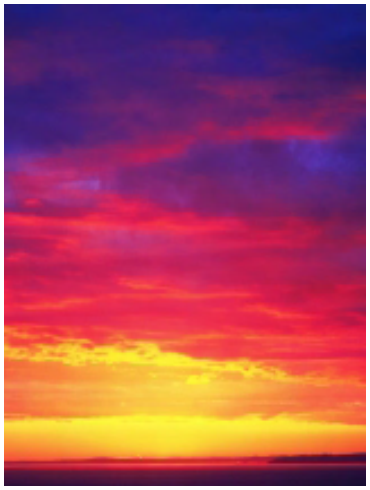
ComputorEdge™ Online — 01/30/09



This issue:
Virtual Offices in the Clouds

With telecommuting and colocation for servers, the Internet superhighway is truly becoming a business destination.

DEPARTMENTS:

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

Return to Table of Contents

Digital Dave

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

A reader deleted a user account in Win XP. Can she get it back?; What could be the cause of a reader's mysterious network issues?; The sound from a reader's computer has gone missing; Do you need to install all prior Windows Service Packs?

Dear Digital Dave,

I've learned tons from your column over the years. Thank you!

I deleted a user account on my XP Pro machine. I'd never done this before. In spite of my computer education, I wasn't familiar with what actually takes place, and I just didn't think*! I'm a businessperson and busy.*

Question: Is there a way that I can recover the deleted files on this hard drive? I did some online reading. Some programs are available. (I trust none of them, especially since this is my business computer.)

Roxanne
San Diego, Calif.

Dear Roxanne,

This has been a fairly common problem in Windows. When people are having problems, they often think that deleting the user account may clear up the situation. However, in deleting the user accounts there is an option to *not* delete all the associated files. If you didn't delete all of the user files, then you should be able to log on as Administrator and find the files under Documents and Settings, plus the old user name.

However, if you did delete all the files, then your only option appears to be data-recovery programs. Rather than searching the Web for programs, it's best to go to a site such as CNET's Download.com. At Download.com, many of the programs are rated by both the editors and the users. These should be clean programs, as complaints would cause the software download to be pulled off the site.

Also of interest is the number of people who have downloaded the program. The more who have used it, the more likely that it is a safe program. The following is a link to the free Windows data-recovery programs at CNET Download.com (*www.download.com/1770-20_4-0.html?query=recover+files&searchtype=downloads&filter=licenseName=Free%7cplatform%253DWindows&filterName=licenseName=Free%7cplatform%253DWindows*).

Digital Dave

Dear Digital Dave,

I was sharing my Internet connection with one other computer (wired) and a laptop (wireless). The modem and router (Netgear) were moved from one location to another. After that, the original PC I was

using is without a connection. That PC works OK at other locations; other laptops work OK at the problem site.

An "expert" said I should uninstall Internet Explorer and reinstall it. I did—nothing happened. The cable has been tested. PCs have been tested. I think there is a sharing issue. The router IP configuration is set to auto, as it is in all PCs. Hope you can help.
Mario Gonzalez
National City, Calif.

Dear Mario,

These networks problems can be pretty mysterious. The first step is to determine if the problem PC is connected to the network at the problem location. That can be done with a program called ping.

Open the Command Window (All Programs/Accessories/Command Prompt). Enter ping and the IP (address) of the router (see Figure 1). If you get a response as shown, you are connected and there may be some other issue. My guess is that you get "Destination host unreachable," which means you are not connected. In this situation, the problem is certainly not Internet Explorer.

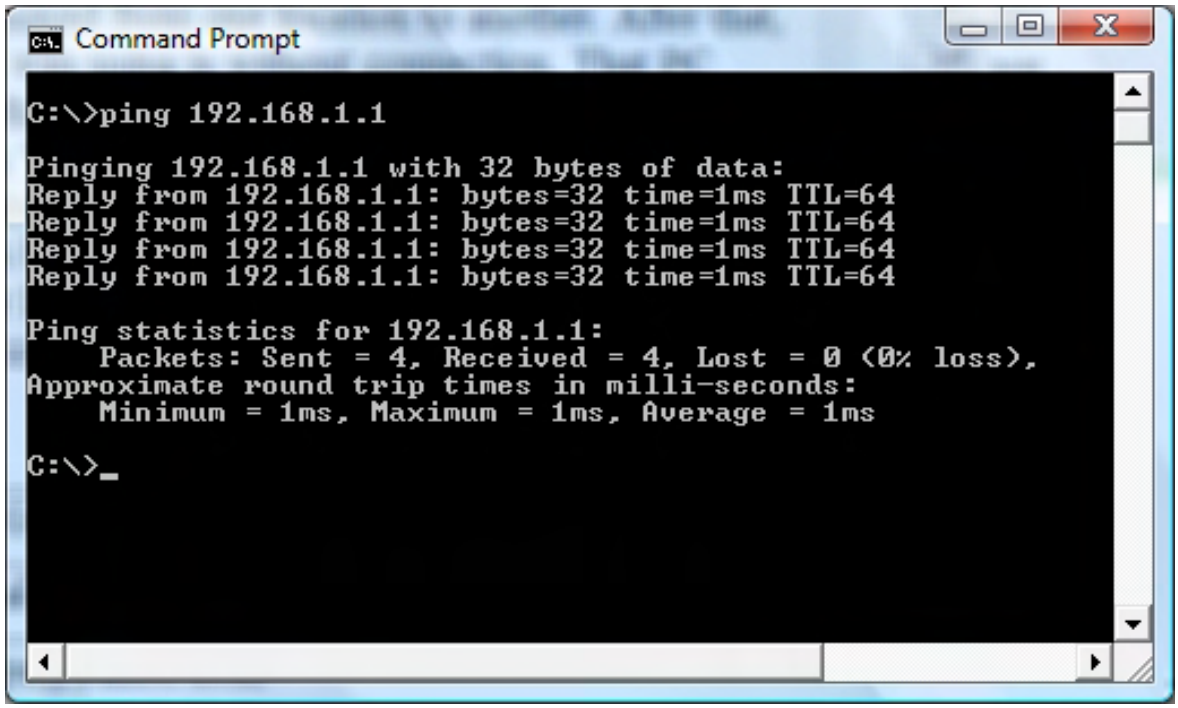


Figure 1. Ping in Command Prompt.

After you recheck that each computer is set to "Obtain an IP address automatically" in the TCP/IP properties of the network connection Properties window, reset the entire network, starting with the modem.

1. Turn off all computers, the router and the modem.

2. Turn on the modem and let it establish a connection with your Internet Service Provider (ISP), 30 seconds to a minute.

3. Turn on your router, allowing time for it to sync with the modem.

4. Turn on the problem computer at the problem location. Check to see if it works without all the other computers active.

5. Bring up the other computers one at a time.

If the problem computer doesn't work at Step 4, then the issues (settings, firewalls, etc.) need to be resolved before moving to Step 5.

If the computer works at Step 4, but stops working at Step 5, then the issue involves another computer on the network.

Generally, the five-step process above will resolve most network issues as long as all equipment is powered down prior to starting. If it doesn't work, call it a night and go to bed. In the morning, it will either work or you will quickly find the solution. I don't know why that is, but it is!

Digital Dave

Dear Digital Dave,

I lost the sound in my computer because I erased some programs. What do I need to do?

Martin
Lakewood, CO

Dear Martin,

Most likely you accidentally removed the software drivers for your sound card. If you don't have a driver disc, then you will need to go to the Support section of the Web site of your sound card's manufacturer. At their site, you should be able to download the drivers and reinstall them.

You may want to check the Control Panel to see if the Sound icon appears. If it does, then you may be able to either turn on the sound or reinstall the drivers from there.

Digital Dave

Dear Digital Dave,

After a partial restore, I have to update to Windows SP1, SP2 and SP3. Can I update SP3 without loading SP1 and SP2?

Herbert Boettcher
Aurora, Colorado

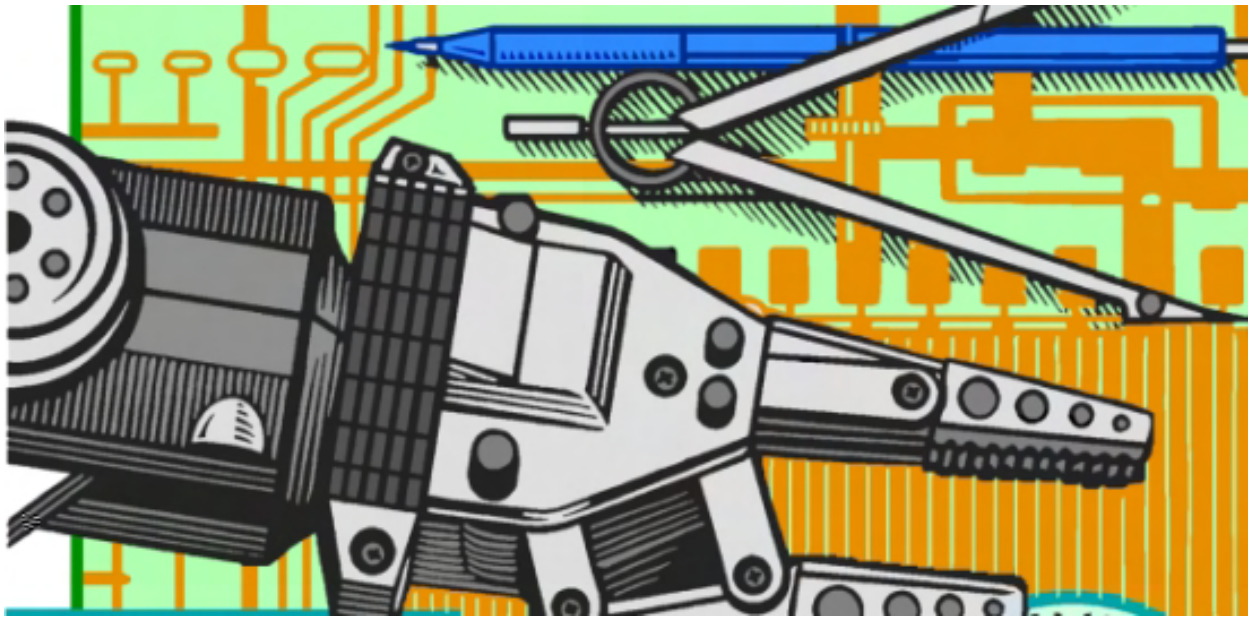
Dear Herbert,

While it doesn't appear that you must install every previous Service Pack (SP) before SP3, you do need to install SP1a. This is documented at this Microsoft Support page (*support.microsoft.com/kb/322389*). I don't know if you can go directly to SP2, but there is no need if you've installed SP1a.

Microsoft Support pages often will answer these types of questions. They are always worth checking. However, I've found that using an external search engine yields better results than using the lame search on the Microsoft site. To specifically search Microsoft Support with Google, enter "site:support.microsoft.com" prior to (or after) your search terms. That will narrow your search to Microsoft Support.

Digital Dave

Return to Table of Contents



Office Tools on the Web

“Web-based apps keep software vendors awake at night.” by Michael J. Ross

> The Web has made it possible for us to store limitless amounts of business and personal data on other people's computers, as well as create and modify them on Web servers through the use of Web-based applications.

Prior to widespread and inexpensive access to the Internet, the typical individual had only one computer on which to store and work with business documents, and that was the one computer in the office. Likewise, you had only one machine for creating and modifying personal documents: the home PC. Before laptops became affordable, transferring files between your business and personal computers required tediously copying the files onto a disc or other data-storage device, and hand carrying it to the destination machine.

But now the Web has made it possible for us to store limitless amounts of business and personal data on other people's computers—all connected to ours through the Internet. Furthermore, we are increasingly able to not just store documents on the Web, but create and modify them on Web servers, through the use of Web-based application programs. This means it is possible to access a document online, from either your business or personal computer, or a third-party machine, such as a PC located in an Internet café. In fact, even the traditional computer is no longer a requirement, because a growing number of these Web office-productivity applications are designed for use on Web-enabled cell phones and other handheld devices.

This new capability is especially critical for today's knowledge worker, who does not use just one device, but several. In addition, more of this work is being done while traveling (i.e., commuting on light rail to the office) or going nowhere (i.e., pedaling like mad on a stationary bicycle in the local gym). Web-based productivity tools have also made it much easier for multiple team members to collaborate on the same document, since there is no longer any confusion as to whose computer currently has the "master copy" of any document; rather, there is only one copy, on the Web.

For the longest time, most documents were made using the most popular desktop-productivity applications, such as Microsoft Word, Microsoft Excel, WordPerfect and others. These programs were typically purchased (or "borrowed") packaged together in suites, such as Microsoft Office. Major software vendors, such as the Redmond giant, derived a considerable amount of their revenue from corporate licensing of these office-productivity suites. Thus the current transition to Web-based applications and data storage has caused most of these desktop software companies to either begin playing catch-up, or simply give up. We will examine some of the leading online office

tools that keep those software vendors awake at night.

G-Office

It should come as no surprise that Google, the Web's current Goliath, poses the most substantial threat to the longtime hegemony of Microsoft Office. It began on June 6, 2006, with the beta release of Google Spreadsheets, which provides much of the same functionality as Microsoft Excel, but minus the hassles of installing Office, paying licensing fees, storing the spreadsheet on your own computer, and (for many people) even trying to find the spreadsheet later.

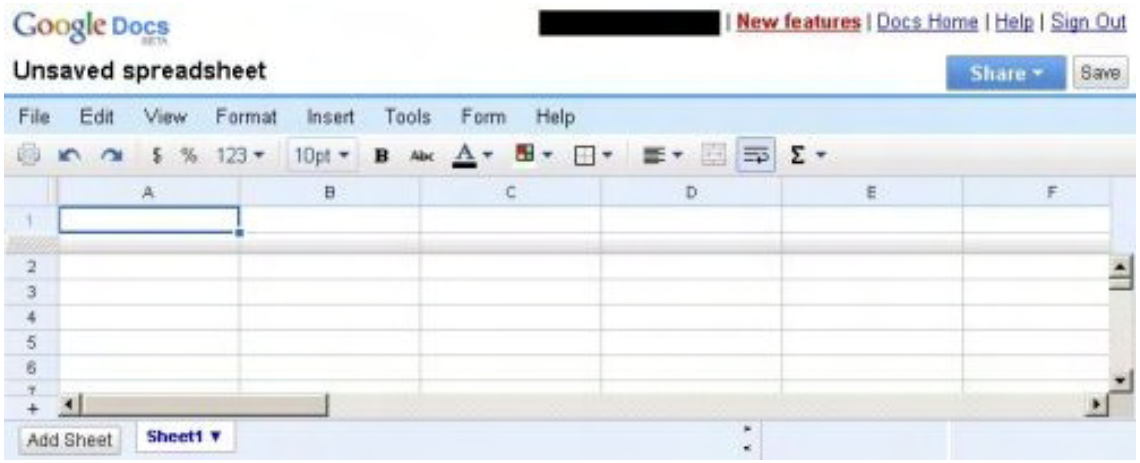


Figure 1. Google Docs—new spreadsheet.

Four months later, the company rolled out Google Docs (*docs.google.com/*), which encompassed the spreadsheet program and added much more, including full support for documents (thus undermining Microsoft Word).

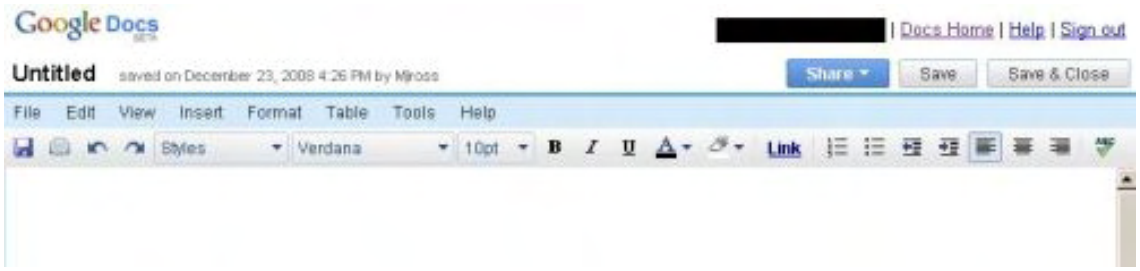


Figure 2. Google Docs—new document.

In addition, the Google Docs package allows you to create presentations (thus countering Microsoft PowerPoint), as well as online forms. Within the user interface, you can organize all of the documents, spreadsheets, presentations and forms that you create, in the existing "unfiled" folder or in new ones. You can see a list of all of your own files, plus any shared with you by someone else. Similar to Gmail, Google Docs allows you to affix a star to any file, which is handy for designating special files.

