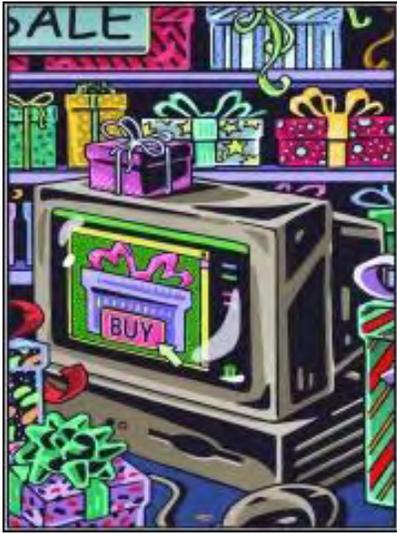# *ComputorEdge™ Online — 11/20/09*

This issue: Shopping Online and a Shopping Cart for Your Web Site

"Cyber Monday" is just around the corner. Before you jump online to shop for those bargains, check out our cyber-shopping tips. Plus, if you're planning to e-tail, a quick-and-easy shopping cart for your virtual store.

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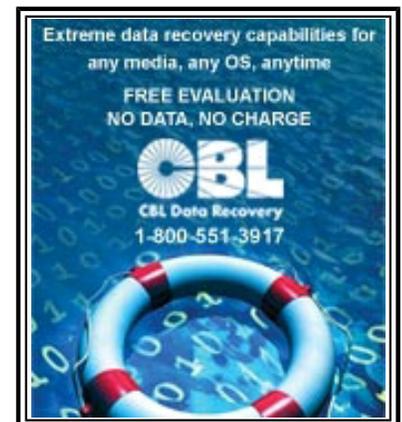
Digital Dave

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

A reader wants to open up an overheating laptop to clean dust buildup; a reader is receiving an annoying message when he tries to eject his USB external hard drive; a netbook won't load certain Web pages via a wireless router.

Dear Digital Dave,

My friend has a five-year-old Toshiba Satellite laptop that will shut down after five minutes due to overheating. He has purchased a cooling base, but it still shuts down.

I would like to know if you think the problem could be a dusty cooling fin on the CPU or power supply? If so, how do you open this laptop up? I could not find any references or manuals online at Toshiba's Web site.

Fred Carson
Snowmass Village, Colorado

Dear Fred,

It could be that it is overheating due to dust buildup. This is a fairly common problem with that particular laptop computer. In fact, all computers (laptop and desktop) are subject to a certain amount of particle accumulation. Eventually, if the heat exchangers get clogged, your computer will start to overheat and shut down. The best way to deal with dust is to open the computer and either blow out the debris or use a small, light brush to clean it off.

Check out *www.irisvista.com*, which is a how-to site for Toshiba laptops. It gives details for opening most Toshibas—plus all the appropriate warnings.

There are other possible causes for the problem that you're encountering—failing power supply, loose or failing component or connector. If cleaning out your computer doesn't do the job, then you may need to take it in for repair—unless you can find the solution on the mentioned Web site.

Digital Dave

Dear Digital Dave,

I am using Windows XP SP 3 with all the latest critical updates. A window sometimes pops up when I try to eject my USB external hard drive. When it does happen, the window gives me the message, "The device 'Generic Volume' cannot be stopped because a program is still accessing it."

This message is extremely annoying, and I have looked everywhere for a possible solution. I have used Unlocker on the drive in My Computer in an attempt to determine whether any process is still trying to access the drive, but Unlocker reports that nothing is (not even Windows Explorer). I have also shut down all windows that have contents of the drive or its subfolders open on the screen. I have shut down all programs that I thought might be accessing the drive, but to no avail. Besides, Unlocker itself is reporting that no process is trying to access the drive, and since it has allowed me to delete files locked by Windows inappropriately, I have had no reason to doubt the veracity of its information.

Most of the time when I get this error I have to reboot in order to solve it. I say "most" because it doesn't work all the time. On rare occasions, even rebooting the computer doesn't allow the drive to be ejected, and I have to resign myself to shutting down the computer completely and pulling it out anyways.

Over the many years that I have worked with computers, I have experienced many problems, but none of them can top this one. This is by far the most annoying and most persistent problem I have ever experienced. It is also one of the only problems that not only continues to bother me, but that I have failed to find a solution for despite the best of my efforts. Judging from the many useless hits on Google, I imagine myriads of other readers must also be having this same problem. External hard drives are very prevalent amongst users these days, and I am no exception, so I now must turn to your expertise. Please help!

Charles Chavez
Denver, Colorado

Dear Charles,

I have experienced the same problem, although it is usually with a thumb flash drive. There are so many processes that continue to run that the longer the drive is in place, the more likely something will be holding on to it. In some cases, it may be the monitoring from antivirus or anti-spyware programs. If you're on a network, then you may have a connection from another computer—if it's doing network tasks. Microsoft has had this problem for quite a while, and I don't yet know of a solution that satisfies all occurrences.

There is also the possibility that caching is set on for the drive. To check the setting:

• Open My Computer and right-click on the drive
• Select Properties
• Go to the Hardware tab
• Select the removable drive
• Click Properties then the Policies tab
• Make sure that the drive is Optimized for Quick Removal

You can also check that indexing is turned off in the General Tab of the drive Properties windows.

Another program that may help you is Process Explorer (*technet.microsoft.com/en-au/sysinternals/bb896653.aspx*), which tells you what files are tied up by which processes. I've used it for dll issues and it works well, although I'm not sure you will get better results than the program you used.

The primary concern when removing an external USB drive of any type from your machine is damage to open files—files that have not been properly saved. While the risk of damage to a USB drive is low when disconnecting, if you want to minimize any danger when you can't get a clean ejection, then shutting down the computer before disconnecting is the best alternative.

Digital Dave

Dear Digital Dave,

I found my new Aspire One netbook (D250-1196) would not load certain pages (broken link, etc.) via my wireless router (Netgear, WGT624 v3), while my desktop's Web browser via wireless worked fine. The page would load when connecting the netbook to the Netgear router using the Ethernet connection. Must be the wireless device in the netbook, right? Nope. The problem page would load on the netbook via other wireless routers at Wi-Fi hotspots.

The netbook is running XP with the latest updates along with the latest wireless device drivers, and the Netgear was reset and has the latest firmware. The problem occurs with or without the router encryption

enabled or a firewall on the netbook. Here is the URL of a page that will not load:

http://ebooks.lvccld.org/F566C85B-14EF-4345-A78B-05D1427BF569/10/256/en/index.htm

I have only pulled half my hair out over this! Suggestions?

Thanks for all the great help in the past.

Tom
Las Vegas, NV

Dear Tom,

As I have been saying for decades, "There is a logical reason for what is happening to your computer—we just don't know what it is." There are times when the forces of technology line up in such a way that a peculiar (and very specific) bug will jump into the system. The problem is that you can reliably repeat the failure with a certain hardware and software combination, but if you change anything, it goes away. Have you tried changing the Web browser (Firefox, Chrome) as well? I would be curious about what the pages that won't load have in common.

In these situations it is best to save your hair by avoiding the set of circumstances that's driving you crazy—either the Web site, the router, the wireless connection, or the Web browser. Otherwise, you will soon need therapy. It is possible that someone knows the answer to the question, but there are times when we need to just move on—as long as there is a way that we can get the thing to work.

Digital Dave

Shopping for Deals Online

"The Internet has revolutionized bargain hunting." by Michael J. Ross

> These days, there is plenty of online up-to-date information on products, sales, coupons, auctions, liquidations and other factors that can turn a full-priced purchase into a terrific bargain.

It has been said that "everyone loves a bargain." That is just as true today as it was back in the pre-Web era, when any major shopping expedition required plenty of time and energy. This usually took the form of endless driving around town, hoping that the advertised sales were as good as the newspaper ads made them appear. A second approach was to work the phone, calling every business in your area (or at least those listed in the Yellow Pages). A third option involved flipping through a stack of catalogs received in the mail, and calling the toll-free numbers on the off chance that the retailer had the products you wanted on sale and in stock. This was the most pleasant method for all those people out there who enjoy being on hold, listening to Muzak—both of them.

"Fred didn't realized that the house he bought on the Internet didn't include the lot."

Then the Internet came along and revolutionized bargain hunting—as it has so many other areas of life. These days, there is plenty of online up-to-date information on products, sales, coupons, auctions, liquidations and other factors that can turn a full-priced purchase into a terrific bargain. Unfortunately, there is oftentimes too much information, with search engines returning millions of hits when you key in terms that you hope will narrow the result list. Even the top-ranked hits form a long list of shopping Web sites, each claiming to find you the very best deals.

In this article, we are going to examine some of the most popular and well-regarded online resources to help you separate the wheat from the chaff, and thus not only save money but time. There are countless online shopping sites, so it is good to know of some of the better choices. One type of product that we will not be focusing on is computers—specifically, complete desktop systems and laptops, as well as computer parts and peripherals, such as printers. If you are in the market for a new or

refurbished system, or you need some other PC-related hardware, your best bet is to visit a local computer shop (not to be confused with the computer sections of the huge electronics stores—at least those still in business).

Too Much of a Good Thing

Oftentimes manufacturers and retailers will stock up on a particular item, only to discover that it sells poorly, or not at all. What do they then do with that excess merchandise? Usually, they pass it along to resellers, at a huge discount. Their loss can be your gain, if you happen to be in the market for some item they couldn't find a buyer for, until you spotted it. An example of an online liquidator is SmartBargains (*www.smartbargains.com/*), which clears out products in just about every imaginable category, ranging from household goods to kitchen supplies, luggage to gift cards, and clothing for women and men. Interestingly, for every item they list the quantity left in stock, which no doubt spurs compulsive shoppers when they see that a compelling product is almost gone.

No discussion of online bargain hunting would be complete without a nod to the granddaddy of all online retailers for excess inventory—Overstock.com (*www.overstock.com/*). As one of the pioneers in the field, Overstock.com has the advantage of years to hone their Web site and to build the sort of purchasing power that makes it possible for them to maximize inventory and minimize prices. The number of available items can be overwhelming, so they have everything organized into eleven major categories: furniture, home and garden, bedding and bath, clothing and shoes, jewelry, watches, electronics, sports, books and other media, world items, and a miscellaneous category. Within each one, everything is further grouped into subcategories, including one for clearance items.

Overstock.com specializes in selling excess products from other retailers, and consequently the inventory is continually changing. The discounts from listed retail prices can exceed 70 percent, but there is no indication as to whether those list prices are the inflated manufacturer's suggested prices, or the actual ones charged by the previous retailer. Fortunately, if you do find an outstanding price, you won't get hit by excessive shipping and handling charges —a favorite tactic among remote retailers—because Overstock.com charges only $2.95 shipping for your entire order (as of this writing).

Searching for You

Even though the results from general search engines can end up listing far too many Web pages—most of which may be of no use to a bargain hunter—there are online deal aggregators that automatically search the Web for merchandise and special offers. Sometimes these services are referred to as "shopping bots," reflecting their similarity with search engine bots, which are the programs that robotically scour the Web and store what they find in online databases for later retrieval.

The tagline for PriceGrabber (*www.pricegrabber.com/*) is "Comparison Shopping Beyond Compare," and that may be a justifiable claim, given the impressive amount of product and price information that the site offers, in addition to product reviews from multiple sources. They list the details of items in 26 major categories, ranging from Appliances to Videos. Anyone can sign up for a free account, and create lists of saved product entries. The site has pages dedicated to their most popular products, rebates and merchant coupons, and a "Deal of the Day." Unfortunately, navigating the site can become frustrating because every time you land on a page, focus is automatically put on the search entry field; consequently, when you try to navigate up and down with your keyboard, nothing happens.

Joining the current green bandwagon, PriceGrabber has an entire section devoted to supposedly eco-friendly products, most of which appear to be there only because they are Energy Star compliant. (For true green products, check out San Diego's own PristinePlanet.com (*www.pristineplanet.com/*).) Another problem with PriceGrabber is the way they lump all sorts of related products into a single category, which makes the sort-by-price functionality essentially useless, since the smallest and cheapest items get sorted to the top, even though they are not even the type of product you are interested in purchasing.

PriceGrabber distinguishes itself from the legion of other price comparison sites with its extensive support for product reviews, submitted by users of the site, as well as product reviewers associated with various publications. The reviews contain detailed commentary on a particular product, and a five-star rating. Other users can then vote for

and against the usefulness of each review, allowing prospective shoppers to read all the submitted reviews for any given product, starting with those ranked by others as most useful. Given that there are a substantial number of reviews—with new ones being added frequently for the most popular product categories—this can be an effective way to gauge whether a particular product will prove satisfying or disappointing to you.

Shopping.com (*www4.shopping.com/*) is similar to PriceGrabber in that it combines price searching with user reviews, and also boasts a large number of items. Formerly known as DealTime, Shopping.com has fewer top-level categories, but a substantial category structure nonetheless. They also have a "Shop Green" section, which appears to engage in much of the "greenwashing" seen with PriceGrabber. Another flaw exhibited by both sites, and possibly every other major price aggregator, is how they initially sort products so the featured stores appear first, thereby requiring probably every shopper to then manually sort by price. In addition, the same bias toward featured merchants is reflected in the first results page of each subcategory. Be sure to click on the link that compares the results from all merchants for the product in question.

The bottom line is that these and the innumerable other shopping Web sites can save you a tremendous amount of time and frustration when you are looking to locate and compare bargains. Just be sure to not settle for the first few products that are displayed. As with any bargain shopping, you oftentimes need to dig a little deeper to find the true gems. As always, caveat emptor.

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.

Avactis for E-Commerce

"A quick-and-easy shopping cart for your virtual store." by Michael J. Ross

> A key component of setting up a virtual storefront is the shopping cart system chosen. Here's a look at Avactis, which offers quick-and-easy storefront customization.

During the shopping season that seems to take over our lives in December, shoppers go online to find bargains, gift ideas and old favorites. With the click of a mouse, they can skip from one store to another, bestowing holiday cheer— or at least holiday bonus dollars—on one online merchant after another. Most of the shoppers will focus the majority of their attention upon the proffered items, with a consumer's perspective.

But some among them will land at a particular online store, and pause, if only for a few moments, and wonder to themselves, "Could I do what this merchant is doing? Could I sell goods worldwide, 24 hours a day, making money even while sugar plums dance in my head? How difficult is it to set up a virtual shop? What are the advantages and disadvantages? How difficult would it be to accept credit card payments? Would such an operation make for an ideal side job, perhaps even flourishing into a full-time job? Could I thereby fulfill my lifelong dream of running my own business, and keeping the profits, instead of my employer doing so?"

There are countless questions that a prospective online merchant might ponder. But in this day and age of feature-filled shopping cart systems, low-cost domain names, reliable Web hosting services, and an endless supply of freely available advice on effective online marketing, it is so much easier to build a successful virtual store, versus years ago when the Web was just getting started.

A key component of such a business is the shopping cart system chosen. These systems come in all shapes and sizes, as well as price tags, i.e., a license fee. There are some shopping cart systems that charge no fee whatsoever, but they invariably offer no technical support from the company itself. Rather, support takes the form of spotty online documentation and forums populated with a range of characters, including many equally confused users seeking help.

Other systems are quite expensive, though they try to compensate for this by offering most if not all of the features that a merchant could ever want, as well as plenty of technical support—sometimes even including access to the company's own software developers, who really know the system, and how to troubleshoot or customize it. These are pre-built systems. Another costly approach is to pay a developer to build you a shopping cart system from scratch. But given the quality and variety of available systems already developed, paying for someone to reinvent the wheel would be expensive, time-consuming, and potentially risky. Web developers such as myself, who work with online merchants, would—or at least should!—never advise a client to build anew what has already been built.

