USB adapters aren't fully compatible with WPA2. On rare occasions, we find equipment that is only WEP compatible (some older handheld wireless devices, primarily). One of the advantages of WPA over WEP is that most computers can crack the WEP encryption fairly easily, with hacker tools that can be Googled and downloaded. WPA also offers the ability for a customer to use an easily remembered passphrase/passkey, rather than a huge hex string that has to be generated.

Some of this is probably obvious to you and me, but considering the level of expertise of the people I deal with day in and day out, my company tries to adhere to the KISS mentality (Keep It Simple, Stupid!). Otherwise these customers generate more calls and more work when they call

back because a "new" computer, printer, wireless device, etc. isn't connecting due to a forgotten passphrase or router password.

-Doug Abel

*Doug,*

*Thank you for the compliment! I am glad that you found the article of interest.*

*I agree that signal interference is a concern with wireless networking. Unfortunately, there are many things that can interfere with your wireless signal, including the material in your walls and ceilings, microwaves and cordless phones. Using an auto setting may be an easy way to resolve this.*

*I also agree that the preferred encryption setting is WPA or WPA2. This offers the most security available for non-commercial routers. It is by no means foolproof, but it is likely sufficient for most users.*

*My objective for this article was to, at the very least, present the proper way to set up and secure a home wireless network. Hopefully, this was achieved. Thanks again for your input.*

-Pete

## **Reinstalling MS Works**

[Regarding the April 16 Digital Dave column:]

The person who is being prompted to "reinstall" MS Works is probably getting the message after a Windows XP update. Recent updates are fixing security holes in all MS products, including Works. If the update notices that a part of Works is missing (due to a partial installation), it will ask the user to put the original Works CD into their CD drive. All the user has to do is insert Disc 1 of the package and then click OK and follow the onscreen instructions.

-Don Davies, Ramona, CA

## **Single-Clicking Benefits**

[Regarding the April 16 Digital Dave column:]

Single-click will highlight a file/directory/etc. in Win7 by hovering over the item for a fraction of a second, thus making it possible to rename a file when saving. It takes a little getting used to, but is much faster than the double-click.

-Jim, San Diego

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