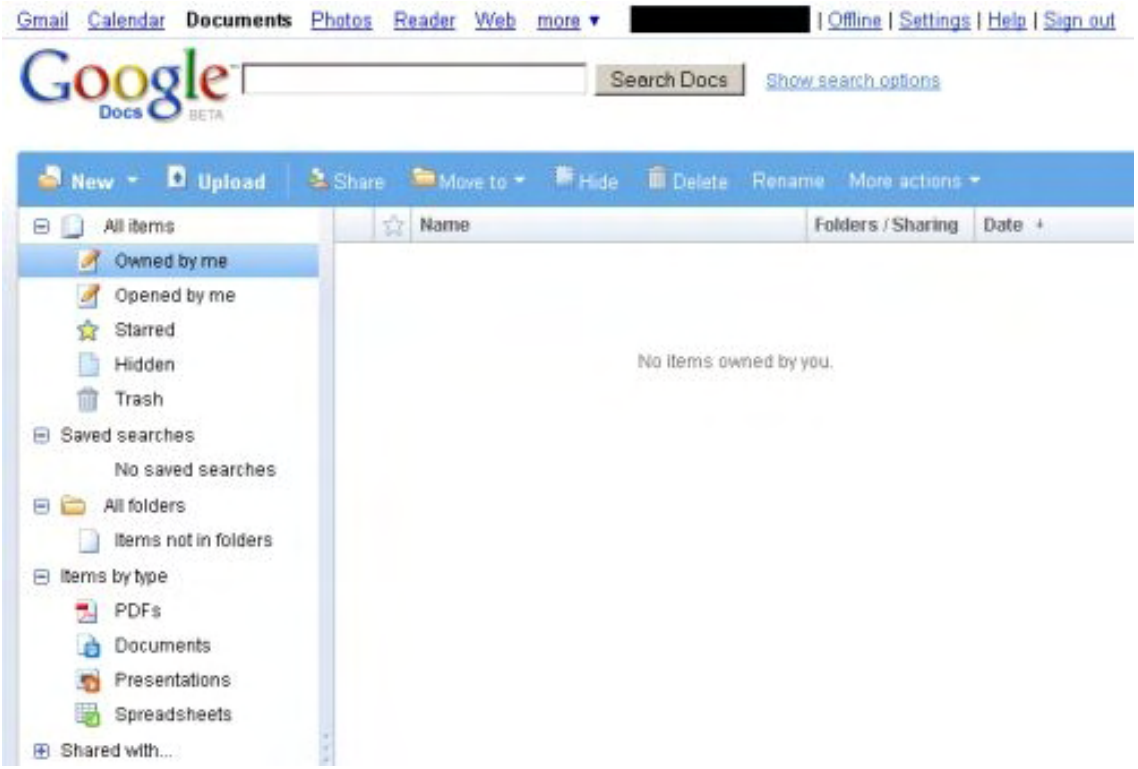


Figure 3. Google Docs home page.

These online products must have been seen by Microsoft as an alarming shot across the bow, because this suite of tools provides all of the commonly used functionality found in Microsoft's counterpart, but is completely free. Defenders of Microsoft Office pointed out that their favorite possessed the advantage that a user does not have to be connected to the Internet in order to work on any of their files. However, this advantage evaporated with the advent of Google Gears (*gears.google.com/*), which allows you to edit Google Docs files even when not online.

Excitement over Google Docs (although of a much more positive variety than that experienced at Microsoft HQ) was also felt by the legion of Internet users who began trying it out, writing about it in their blogs and recommending it to other people. In the first 12 months of the product's availability, the number of documents and spreadsheets went from a little more than 200,000 to just under 1.5 million (October 2006 to October 2007). By the end of that first period, the number of users exceeded half a million, in the United States alone.

Redmond Responds

Microsoft is not accustomed to losing any battle, and thus, as part of its massive strategic initiative to compete on the Web, it began work on Office Web. Even though it is not yet available, as of this writing, Microsoft executives are already singing its praises and preparing the public for the next release of Office, which would include full Web capabilities. On October 28, 2008, at the Professional Developers Conference in Los Angeles, Calif., a senior vice president within the company's business division announced that Office Web would consist of lightweight versions of the Office products—specifically, Word, Excel, PowerPoint and OneNote—that would be accessed through Web browsers. Note that this product should not be confused with Office Live Workspace (*workspace.officelive.com/*), which allows users to simply save documents on the Web, but not modify them online.

The Microsoft representative stated that documents would be accessible using PCs and phones, and that the files could be edited collaboratively. However, no mention was made as to whether or not the only supported Web browser would be Microsoft's Internet Explorer (IE). This of course would be a mistake, given IE's declining market share, but it would be consistent with attempts by Microsoft and other companies, years ago, to lock Internet users into that particular browser. Fortunately, some bloggers have reported seeing demos running in Firefox and Safari, which should be possible since Office Web runs on Microsoft's new Silverlight technology, for

which there are plug-ins for those browsers.

Given that Microsoft has always charged for the desktop-based Office suite, how will it generate revenue from the Web-based version? Apparently the company will offer access to Office Web through subscription and with advertisements. This naturally raises the question as to how OEMs, which traditionally have made money by selling Office software, would be able to continue to do so with Office Web.

Other Contenders

Google and Microsoft are certainly not the only game in town, as evidenced by the growing number of companies and open-source development groups releasing Web-based office suites and individual programs. There are far too many to cover here, but we can mention some of the better-known efforts.

Adobe may be wondering why its online word processor, Buzzword (*buzzword.acrobat.com/*), has not been receiving much media or user buzz. For one thing, many prospective users may find the program's black home page to be rather cold and uninviting. But if you get past the existentialist page styling, you will find that the program is not only free of charge, but it offers many attractive features, such as a display that exactly matches what will appear when printed (unlike some desktop-based word processors), role-based access control, document version control (including the ability to revert back to earlier versions), powerful list styling, collaborative editing and digital image manipulation.

picoScribe (*www.picoscribe.com/*) consists of the word processor picoWrite and the spreadsheet program picoCalc. Their answer to PowerPoint, picoShow, has not yet been finished. picoWrite features a layout engine for pixel true rendering and printing (not the inferior ones of Web browsers); Office-like page layouts including multiple columns, footnotes, tables, images, embedded spreadsheets, command undo/redo, zooming, real-time online collaboration (utilizing peer-to-peer networking) and document editing offline. picoCalc offers all of those features except those specific to text layout. Even though this suite has been written up in online articles, as of this writing, the first beta version is still being developed for its release (according to Eric Hellmich of picoScribe, in personal correspondence).

Thinkfree Office (*product.thinkfree.com/office*) has a far more impressive online presence, and is comprised of four applications, all of which are designed to have greater compatibility with Microsoft Office, versus their rival suites. The word processor is Write, and it supports headers, footers, tables, hyperlinks, sections, multicolumn layouts, drop caps, image grouping, paragraphs styling and more. Calc is the spreadsheet program, and it supports 40 types of charts, 300 functions, auto-fill, multiple cell formatting, worksheet protection, image management, etc. The presentation program is named Show, and handles clip art, drawings and other images, as well as drawing tools and color schemes. The Thinkfree suite is rounded out with Manager, which provides collaborative and distributed document management. The company does offer a free trial version, but they force you to complete a contact form just to find out the price ($49.95), which is annoying.

Zoho (*www.zoho.com/*) makes available a list of Web-based applications whose number and total functionality exceed those of even Microsoft Office. They include Mail, Writer, Sheet, Show, Docs, Notebook (online note taking), Wiki, Share (online repository), Planner, Chat, CRM, Projects, Creator (online databases), Invoice and Meeting. Most industry analysts and software reviewers have given the Zoho products high marks. Zoho offers free versions of all of its applications, as well as more advanced fee-based versions.

So the next time that you need to create a document or spreadsheet or something similar, don't feel obliged to use Microsoft Office. Think outside the cubicle.

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

Return to Table of Contents

Moving into a Virtual Office

"Gain flexibility for traveling, telecommuting." by Jack Dunning

Creating a virtual office is the act of locating your central work area in cyberspace—a location that you can visit only through a computer and an Internet connection.

The term "virtual office" refers to an environment where, by using computers and the Internet, a person's work and livelihood are no longer tied to a brick-and-mortar building. It is more than working from home and setting up all of your computers and printers in the spare bedroom. Creating a virtual office is the act of locating your central work area in cyberspace—a location that you can visit only through a computer and an Internet connection.

"This is George's Virtual Office. He pretends to work here!"

If you keep all of your necessary files and programs on your computer, using the Internet only for e-mail and Web browsing, then you have a home office—or in the case of a laptop, a mobile office—not a virtual office. To qualify as a cyber-workspace, the work and/or collaboration must exist and be done at a remote Internet (or wide area network) location accessible by business associates—and possibly clients. The virtual office may use a combination of Web applications, e-mail, instant chat, file sharing and other remote applications.

I've been working from a virtual office for more than a year now. There is no physical address for *ComputorEdge* other than a post office box. Everything that *ComputorEdge* associates do, they can do from anywhere in the world, as long as they have access to a computer and an Internet connection. For most of our routine work, all we use is a Web browser. (For accounting purposes, we do need QuickBooks installed on individual computers, but we can still access the remote books from anywhere.) I can say unequivocally that the virtual office works—at least for an online business.

I would urge every business person, especially those who deal primarily in information, to investigate moving to a virtual office. Even if you stay in your current brick-and-mortar location, the flexibility added for traveling and telecommuting is a tremendous advantage.

Setting Up a Virtual Office

While it is quite possible to set up your cyberspace work environment in your current office space, I would recommend that you consider locating your servers elsewhere. Since a virtual office is not dependent upon geographic location, it makes sense to put the servers in an environment that's not as susceptible to the usual problems of leased office space. Before moving to a colocation facility, *ComputorEdge* kept all of its servers, including the Web server, at our old physical location.

I've never been in a building that doesn't occasionally lose power. At our old offices, every time the power went out, so did our servers. Sometimes we were informed in advance by the landlord that the power would be turned off for a specific period of time. That didn't help, because any downtime with a Web server is lost time.

At times, workmen implementing services for other tenants in the building would accidentally disconnect our T-1

Internet connection. Once we figured out what was going on, the workmen would apologize, but, again, it doesn't help when your virtual office can't be reached over the Internet.

If a server crash occurred in the middle of the night, someone would need to drive to the office to bring the computer back up. (That's if the crash was even noticed.) The monitoring of servers, particularly Web servers, was a problem. The optimum solution was colocation of the servers at a facility that was designed for Internet access.

Colocation Facilities

In the early days, I was resistant to moving our servers out of the building to a remote facility. I wanted to have control over the machines—not be dependent upon anyone else. It was only a few years ago that I decided to lease out-of-office space for our servers. It was one of the best business decisions that I have made.

The problems of maintaining the servers in local office space were gone. Plus, I continued to have total control and 24-hour access to my servers. Colocation facilities have redundant Internet and power systems to ensure continued operation, even if the local city power is down. The colocation staff would do 24-hour monitoring of your servers with probes. If there was a problem, the staff would call—even in the middle of the night. If you needed them to restart a computer, they would oblige, although they would not work on the computers or software.

Today the country is covered with colocation facilities. As with any business, they are not all created equal. There are a number of factors that you should address when deciding upon where to set up your Web server or virtual office. I addressed those issues in more detail last year in "Building a Virtual Office (*webserver.computoredge.com/online.mvc?issue=2607&article=in1*)."

Servers for the Virtual Office

For servers in a virtual office or as Web servers, I lean toward using the Linux or FreeBSD (Unix-like) type of servers. These packages are solid and not bloated with the extra (useless) features found in most "user-friendly" operating systems. Unix-like systems can act as Web servers and e-mail servers, and hook up with Windows users via a program called Samba (*www.samba.org/*). One of the pluses of using this type of server is that most of the software is open source and freely available. Both Apache (*httpd.apache.org/*) for Web servers and Postfix (*www.postfix.org/*) for e-mail servers are some of the best and most widely used software programs for their respective applications.

However, I was forced to add one Windows server to the virtual office because QuickBooks (the accounting program that we've used for decades) needed Windows to run its serving engine. In some ways this was fortuitous. If the Windows Business version (or above) is installed, then the Windows Remote Desktop Connection software can be used to directly control the server from another Windows machine (any version) anywhere in the world. Other Windows features, such as Task Scheduler, have been useful for backup and the launching of the weekly e-mails. These tasks could have been done on the FreeBSD machines (and some tasks are), but the convenience of having a Windows machine inside the virtual office network gave me an alternative access point.

Routers

The *ComputorEdge* virtual office also has two routers inside the cabinet at the colocation facility connected to the internal network and the Internet. While this redundancy makes it easier to get internal network access if one router goes down, that was not the original intention.

The first router was an SSL VPN router. SSL VPN routers use the same protocol as the Web to create a Virtual Private Network (VPN). Our particular router made by SonicWall (*www.sonicwall.com/us/products/446.html*) uses client software called NetExtender to create an encrypted connection with the virtual office.

ComputorEdge personnel initially use a Web browser to log in and download the NetExtender software. Then,

once loaded, NetExtender connects to the router from any Internet connection and assigns an internal virtual private network IP to the user. The associate is on the virtual office network! This gives direct access to all of the servers, including sending and receiving e-mail from anywhere.

The SonicWall router would have served all of our needs except that the SSL VPN connection can't pass the IPSec protocol. To work remotely, QuickBooks requires IPSec. (It took a little while to figure this one out.) I needed to tie in another, more or less "plain vanilla" router (with the usual security and firewall protection) and install another form of a VPN. I found that the quickest and easiest VPN to install and use was Hamachi (*www.hamachi.cc*) from LogMeIn.

Hamachi is a service that creates encrypted peer-to-peer networks. There is a free version and premium subscription service. I put the premium service on the Windows server in the virtual office, which ensures high-speed connections with the server—although not with other peers.

Having two routers has come in handy. If I can't get into the virtual office one way, I can usually get in another.

Putting It Together

Before you move your servers to a colocation facility, set up the equipment at home—or in your current office. While many colocation facilities have ways to make it easier to work directly with your computers (without sitting in the noisy cabinet room with a keyboard in your lap), it is best to know that everything is working before you haul it to the remote location.

After you've moved your new virtual office equipment to the colocation site, first start initiating your business associates with the new system from the physical office. If you set up your system properly, working with the virtual office may not be much different from connecting to the old in-office network. Taking the transition in steps helps to work out many of the bugs while developing the Web techniques that will make your business run smoother.

Once the system has been tested from the office, as well as on the road, it's time to begin moving people out of the office, one by one. There are many people who will appreciate the opportunity to work from home (although some will miss the socializing).

Eventually, the virtual office will be the hub of all your business activity. Then, when your office lease is up, post the furniture on Craigslist and move out.

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

Return to Table of Contents

Windows Vista Tips and Tricks

Windows Vista Tips and Tricks

"Setting File Associations to Open Programs in Windows Vista" by Jack Dunning

Understanding how file-type associations work and how to change them is one of the most important tricks for tailoring our computer environment to how you want it.

One of the easiest ways to load a program is to double-click on the document icon or name. Usually the desired program is loaded with the selected file in place for editing or playing. This is true for almost all computers with a graphical user interface (GUI), whether Windows, Macintosh or Linux. This approach to opening files and programs is more used in personal computing than any other method.

The technique of opening files with a particular program is accomplished by associating the type of file with the program. The file type is designated by the file extension (the letters that follow the last dot in the file name, i.e. mywordfile.*doc*). The operating system keeps a list of file types and the associated programs (defaults) that should be opened when the file is opened (or double-clicked). This is great—until a file is associated with a program that we don't want to use.

When someone purchases a new computer with Windows installed, there are often trial versions of Microsoft Office (Word, Excel, PowerPoint, etc.) installed in the same system. This can be pretty annoying if you have no intention of using Microsoft Office, because the file extensions used by Office, which are numerous, will be associated with all the common files. Every time you click upon a document, the trial version (limited number of runs) of Office will load while offering you a chance to upgrade. In Windows Vista, there are ways to avoid, then eliminate this problem.

When new software is installed on your Windows computer, it will often automatically reset itself as the default program for the type of files it uses. The best programs will give you the option during installation, but some will hijack all the recognized file types. You need to know how to change default programs and file-type associations to make your computer act the way you want.

Choosing the Program

The first method for loading an alternative program rather than the default is at the time of loading the file. Rather than double-clicking the name of the file, right-click the name and highlight "Open With" in the menu. A submenu of programs should appear offering alternative selections, plus "Choose Default Program..." at the bottom of the list. Simply select the program you want to use, or, if not found (for a more permanent solution) click "Choose Default Program..." The Open With window will open, as seen in Figure 1. (Note: If there is no menu, only "Open With...," then there is no alternative program listed and the same Open With window will open with only one program listed.)