The third broad category of shopping cart systems are those that charge a modest fee, for which the merchant receives a fully capable system that has been tested by the company as well as numerous other users. The level of technical support varies from one company to another, but the overall amount and quality of support and available knowledge is generally greater than for free systems. In this article, we will look at a shopping cart that is in this category, Avactis, from Pentasoft (*www.avactis.com/*).

Figure 1. Pentasoft homepage.

Avactis offers the standard features to be found in any decent virtual store: product listings, product details, user shopping cart management, categories, site search, user account, special offers, etc. On the company's site, they boast that Avactis allows for quick and easy storefront customization, including multiple designs and theme options. In addition, they state that Avactis can be integrated into an existing merchant site, which is a rare capability among the competition.

Like so many similar systems, the technical prerequisites for installing and running Avactis consist of an Apache (*www.apache.org/*) Web server, a MySQL (*www.mysql.com/*) database, and the PHP (*php.net/*) scripting language. Some of the features within Avactis require additional technologies, which may or may not already be provided by whichever hosting service you choose: HTTPS (security certificate), SSH (secure shell) access or Cron job management, the Apache mod_rewrite module, and some common PHP settings. All reputable Web hosting services provide these components. (My own site has step-by-step instructions to get Web hosting (*www.ross.ws/hosting*), if you are unfamiliar with the process.)

Installing Avactis

Even though there is a licensing fee ($199 one-time, or $19.95 each month), you can try out Avactis at no charge, to see if it meets your business's needs. First go to their free product page (*www.avactis.com/free_shopping_cart.php*), enter your name and e-mail address, click the blue button, and you will be sent information for downloading the installation file. Save that to somewhere on your computer where you can find it later.

The downloaded file is a Zip archive file, so open it up and save the contents into a new Avactis directory within your Web server's root. The entire Avactis installation on disk comprises 4,326 files in 1,070 directories, and requires about 19 megabytes of hard disk space.

Next create a database on your MySQL server for Avactis. The following commands will do this:

```
CREATE DATABASE avactis_test;
GRANT ALL ON avactis_test.* TO avactis_user@localhost IDENTIFIED BY 'password';
```

This example is using test values only; you should use a far more secure password for any production installation.

Point your Web browser to the Avactis index.php, which will begin the Avactis installation process. For instance, if you had named the Avactis root directory "Avactis" and had placed it in the root directory of your local Web server, then the URL to use would be http://localhost/Avactis/index.php. You can even leave off the "index.php" if your Web server has been configured to look for that file name as a default.

Figure 2. Avactis installation start.

At the installation start page, click the blue button to begin the process.

Figure 3. Avactis installation ULA.

At the license agreement page, click the agreement checkbox and then the Continue button.

Figure 4. Avactis installation configuration settings initial.

The third screen, shown above, is a critical one, because this is where you will enter the information needed by Avactis to connect to the database you had created earlier. The license key you would have received from Pentasoft.

Figure 5. Avactis installation configuration settings entered.

Be careful to use only lowercase letters for the Avactis admin account password; otherwise you may receive an error message.
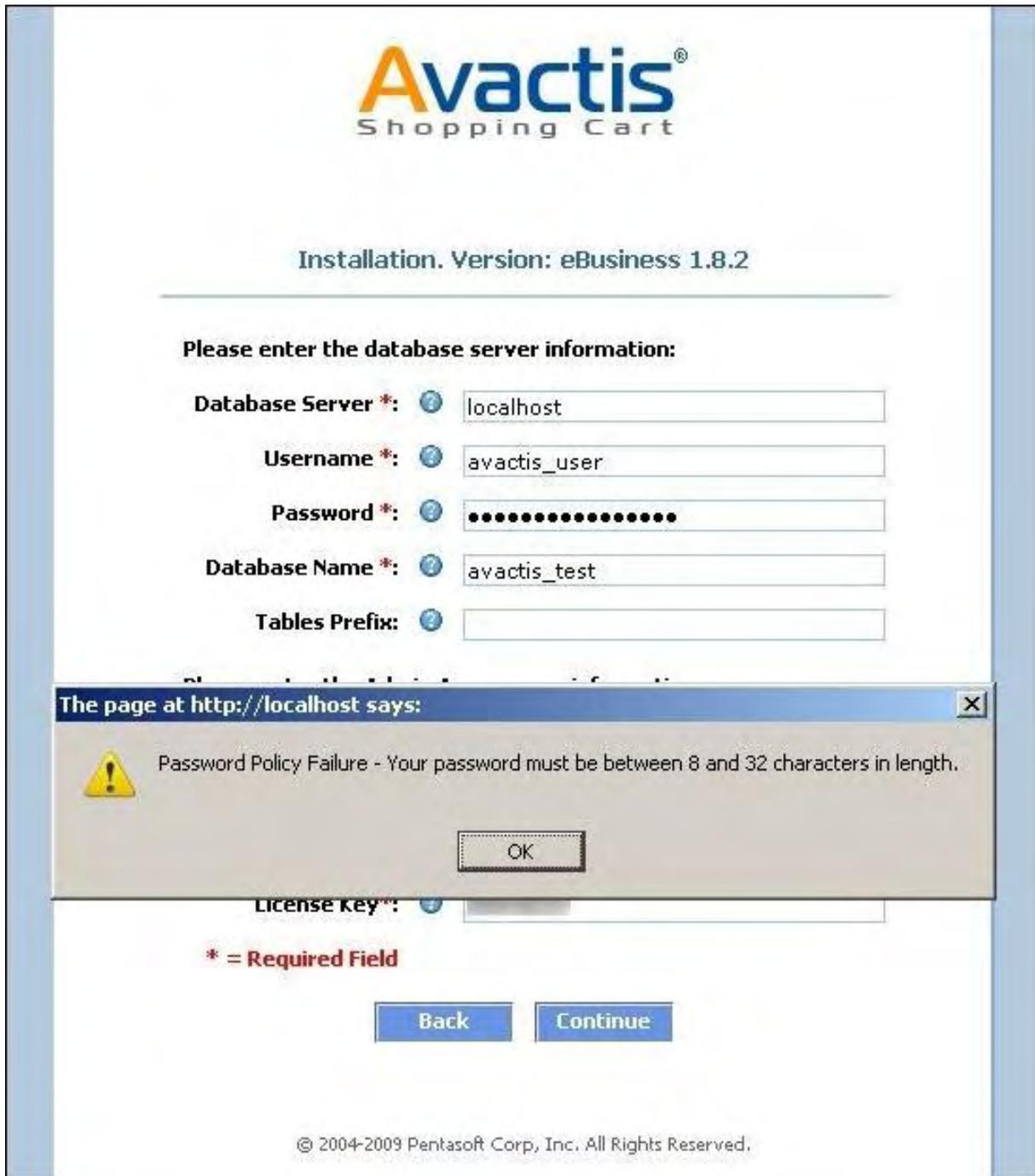
Figure 6. Avactis installation password error.

If all goes well, Avactis begins creating the tables within its database.

Figure 1. Pentasoft home page.

Figure 7. Avactis installation creating tables

After the database has been set up, the installation is complete, and you are shown the URLs for viewing your store, as well as logging in to administer it.

Figure 8. Avactis installation complete.

You should now be able to see the initial Avactis store home page, shown in the screenshot below.
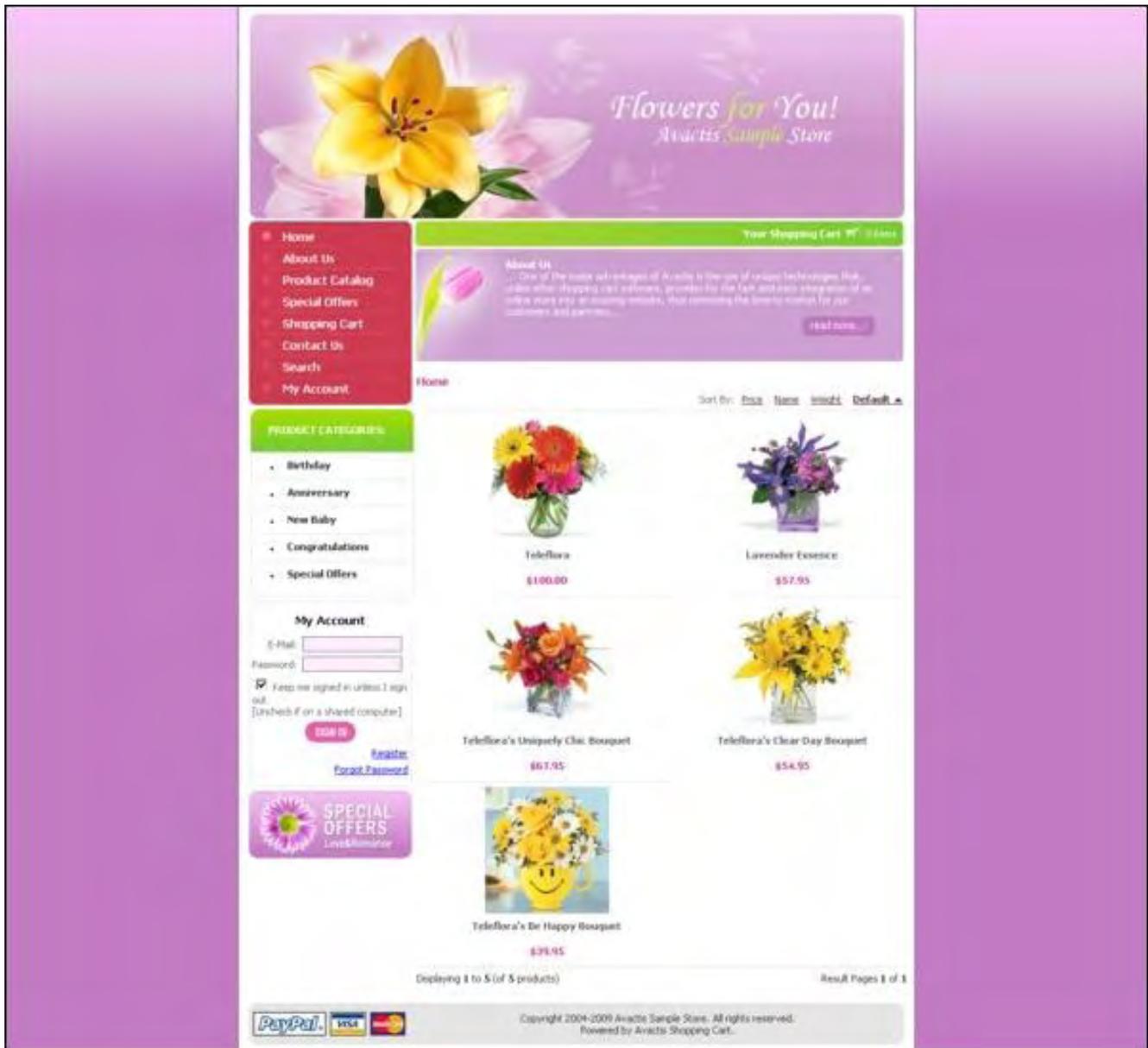
Figure 9. Avactis store home page.

Administering Avactis

To access the administrative area, simply append the string "avactis-system/admin" after the Avactis root directory path. Continuing our example mentioned earlier, the URL would be http://localhost/Avactis/avactis-system/admin/index.php, at which point you will be at the login page.

Figure 10. Avactis admin login.

Login using the Avactis administrator username and password that you specified during the installation process.
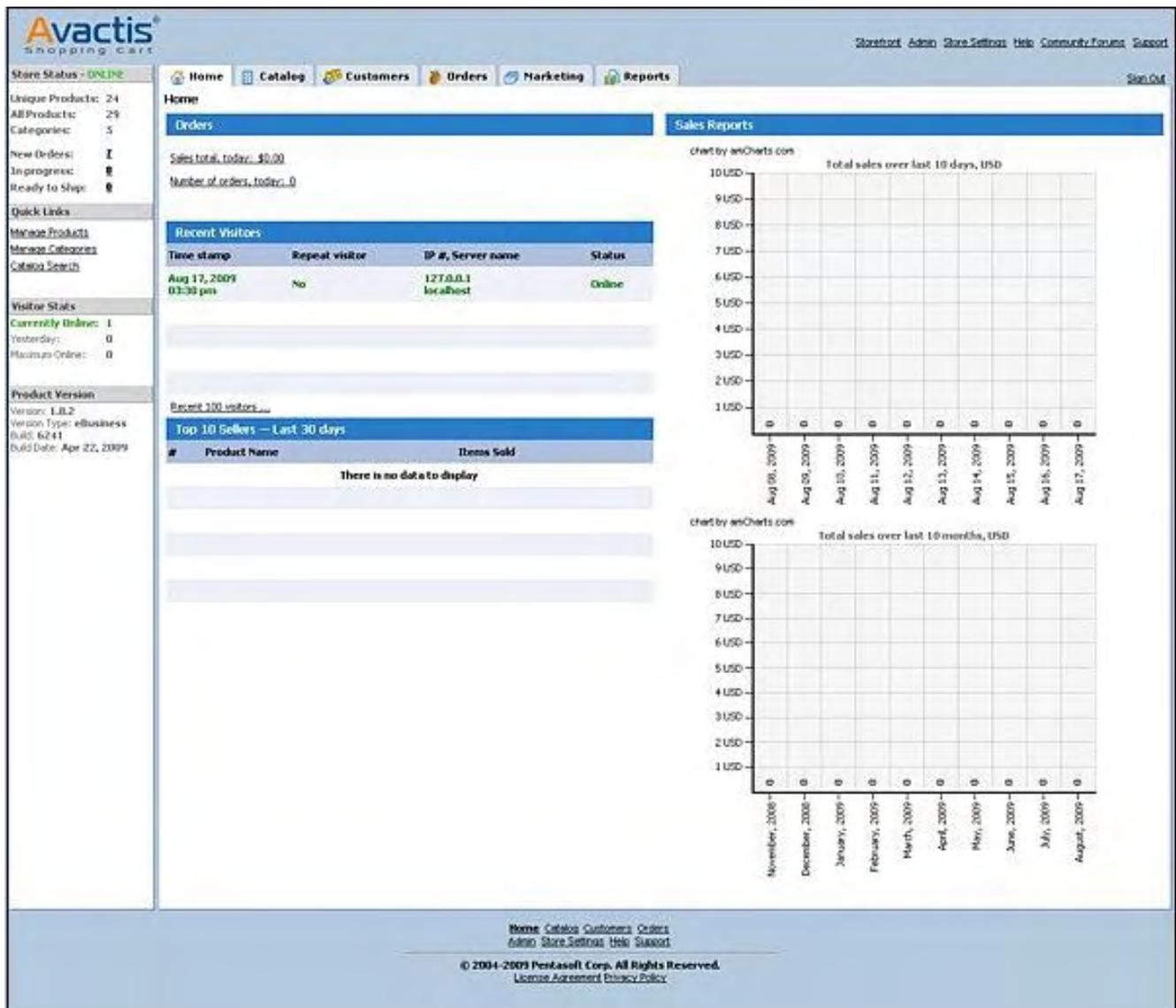
Figure 11. Avactis admin panel Home.

Once inside the administrative area, you will be on the Home tab, which shows you high-level statistics of your store, such as the number of products, categories, orders, visitors online, and daily sales numbers in chart form. In the navigation area on top, you will see additional tabs for Catalog, Customers, Orders, Marketing and Reports. To the right of that area are several links, the third of which takes you to the store settings page, which has links to all sorts of pages for managing such critical details as payment and shipping methods, digital products, search-engine-friendly URLs, and much more.
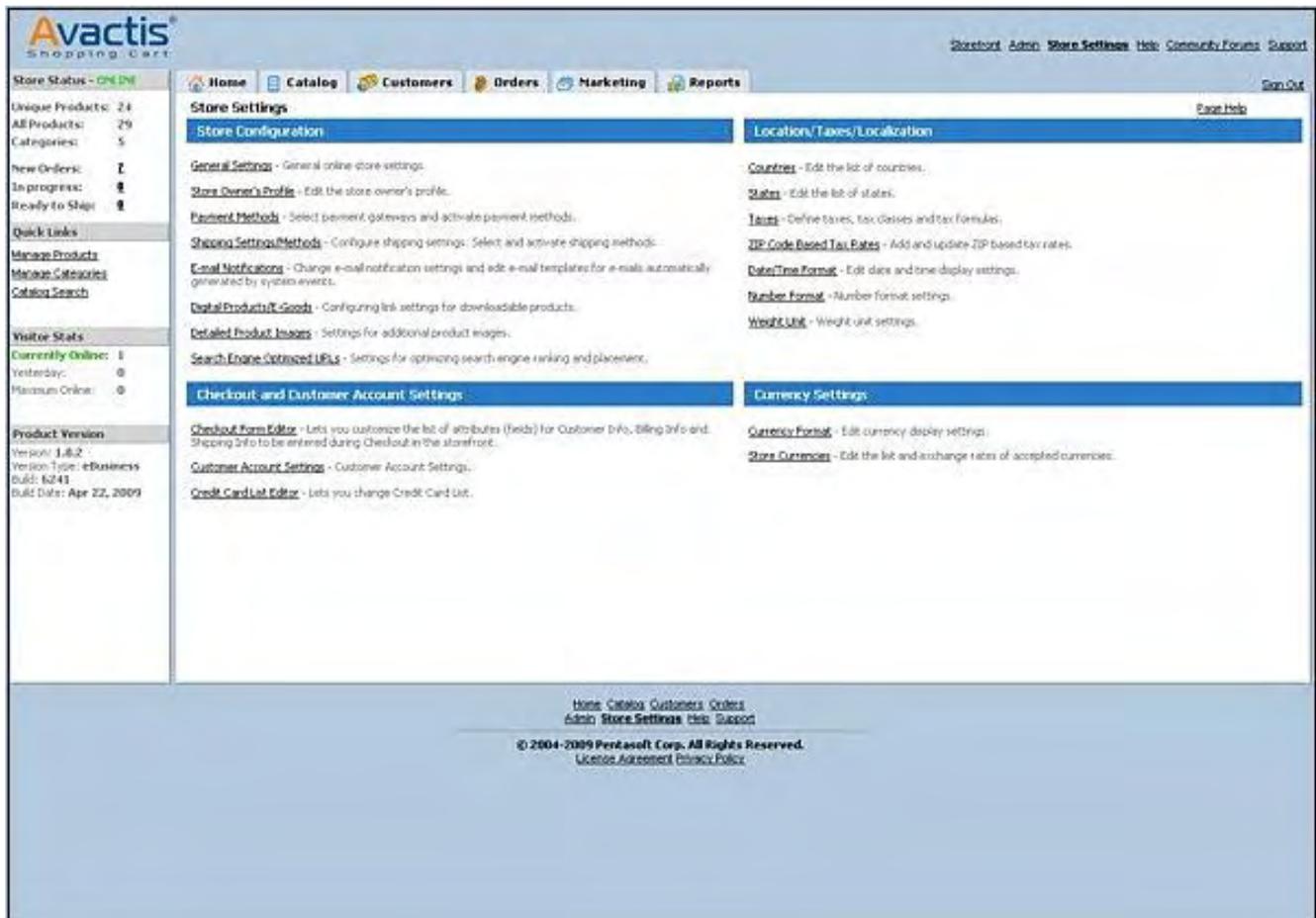
Figure 12. Avactis store settings.

When you are ready to deploy your Avactis store on the Web, upload all of the contents of the Avactis directory into the root directory of your remote server. Then export the Avactis database on your local computer into an SQL file, and import that into your remote MySQL server. Finally, test the Avactis store as well as the admin panel to verify that everything is working.

If all goes well, you should now be the proud owner of a new online store, ready for products to be added. If you need additional assistance, either request the help of a professional programmer or check out the Avactis user manual (*www.avactis.com/manuals.php*) and online support forums (*www.avactis.com/forums/*).

My only criticism of Avactis, at this point, is that it uses HTML tables for page layout, which has many disadvantages, though none that would prevent your store from functioning. We can only hope that in the future they improve the rendered HTML, and use divs and CSS for layout.

If you choose to create a virtual store using Avactis, then during the holidays you could end up making more money than you spend!
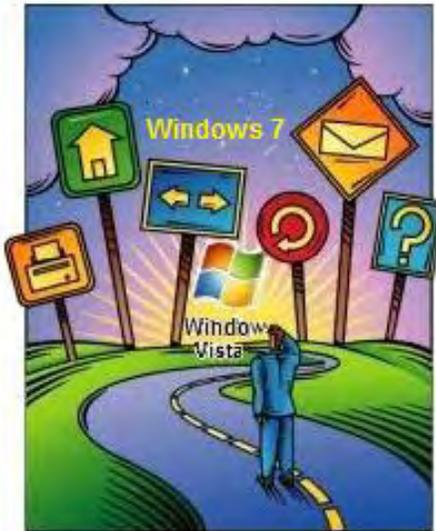
Michael J. Ross is a Web developer (*www.ross.ws*), writer, and freelance editor. He creates Web sites that help entrepreneurs turn their ideas into profitable online businesses.

Windows Tips and Tricks

"Microsoft Security Essentials" by Jack Dunning

Microsoft Security Essentials quietly sits in the background trying not to remind you that Windows might have an occasional security problem. That's the way Microsoft wants it.

Last week in Digital Dave, I read about a free antivirus/anti-spyware program, Microsoft Security Essentials, being offered by Microsoft to Windows users. Since I do the Windows Tips and Tricks column, I felt obligated to give it a try.

The Microsoft Web site states, "Microsoft Security Essentials provides real-time protection for your home PC that guards against viruses, spyware, and other malicious software." My attitude toward anti-malware software is that everyone should have some installed on their computer. There is no perfect software protection, and there are certainly some programs that are better than others, but most important in keeping your computer safe are the habits you develop that promote safe computing. No matter how good the protection provided by any software, there will always be a virus that will find a way around it. Therefore, it's necessary to learn to do the things that will keep you safe.

Microsoft Security Essentials (*www.microsoft.com/Security_Essentials/*) has received reasonable reviews from critics and users alike. It is unobtrusive and simple to install. It seems to do pretty much what most of the AV programs do.

Installing Microsoft Security Essentials

The first step is to download Microsoft Security Essentials (*www.microsoft.com/Security_Essentials/*). Before downloading, you will be given the choices shown in Figure 1. You will need to know whether your Windows Vista/7 is 32-bit or 64-bit.

Figure 1. Selecting the version of Microsoft Security Essentials.

Before you start the installation process, you should uninstall any antivirus software on your computer. Because of the nature of this type of software, multiple programs can interfere with each other, plus there is very little advantage to having more than one program running.

After you have downloaded the file, you should double-click the program icon in its folder if you didn't originally select Run After Download. You will then see an opening screen; after hitting the Next button, you will get to the Validation screen. In order to use Microsoft Security Essentials you need to be using a validated copy of Windows. The next screen warns you to uninstall any anti-malware software currently on your computer, if you haven't already done it.

After completing the installation, Microsoft Security Essentials will load. The program needs to download the updated virus database and run its initial scan. You should see a window similar to Figure 2. Once the database is updated, the program will automatically start a Quick Scan of the computer.
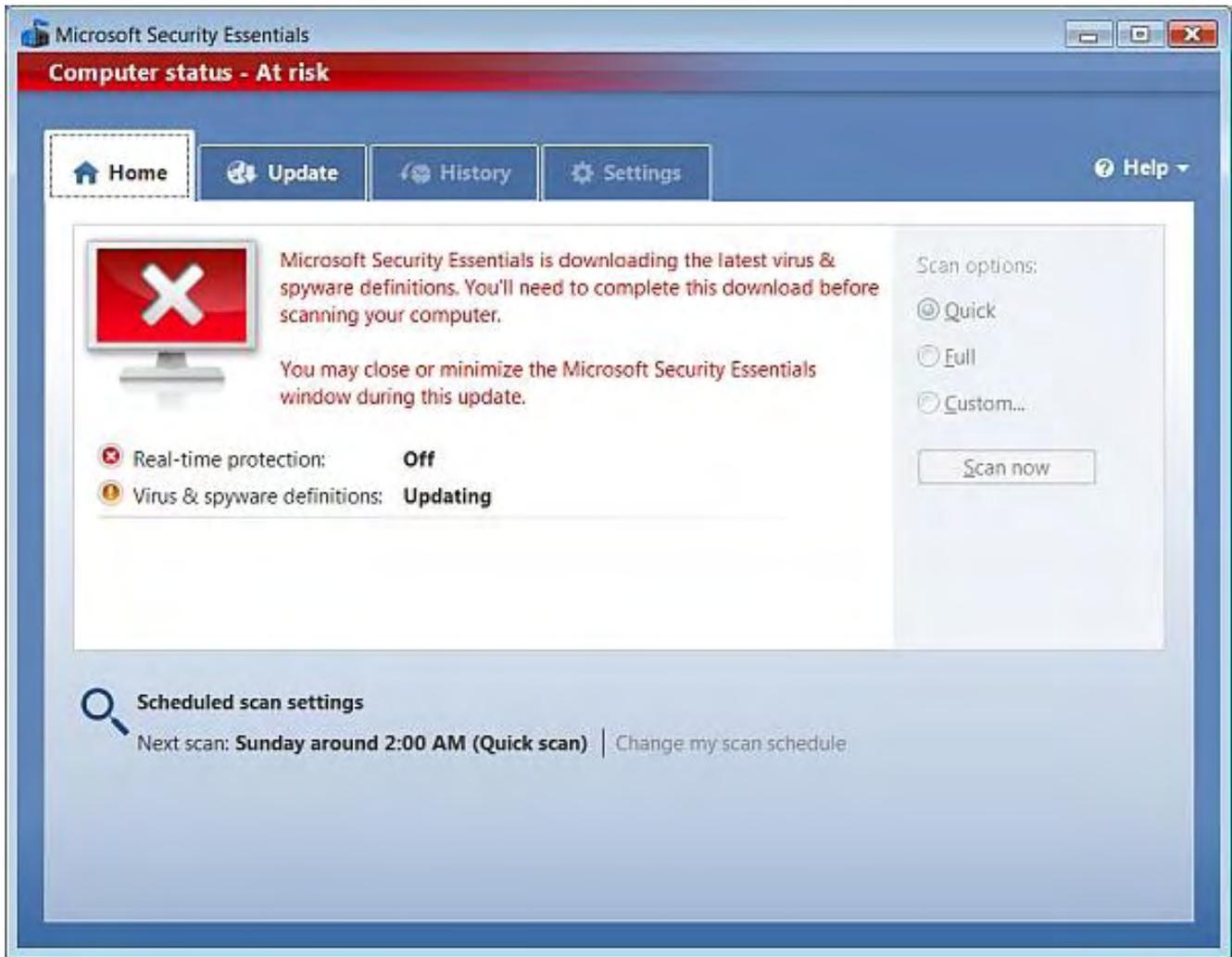
Figure 2 The Microsoft Security Essentials window on first load.

The Quick Scan checks only those files that are the most likely to carry an infection. This scan took about 10 minutes to complete, and I was able to work on other things while the scan was functioning. You can opt for a Full Scan once the program has finished the first scan. A Full Scan can take quite a while, depending upon how many files are on the drive and how many drives you have installed.

Once the first scan is completed, you will see a window similar to Figure 3. This Home screen tells you that the protection is on and the database is up-to-date.
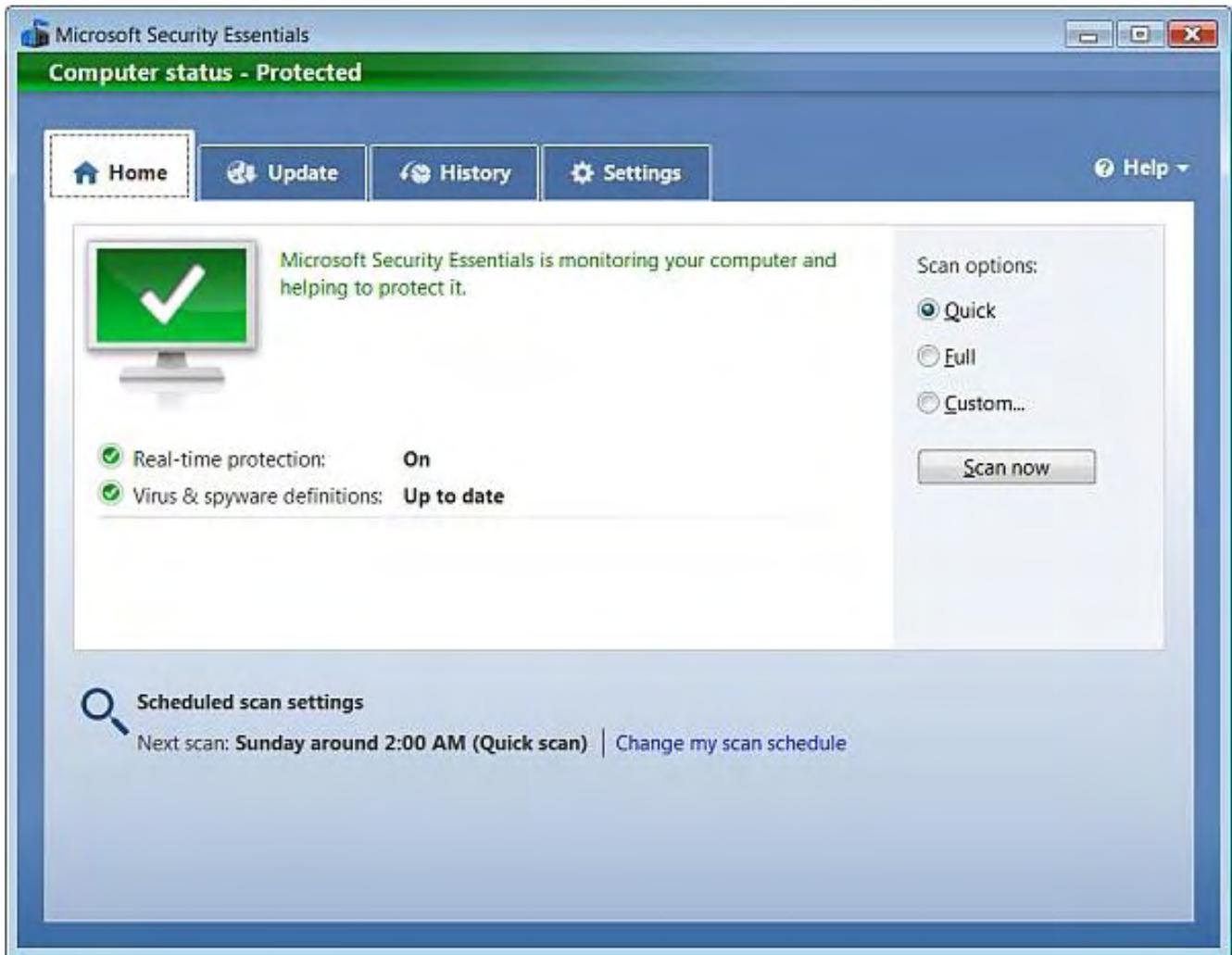
Figure 3. Microsoft Security Essentials Home screen when activated.