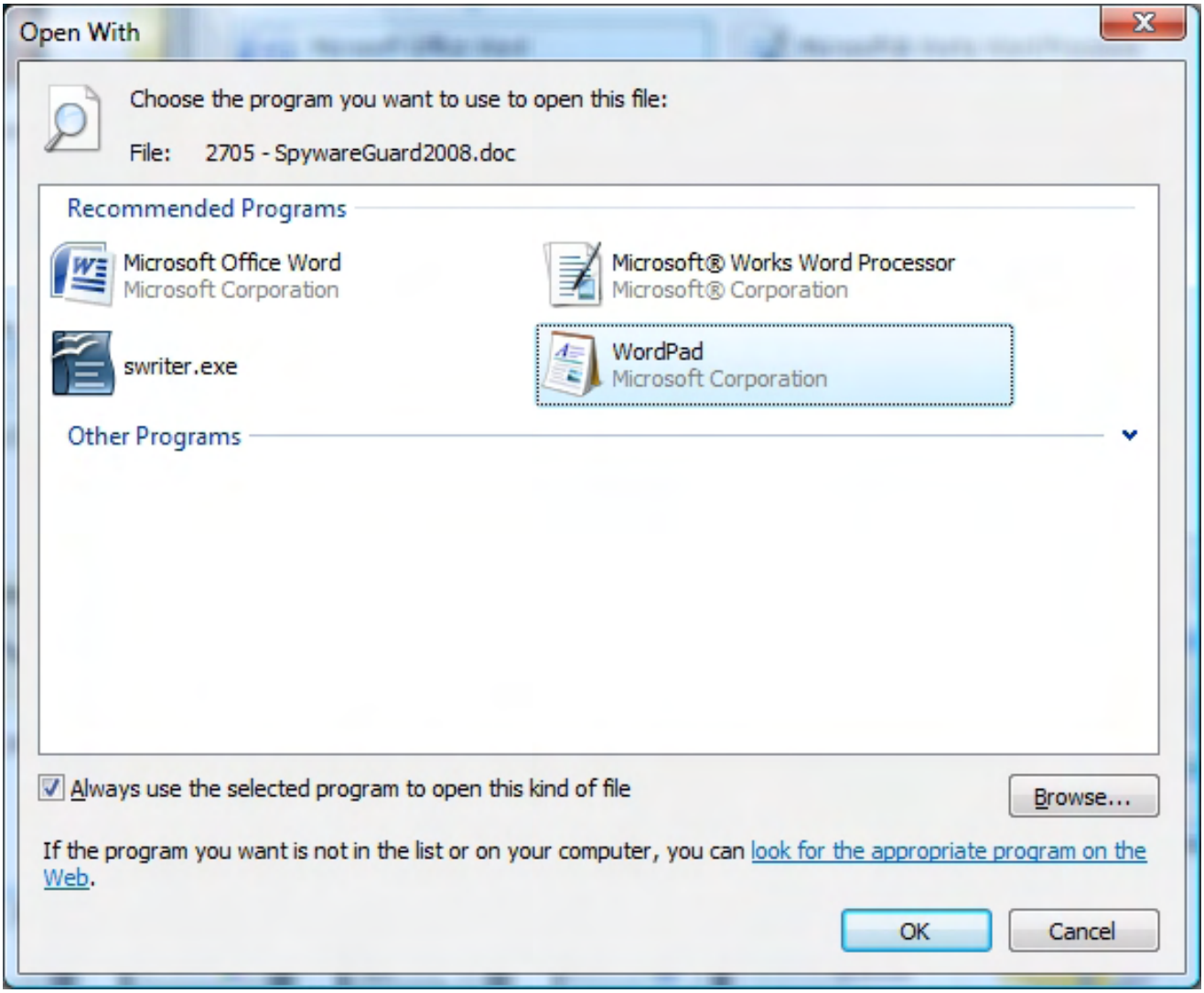


Figure 1. Windows Vista "Open With" window.

The Open With window allows you to associate the current file type with a new program. If you select a new program, then all future file openings will default to the new selection. There is a Browse button at the bottom of the window that allows you to search for a program that may not be listed.

The Default Programs Window

Rather than waiting for a problem, you may want to check or change all of the file associations that are set up for your programs. This is done through the Default Programs window.

The easiest way to open the Defaults Programs window in Windows Vista is to type "default" into the Start Search field in the Windows Start menu and select "Default Programs" from the top of the list. This window can also be opened directly from the Control Panel (Classic View) or under Programs in the Control Panel Home standard Vista view (see Figure 2).

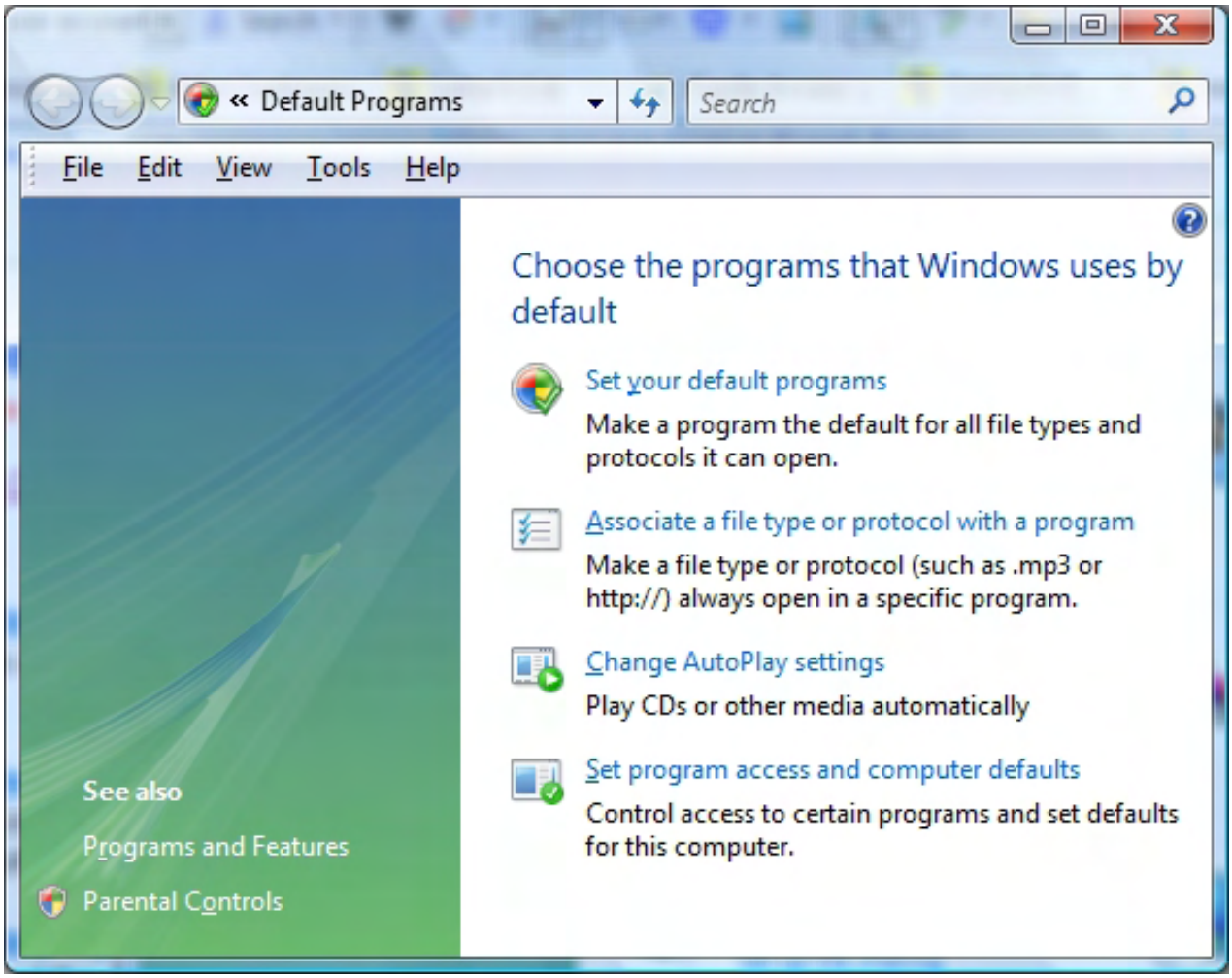


Figure 2. Windows Vista Default Programs window.

When you select "Set your default programs," the window showing the major programs installed on your Windows Vista machine will appear (see Figure 3). You notice that it does not list all of your installed programs, but rather those that have multiple possible file associations of the most common files that may overlap with other programs. For example, word processing and graphics programs tend to be included, whereas the BitTorrent programs I have installed don't appear. (Dealing with program associations for the less well-known file types will be discussed next week.)

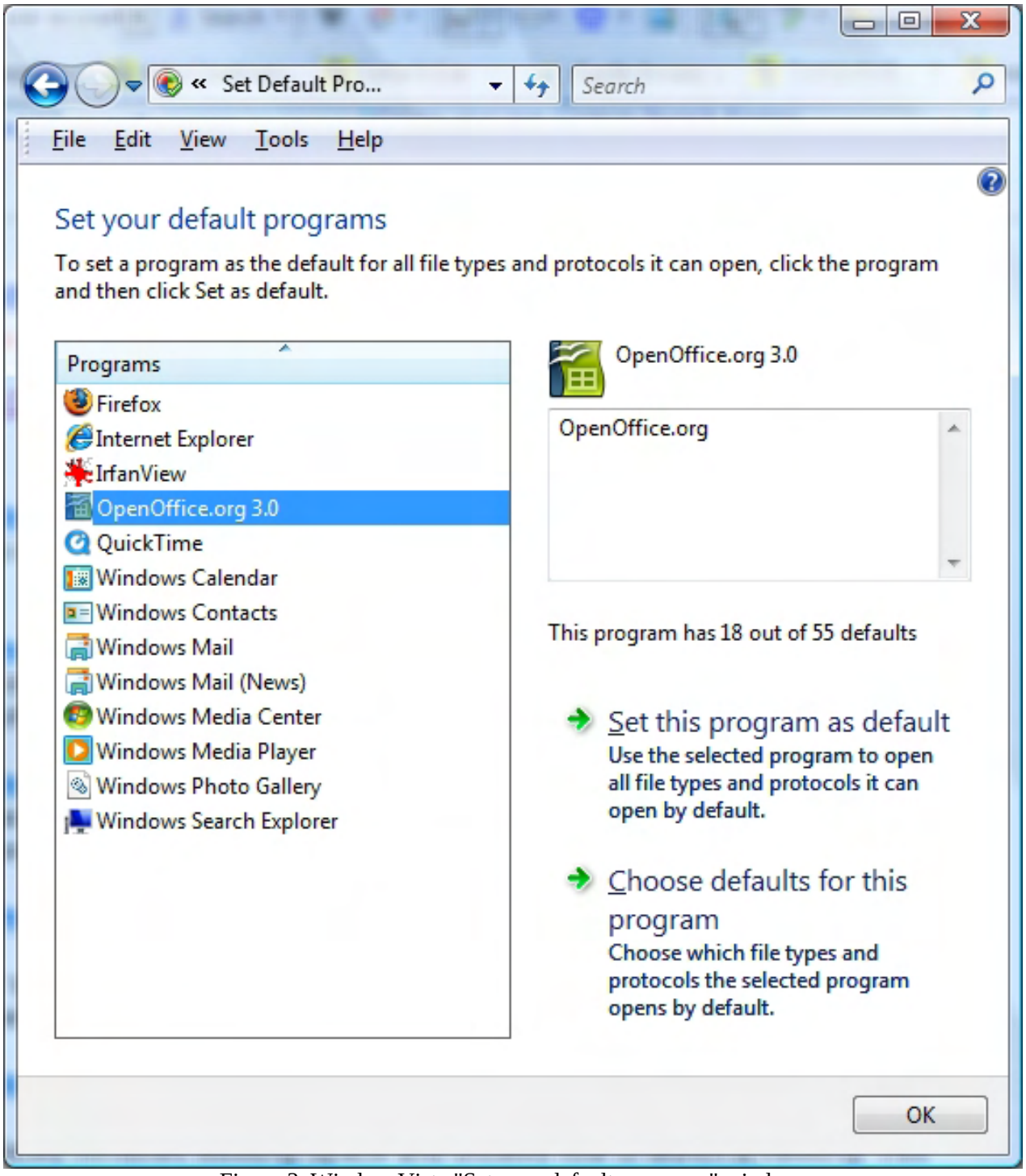


Figure 3. Window Vista "Set your default programs" window.

When you select a program (in this case, OpenOffice), the window will display how many defaults can be set (55) and how many are set (18). If you want the program to be the default for all of the appropriate file types, then click "Set this program as default." You may not want to do this, if you have other special-purpose tools for specific types of files. For example, I prefer to use an old copy of FoxPro to open database files (.dbf). If I activated all the possible OpenOffice defaults, it would also grab .dbf files.

To pick and choose which file extension you want to default to the selected program, click "Choose defaults for this program." The next window will display a list of all the file extensions that the selected program can open (see Figure 4). In this case, the window shows the part of the list that shows the PowerPoint file types (.ppt, .pot, etc.).

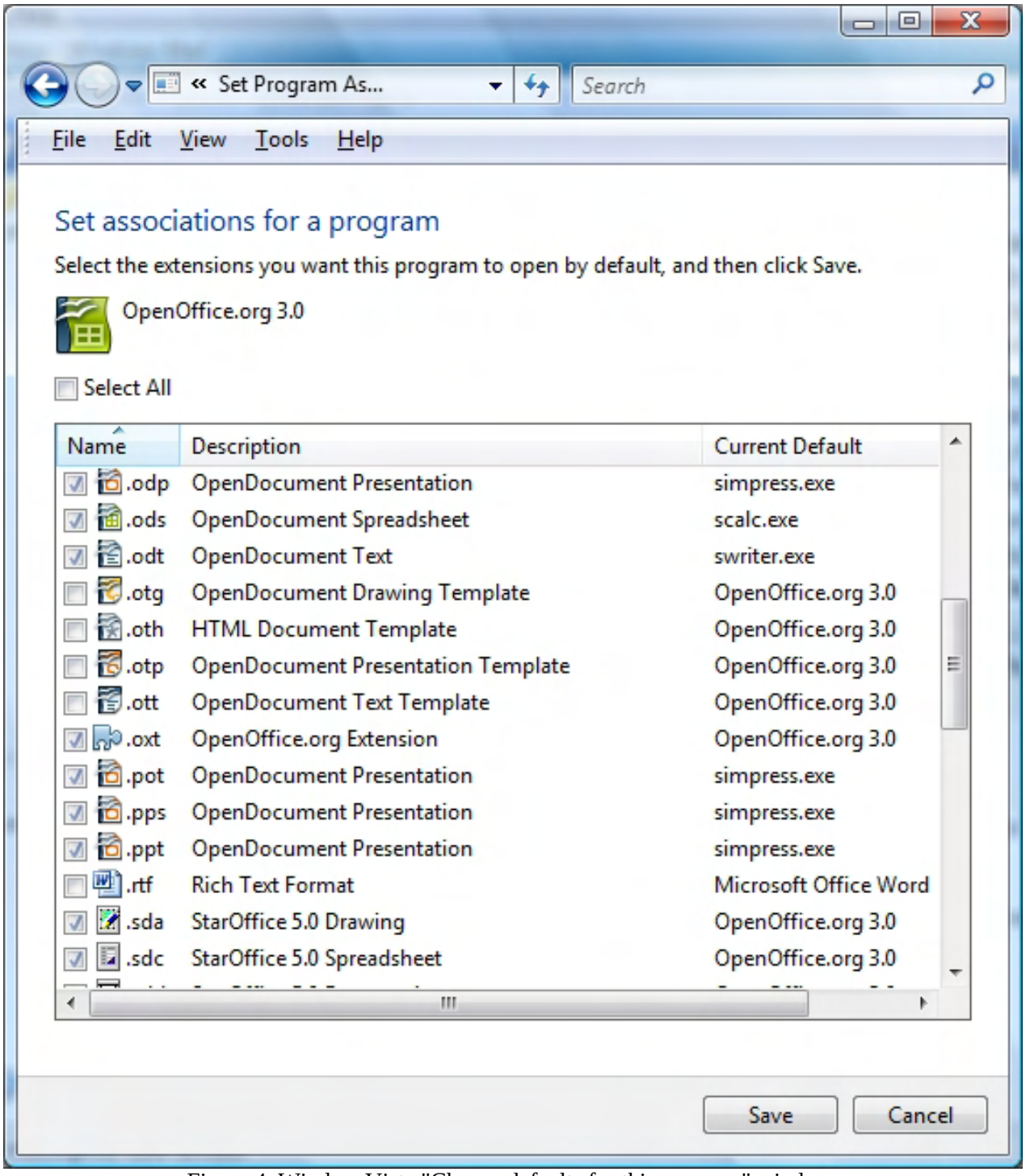


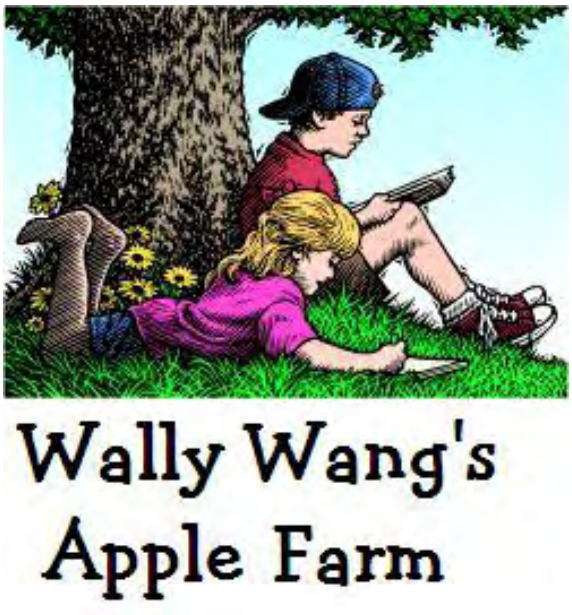
Figure 4. Window Vista "Choose defaults for this program" window.