The Settings tab includes all of the options for tailoring the software (see Figure 4). The scan can be scheduled for a particular day of the week or daily. You will want to pick a time that you are not likely to be using the computer. You can, and probably should, check the box that says, "Start the scheduled scan only when my computer is on but not in use." By clicking the items in the navigation pane on the left side of the window, you can review the default settings for the program and make adjustments as necessary.
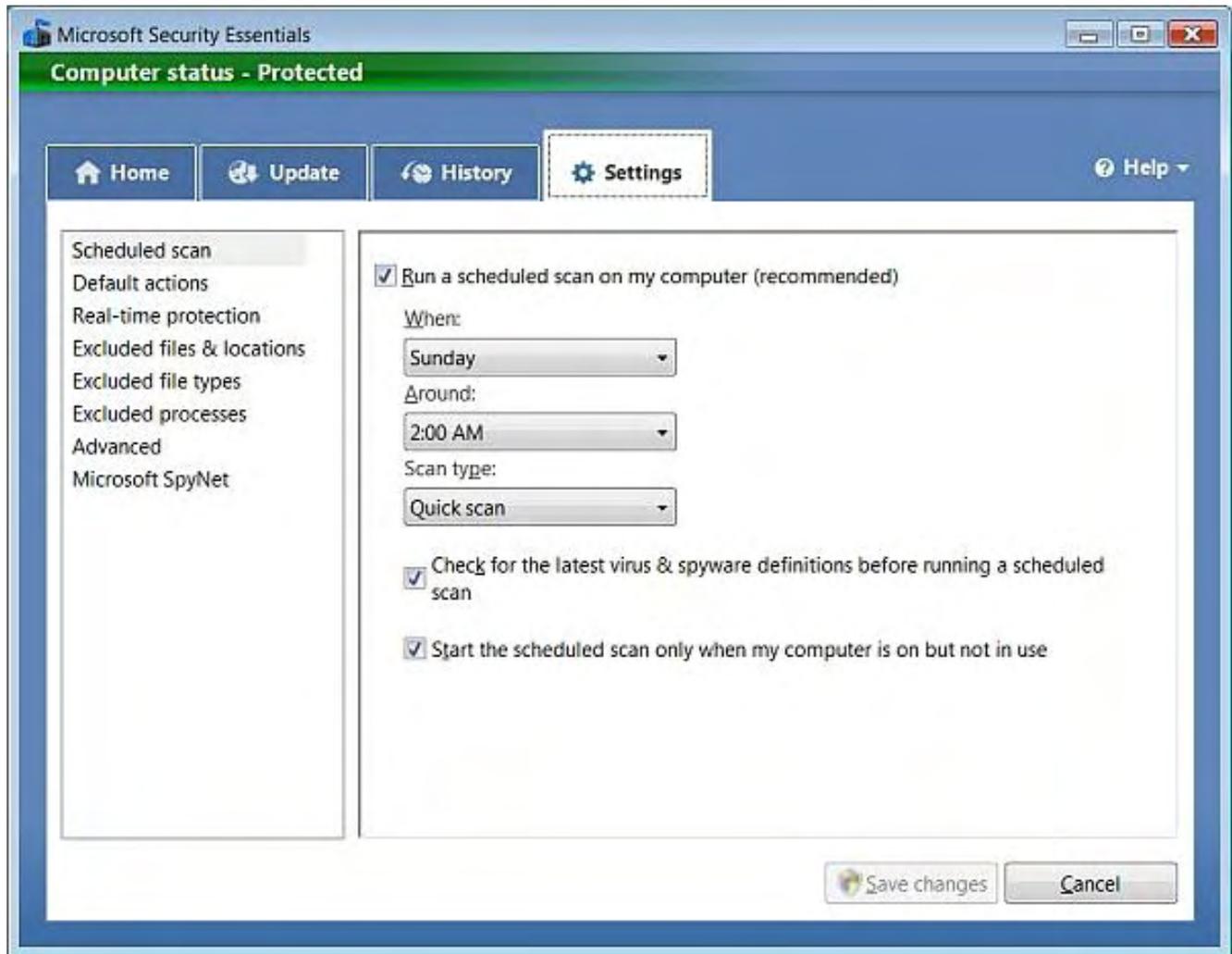
Figure 4. The Settings tab in Microsoft Security Essentials.

Since Microsoft Security Essentials replaces Windows Defender, Defender is automatically deactivated when MSE is installed and run. If real-time protection is turned on, and it should be, then you will get a warning when you attempt to opened a suspected file, similar to Figure 5. You will then have the option to remove the infected file, quarantine it, view further details, or allow it.
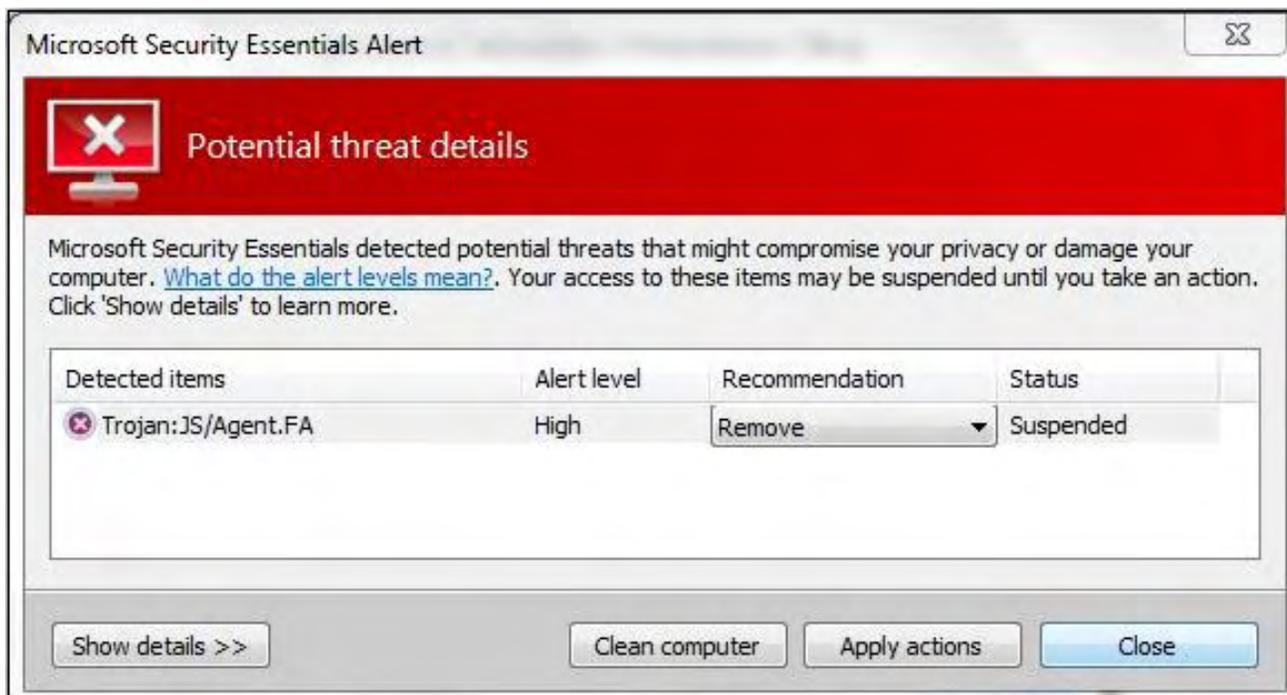
Figure 5. A threat is detected in Microsoft Security Essentials.

You might notice that your e-mails will not have a message on the bottom saying that they've been scanned. That's because Microsoft Security Essentials does not scan e-mail. As I understand it, the general consensus in the security community is that e-mail scanning is a waste of time. The important time to catch a threat is when the file is being opened. E-mail scanning does not add any additional protection.

On one of my computers, I've had Microsoft Security Essentials running for about a week. I haven't noticed it one way or the other. Although the icon sits in the tray, there are no reminder prompts ("Hey, I'm working!") or other notices. Unlike other antivirus programs, Microsoft Security Essentials quietly sits in the background trying not to remind you that Windows might have an occasional security problem. That's the way Microsoft wants it. For me, so far so good.

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*

Wally Wang's Apple Farm
"Things to Buy" by Wally Wang

If you need to run a handful of Windows programs but want to use a Macintosh, Parallels is a great tool to ease your transition. Also, Wally dissects Best Buy's $249 Acer laptop offer; and a tip on using the Spotlight Comments text box, which lets you type a unique label to identify a file.

Here's the dilemma that Macintosh users face. Most of them want to use their Macintosh, but most of them also need to run an occasional Windows program that isn't available for the Macintosh. One popular solution is to run Windows through Boot Camp, which is Apple's free program that lets you install Windows XP, Vista, or Windows 7 on any Macintosh that uses an Intel processor.

The main advantage of Boot Camp is that it essentially turns you Macintosh into a PC clone. Back in September 2007, PC Magazine (*www.pcworld.com/article/136649-3/in_pictures_the_most_notable_notebooks_of_2007.html*) even found that a MacBook Pro ran Vista faster than any other PC from companies such as Dell or Hewlett-Packard. If you want the fastest PC possible to run Windows, you'll want a MacBook Pro. Best of all, a MacBook Pro will also give you the ability to run Mac OS X programs like iPhoto and GarageBand, too, which no other PC can offer.

To use Boot Camp, you just need to buy a copy of Windows XP, Vista, or Windows 7. The drawback is that when you boot up to run Windows, you can't switch back to Mac OS X without rebooting.

The most convenient option is to use a virtualization program like Parallels (*www.parallels.com*), which costs $79.99. Toss in the cost of Windows (at least $100 or more), and you'll be able to run Windows on your Mac for around $200.

Parallels offers three ways to run Windows. First, you can run Windows in an ordinary Mac OS X window or just have Windows gobble up your full screen to create the illusion that you're running it exclusively on your Mac.

Figure 1. Windows can appear inside a Mac OS X window.

This option gives you access to the full Windows environment. You'll be able to click your mouse inside Windows to control Windows, or click outside that window to control Mac OS X.

A second way to run Windows through Parallels is something called Coherence. That's where you never see the Windows desktop at all. Instead, your Windows programs appear as ordinary icons on the Mac OS X dock.

When you open a Windows program, it appears on your Mac screen like an ordinary Macintosh program (although it will probably look noticeably uglier). Through Coherence, you can use a Windows program without the nuisance of seeing Windows itself.

Figure 2. Windows programs can appear in their own Mac OS X window without displaying the Windows desktop at all.

If you'd rather not place Windows program icons on the Mac OS X Dock, Parallels offers a third solution; just access the normal Windows Start button menu through an icon on the Mac OS X Dock.

Figure 3. You can access the Windows Start menu within Mac OS X.

In the past, running Windows inside a virtual machine like Parallels meant that any files you created within Windows remained trapped inside that virtual machine. With the latest version of Parallels, any virtual machine can now get full access to storing and retrieving files from your Mac OS X folders as well.

This lets you use your favorite Windows program, store the actual files on Mac OS X, and then back up all your Mac OS X files using a program like Time Machine. One drawback of letting Windows have access to your Mac OS X files is that if a virus gets loose on your Windows virtual machine, that virus can now delete files stored on your Mac.

If you want to run Windows programs on your Macintosh, Parallels 5 makes it simple. Installing Windows through Parallels just requires typing in your Windows serial code and walking away while Parallels creates your Windows virtual machine on its own. If you have an existing Windows computer, Parallels includes a special program that can clone your Windows PC so you can copy that file and run it on your Macintosh.

Perhaps the biggest drawback with Parallels is that running another operating system within Mac OS X requires a good chunk of memory. Windows isn't as fast in Parallels as running on a dedicated computer (or through Boot Camp), so the faster the processor in your Mac and the more RAM you have, the faster Parallels will be able to run Windows.

If you need to run a handful of Windows programs but want to use a Macintosh, Parallels is a great tool to ease your transition. With Parallels, you can be happy running a Macintosh and use Parallels and Windows to run an occasional Windows program. Then shut down that Windows program and free up more system resources to use Mac OS X, which is what you'll really want to use anyway.

Best Buy's $249 Acer laptop

This is the problem I have running Windows through Parallels. I still need to write about various Windows programs (such as Microsoft Office 2007/2010), so I need to see both the Windows programs I'm writing about and my word processor at the same time.

One solution would be to get two monitors and have each program window appear in a separate monitor. When I used to rely on a single PC, a beta program would often crash or freeze the entire operating system, killing my word processor at the same time. When using Parallels, any Windows program that crashes simply kills the virtual machine, but leaves Mac OS X unaffected. However, I prefer running Windows beta programs on a separate computer while running my word processor on a different computer.

My current PC once ran Windows XP nicely with 1GB of RAM and an Athlon 2.10GHz processor. Now under Vista, this PC limps along. I can only upgrade this PC up to a maximum of 2GB of RAM, and it would probably run Windows 7 a little better than it runs Vista. That would mean spending $119 for an upgrade copy of Windows 7 Home Premium plus another $40 for an extra 1GB of RAM. However, Best Buy's offer on Veteran's Day caught my eye.

For just $249, Best Buy offered an Acer laptop with a 15.4-inch screen, Intel Celeron 2.20GHz processor (more powerful than Atom processors used in most cheap netbooks), 2GB of RAM, 160GB hard drive, a three-to-four-hour battery life, a 6.3-pound case, and Windows 7 Home Premium (64-bit version). Considering that the cost of Windows 7 Home Premium alone retails for $199 (the upgrade version is $119), Best Buy's Acer laptop is like getting a brand-new computer for $50 more.

With Acer's $249 laptop by my side, I can run Windows programs while still using my Macintosh without any slowdown in speed if I were running both Mac OS X and Windows in Parallels. If the Windows program crashes for any reason, my Macintosh word processor (and all its files) remains safe.

Of course, a $249 laptop is a bargain, but here are potential pitfalls. First, Best Buy had a stack of these $249 laptops in their store, but some had yellow stickers on them and some had red stickers.

A box without any sticker cost $249 and included McAfee, Norton, and other companies' trial-ware programs that clutter up your hard disk. They're easy to remove, but just a nuisance.

A box with the yellow sticker cost $39.95 more because Best Buy had already removed all these trial-ware programs so you can start with a clean Windows 7 system. While nice, charging extra for what you should get in the first place is like Ford charging an extra $39.95 not to spill a milkshake on the driver's seat and throw a bunch of trash on the floor before selling you a car. Should people really pay extra to get a clean Windows 7 PC?

A box with the red sticker cost $69.95 more and came with a licensed copy of an antivirus program (probably McAfee, since that was the trial-ware program that I uninstalled off my computer). Again, this sounds like a nice service until you realize that Best Buy could just install a free antivirus program from AVG (*free.avg.com/us-en/ homepage*) or even from Microsoft (*www.microsoft.com/Security_Essentials*), and then people wouldn't have to pay for annual subscriptions to keep their antivirus programs up to date either.

By taking advantage of the fact that most people don't feel comfortable uninstalling trial software programs or finding and using free antivirus programs, Best Buy (and probably other retailers as well) are simply profiting off the public's ignorance.

A second problem with the $249 Acer laptop is that it doesn't come with any recovery discs to reinstall everything in case your hard disk wipes itself out. You can order recovery discs from Acer for an extra $20 or just make your own using three DVDs.

Unfortunately, the program that Acer includes on their laptop to burn these recovery DVDs didn't work. Instead, it wasted time burning a disc only to ultimately warn me that an error occurred and the disc didn't burn correctly. After the second time of trying to burn a DVD (and nearly an hour later), I just gave up before I went through a stack of DVDs and ruined all of them.

This $249 Acer laptop runs Windows 7 just fine, although at 6.3 pounds, it's definitely heavy to lug around on a regular basis. Even better, for its low cost it's practically disposable, so if you drop it or someone steals it, you won't lose out on too much money.

Compared to my MacBook Air, this Acer laptop looks like a bulky antique from ancient history. It works, though, the price is right, and it will get the job done. For a cheap solution to running Windows programs, this $249 laptop is another alternative.

<p align="center">*   *   *</p>

Open the Finder window and you'll see the Spotlight search box in the upper-right corner where you can type all or part of a filename or file contents, and your Mac will list all files containing your text.

So if you're looking for a file named "Taxes 2007" or one that just has the word "taxes" buried somewhere inside that file, you could type "taxes" in the Spotlight text box to find your file.

To make certain files even easier to find, you can add your own tags. So if you tag a file with the word "igloo," Spotlight can find it again even if the word "igloo" doesn't appear anywhere in the filename or inside the file itself.

To tag certain files with a distinctive label, just right-click on that file and choose Get Info from the pop-up menu. This opens an Info window where you can type text into the Spotlight Comments text box.

Figure 4. The Spotlight Comments text box lets you type a unique label to identify a file.

Type a unique label and close this Info window. Now you'll be able to find your file using this unique label in Spotlight again.

In the early days, before Wally became an Internationally renowned comedian, computer book writer, and generally cool guy, Wally Wang used to hang around The Byte Buyer dangling participles with Jack Dunning and go to the gym to pump iron with Dan Gookin.

Wally is responsible for the following books:

 • Microsoft Office 2007 for Dummies (*www.amazon.com/gp/product/0470009233?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470009233*)
 • Beginning Programming for Dummies (*www.amazon.com/gp/product/0470088702?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470088702*)
 • Breaking Into Acting for Dummies with Larry Garrison (*www.amazon.com/gp/product/0764554468?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0764554468*)
 • Beginning Programming All-in-One Reference for Dummies (*www.amazon.com/gp/product/0470108541?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470108541*)
 • Steal This Computer Book 4.0 (*www.amazon.com/gp/product/1593271050?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1593271050*)
 • Visual Basic Express 2005: Now Playing (*www.amazon.com/gp/product/1593270593?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1593270593*)
 • My New Mac (*www.amazon.com/gp/product/1593271646?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1593271646*)
 • My New iPhone (*www.amazon.com/gp/product/1593271956?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1593271956*)
 • Strategic Entrepreneurism with Jon Fisher and Gerald Fisher (*www.amazon.com/gp/product/1590791894?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1590791894*)

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

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

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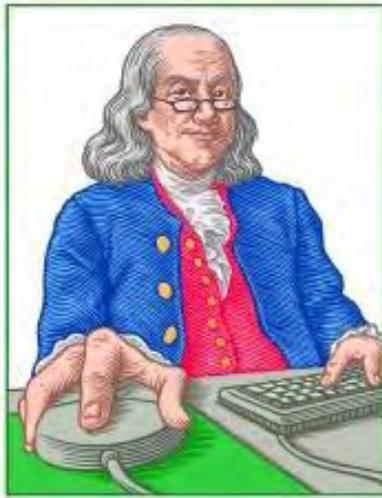
Linux Lessons: Installing Ubuntu

"Step Two--Partitioning" by ComputorEdge Staff

The second part in a series on installing Ubuntu discusses disk partitioning. Also, a reader ran into problems with the installation of Ubuntu 9.10.

This is the second part in a series by Pete Choppin on installing Ubuntu.

This week we're going to begin the installation of Ubuntu, and we'll go over disk partitioning. At this point we are assuming that you have been able to download the latest version of Ubuntu and you have created the installation CD as discussed in last week's Linux Lessons. If you need assistance with this, there is documentation available on the Ubuntu Web site (*help.ubuntu.com/community/BurningIsoHowto*).

Let's get started with the installation. Put the CD in the drive and start up the computer.

The first screen that you will be presented with is a language-selection screen

Just highlight your language and press Enter.

You will then be presented with the Ubuntu install selection menu.
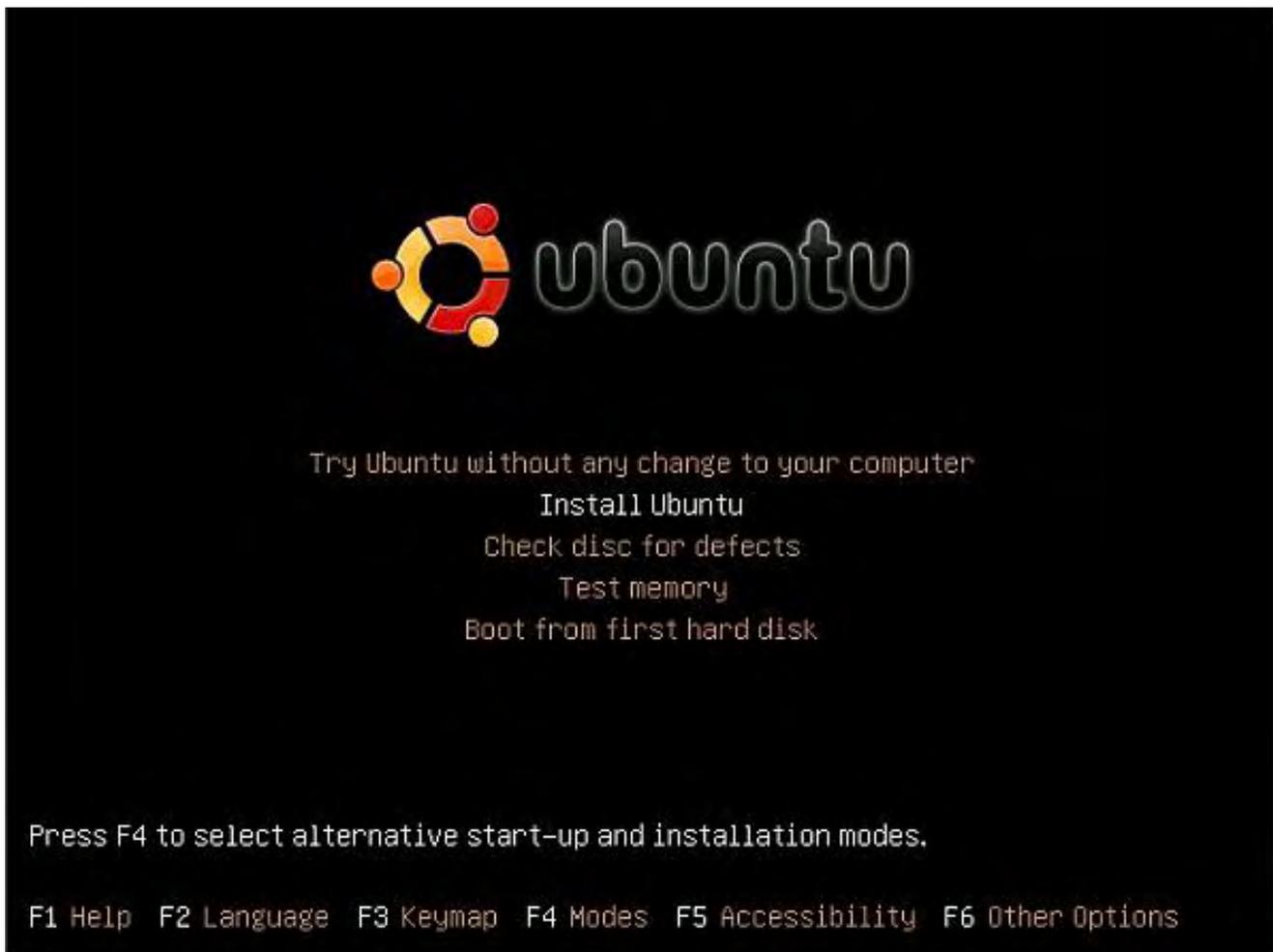
From this point you can install Ubuntu, test the install CD you created, or test the system memory. There is another option on this menu called "Try Ubuntu without any changes to your computer." This option is for booting the Ubuntu system from the CD, without formatting or changing your hard drive. If you would like to try this option, it is a nice way to check out Ubuntu without going through the full install, and it will not modify your computer in any way.

For our purposes, we will select the second option and run the full install.

After a few moments you will see a Welcome screen where once again you will select your language.

No localization	**Welcome**
Asturianu	Ready to install? Once you answer a few questions, the
Bahasa Indonesia	contents of the live CD can be installed on this computer
Bosanski	so you can run the system at full speed and without the
Català	CD.
Čeština	
Cymraeg	Answering the questions should only take a few minutes.
Dansk	
Deutsch	Please choose the language used for the installation
Eesti	process. This language will be the default language for the
English	final system.
Español	
Esperanto	
Euskara	
Français	
Gaeilge	
Galego	
Hrvatski	
Italiano	
Kurdî	
Latviski	If you have Internet access, read the release
Lietuviškai	notes for information on problems that may
Magyar	affect you.
Nederlands	**Release Notes**

Step 1 of 6   Quit   Back   Forward

At this point you have begun the GUI portion of the install. You will now have on-screen explanations, and from now on things should be fairly self-explanatory, with the exception of disk partitioning, which we will go over in more detail.

Continue through the next screens. They are for time zone and keyboard layout selections and should be self-explanatory.

On Step 4 of 6 you will begin the disk-partitioning process. This is the most complicated part of installing any Linux system. It is true that you can always let the installer determine your partitions for you, and this is certainly simpler, but you might want to have some say in the process because the installer will only set up the most basic partition layout for you. Also, you don't really know what the installer sets up until after the fact. I personally like to know how my partitions are set up for later reference so I understand how my system is set up and operates.

Prepare disk space

This computer has no operating systems on it.

Where do you want to put Ubuntu 9.10?

○ Erase and use the entire disk

SCSI3 (0,0,0) (sda) - 21.5 GB VMware, VMware Virtual S

⚠

○ Specify partitions manually (advanced)

☐ Specify partitions manually (advanced)

Step 4 of 6   Quit   Back   Forward
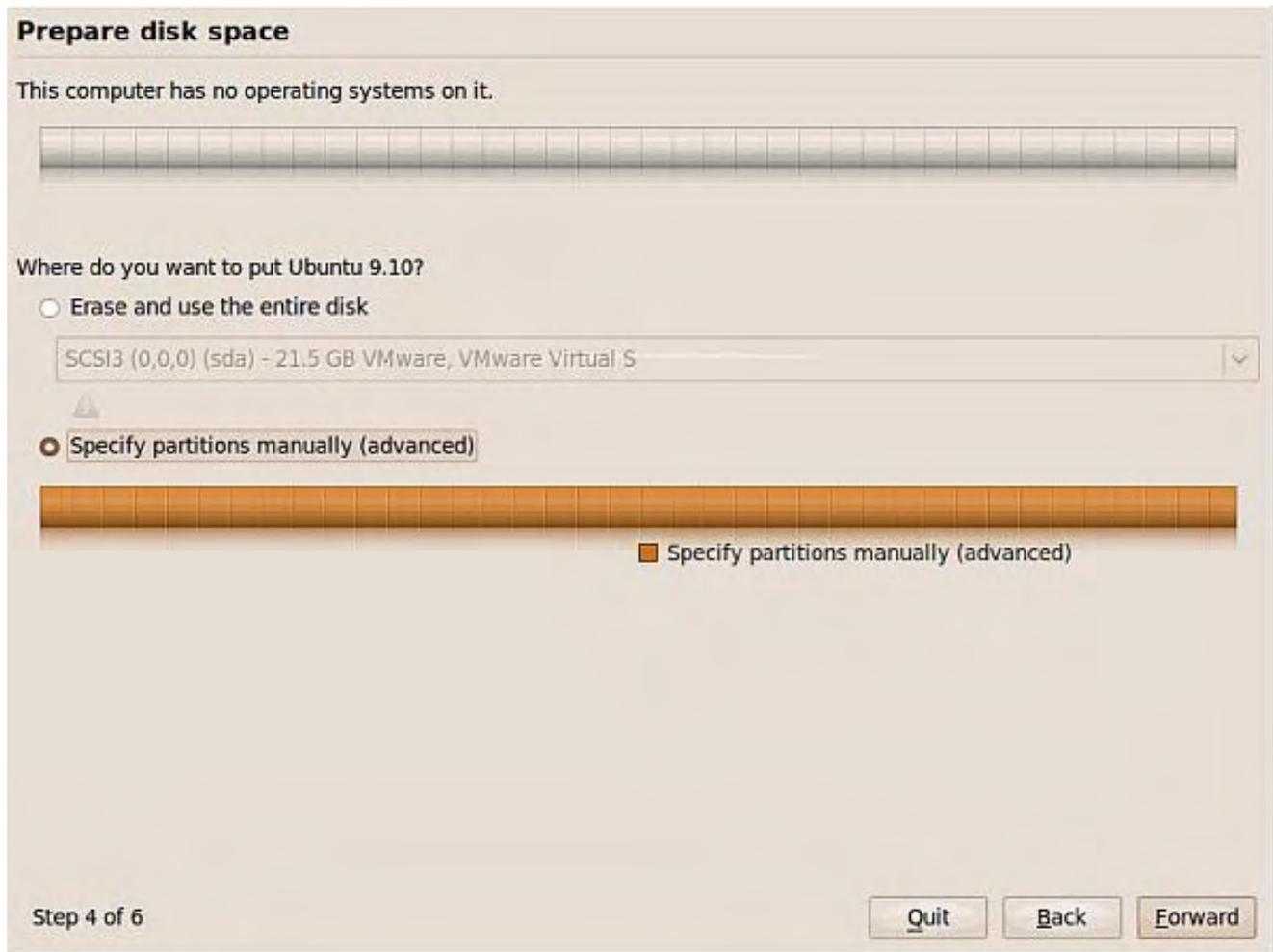
The screen on Step 4 of 6 has a graphic representation of your hard drive. Mine shows there is no operating system installed. For example, if I had Windows or another operating system on this computer, that partition would be shown in the graphic.

Below the graphic, you have two choices. Essentially, the first option will erase your entire drive and Ubuntu will partition the drive and prepare it for installing the OS. This is the option you would select if you do not want to bother with partitioning. The second option is for manual partitioning, and this is what I will be explaining, so go ahead and select the second option and go to the next screen.

The next screen looks rather blank. This is because we have not specified any new partitions.

Prepare partitions

Device	Type	Mount point	Format?	Size	Used
/dev/sda					

New Partition Table...   Add...   Change...   Delete   Revert

Step 5 of 7   Quit   Back   Forward
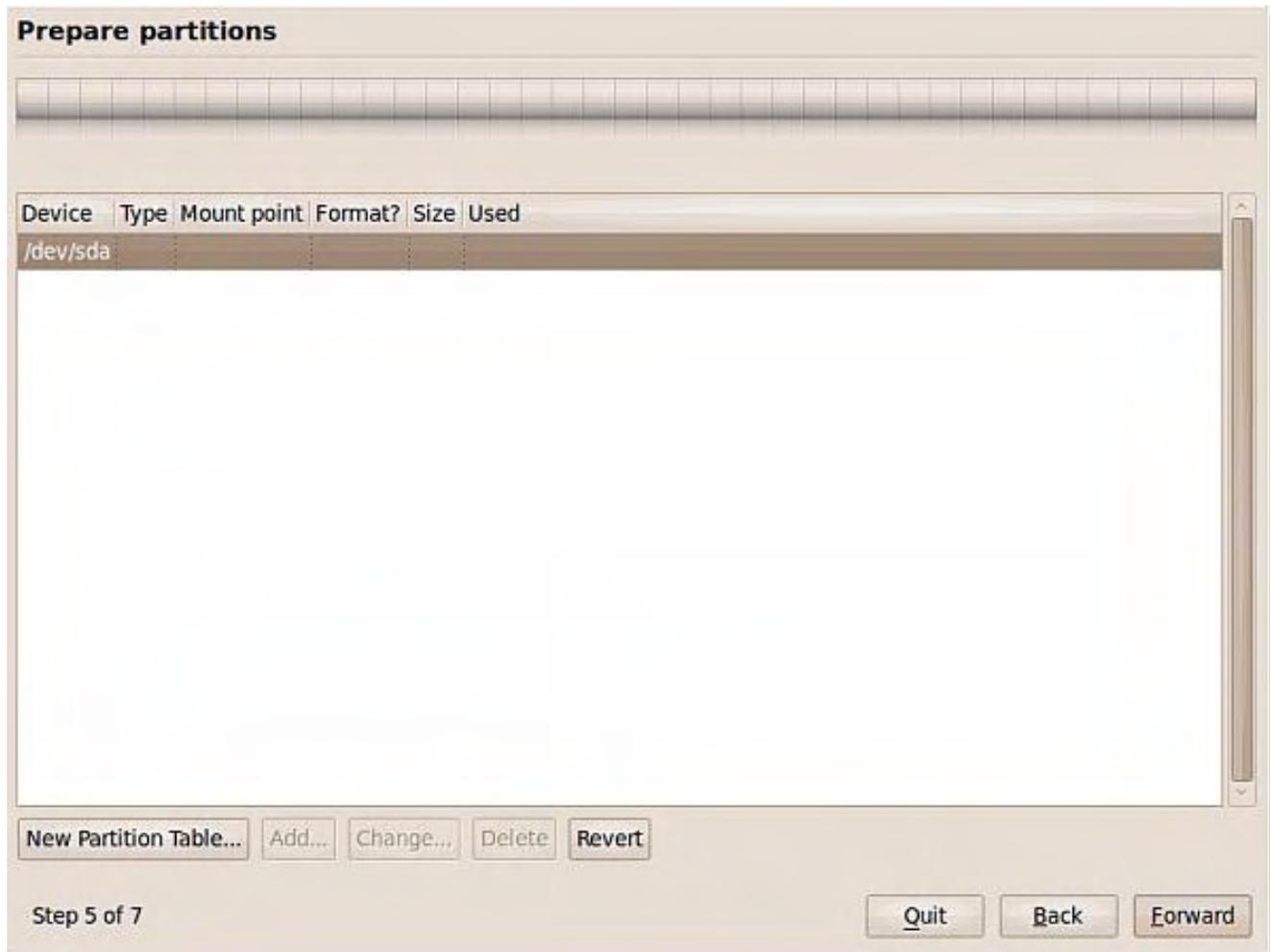
You should see a Device listed labeled /dev/sda. Highlight this device and then click the New Partition Table button below.