Some people were sending me PowerPoint files (.ppt). Every time I opened one, a trial version of PowerPoint was opening and harassing me with registration questions. I checked the appropriate boxes in this window for OpenOffice and saved. I am no longer annoyed by PowerPoint, since it no longer appears.

Understanding how file-type associations work and how to change them is one of the most important tricks for tailoring our computer environment to how we want it. Next week, I'll do more on dealing with specific file types and program associations.

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

Return to Table of Contents



Wally Wang's Apple Farm

"Virtual Offices" by Wally Wang

The business world is changing, and whatever you do to earn money in the future, you'll likely be doing part or all of it outside of a traditional office. That's where a virtual office comes in. Also, a look at using RapidWeaver to create a Web site, and a tip on using your iPhone for walking and transit directions.

All the news about the economic crisis can make you think the whole world is crumbling before our eyes. However, if you study the current news carefully, you'll see that nearly all of the economic suffering is occurring in shrinking areas such as manufacturing, retail and administrative work. In other words, if you build stuff in a factory, sell things in a traditional brick-and-mortar store, or push papers around in an office, chances are good you'll lose your job with little hope of ever getting it back again.

There's a reason for why those types of jobs are suffering. The economy is changing, and automation makes many factory, retail and administrative jobs irrelevant. Just as companies no longer employ rooms full of typists to write business letters when anyone can duplicate their efforts with a computer and a word processor, so will companies no longer need as many factory, retail or admin people when computers can do most of that work quickly and more accurately.

With so many traditional jobs disappearing, expect rush-hour traffic, office buildings and business clothes to seem as archaic one day as powdered wigs and snuff boxes. Like it or not, the business world is changing, and whatever you do to earn money in the future, you'll likely be doing part or all of your work outside of a traditional office.

That's where a virtual office comes in. Instead of showing up at a building in the morning and leaving eight hours later in the afternoon, a virtual office means you'll be working anywhere you happen to be, such as in an airport, at home, in a coffeehouse, outside in the park, or in a public library.

Besides eliminating physical boundaries, virtual offices also eliminate time barriers. Instead of working from 9 to 5, you can choose to work whenever you want without a boss looking over your shoulder. If you can't discipline yourself, your chances of economic survival will plummet dramatically.

The key to a virtual office is a mobile phone; a wireless Internet connection; a laptop computer; and an online e-mail and file storage site, such as Google Docs, MobileMe, or iWork.com. The online storage site provides access to your documents and e-mail so you can tap into them anywhere in the world with a mobile phone or a laptop. It doesn't matter which mobile phone or laptop you use anymore, since the key to every virtual office will be Internet access and the online site, often dubbed "the cloud."

Google Docs provides a free online word processor and spreadsheet, making it great for sharing and collaborating online. The big drawback is that if you're out of Internet contact, you can't work on your documents unless you download them to your computer, so you'll still need to use a word processor offline too.

MobileMe is more useful just for sharing files. You can store your important files in private folders and then post other files in a special public folder that you can selectively allow others to access. The problem is that if you give three different people access to your files, they can each download a file, make three different set of changes, and now you'll wind up with three different versions of the same file, which you'll have to merge together to create a single file again.

Apple's iWork.com is currently in beta form and works only with the iWork suite of programs that includes Pages, Keynote and Numbers. If you don't use iWork, you can't use iWork.com.

Like MobileMe, iWork.com lets you post files for others to download. Unlike Google Docs, which allows others to collaborate online, iWork.com lets others only post comments directly on a document without changing the document itself. Although you need a Macintosh and iWork to create and post documents, anyone with a browser (Windows and Linux users) can view those documents and leave comments.

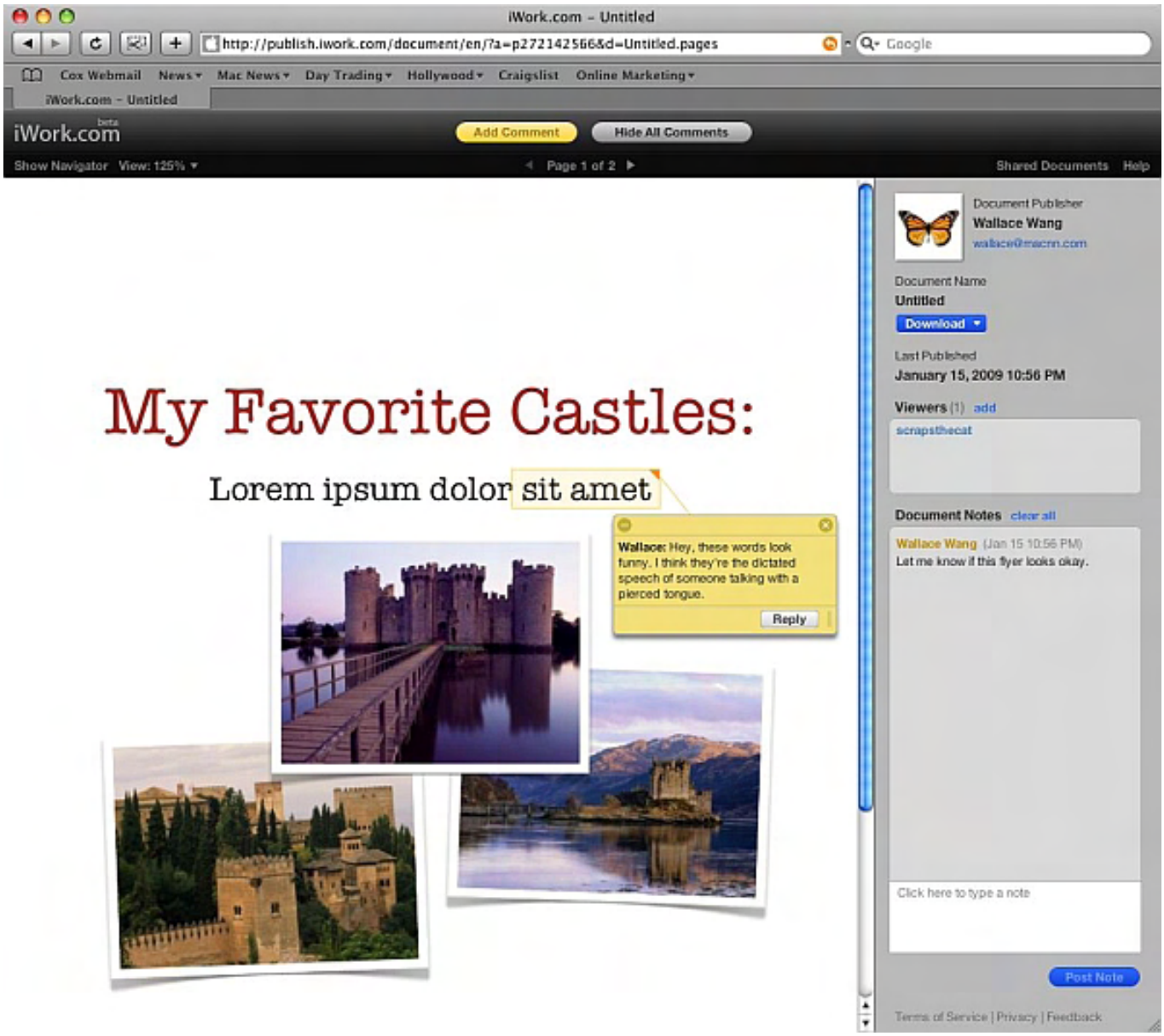


Figure 1. iWork.com lets you post any iWork documents online for others to view and comment on.

If you need multiple people to collaborate on a single document, Google Docs is your best choice. If you want to comment and share iWork documents only, then use iWork.com. If you just want to share any kind of files, then

MobileMe will meet your needs.

The future of virtual offices lies on these online "clouds" that can store data, which is why Microsoft wants to kill Google because the type of operating system you use is now irrelevant. With a mobile phone, a laptop computer, and an online "cloud," your office can be wherever you want it to be. Now all you need to do is make sure you actually get some work done.

* * *

The virtual office is a great way to get work done anywhere and any time, but it lacks the social aspects. In a real office, you can chat with co-workers during a smoke break or in the break room. In a virtual office, you have to actively solicit contact with others, and one way you can do that is through a Web site.

Putting up a Web site isn't difficult, but it can be troublesome to get it right. Professional Web designers use Dreamweaver, but if you just want something much simpler, you can use iWeb (included free with every new Macintosh) or RapidWeaver (*realmacsoftware.com/rapidweaver*). Although RapidWeaver costs $79, the price may be worth it over iWeb.

To design a Web page from scratch, you have to start with a blank page and manually add pictures and text boxes. Each time you added a new page, you have to create it from scratch. While this gives you the most flexibility, it also takes time and design skills. RapidWeaver provides a library of templates, so you just choose the design you like and create a blank page with graphics already decorating the border of your pages. This gives you less flexibility in placing and choosing graphic designs, but lets you create something in seconds instead of hours.

Even better, you can change the design of your entire Web site at any time. Just click on a new design, and RapidWeaver changes every Web page without affecting any text or graphics you might have added. For anyone who just wants to create a Web site quickly, RapidWeaver lives up to its name.

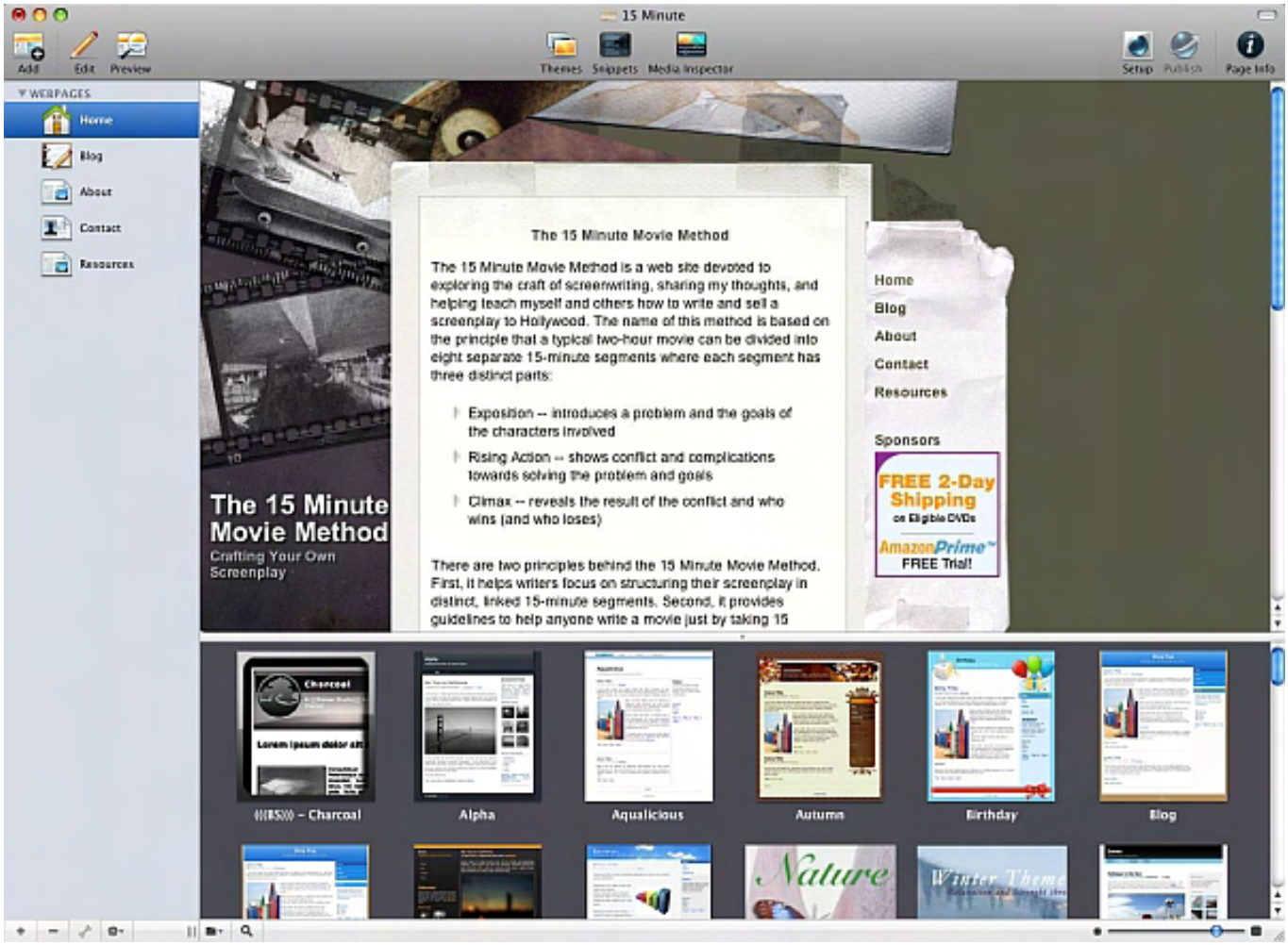


Figure 2. RapidWeaver lets you choose the design of your Web pages from a library of themes.

One major stumbling block for novices is posting their Web pages on a hosting service. If this sounds complicated, it isn't, but it's almost always more difficult than it should be. The traditional way of creating Web pages is to store them in a folder on your hard disk and then use an FTP (File Transfer Protocol) program to send those files from your computer to whatever hosting service you use, such as GoDaddy.com.

RapidWeaver eliminates this step by including a built-in FTP client. Just type in the necessary FTP information one time (such as your account name, password, and location to store the files), design your Web pages and click the mouse, and RapidWeaver sends your Web pages to your hosting service. RapidWeaver works with MobileMe and any Web hosting service, so you can get one-click convenience whenever you need to update your Web pages.

To see a RapidWeaver-designed Web site, visit The 15 Minute Movie Method (*www.15minutemoviemethod.com*), which is a site I put up about how to write screenplays. I put this site up for two reasons. First, I wanted to put my thoughts out to the world on my theories about writing screenplays. Second, until people know I'm writing screenplays, they won't have a reason to contact me about this subject, so this Web site is one way to socialize over the Internet. By using RapidWeaver, putting together and maintaining this Web site is ridiculously easy, while creating an interesting graphic design that I could probably never create on my own if I had to use another program like Dreamweaver.

If you need absolute control over the design of your Web pages, you'll probably be happier with Dreamweaver, but if you just want to create something that looks good fast, then RapidWeaver is perfect for everyone else who finds Dreamweaver and Web page designing way more confusing than it should be.

* * *

The latest 2.2 firmware update to the iPhone added a strange new feature. In addition to giving you driving directions, the iPhone can now give you transit and walking directions.

Just tap the Maps icon, type in your destination, tap the Current Location button in the bottom-left corner of the screen, and you'll see a map highlighting the shortest route. At the top of the screen, you'll see icons representing a car, a bus, and a man walking.

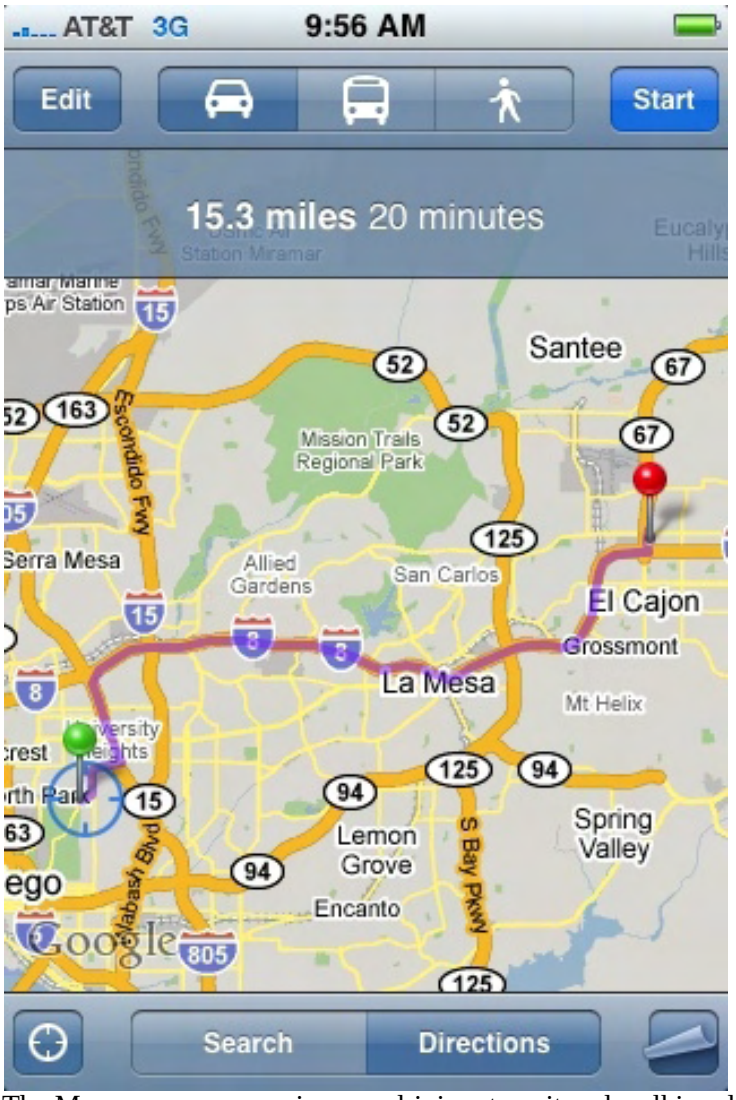


Figure 3. The Maps program can give you driving, transit and walking directions.