You will immediately be presented a warning telling you that creating this partition here will remove any current partitions (of which we should have none). So unless you already have a previously created partition, go ahead and click the Continue button. If you do have an existing partition you do not want to remove, you can click the Go Back button, and you should have an area of free space on your hard drive on which you may create your new partition.

The next screen brings you back to the Prepare Partitions area, and you will now see a free space area. From here you will now add new partitions. Highlight the free space in the Device column and then click the Add button at the bottom.

You will see a small dialog box appear labeled "Create partition."

I have highlighted the important parts of this dialog box that you will need to use to configure each partition, and I will also explain these below.
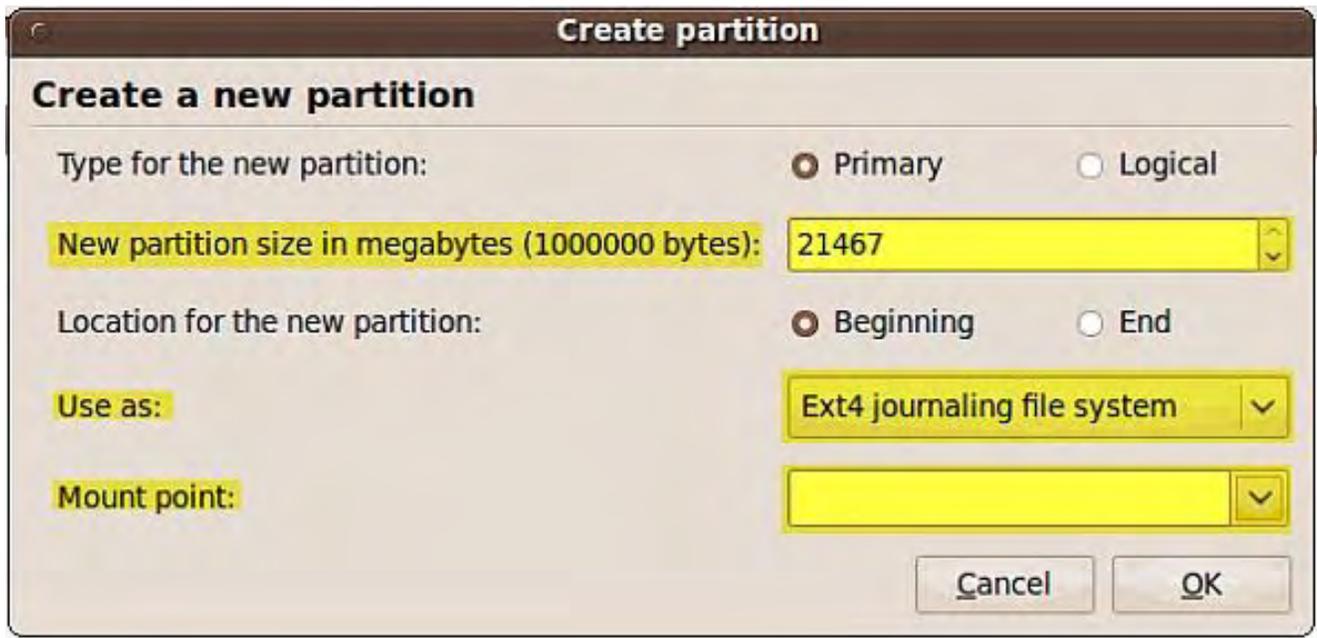
The first partition we will create is called the swap partition. The purpose of this partition is to allow for swap or overflow space in the event that your system memory is exceeded. Creating a swap area separate from other system files will protect those files from corruption and poor performance. Long experience has shown me that setting up this partition significantly enhances system performance and will ensure a flawless file system.

• *Partition Size*

Best practice is to provide twice the space for this partition that you have installed physical RAM. For example, if you have installed 1GB of RAM, then you would enter 2048 here for 2GB of swap space.

• *Use as*

Select Swap area from the drop-down menu

• *Mount point*

This describes the mount point on the hard drive. I guess it is somewhat akin to assigning a drive letter in a Windows system, although it is far more flexible and has other uses as well. However, a swap partition does not require a mount point, and when the Swap area is selected in Use as above, this field will be disabled.

Click OK and Ubuntu will create your new swap partition.

The next partition we will create is the /boot partition. This partition is where the boot files will reside as well as much of the Linux kernel. The purpose of creating a separate /boot partition is to make resolving boot problems easier or rescuing a system that cannot boot up somewhat easier to troubleshoot. It is just good practice to set up a separate /boot partition.

To do this click on the free space again and click Add. The same Create partition screen appears, and you will just need to set up the proper settings for a /boot partition. Boot partitions are small. I would not allocate anymore than 100 megabytes for this partition. From the Use As drop-down, select the Ext4 journaling file system and choose /boot for your Mount point. Click OK, and Ubuntu then creates your boot partition.

We will create one last partition. I know, there are a lot of opinions and practices out there for proper partitioning. These can get quite complicated. My objective here, however, is to demonstrate and explain the partitioning process, and also to show why you might want to set this up yourself, rather than have the system do it for you. If you are

interested in going into more details on Linux partitioning, I found a fairly extensive article (*www.linuxsa.org.au/tips/ disk-partitioning.html*) that will keep you riveted learning all about proper Linux partitioning. It is quite interesting.

For simplicity's sake, let's create our final partition, which is referred to as the root partition, or often simply referred to as /. This effectively is the remaining free space on the hard drive and will contain the remaining system files as well as any applications that are installed and anything you will add or store on the hard drive. The entire Linux file system will be set up on this partition, and we will go over this in a later issue when we discuss using Ubuntu.

Select the remaining free space on the Prepare Partitions screen and click the Add button. The entire free space will be displayed in the new partition size box. Just leave that where it is. Also, leave the Use As on the default Ext4 file system selection. In the Mount point box chose / as the mount point. Click OK. Ubuntu then creates the final root partition, which will encompass the remaining space on your hard drive.

You should end up with three partitions that look similar to this screen now.
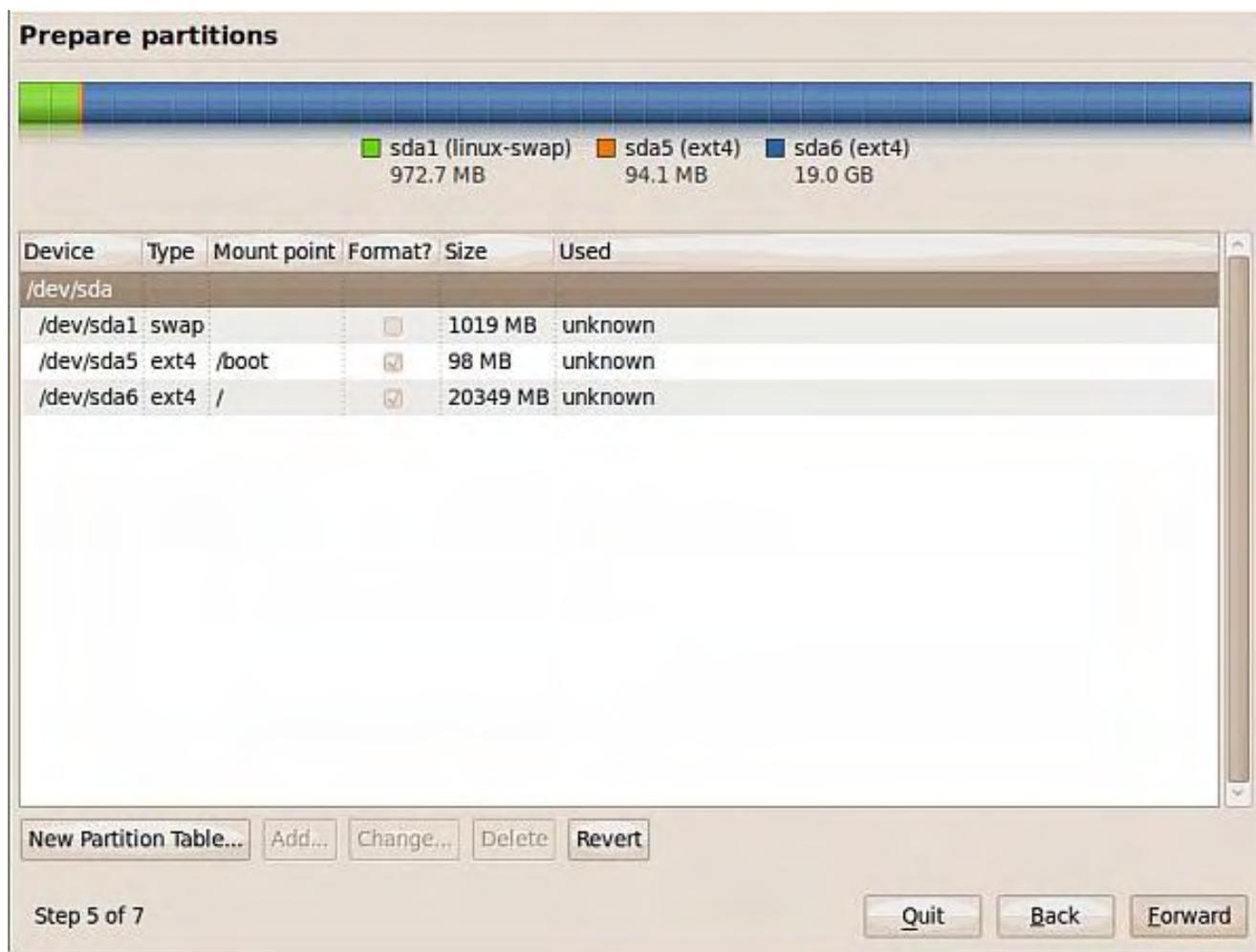
Well, I think that is plenty to work on for now. Let's stop here at this point of the Ubuntu installation. Next week, we will go through the rest of the setup and finalization of installing Ubuntu.

If you have comments or questions about this article, please submit them. I will be happy to answer them.

Pete Choppin, My Bio (*webserver.computoredge.com/editorial/prg/authorbio.mvc?contribid=CHOP*)

Ubuntu 9.10 Problem

I've been using Ubuntu for several years and prefer it to XP. I've been running version 8.04 without problems.

Recently I tested 9.10 running from the CD. It gave a message that some generic driver needed replacement with a proprietary driver. I gave permission to install the driver, then 9.10 ran as promised. Having passed the test, I then went back and did a complete reformat and install of 9.10. The install went well up to the point of reboot on completion. This time, instead of giving me an option to install a proprietary driver, it simply locked up, stating that a file was missing with a long series of numbers. "Press any key to continue." I did and got the same message. The computer is now useless since I can't find the old 8.04 disk.

Anyone run into a similar problem? I'm now doing my work on a Windows 7 computer.

Steve

<div align="center">*   *   *</div>

Give Us Your Linux Tips and/or Questions

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

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

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

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*.

Rob, The ComputorTutor Does VB. Net 2010

"More Custom VB.Net 2010 Controls" by Rob Spahitz

Last time, we created a custom control in VB. This week we create one from scratch and add custom properties.

Last time, we created a custom control in VB. This week we create one from scratch and add custom properties.

Note: These columns are written using VB.Net 2010. However, most of the features will work just fine with VB.Net 2008 or even earlier versions. To see how to install VB.Net 2010, check my July 31, 2009 column, and to retrieve project files, check my server at *www.dogopoly.com/ce*.

By the way, for those who would like to help contribute to these columns, purchasing one of our DOGOPOLY board games (no! not a video game—yet) would help a lot. Go to *www.dogopoly.com* and place your order. In a message, say you saw us on *ComputorEdge* and we'll throw in FREE gift-wrapping (a $5 value) with your order. If you decide to buy elsewhere, make sure you get the 25th anniversary edition (with the sunrise on the front and a picture of the board on the back.) You'll get a great gift and more columns too!

My ToolBox

Following along the lines of what we did last week, let's continue by making a User Control from scratch. Create a new Windows Forms Application project called MyBoardGame, then add a User Control called usrPiece (from menu item Project/Add User Control).

Our goal will be to draw a piece from the Dogopoly game onto the User Control (usrPiece) and allow that to be used on a separate form. To make it more interesting, we'll allow the ability to change the color of the dog from the form (rather than have it pre-determined by the Control).

To start, we need to understand how User Controls work. When you add any control to a Form, several events occur before it is ready for use. The control has to be assembled (if there are several subcomponents), which is part of its Initialization/Load process. Along the way, it needs to be added to the Form, Drawn and eventually given the Focus (if appropriate).

With conglomerate controls, the drawing part is done by the sub-pieces so you don't need to worry about handling it yourself. However, if you want to create your own custom image (like a round button or a board game piece), you need to make sure that the drawing happens as expected.

When you draw onto a control, there are several ways it can be done. If you draw a picture onto a control when it loads, you might see the image when the form loads. However, if the control is obscured for any reason (minimized or a pop-up window covers it), then the image never returns. Instead, we have to use the correct event to ensure that the image gets drawn every time it's needed. To do this we use the Paint event.

Make sure the User Control is selected. In the Properties window, select the icon at the top with the lightning bolt, then double-click the Paint event name to get to the code area. If you double-clicked on the User Control, it would set up a procedure for the Load event, which is not what we want. Another way to get the Paint event procedure is to go to the code area and select usrPiece Events from the left drop-down list at the top of the code area, then select the Paint event from the right drop-down list, as seen in Figure 1.

Figure 1. Selecting the Paint Event for a User Control.

As discussed in a previous column, we can use the parameters in the "Sub" line to help us work with the event. In this case, "e" is defined as System.Windows.Forms.PaintEventArgs. This allows us to get to the drawing area of the User Control. Without this, we'd have to create a drawing area from scratch.

Let's start drawing. On the blank line in the event procedure, enter the "e" variable followed by a "." which will open the Intellisense listing. From there, select Graphics.FillRectangle followed by an open parenthesis. You should see a tooltip similar to Figure 2.
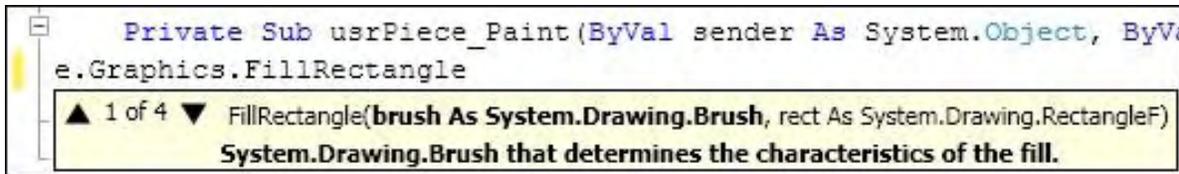
Figure 2. Tooltip from the FillRectangle Procedure.

Notice how it suggested one of four possible definitions for the FillRectangle procedure. As you look through, you'll see that they all require a value for the "brush" with data type System.Drawing.Brush. The other options seek variations of rectangle coordinates. The simple variation allows you to enter an "x", "y", "width" and "height" value, which can simply be numbers. But where do we find a brush?

It turns out that we can normally try to use the "New" keyword to create a class for such uses. However, this does not work here because brush is what's known as an abstract class and requires you to create one of its variations (which you may have to create.) In this case, we can use something called SolidBrush, which is a "Type" of brush. Continue typing with "New SolidBrush(". You should see another tooltip plus a collection of valid choices for the color that is expected to make a new SolidBrush. For now, enter Green and close the parentheses. Wrap it up by entering a comma and some values to define a rectangle and close parentheses again. The line should look something like this:

```
e.Graphics.FillRectangle(new SolidBrush(Color.Green),10,10,100,100)
```

At this point, if you successfully Build the project and return to the Form Design, you can add this item from the Toolbox onto the form and a green box will appear in it as seen in Figure 3.
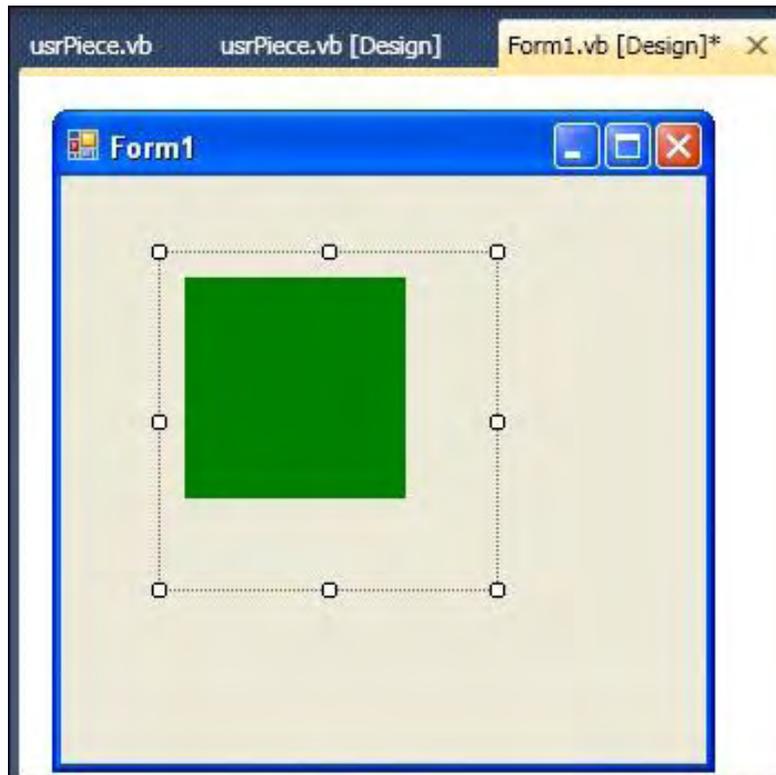
Figure 3. Form with User Control and Green Box.

Now for the interesting part. Suppose that you want to change the color of the box from green to blue. Normally, you'd go to the control and find a property to match your request. In this case, the BackColor property would seem appropriate. Set that to a nice shade of blue and you should see the control change to something like Figure 4.
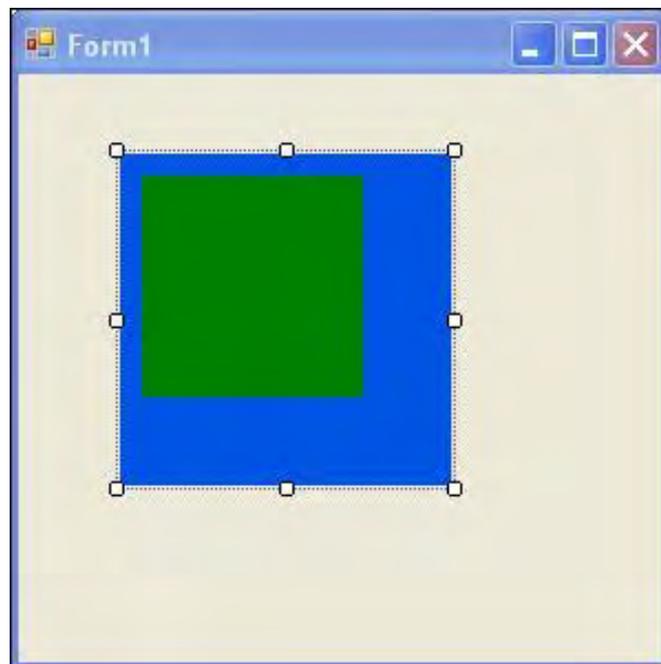
Figure 4. Control with Blue Background.

So what happened? Well, the background became blue. Very well. How do we change the green? If you change the ForeColor property, nothing seems to happen. If you look at the other properties, none of them offers a way to change the color.

The problem is that the color is defined *within* the User Control, not by the user of the control. To change this, we'll

need to create a mechanism for the control to receive and report the color of the box. The way that controls do this is with a property.

Visual Basic classes support properties, and this procedure works very well in User Controls. Let's go add one for the user control to allow users to change the box color. Since the box represents a game board piece, let's call it PieceColor.

Back in the User Control code window, let's add this to a blank line below the other Sub that's there. One simple way to do this is to right-click and select Insert Snippet. This will present a new menu. Double-click Code Patterns (which includes Properties), then "Properties, Procedures, Events" and the "Define a Property". This will leave you with an entire property structure, color-coded and waiting for customization as seen in Figure 5.

```
End Sub

Private newPropertyValue As String
Public Property NewProperty() As String
    Get
        Return newPropertyValue
    End Get
    Set(ByVal value As String)
        newPropertyValue = value
    End Set
End Property

End Class
```
Figure 5. Property Code Snippet.

The first highlighted box lets you enter a name. Enter "m_PieceColor" and press the tab key. In the next box enter "Color" then tab and in for property name enter "PieceColor". You now have a property ready to receive a user-defined color and show the current selection.

Notice how the first line creates a local variable for use by the property:

```
Private m_PieceColor As Color
```

The next line is similar to a Function and simply defined the name and data type for the property. After that you see two blocks called Get and Set. The Get block is used by VB to get the current value of the property and return it to whatever is asking (such as the Property window in the design area or another part of the VB code). Conversely, the Set block will receive a value and set it for later use. Again, this can be done by changing the value in the Property window or through VB code. Notice how Get simply returns a value (although it can also do other things before that), but the Set must receive the value that is going to be stored so a parameter is defined on the Set line just like any other subroutine.

Since we want to apply this color to the box that we are drawing in the Paint event, we should do two things. First, give the variable an initial value, such as Green. Before doing that, right-click on a green box and select "Hide Snippet Highlighting" then update the line to this:

```
Private m_PieceColor As Color=Color.Green
```

Now on to the Paint event procedure. At the point where we previously put Green, replace it with the variable above:

```
e.Graphics.FillRectangle(New SolidBrush(m_PieceColor), 10, 10, 100, 100)
```

Build this and return to the Form. If your build is successful, the changes should be ready to go. If you're using VB 2008, you'll see the PieceColor property show up in the property list for the control. However, in 2010 it seems that Microsoft updated things to better support multiple versions. As such you'll need to add a new control to see the property as seen in Figure 6.

Figure 6. The New PieceColor Property.

Now when you change the property to Blue, the property gets updated. "Um, Rob? Mine didn't turn blue!" Hmmm... yes. I merely said that the property was updated, not the screen. The problem is that Paint event only occurs when the window requires it. Changing the property doesn't require a screen update (according to Windows, anyway). However, if part of the form is obscured by another window, then the obstruction is removed; you see the blue show up as in Figure 7, where I opened a window that covered only the bottom right corner of the control. Upon minimizing that window, the blue showed up.
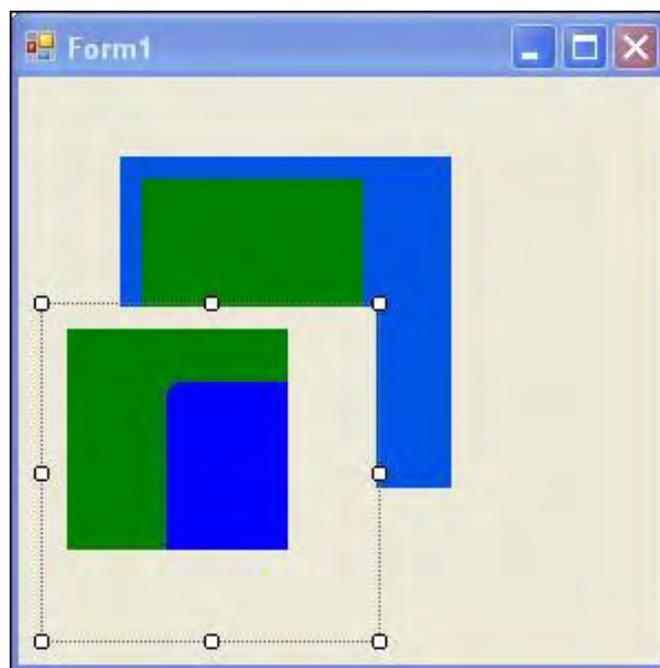

Figure 7. Partly-Blue Box.

To solve this problem, we need to force the Paint event procedure to run. You might think that all you have to do is call the procedure when someone Sets the color. In concept that's right. In practice, it doesn't really work. The problem is that you don't have the proper values to pass to the parameters (the "sender" and "e" parameters). Instead, we have to use a different mechanism to force Windows to run the Paint event. As it turns out, the way to do this is to refresh the control.

In your property's Set block, after storing the new value, force a refresh:

```
Set(ByVal value As Color)
m_PieceColor = value
Me.Refresh()
End Set
```

Rebuild and try again. Note that if you don't Build, the changes are not updated into the toolbox, so if it appears that your changes are not appearing, you may have missed this step or the project may not have successfully been built. Failed builds usually show up in an error list window below the code. If you don't see that window, try menu View/ Error List.

As before, VB 2010 requires a new control in order to see the changes you made. Note that there may be a setting to override this, since while you're developing you will need to do this back-and-forth a lot. However, since this is a new feature in a new version, I haven't found a way to force it to act like previous versions. If someone spots it, let me know and I'll pass it along.

Meanwhile, one more thing that would be really nice is to make the background of the User Control transparent. If you look at the BackColor property and select the Web tab, you see an option for Transparent. Unfortunately, this does not work as expected in Windows Forms. To handle Transparent backgrounds here, it seems you have to take a very different approach and basically create a separate form. There are some other ways to handle that, but none are really pleasant. Again, if someone knows an elegant way to get transparent backgrounds on User Controls, please let me know.

Anyway, to wrap things up, here's some code to add a "block dog" from the Dogopoly board game:

```
Private Sub usrPiece_Paint(ByVal sender As System.Object, _
ByVal e As System.Windows.Forms.PaintEventArgs) _
Handles MyBase.Paint
Dim objBrush As SolidBrush = New SolidBrush(m_PieceColor)
With e.Graphics
.FillRectangle(objBrush, 30, 10, 20, 40) ' Head and neck
.FillRectangle(objBrush, 10, 20, 20, 20) ' Nose
.FillRectangle(objBrush, 30, 50, 90, 40) ' Body
.FillRectangle(objBrush, 30, 90, 20, 20) ' Front leg
.FillRectangle(objBrush, 20, 110, 30, 20) ' Front foot
.FillRectangle(objBrush, 100, 90, 20, 20) ' Back leg
.FillRectangle(objBrush, 90, 110, 30, 20) ' Back foot
.FillRectangle(objBrush, 120, 30, 10, 30) ' Tail 1
.FillRectangle(objBrush, 130, 10, 10, 30) ' Tail 2
End With
End Sub
```

Other than moving the SolidBrush usage into a separate variable and throwing the FillRectangle methods into a

"With" block for more readability, there's not really anything special here.

The end result after changing the color to Purple can be seen in Figure 8.
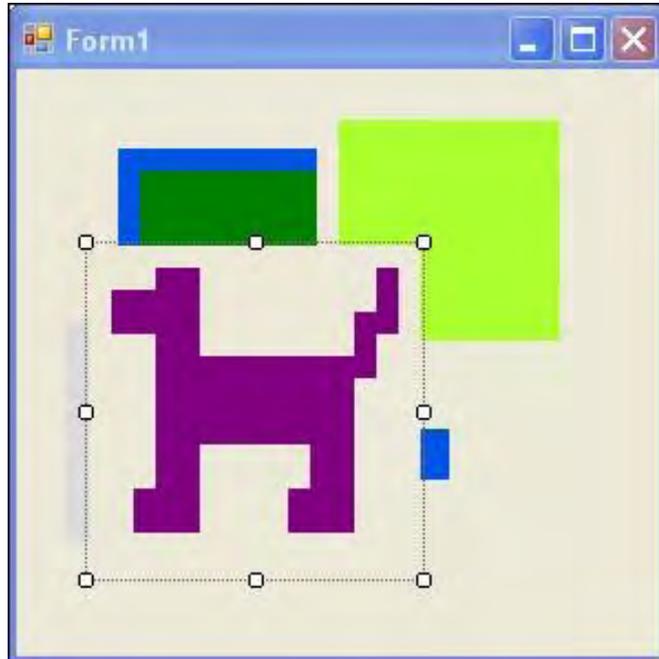
Figure 8. Purple Dogopoly Dog.

In coming weeks, I'll start wrapping up VB then. I'll focus these columns on computer solutions. Meanwhile, support the cause and get a great game!

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*.

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

Worldwide News & Product Reviews

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

Lost Cell Phones in Cabs—A taxi survey reveals staggering numbers of cell phones and other electronic devices left in cabs. Protect that valuable data! Saving Face(book)—Worms are now infiltrating social networks. HP 2709m 27-Inch LCD Monitor—A review of the LCD monitor.

Lost Cell Phones in Cabs

According to a survey carried out every other year in New York City amongst Yellow licensed taxicabs, over 30,000 mobile phones are left in Big Apple taxis every six months. And the drivers warn that the next few weeks are the worst for leaving mobile devices such as phones, laptops and USB sticks in the back of their cabs as busy shoppers jump in and out of their cabs with their hands full of Thanksgiving and holiday shopping.

Credant Technologies notes:

The study also highlights the fact that if you travel in taxis or other forms of public transport, then you need to encrypt your data so no one can see it. At the very least, you should password protect your data since, as various high-profile cases have shown in the last few years, it could easily fall into the wrong hands.

This warning message to the business community—as well as individuals—to be vigilant when traveling with their mobile devices has never been more relevant, especially as more people than ever before are using the latest range of "must-have" mobile smartphones to store sensitive personal and business information.

Many of these devices now have the capacity to store as much as 4,000 pictures, 20,000 Word documents, 200,000 e-mails or an amazing 500,000 contact files, making them an obvious target for identity-theft criminals and hackers who can—and do—steal this information and then assume the identity of the user both in their personal and business life.