Clicking on the car icon gives you driving directions, clicking on the bus icon gives you directions to the nearest mass transit option such as a bus. Clicking on the walking man icon gives you walking directions.

For most places, the driving directions are all you need, but for places like New York or San Francisco where public transit is far easier to use, the mass-transit options can tell you how to get to the nearest bus stop or station, what time the bus or train will leave, and how much fares will cost.

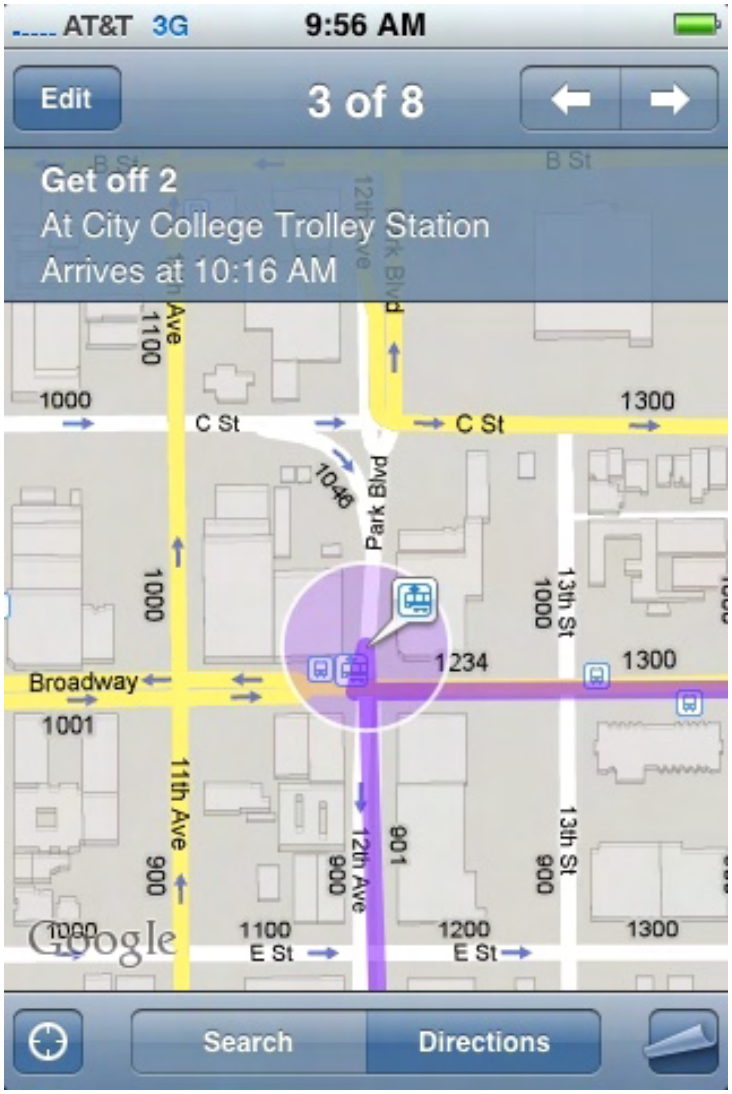


Figure 4. You can get directions to the nearest transit station.

Armed with an iPhone and driving, transit or walking directions, you should never get lost again. Just toss in a laptop computer to go with your iPhone, and your virtual office is really just you.

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 *Microsoft Office 2007 for Dummies*, *Breaking Into Acting for Dummies*, *Beginning Programming All-in-One Reference for Dummies*, and *Mac All-in-One Reference for Dummies* from *www.dummies.com*, as well as, *Steal This Computer Book 4.0*, *Visual Basic Express 2005: Now Playing*, and *My New Mac* from *www.nostarch.com*. He is also the co-author of *Strategic Entrepreneurism* from *www.selectbooks.com*.

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

When not performing stand-up comedy or writing computer books, he likes to paper trade stocks with the video game Stock Reflex (*www.plimus.com/jsp/download_trial.jsp?contractId=1722712&referrer=wwang*).
Wally can be reached at *wally@computoredge.com*.

Return to Table of Contents

Web InSites

“Adventures in Malware” by Dawn Clement

> Dawn's computer was infected with a particularly nasty piece of software. Learn from her mistakes!

It's been a helluva week. My computer got infected with a particularly nasty piece of software and I've spent all week getting my technology working again. I had planned to write this week's column on the "Green" benefits of telework and telecommuting, but didn't get it done because I was busy taking care of my equipment. If you will be so kind as to lend me your shoulder for a minute or two, I'll tell you all about it…

At one point in time, my husband copied his entire CD collection (well over 600 discs) onto the computer so he could listen to them while he worked. He used Windows Media Player to convert the files, and they were saved with .wmf extensions. Come to find out, wmf files won't play in an MP3 player. So he asked me to convert the files and put them on his iPod. I thought this would be an easy task, but quickly found otherwise. All the files had DRM (Digital Rights Media) protection and would not allow me to change the formatting to MP3. I began trolling the Internet to find some sort of program to strip the DRM and allow me to convert the files. I know that technically that's not legal, but since we own the CDs, I justified it to myself. (Plus, I was too lazy to just re-record the discs.)

Turns out that people who say their software can strip DRM aren't always the most trustworthy people out there. I found a program that sounded like it would do the trick, downloaded it, and installed it on my hard drive. Big Mistake.

What I ended up with was something called "Spyware Guard 2008". Spyware Guard 2008 is a fake anti-malware application. There is an actual freeware program called SpywareGuard from Javacool Software, that really does what Spyware Guard 2008 says it will do. This is not the same software.

The Spyware Guard 2008 Web site is hosted on an IP address physically located in Russia (which also hosts several other Web sites including a porn site). The program loads fake viruses and Trojans, and then tells you your computer is infected and that they can clean it up if you pay to register the program. It was obvious to me at this point that something was not quite right, as the grammar and spelling are slightly off. I thought I was safe because I didn't register, but I was wrong. I'm afraid that I've always been pretty smug about the fact that I don't have anti-virus software on any of our computers (after all, the computer can't get infected without user intervention), and my face sure is red now.

Spyware Guard 2008 hijacked my browser. I was still online, but couldn't choose what sites to visit because Spyware Guard 2008 redirected me to random sites. It loaded itself every time I rebooted, and if I tried to end the process my computer crashed. Every minute or so, a warning would pop up informing me that my computer was infected and encouraging me to register Spyware Guard 2008. Extremely annoying!

I loaded McAffee Internet Security Suite and scanned my hard drive. Nothing found. I ran AdAware. Nothing

found. I couldn't download anything because my browser was not co-operating, and I didn't have any other security software on the hard drive. I decided to remove this pernicious software the old fashioned way. Using another computer, I downloaded the instructions for manually removing Spyware Guard 2008. I followed the instructions to the letter, removing all the associated files and registry entries. I was sure it was over, and rebooted the computer. Guess what came back!

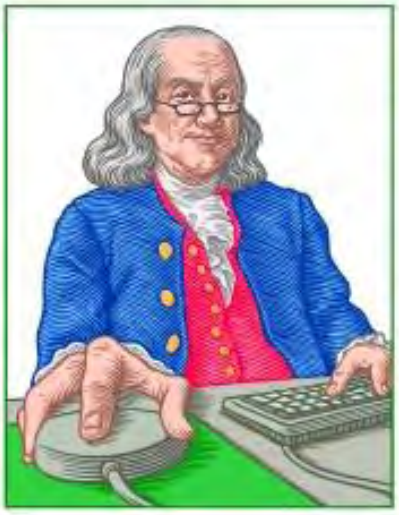
After several unsuccessful attempts at a manual removal, I realized drastic measures were needed. I backed up my data (which I'm afraid to put back on the hard drive, fearing a reinfection) and deleted my Win XP user account. It worked. Spyware Guard 2008 is gone!! Of course, all my data is gone as well—all my bookmarks, photos and writing—and I had to reinstall all of my peripherals, but after all the grief I suffered, it's worth it.

Most of the success stories I found online involved a spyware removal tool from Malwarebytes. I was unable to actually use the tool because I couldn't browse to the Web site, but it's a good thing to know anyway. You can find the Malwarebytes Anti-Malware removal tool on their Web site (*www.malwarebytes.org/*).

The moral of the story is two fold: always keep updated anti-virus software on your computer even if it's not running (you never know when you're going to need it) and always have more than one browser available to use (in case one gets hijacked).

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

Return to Table of Contents



LITTLE LINUX LESSONS

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

Little Linux Lessons: Tips and Tricks from Users

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

A reader responds to last week's Ubuntu/Skype/PulseAudio problem, but more help is needed; A reader wonders why Linux and open source can't be more user friendly.

Last Week's Ubuntu/Skype/PulseAudio Problem

Richard asked, "Has anyone come up with the real answer? There seem to be many workarounds available, some of which work occasionally/randomly or not at all."

Pete responds:

No. I have not. I have had many PulseAudio problems. I am running Fedora 8 (which is not using PulseAudio). I attempted upgrading to Fedora 10 and have had no success with PulseAudio. I have had to resort to rolling back to Fedora 8.

Sorry, no help here.

Pete Choppin

Anyone else have any thoughts?

* * *

*If you have an answer to this question, please address it to Linux Lessons (*ceeditor@computoredge.com*).*

Frustrating Week (or Two?)

Thanks for the responses on my Ubuntu questions. I must admit defeat. I have installed Windows Home Server and couldn't be happier. Everything is working great. I have not resolved my Linux issues. In fact that is why I am writing, because as a computer user and Microsoft victim, I have issues with Linux.

Is the sole purpose of Linux simply to make otherwise intelligent people feel incredibly stupid? Would it really be like selling out to the man to make the operating system just a *bit* more user friendly? Also at issue, I am returning to school and changing careers; I am a student at Metro State. I have checked into classes for Linux, and they aren't offered. Why does it seem no one is interested if the rest of us get it?

This really seems like a good ol' boys club. When I visit sites with tutorials or other information offerings, it doesn't take long before I am completely baffled. They all seem to assume that everyone wanting to get involved with Linux has a computer science degree.

I am not a rookie. I am not a noob. I served in the U.S. Navy as a radar technician for four years. I have been

building computers for 15 years; I am familiar with DOS, Windows 3.1, 95, 98, XP, Vista, and now Windows 7 and Windows x64, and WHS.

Why are there not more user-friendly information outlets for Linux? If people really wanted everyone to move away from Microsoft and toward open source, as far as I can tell they are going about it the wrong way. It seems open source should have open arms for the rest of us, and yet the experience seems more like trying to break into Fort Knox.

If the Linux community is interested in gaining more market share or "opening" up open source, they're going to have to take some lessons from Microsoft.

Scott

* * *

Looking for Some More Questions

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

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

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

Jack Dunning
ComputorEdge

ComputorEdge always wants to hear from you, our readers. If you have specific comments about one of our articles, please click the "Tell us what you think about this article!" link at the top or bottom of the article/column. Your comments will be attached to the column and may appear at a later time in the "Editor's Letters" section.

If you want to submit a short "ComputorQuick Review", or yell at us, please e-mail us at *ceeditor@computoredge.com*.

Return to Table of Contents

Rob, The Computor Tutor

Rob, The ComputorTutor Does Programming for Visual Basic for Applications

"Access VBA Programming" by Rob Spahitz

Last week, we started exploring the Visual Basic (VB) environment. We'll continue that, and also revisit the Access code-generating wizard, and then see what VB code was written for us.

Last week, we started exploring the Visual Basic (VB) environment. We'll continue that today, and also revisit the Access code-generating wizard, and then see what VB code was written for us.

Exploring VB

Open Access. Feel free to use an existing database or create a new blank one. I'll use an existing one found on my server at *dogopoly.com/ce*.

Once the database is open, go to Tools/Macro/Visual Basic Editor (or simply press Ctrl-F11).

Let's spend some time looking around. First, along the top you'll find a set of menu items, many of which will be quite familiar. In the File menu, you can Save the current database, Import a file into VB, Export a VB file, Remove it, Print it, or Close VB and return to Access. When you import or export, you have three different file types, which we'll explore later.

Under the Edit menu, you'll see a lot of familiar features such as Undo, Cut, Copy and Paste. In addition, you'll see a few other interesting things like List Properties/Methods and Quick Info. These assist you in learning about the objects you are working with, such as forms, text boxes and command buttons. We'll explore these as needed.

The View menu is helpful. Often you will accidentally close a window and then need to see something in it. This menu is the place to go for that. It also offers a few other windows and panels that can show very useful information.

The Insert menu lets you add new blocks of computer code (Procedures) or files to hold these blocks (Modules and Classes).

Next is one of the more interesting items in the computer world: the Debug menu. The word "debug" came into popular use in the 1940s as the computer world was really starting to take off. There are many stories about it but here's mine:

Computer engineers worked hard at getting electronic lights to show up just right to generate things like simple arithmetic (yes, back in the days before computers and electronic calculators). By plugging a wire into a slot for the number 5 and another wire into a slot for the number 2, a light was supposed to illuminate the number 7. After much trial and error (and effort), the engineers finally got it! All excited, they ran to their boss in another room and asked him to come in and see what they had achieved. In came the boss. They plugged in the wire for a value of 5; in went the wire for a value of 2; lo and behold, the light illuminated number . . . 8. "But I swear it was just working," reported one of the engineers, now very disappointed.

As they searched through for the problem, they found that a moth had flown into the works. Upon removal of the bug, in a process now known as debugging, the problem was fixed. Apparently that moth is now housed in the Smithsonian Institution in Washington, D.C. Here's their story (*americanhistory.si.edu/collections/comphist/*

objects/bug.htm).

So what does debug mean? In modern-day computer programming, debugging is the process of removing computer code that is not producing the expected results. In the case of the Debug menu, VB offers a variety of features to help identify incorrect computer code. We'll explore these in a later column.

The next menu item is Run. This allows you to start processing something like a Form or Report. That is, this lets you switch from Design mode to Run mode. You also have the option to pause (Break) the computer code that runs when you start, or to stop (Reset) it while it is processing.

Continuing in the menus, you find Tools. This lets you define additional components that are not integrated into Access or VB. You can run the old-style code called macros or explore additional setup options.

Next is Add-Ins. This lets you insert plug-in features created by others, similar to things like Web browser plug-ins. These would normally be for special-purpose features that you buy from an outside source.

The last two menu options are Windows and Help. These offer standard features that allow you to arrange how your computer code windows appear and to explore help items.

VB Windows

Aside from the menus, you have a collection of parts including toolbars, a Project window, a Properties window, maybe a few more windows, and a big area where code windows will appear. These windows are movable, but they are typically docked (attached) to certain areas of the VB application window.

The Project window will include a collection of pieces organized similar to Windows Explorer. You will see the Access project names. If you have only one project, you see one main item. Inside your projects you see a collection of folders. These folders contain the computer code associated with different objects, such as forms, reports, modules and classes. If you don't see anything yet, then you have no computer code defined.

The Properties window contains settings for the currently selected object. Objects include things like your database, forms, reports, text boxes and command buttons.

The code window contains all of the pieces of computer code that might be used by your database to add the custom features that you'd like to enable.

Wizard Code

Now that we've learned a bit about the VB environment, let's get back to Access and see how it uses VB to help you to add useful features, such as the ability to have one form open another form. Let's get that one to happen.

First, return to Access. The easiest way is to click on the Access button in the Windows taskbar or to click on the Access box near the top-left corner of VB.

Go ahead click on the Forms object from the main access menu. Now let's create two forms. One form will be just a simple form that has a Close button; the other will let you open the first form.

Double-click on "Create form in Design view" to open a blank form. From the Toolbox (View/Toolbox as needed), select the Command Button (located underneath the check box, as seen in Figure 1), and then click near the bottom center of the form.

Figure 1. Access Toolbox.

When the Command Button Wizard starts, you will be presented with a collection of choices, as we've seen in a previous column. Select Form Operations from Categories, then Close Form from Actions, then click on the Next button. Enter some text, such as "Close" next to the Text option, and then click the Next button again. For the name, enter the name cmdClose, and then click on the Finish button.

Your form should now look something like Figure 2.

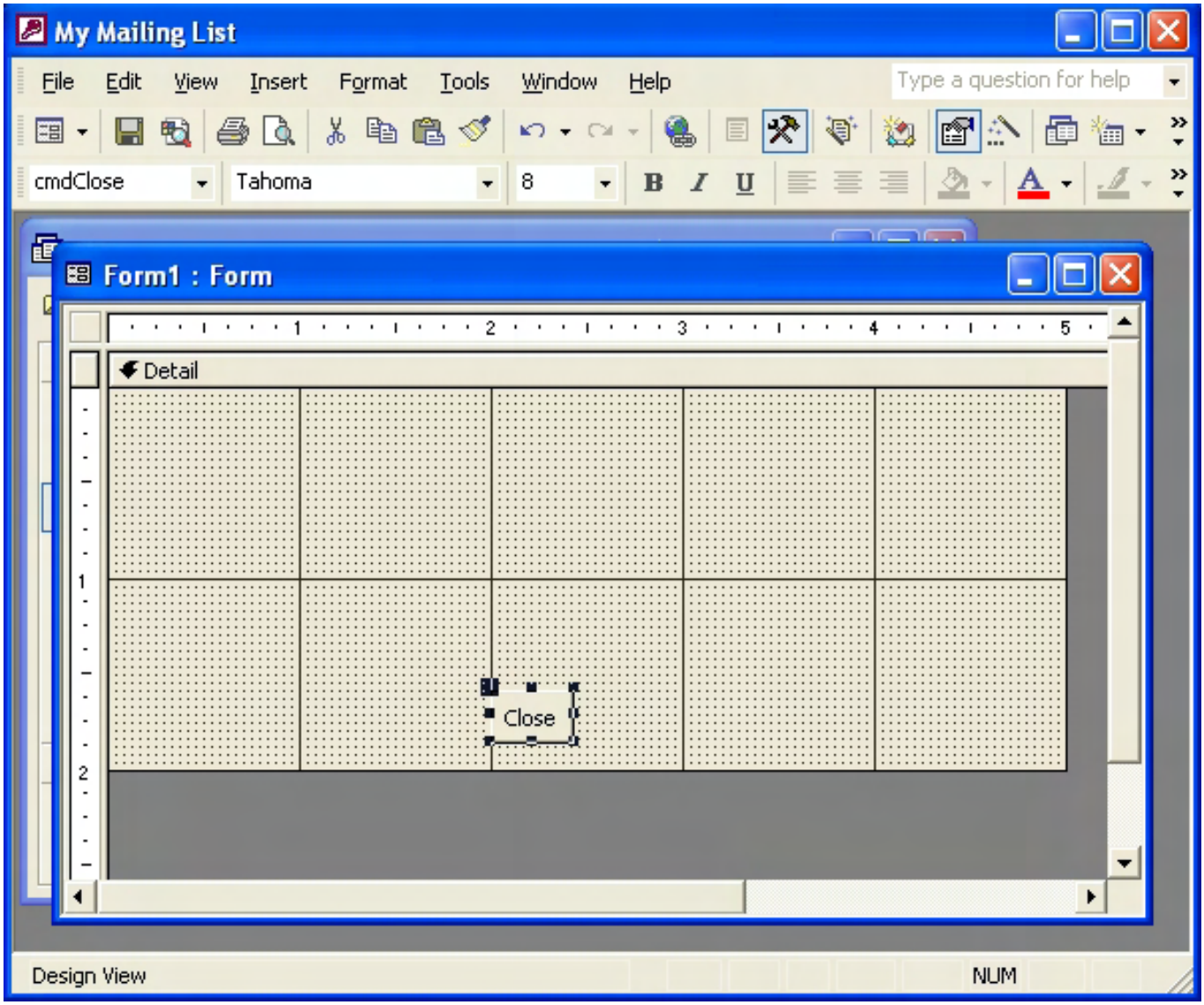


Figure 2. Simple form with just a Close button.

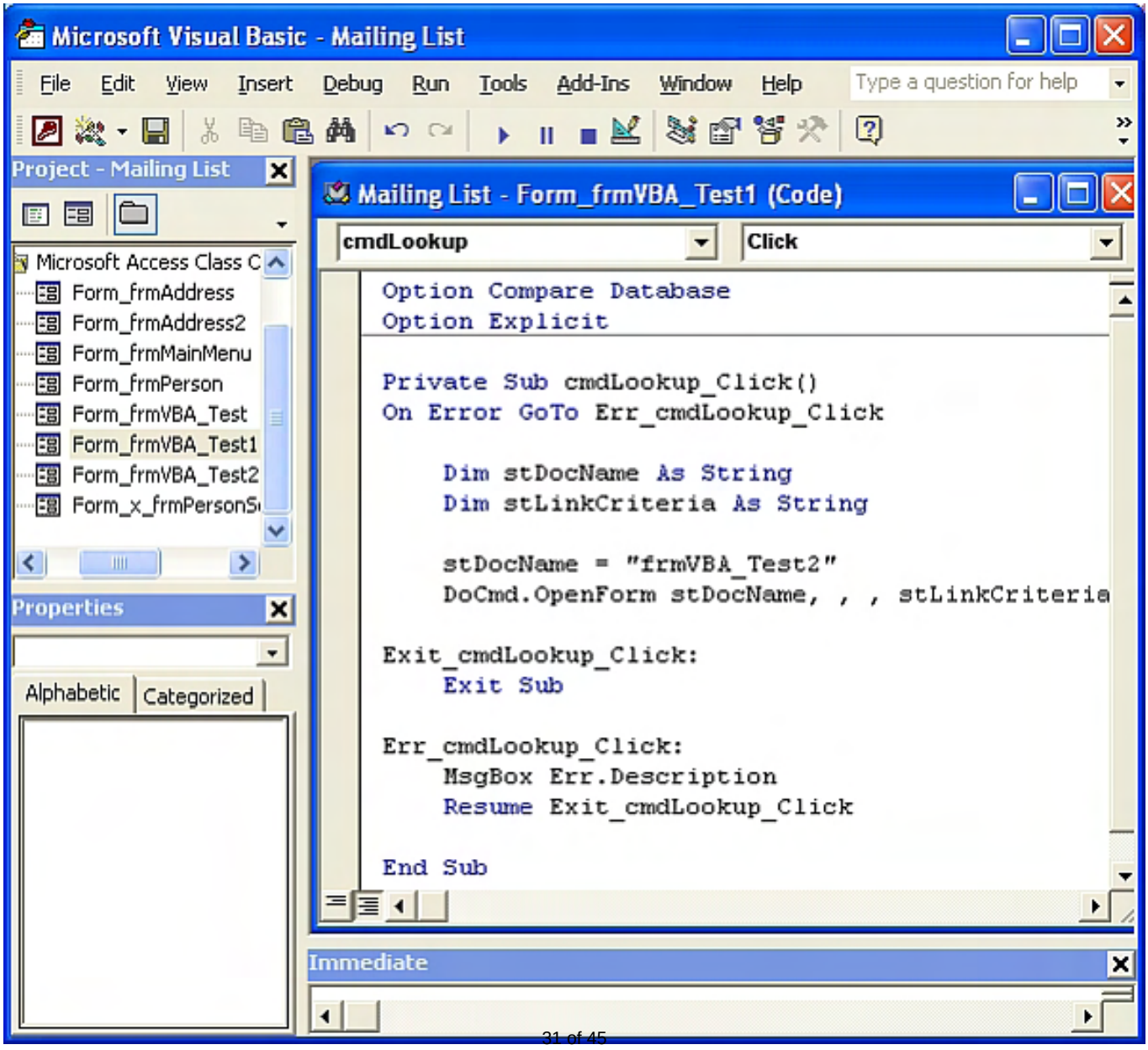
We'll explore the code for this shortly. Meanwhile, close this form and name it frmVBA_Test2.

Back in the Forms area, create another new form in Design view. Once again add a Command button, this time near the center of the form. Again, use the Wizard to select Category Form Operations, but this time choose the action of Open Form, and then click the Next button. From the next window, select frmVBA_Test2, which you created above, and then click the Next button. Again, enter text in the box, such as Open, and click on the Next button. Finally, name this button cmdLookup and click on the Finish button.

Save this form with the name frmVBA_Test1 and switch to Form view. When you click on the Open button, the other form should open. Click on that form's Close button and that form will close.

Now let's explore the form's VB code. Press Alt-F11 to get into VB. You should now have in your Projects window a folder named "Microsoft Access Class Objects" (which would have been there if you previously had code). You should now have two new entries inside that folder, one for each of the new forms that you just created. If you did not add the buttons to generate VBA code, these would be hidden.

Double-Click on the entry called Form_frmVBA_Test1. You should see something similar to Figure 3, showing the VB code created to open a form.



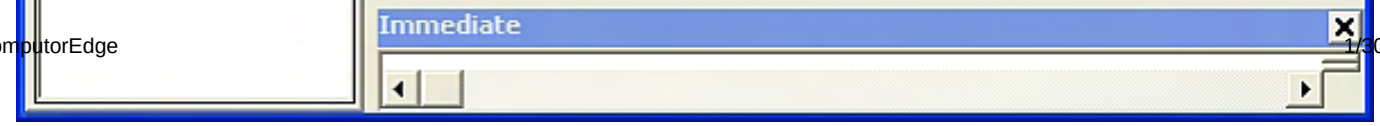


Figure 3. Open Form VB code.

Two weeks ago we started exploring some of the more common VB commands. It may seem strange that none of these appear in the code we see, so let's explore what's there and find out why there are no "common" commands.

First, at the top you'll see one or two entries, starting with "Option," that appear depending on your VB settings. We'll explore these at a later time. Next, we see a line with the word "Sub" near the beginning:

```
Private Sub cmdLookup_Click()
```

When you create some new computer code in VB, you tell Access about it by putting it into a subroutine. VB requires a line with the word Sub on one line and the words "End Sub" somewhere after that. A sub has several parts. In our case, it's defined as Private, meaning that it is available only from within this form. Other forms do not have access to this subroutine. Then the word Sub is obviously required. Next you get the name of the subroutine. In this version of VB, the name also has special significance. Starting with version 7 (aka VB.Net), this changes a bit. Anyway, if the name consists of an object name, such as cmdLookup, followed by an underscore character, followed by an event name for that object, then you have an event procedure that will run whenever the event occurs on that object. So in this case, when the click event occurs on the cmdLookup button, this VB code runs.

Finally, subroutines have parentheses after the procedure name. This simply defines additional values that the procedure will use. In this case, with nothing inside parentheses, the procedure is simply ready to start without any additional values.

The next line we see tries to catch any errors that occur:

```
On Error GoTo Err_cmdLookup_Click
```

When you see "On Error GoTo," it tells VB to watch for any errors. If it finds any, it should immediately jump to the place with the name after the GoTo. In this case, errors should jump to a VB label called Err_cmdLookup_Click. Lower in the code, you see this name in column 1 followed by a colon (:). The colon identifies this as a VB label. If there are no errors with processing the VB code, it does not jump to this label.

In addition, if an error occurs, you would have additional code to help identify what to do about the error. After that, you would normally "Resume" back to another place in the code. In this case, it will jump back to a different VB label.

The next two lines start with Dim:

```
    Dim stDocName As String
    Dim stLinkCriteria As String
```

In databases, if you want to save a value, you create a field in a table. In VB, if you want to save a value, you create a variable in a Dim line. In VB, after the word "Dim," you add a name for the variable (like a field name)

and optionally add the word "As" followed by a data type (just like the data types in a table, except that you have more choices, including custom data types.)

So these two lines simply create variables named stDocName and stLinkCriteria, both of which are data type String, which is the same as an Access data type of Text (well, really Memo, since there is essentially no limit to the number of characters you can store in the variable.)

The next VB line puts a value into the first variable:

```
stDocName = "frmVBA_Test2"
```

VB expects the variable name followed by an equal sign (=) followed by a calculation that produces a value of the proper (or a compatible) data type. In this case, the form name frmVBA_Test2 enclosed in double-quotes tells VB to use the exact text in the quotes. Although it looks like the name of a form, it's really just arbitrary text that VB will send to Access and let Access decide if it means anything. If you were to change the text inside quotes, like replace the 2 with a 3, VB wouldn't care. However, Access would not know what that means, so Access would complain if you asked it to interpret that name. So this line merely puts some text into a string variable.

The next line is the one that does all the work:

```
DoCmd.OpenForm stDocName, , , stLinkCriteria
```

"DoCmd" is a special Access command. Based on the way VB talks to Access (which we'll explore in a future column), VB recognizes that this is an Access command. Adding a dot after the command tells VB to ask Access what the command can do. One of the options for DoCmd is OpenForm, which, as you would imagine, tells Access to open a form. Since Access does not necessarily know what form to open, it uses additional information to find out which form. It also offers some additional parts. In this case, the first part is the VB variable stDocName, which was previously set up with some text that happens to match the name of an Access form. After that are a few commands and the variable stLinkCriteria.

Hmm . . . what is the value of stLinkCriteria? Well, this is where the Access wizard did a bad thing! It used a variable that was never given a starting value. As it turns out, VB will handle this by leaving that variable blank (technically an empty string), which Access will simply ignore in this case. We'll explore this issue at another time.

So with this command, what we really get is VB looking up the value of the variable stDocName and sending it to Access with the OpenForm command. If the value is a valid form name, Access opens the form and lets VB continue. If the form is not found or is otherwise inaccessible, Access tells VB that an error occurred, and guess what? VB jumps to that VB label from the On Error command that we saw earlier.

Finally, after another label, we complete the procedure:

```
Exit Sub
```

This is how VB immediately exits the currently subroutine. If this were omitted, it would keep going into the code that gets run when an error occurs, and you would *think* an error occurred when nothing happened.

Since we're out of room for this week, save this database and we'll take up more of this in the next column, where we'll explore how the Close button works on the other form.

See you then!

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

Return to Table of Contents

Worldwide News & Product Reviews

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

A Virtual PC Is a Green PC—Organizations can cut costs and help the environment via desktop virtualization; Don't Let Your Data Get Taken to the Dry Cleaners—Be vigilant when traveling with your mobile devices; Jaw Tunes—A review of Audio Bone, which lets you listen to music, movies and games through your jaw; Working with Adobe Flash CS3—A look at the Web site-creation tool.

A Virtual PC Is a Green PC

In an article titled "Effecting Change Now: Stimulating Your Organization with Green Technology," industry analyst and CEO of Sugarlab Corp (*sugar-lab.com*) Lisa Voldeng writes, "There is no obstacle that can stand in the way of millions of voices calling for change. In the week of President Obama's inauguration, his words are a noble call to us all to rise to meet the best in ourselves, many of us are wondering, but how do I tangibly effect change in my own life? Or in my own organization?"

"The functional area where organizations can most effectively—and immediately—cut costs and positively impact environmental change, is IT. For example, using powerful, low-cost desktop virtualization tools, you can reduce your IT maintenance and support costs by up to 80 percent—while also reducing electricity usage and electronic waste by up to 90 percent. Desktop virtualization technologies leverage the unused computing power of a single computer, creating an efficient alternative to traditional desktop-per-user computing."

Voldeng notes that, because of the radical reduction in electricity and electronic waste (up to 90 percent), virtual desktops are immediately eco-friendly. "For example, a recent deployment in South Africa—which delivered 2,205 virtualized desktops to 105 South African schools using only 315 computers—saves the equivalent of over 4,000 tons of CO2 emissions; the equivalent of taking 700 cars off the road. And with over 30,000 desktops successfully deployed in governments, schools, libraries, businesses and military in over 100 countries."

Don't Let Your Data Get Taken to the Dry Cleaners

Yvonne Eskenzi of Eskenzi PR tells us, "Data leakage and data loss is at an all-time high. It could be blamed on the ever-popular USB or memory stick which most people now use to download and transport large amounts of sensitive data. So it's no surprise to find in a survey released today by Texas-based data security experts Credant Technologies that in England over the last year, 9,000 USB sticks had been forgotten in people's pockets as they take their clothes to be washed at the local dry cleaners.

"Dry cleaners in the suburbs, on the commuter belt, or based in city centers find the most USB or memory sticks. One dry cleaner in the heart of the City of London said he is getting an average of one USB stick every two weeks, another said he had found at least 80 in the past year."

A similar survey was conducted by Credant last September amongst taxi drivers in London and New York, which showed that more than 12,500 handheld devices such as laptops, iPods and memory sticks are forgotten in the back of taxis every six months.

Michael Callahan, senior vice president and chief marketing officer at Credant, said, "If the data is sensitive or valuable, then people should protect this information with encryption so no one can access the data at any point—as it could easily end up in the wrong hands."

Eskenzi concludes, "A warning message to the business community and individuals to be vigilant when traveling with their mobile devices has never been more relevant, especially as many of these devices now have the capacity to store as much as 10,000 Word documents, 11,000 pictures, 500,000 contact details or an amazing 1.1 million e-mails, making them an obvious target for identity theft criminals and hackers who can steal this information and assume the identity of the user both in their personal or business life."

Jaw Tunes

What did Beethoven and river hippopotamuses have in common? That's correct—listening to sounds with their jaws. You, too, can listen to music, movies, games, etc. through your jaw, thanks to a mechanism known as bone conduction and a product called Audio Bone (*www.audioboneheadphones.com/products.html*).

Bone conduction (*en.wikipedia.org/wiki/Bone_conduction*), which the Audio Bone has been designed to utilize, is the transmission of sounds through skull bones to the inner ear. Beethoven reportedly dealt with his hearing loss (*en.wikipedia.org/wiki/Beethoven#Loss_of_hearing*) by biting a rod connected to the soundboard of his piano, thus transmitting the piano's musical vibrations to his jaw. River hippos (*acp.eugraph.com/elephetc/hippo.html*) evidently also rely on bone conduction, through their enormous jaws, to hear each other's vocalizations while submerged.

Instead of a using a rod similar to Beethoven's, music listeners in the 21st century can take advantage of bone conduction by using a device that converts electric signals into mechanical vibrations and delivers them to skull bone, which, in turn, transfers them to the inner ear. This is where the Audio Bone fits in (*www.audioboneheadphones.com/howitworks.html*).

The Audio Bone consists of a flexible, semicircular piece with an ear loop and signal-converter unit—accented in your choice of blue, black, orange or white—at either end (see Figure 1, left). The semicircular piece goes behind the user's head (see Figure 1, middle), the loops fit over the ears, and the signal converters sit immediately in front of the tragus (that's the pointed, fleshy structure west of your ear canal; see Figure 1, right). A four-foot cable with a 3.5-mm stereo plug connects the Audio Bone to your choice of sound source.

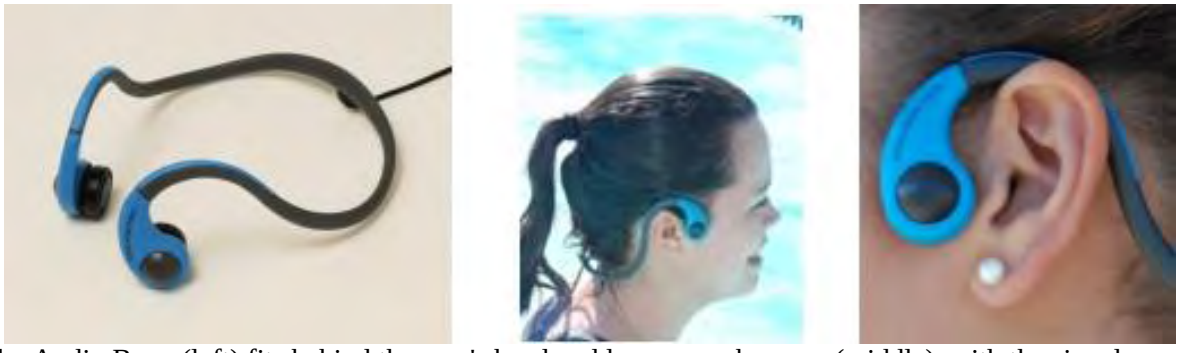


Figure 1. The Audio Bone (left) fits behind the user's head and loops over her ears (middle), with the signal-converter units positioned just in front of the tragus (right).

How does the Audio Bone's sound quality compare with that of conventional earphones? Your mileage may vary, but my impression is that it's remarkably good—the Audio Bone delivery is crystal clear rather than the muddy or tinny tone of entry-level conventional earphones. Moreover, the Audio Bone is a subjectively different experience from stereo or surround sound. With conventional earphones, singers' voices are located in the middle of my head and instruments are in my left or right ear canals. With the Audio Bone, however, it's as if I were immersed in the music; the vocals and instruments simultaneously are inside and outside my head. This probably makes sense given that the music source is delivered through the jaw, external to the ear canals. I think it's cool!

While the Audio Bone delivers a subjectively different sound quality than conventional earphones, it does have

some downsides. In my experience with this product, music lacks vibrancy, detail and bass. Bass guitars, in particular, are noticeably more subdued than with conventional earphones, such as V-Moda's Vibe (*webserver.computoredge.com/online.mvc?article=world&issue=2506*). This is predictable because the Audio Bone is spec'd at 50–12,000 Hz frequency response. Thus, audiophiles and bass guitar lovers could be disappointed with the Audio Bone's sound quality.

Before turning thumbs down on the Audio Bone, however, several unique advantages merit consideration. First, the Audio Bone could be healthier to use than in-ear-canal phones because it bypasses the ear drums, which are susceptible to serious damage when exposed to high-volume sounds over time. Second, the Audio Bone could be safer to use while bicycling, jogging or walking than in-ear-canal phones because it is not noise-canceling; the user readily can hear traffic and other nearby threatening disturbances in the Force. Lastly, the Audio Bone is more sanitary to share with friends and relatives than silicone-tipped earphones because it never gets gunked up with ear-canal wax. These advantages could outweigh the downside in sound quality.

The Audio Bone also has several additional drawbacks to keep in mind. First, in my experience with this product, there is a definite sweet spot in front of the tragus for positioning the signal converter units, and it can be a bit tricky to nail. Second, the semicircular piece and ear loops can become uncomfortable and conflict with eyeglasses' earpieces. Lastly, the Audio Bone's MSRP is a tad pricey at $189 plus S&H (but it comes with a 30-day money-back guarantee and six-month warranty).

The Audio Bone could be a responsible purchase for young listeners whose auditory system would be subjected to damage-inducing volume levels; in this case, the benefit outweighs the cost. For discerning music lovers and gamers who could miss blaring thumpa-thumpas in their favorite tracks, however, the Audio Bone's cost-benefit ratio might be too high.

reviewed by Barry Fass-Holmes

Working with Adobe Flash CS3

I've used Flash to create everything from fun animations to sophisticated banner ads for Web sites. Here's a look at how I use the features in Flash CS3 Professional (*www.adobe.com/products/flash/*) ($300-$400 street price) for both work and play.

Right off the bat, Flash CS3 Pro tries to ease my way by offering templates on which I can base my presentation, including slide shows, quizzes and banner ads (see Figure 1). I can then customize any of the templates and create and save new templates. This version of Flash throws in several new templates for mobile phones and similar devices. Flash CS3 adopts a similar look and feel as Photoshop, Illustrator and InDesign, with a workspace displaying panels for the various commands (see Figure 2). I can switch among different workspaces and dock and undock each panel for ease of use. Often as I move through different stages of a project, I'll change the workspace to display the specific controls I need.

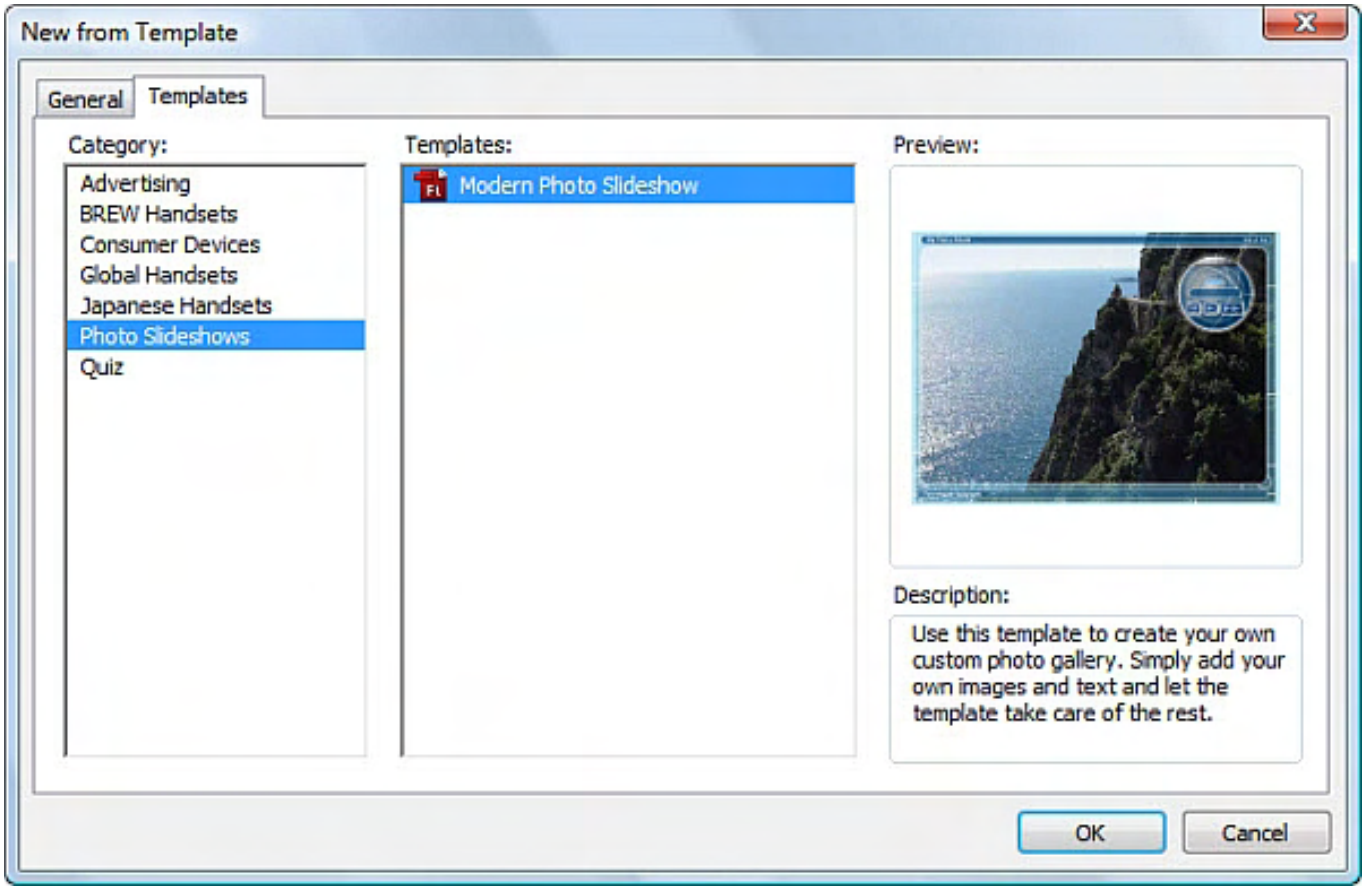


Figure 1.

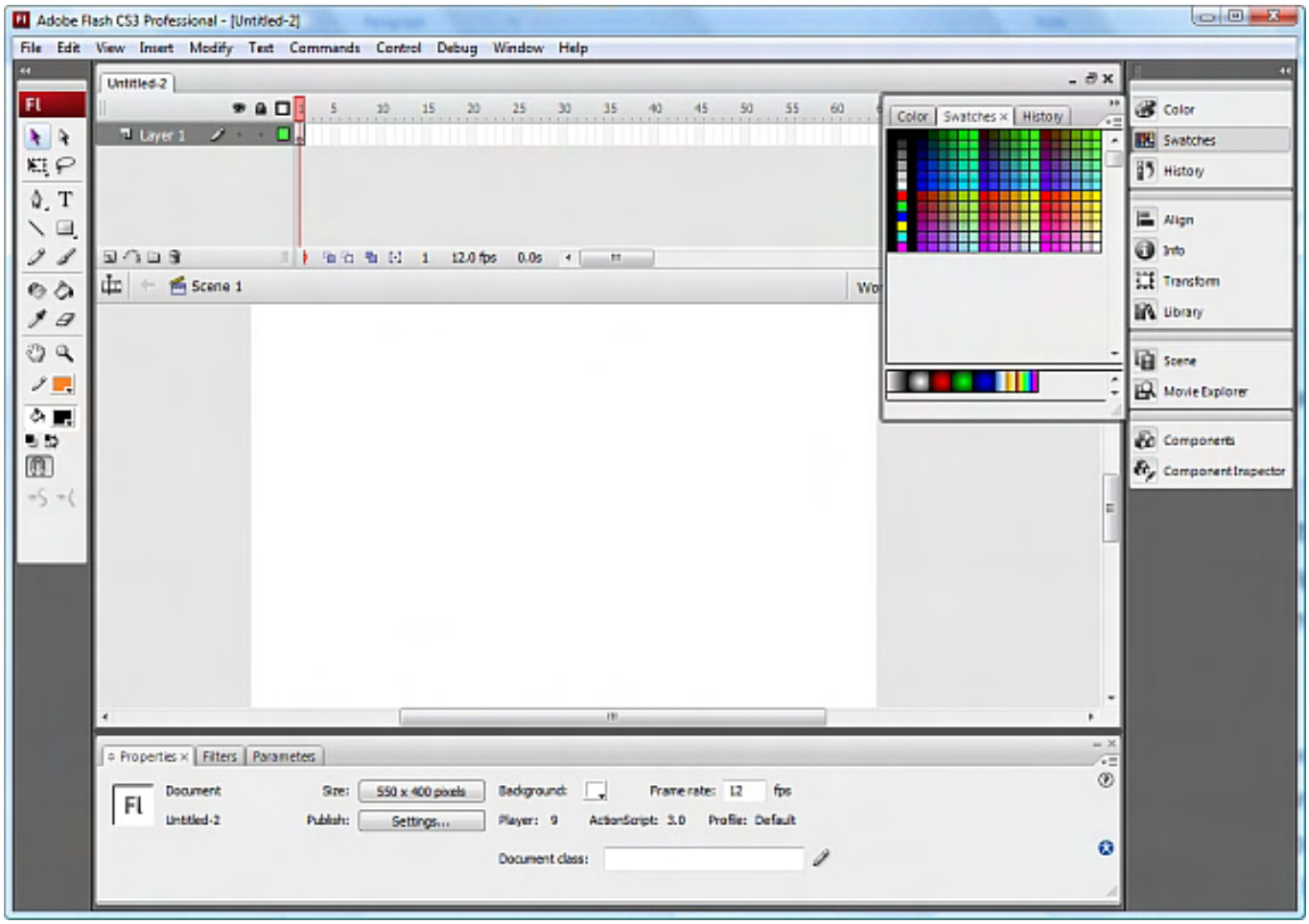


Figure 2.

The drawing tools in Flash CS3 are closer in strength to the tools in Illustrator, notably the popular Pen tool. I can more easily move and manipulate an object by dragging its anchor points and converting those points into curves to shape the object. Rather than create an object in Illustrator and then copy it to Flash as I did in the past, I'm more likely to draw it directly in Flash. The software has always featured the often-used oval and rectangle tools for drawing those objects. Flash CS3 provides two new objects called Oval Primitive and Rectangle Primitive. These new Primitive objects let me control the exact size, shape, and other properties of my oval and rectangle drawings after I've created them (see Figure 3). This is a huge time-saver since it means I no longer have to recreate an oval or rectangle from scratch if I need to change any of its elements. Another great option: Flash offers a library of pre-designed buttons and other objects, so there's no need for me to design them from scratch (see Figure 4).

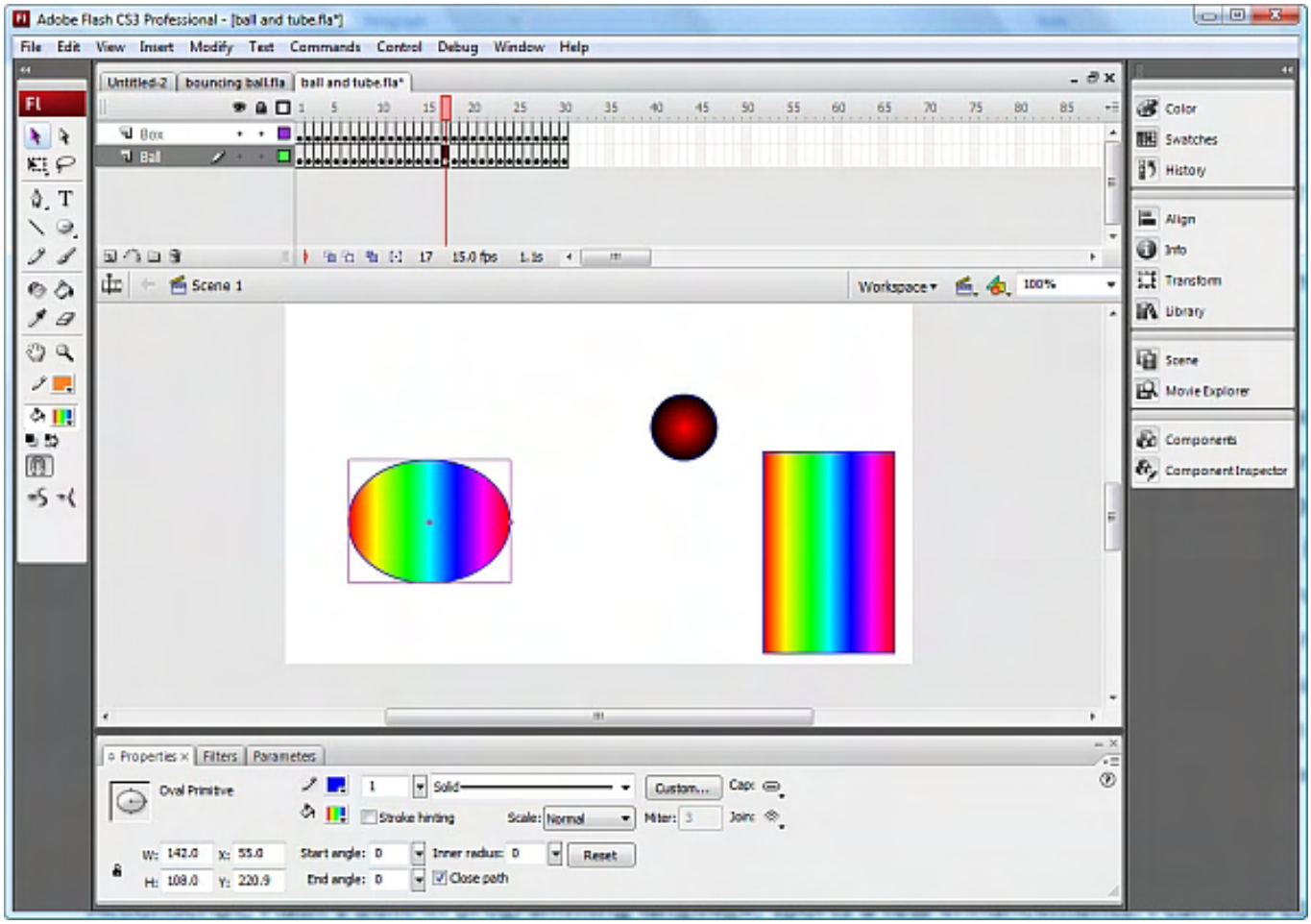


Figure 3.

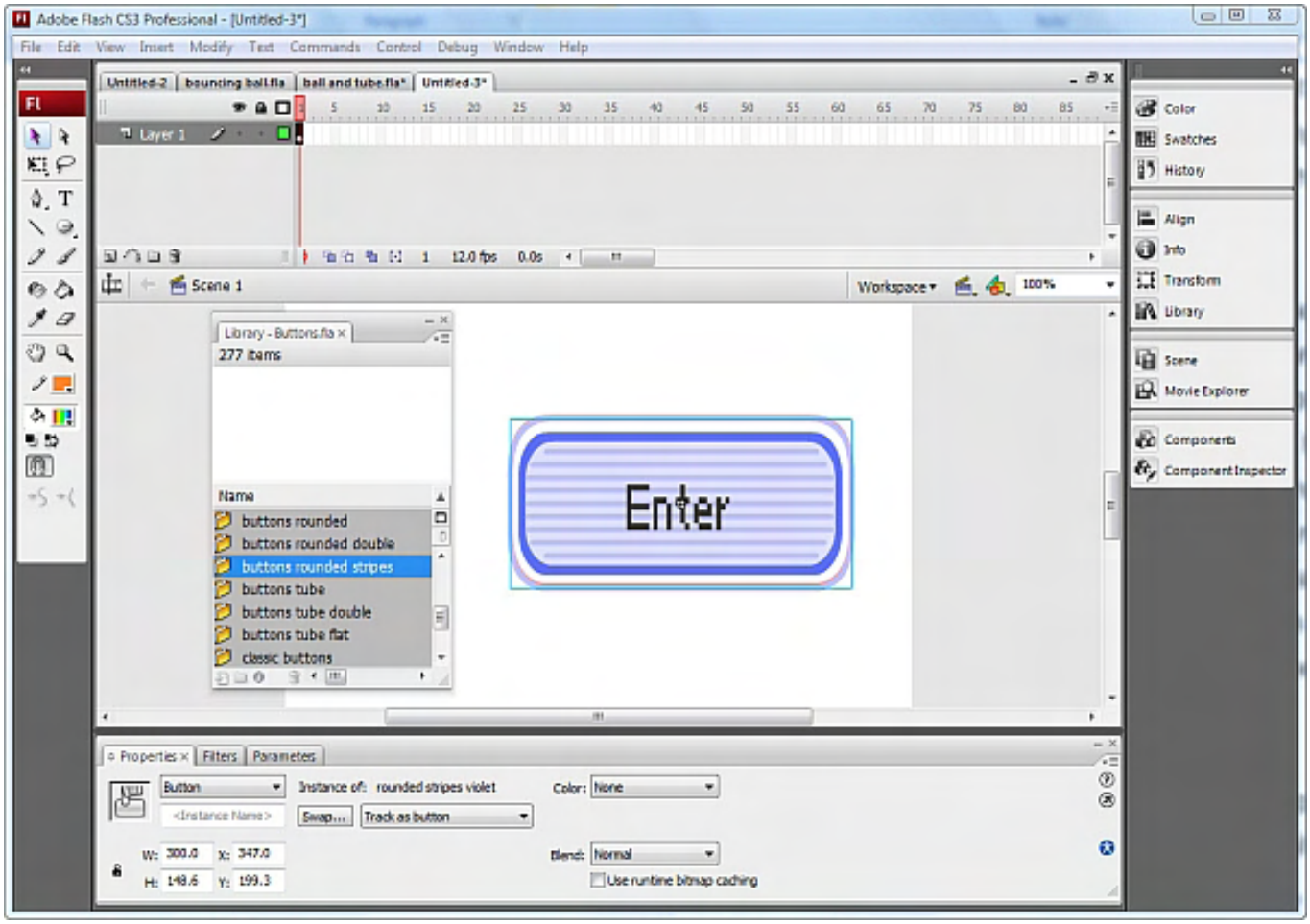


Figure 4.

ActionScript, Flash's built-in programming language, sports a few enhancements. I can copy motion tweens directly to Actionscript, letting me easily apply a motion from one object to another without having to code. I can create a motion for one object, such as a bouncing ball, and save that motion as a script. I can then copy that same bouncing effect to a different object by applying the script. Flash CS3 also offers a new debugger to help me better track down errors in my Actionscript code.

Flash CS3 offers some cool options when working with video files to include in a presentation. I can now more easily export the Flash video as a QuickTime movie. I can choose among a variety of skins with different looks and controls in which to display the video. Flash CS3 also plays well with the other tools in the CS3 suite. I can import Photoshop and Illustrator files, either keeping their original layers or converting them into Flash layers or keyframes (see Figure 5). I can choose to import all layers or just specific ones and decide how to format each layer; for example, a text layer can remain editable text or be converted into a bitmap or vector graphic.

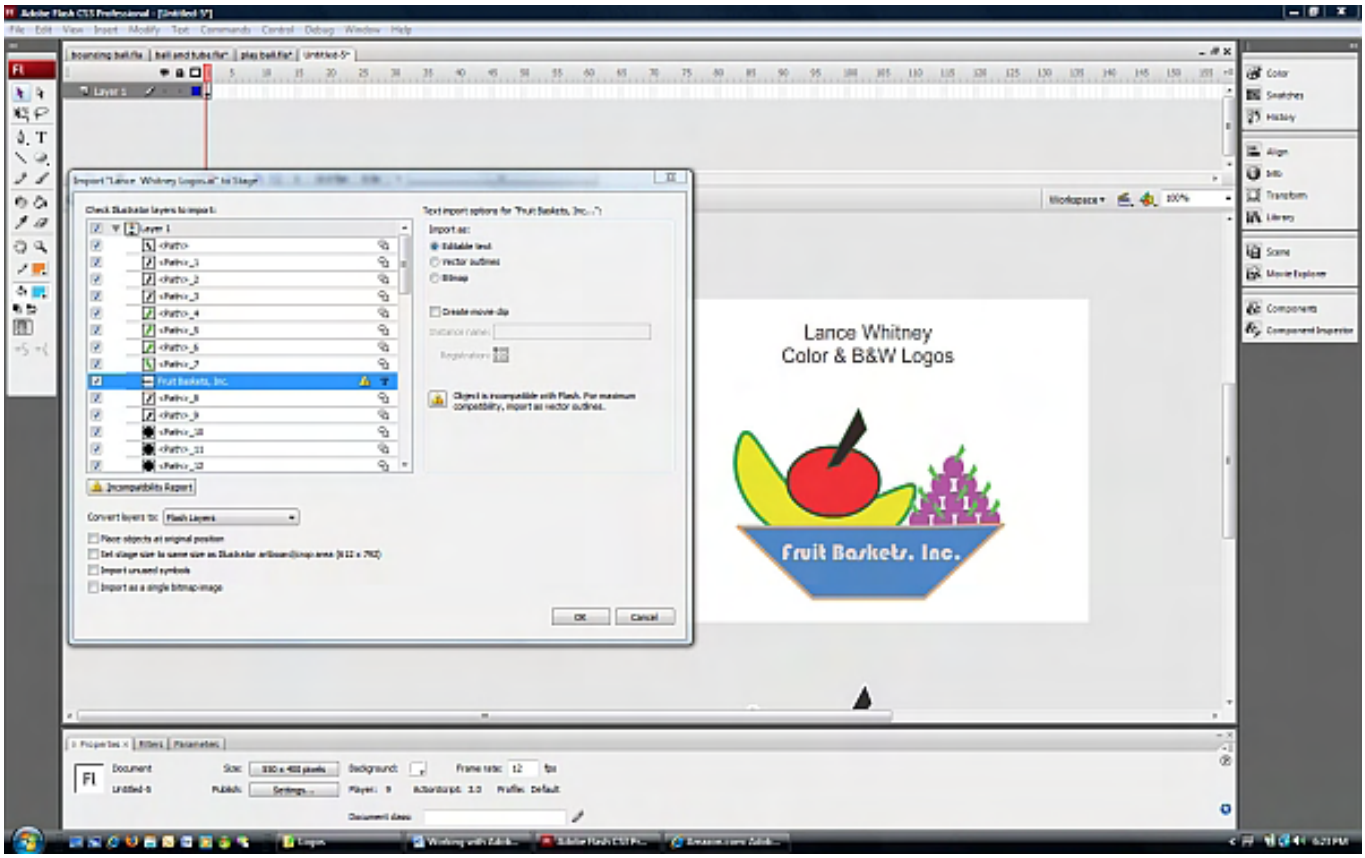


Figure 5.

As always, Flash remains a challenging program to learn and master. But as with the other CS3 programs, I can take advantage of both the built-in and online tutorials. Also, by registering the program, I get a free month of training at Lynda.com, a top training site.

reviewed by Lance Whitney

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

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

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

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

Carr has judged many writing competitions including San Diego Press Club and Time-Warner Communications contests and was sole judge for the national NAPPA Tech Toys awards for five years (which his kids really

appreciated). He was recently a judge for the national "Poetry Out Loud" competition.

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

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

Learn more at *www.charlescarr.com*.

Return to Table of Contents

EdgeWord: A Note from the Publisher

"Computing in the Cloud" by Jack Dunning

Whether backing up files, running business apps from the Internet, remotely basing e-mail programs, or doing online accounting, companies are making huge investments in cyberspace applications.

It seems the trend is for everything to move to the Web. That's the concept of "cloud computing." Or, is it head-in-the-clouds computing? Google (which started in the clouds) and Microsoft are making huge bets on the future of Internet-based computing. There are also multitudes of smaller companies making the same bet. Whether backing up files, running business applications from the Internet, remotely basing e-mail programs, or doing online accounting, companies are making huge investments in cyberspace applications. Where will it all lead?

There is no doubt that our economy becomes more dependent on the Internet every day. It is truly *the* ultimate network. Putting applications on the Internet only makes sense. They can be accessed from anywhere in the world. The Internet is a truly distributed system, in that there is redundancy in the multiple paths that allow access to our systems. Cyberspace is a robust system because it is not dependent upon any one link in the chain. The Internet grows of its own volition—new pieces are added continually. It seems that the only thing that could shut down the whole system is the solar radiation showers due December 21, 2012, when the Mayan calendar ends—or starts over.

I'll admit that I'm betting on the Internet (despite the problem of the Mayan calendar). I'm particularly pleased that no one is in control of it. If any government were able to get its hands around cyberspace, they would surely screw it up. (That's what government does best.) The Internet is fertile ground for growth (which is why some of the weeds thrive so freely).

The Internet did not exist 75 years ago. Computers were for the most part an idea sloshing around in the brain pan of a few dreamers. The world was in the middle of what we now call the Great Depression. People tend to compare today's economic situation with that long, devastating period. However, as usual, there is very little to compare.

The fact that we are now an economy that's run by computers and the Internet cannot be left out of the economic equation. Computers make everything happen faster. Without computers, the massive problems of derivative instruments and their unpredictability wouldn't exist. People wouldn't be able to put them together with pencil and paper—and even with computers, they still don't understand the animals.

At the same time, the cleanup of this economic mess will happen quicker through computers. It's already happening at a fairly rapid pace (although not fast enough for many people). The Internet and computers are in the middle of a renovation and change that will bring times unlike any other. Yet, except for those who are working in the middle of the cloud, the media is ignoring the impact of technology.

When I hear politicians say that it's going to get worse before it gets better, I get annoyed. Why? Because there is no way they know that; plus, the prediction itself can slow recovery. Any reasonable economist will admit that the timing of economic change is almost impossible to predict. Most make predictions on the theory that if they state something enough times, they will eventually be right—like the stopped clock that's right twice a day.

It's best to stop reading the paper and watching network news. They don't have a clue either. Move forward with what you must do. Learn a new computer skill. Put up a Web site. Build a virtual office. With time (not as long as you may think), it will start paying off. You have options that didn't exist in the 1930s. They are called computers and the Internet. There is always an entrepreneurial burst during economic downturns. From that perspective, this time is no different.

Return to Table of Contents

Editor's Letters

"Readers write in with letters to the editor." by ComputorEdge Staff

"ComputorTutor: Just What I Wanted," "Reviewing TaxACT and Online Filing," "Wi-Fi Connection," "Digital Dave on Oliver's Offensive Wallpaper"

ComputorTutor: Just What I Wanted

[This letter is in regard to Rob Spahitz's January 16 ComputorTutor column, "Programming with Microsoft's Visual Basic."]

I have wanted an article like this for 10 years! I moved out of San Diego in 2002, and miss my digital fix. Please get me on the mailing list. I need to learn this! I'm an idiot, but I mimic really well. Too old to have taken a single computer class when I was in school—I need this! I need Excel 97 to jump up and do tricks for my boss.

Then, can you teach me how to do a MYSQL/PHP Web site? I just can't seem to grasp it from online tutorials.

-Jim Matters, Huntersville, NC

Reviewing TaxACT and Online Filing

[The following letters are in regard to Michael J. Ross' January 16 article, "Income Tax-Preparation Software Programs."]

I have used TaxACT (the free edition) for years. I find it a lot easier than TaxCut, which is H&R's version. I did use TurboTax many years ago, when I was doing AARP free taxes for the elderly in 1995. (I quit when a retired airline pilot, who made $70K that year, wanted AARP to do his taxes for *free*. We even had a donation box, and he did not put anything in it.)

Overall, however, it was gratifying to help seniors and single parents. I now am fully retired and loving it.

Thank you for your publication, which I get online.

- John C., Temecula, Calif.

Years ago, I heard one rationale for submitting tax forms on paper that strikes a chord: Allegedly the IRS is more likely to treat an incorrect entry or calculation as an honest mistake on handwritten forms. Don't know if it's really true, but I do fill in my final forms by hand, copying the relevant numbers in from handwritten or printed papers, spreadsheets or online calculators. Even if all calculations are done by computer, the act of filling in the forms by hand gives one more crosscheck on the numbers and any items of income or deduction that might have been overlooked.

Also, has anyone else noticed how much of the text in the yearly commercial tax publications is taken verbatim from IRS publications and instructions, which the IRS will mail you for free?

-Stewart A. Levin, Centennial, Colo.

I thought the article was well written and informative! I would like to add that you have the option of going online

at *irs.gov* and they will link you to Web sites to do your taxes online for free—if you qualify!

-Mark Larry, San Diego, Calif.

Wi-Fi Connection

[This letter is in regard to Michael J. Ross' September 26 article, "Wi-Fi Security Blunders."]

Computers aren't the only thing that can connect to unsecured Wi-Fi connections. My Nintendo DS does have Wi-Fi capabilities and can connect to the Internet, but it doesn't support WPA, which is rather ridiculous since WPA was widely available when the DS was introduced. However, I had no trouble finding an unsecured WEP connection in more populated areas of the county.

Fortunately there are other options for my DS (one of which being the no-longer-in-production Nintendo Wi-Fi USB connector, which works only for the DS and Wii systems), but I do wish they had included WPA support.

I know plenty of people who couldn't tell you what the difference between WEP and WPA is. And that is really quite a shame. So many things currently support connecting to random Wi-Fi signals that it is not recommended to just ignore security with regard to your Wi-Fi.

-Donja, Coronado, Calif.

Digital Dave on Oliver's Offensive Wallpaper

[This letter references the January 16 Digital Dave column, where a reader wrote in about removing "offensive" wallpaper.]

What Oliver may be complaining about may not be a wallpaper, but the temporary screen that shows up when starting most commercial computers—the Dell logo, for instance. It appears that someone may have inserted their own graphic in place of the original. Unfortunately, I don't remember how to undo that.

-Jay Kraeszig, Indianapolis, Indiana

*If I did misunderstand, then I found this link (*www.jakeludington.com/windows_xp/20060219_change_xp_boot_screen.html *) for changing the boot skin. Also, by searching on "replace windows startup screen," many more options will come up. Be careful! Some of these techniques call for changing sensitive parts of the computer system. Create a restore point first.*

-Digital Dave

ComputorEdge always wants to hear from you, our readers. If you have specific comments about one of our articles, please click the "Tell us what you think about this article!" link at the top or bottom of the article/column. Your comments will be attached to the column and may appear at a later time in the "Editor's Letters" section.

If you want to submit a short "ComputorQuick Review", or yell at us, please e-mail us at *ceeditor@computoredge.com*.