Sean Glynn, vice president with Credant Technologies, said: "It's clear that none of us are infallible, especially at this busy time of year, when it's all too easy to forget things when you're traveling. Back in the good old days when a window was something you looked out of, and a Mac was something you wore in the rain, it used to be small items like umbrellas and briefcases stuffed full of boring office papers. Now it's laptops, smartphones and thumb drives, all chock-full of valuable information to an identity thief," he added. "This time of year would appear to be the worst time of year for leaving things at the back of cabs—so our advice is to be more cautious than ever and, as the voice on the train always tells us: check you have all your belongings with you before you leave."

"And if you don't want to worry about the consequences of losing your mobile—with all those embarrassing text messages and pictures—or laptop with valuable personal and company information," he continued, "then protect that data using encryption and/or passwords. The technology is available, so why not use it?"

Over the last few years of the taxi survey, cabbies have recalled—with some amusement—a variety of strange and unusual objects in the back of their cabs at the end of the shift.

These have included a wedge of money that came to $5,000—and which found its way back to its rightful and presumably very happy owner, 12 dead pheasants, and a casket of funeral ashes, to mention but a few. And that is before we get to the cabbies that found items such as false teeth, artificial limbs, pork chops and a bra in the back of their taxi!

Credant passes on the following tips to ensure, if you do lose your laptop, mobile phone, smartphone or other mobile device, you don't lose your entire personal and/or corporate identity along with it.

• Back-up your mobile device regularly.

•If you have important and sensitive company data on your mobile device, get your IT department to encrypt it—they can do this remotely—meaning only you can read it!

• Use a strong password on all your devices which combine numbers, letters and symbols.

• Put your name and number with details of a reward on your device if found and returned.

• Use your device's security features—such as the Personal Identification Number (PIN) number which only you know to stop others getting access to it!

• Use your head—don't keep data on your laptop or mobile phone that others could use against you—such as revealing pictures.

• Don't save old SMS or e-mails on your handset that you don't need any more—you'd be surprised how many people keep their default password e-mails on their mobiles and other hugely sensitive information like PINs, bank account details or passwords!

• Check your message folders such as drafts, saved and outbox as there will be lots of information you just don't need to keep there. Look at your call list—delete any numbers you no longer need.

• Physically mark your handset with personal information. This will greatly reduce the second-hand value of the mobile if it is stolen.

• Record your IMEI: Every mobile phone has a unique 15-digit electronic serial number that can be referenced by dialing *#06#.

• Notify your network carrier *and* the police immediately in the event of loss or theft. Tell them your IMEI number and any other identifying features on your phone. (If the device contains company data—e-mails, customer or employee records, documents, etc.—inform your employer also. You/they may be required to inform the appropriate authorities for a potential data breach.)

• Finally, don't leave your device open to access (e.g. leaving Bluetooth or Wi-Fi on, visible and unsecured).

Saving Face(book)

News & Experts Syndicate's Tony Panaccio writes in this week about the latest social networking threats:

Facebook isn't just a place to hook up with ex-girlfriends from high school anymore. Companies large and small are now using it for networking and legitimate business tasks. Unfortunately, it can also be a place to hook your company's network up with some nasty viruses.

The latest one, a worm called Koobface, has hit all the social networks, including Facebook, MySpace, hi5, Bebo and Twitter, and can riddle your network with malware, spyware and can steal sensitive data right from your workstations' hard drives. Like past generations of computer bugs, Koobface wants to not only infect your computer, but then use you as a jumping off point to infect others. But unlike past viruses, Koobface and similar new malware programs are leveraging your company's social network account to reach out and infect your online friends and business associates.

"Somewhere in the world there are some guys sitting around and dreaming up things that will make you click on a link," said Chip Reaves, global director of Computer Troubleshooters, the largest international network of outsourced

IT providers that offers onsite computer services to small businesses.

"Koobface's most effective way to spread is to send links to your friends with text like 'I can't believe it's you in this video—were you sober? LOL!' Koobface combines state-of-the-art software which can infect your computer in multiple ways with these creative lures designed to make you want to click on the infected links. It's pretty insidious."

According to an analysis by malware research firm Trend Micro, Koobface is composed of as many as 26 separate functional pieces, each of which is designed to use you and your computer in different malicious ways.

Reaves suggests these tips to protect your office network:

Antivirus, anti-spyware

First and foremost every computer user on the Internet needs professional, up-to-date protection software. This should at a minimum include both antivirus and anti-spyware support (some free packages do not include anti-spyware), and ideally should also include a link-scanner component to minimize the risk of visiting Web sites which are known to be infected.

Claim your name, check your fame

If you are using social networking sites such as Twitter or Facebook, do periodic searches for yourself. This is especially helpful with small businesses to see what people are saying about you, but if you're infected, you may find updates from yourself—which you never sent.

Use a third-party Twitter application or your phone

Third-party applications such as Tweekdeck or Twhirl can help block certain exploits that would otherwise infect you from the Twitter Web site. They can also help by showing where a "shortened" URL will take you before you click. Using your cell phone for updates is also safer than using the Twitter or Facebook Web sites directly.

Secure your browser

Make sure your Web browser is the most up-to-date version, since many vulnerabilities in older browsers (even ones from just a few months ago) are often used by malware creators to infect your computer. Chrome and Firefox are generally considered safer than Internet Explorer, but any browser with its security setting set to High and with the most recent updates should be fine. For the highest level of security, consider using Firefox plus Noscript.net to block most potential points of vulnerability.

Ask to include social-media protection in your IT management plan

Many small businesses and home users today are outsourcing all their computer management to a local computer service provider through what's called a Managed Services plan. Ask your local Computer Troubleshooter or other service provider to include social media protection in your computer management plan.

"If your IT department or outsourced support doesn't take all those elements into account, it's not a matter of if you'll experience downtime—it's a matter of when and for how long," Reaves said. "It's not right to be held hostage by your computer troubles or by your IT support by proxy. Uptime is not a luxury—it's a necessity for any home or business. Make certain that your IT company guarantees it. If they don't, look for another firm."

HP 2709m 27-Inch LCD Monitor

It's amazing the size and quality of monitor you can buy nowadays for a few hundred bucks. I remember just a few years ago reviewing relatively puny 17-inch LCDs (by today's standards) that cost well over $1,500.

We recently got our hands on an HP 2709m 27-Inch diagonal HD monitor (*www.hp.com*) (about $350).

The 2709m features 1920 x 1080 HD native resolution, a 5 ms on/off response time, and 30,000 dynamic contrast ratio. Something HP calls BrightView technology helps create sharper images and reduce glare.

The glossy finish makes the monitor a bit shiny for my taste, but it also seems to help sharpen colors. I've preferred matte finishes in the past, but if it helps make the picture better, it's worth suffering with a little bit of reflection.

The 5 ms response time, while still not as good older CRT (picture tube) technology, is almost there. Watch sports, action movies or play games without blurring or ghosting.

I like the 2709m's slim profile that allows a keyboard that can fit snugly against its base—a real space saver on a crowded deck. It also has built-in speakers that might actually be good enough for day-to-day use, especially if you couple them with a subwoofer to pump out the lows. The tilt-and-swivel base works smoothly.

The 2709m also has a very wide viewing angle so many people can watch it at once. Using Quick View mode you can also optimize the display right from the monitor for movies, photos, or games.

Connect using the HDMI, DVI-D, and/or and VGA ports.

One little feature I really like is that you can turn off the front panel power LED so there's no irritating light shining at you in a dark room. There's also a built-in Ambient Light Sensor that automatically adjusts the brightness of the monitor depending on how dark or light it is in the room. Very cool for when someone walks in and turns on or off a light.

The HP 2709m includes a one-year warranty. I wish it were longer, especially considering how many stories I hear (including a couple of my own) about LCD panels from many manufacturers frying after little more than that time. You might want to consider an extended warranty for this purchase.

Very nice monitor. Highly recommended.

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*.

ComputorQuick Reviews: A Free Video File Conversion Program--for Now

"Computer Product Opinions from ComputorEdge Readers and Staff" by ComputorEdge Staff

Fast Video Converter PRO is being offered as a free trial. Also, a call for contributions on next week's topic, what to look for when buying a computer.

Get Fast Video Converter PRO Free!

If something is free, it attracts my attention. I got word that IObit was giving away its video conversion program, Fast Video Converter PRO (*www.dvdfast.net/gift/thanksgiving.php*), until November 30. I gave it a try and was pleasantly surprised. I've had trouble with a number of the video conversion programs, but this software was extremely intuitive (see Figure 1). It easily did everything that I wanted it to do. While it converts files from the QuickTime MOV format, it does not convert to it. (This is common with many of the video conversion programs.) What made it nice was the labeling of the formats with the devices with which they work, such as, iPod, iPhone, Zune, etc.

Figure 1. The layout of the Fast Video Converter PRO screen was simple and easy to use.

In order to get the registration key, you are asked to "Enter the names of persons who you want to say 'Thank You',..." This seems a little odd because it's not asking for an e-mail address, just a name—any name. In any case, download the trial version, enter the key supplied, and you're off and running.

With so many free file conversion programs on the market, I don't know if people will start paying for the product after November. Perhaps IObit wants to draw more attention to their other product, Fast DVD Ripper Pro, although there is also a ton of products named "DVD Ripper" on the market.

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Next Week: Buying Computers.

*Next week, what to look for in a computer. What's your most important criteria in a new computer? Your comments will appear right here in ComputorQuick Reviews. Send your thoughts to ComputorQuick Things I Want This Year (*ceeditor@computoredge.com*).*

We Want Your Opinions About Hardware, Software and Web Sites

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

We have decided to include this feature in every issue as a reminder that this is your magazine—even if we don't have any new reader reviews. If you would like to see the type of reviews that we have run in the past, then check out

ComputorQuick Reviews (*webserver.computoredge.com/sitemap.mvc?
feature=Columns&columnedcode=persrev&column=ComputorQuick%20Reviews*) in the *ComputorEdge* Site Map.
You will find that they are quite varied. We would like to see more. Consider this column a gentle prod saying that
we would like to hear from you.

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

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*The purpose of this column is to give our readers an opportunity to express their opinions about products and
services that they have found particularly useful. If you have had experience with hardware, software or a Web site
that made you say, "This is really great! I want to tell everyone about it," then this is a good place to do it.*

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.

Spam of the Week

"The latest in annoying and dangerous e-mail currently making the rounds." by ComputorEdge Staff

The devastating Conficker infection from last year is being invoked in a new spam e-mail. Also, the "payment request from [company name here] spam is making the rounds.

The Ironic "Conficker.B Infection Alert" Spam

With an ironic twist, the devastating Conficker infection from last year is being invoked in a new spam entitled "Conficker.B Infection Alert" supposedly from Microsoft Support. The e-mail appears to offer a free software scan with an attached file (see Figure 1).

Regards,
Microsoft Windows Agent #2 (Hollis)
Microsoft Windows Computer Safety Division
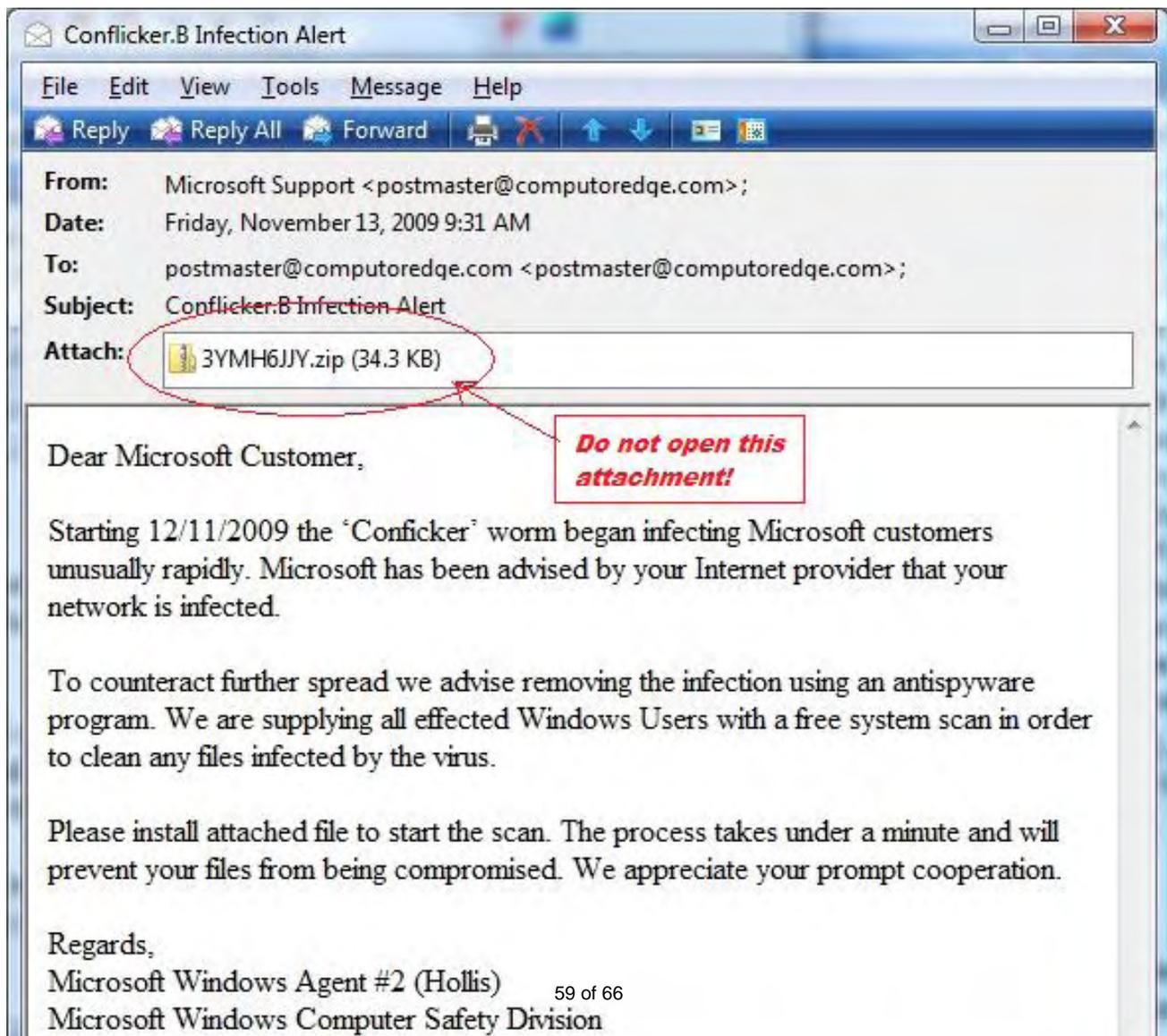
Figure 1. The "Conficker.B Infection Alert" phishing scheme.

The spammers are using last year's scare to do a little more phishing. If you get one, just delete it. Microsoft does not use e-mail to send software or updates. The attached zip file is a well-known Trojan horse.
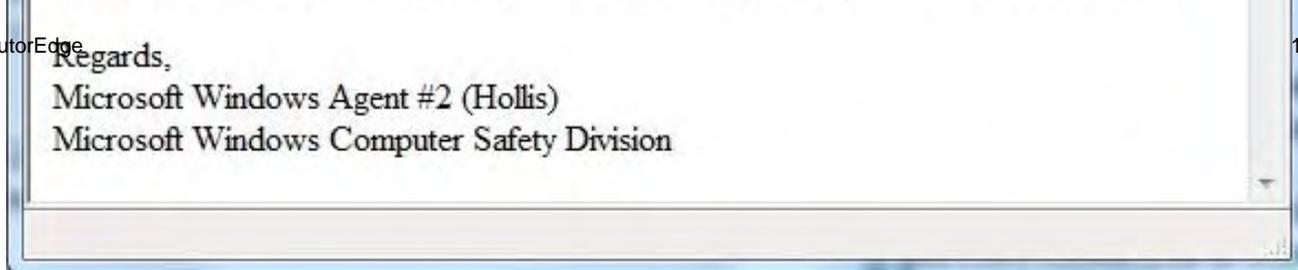
The "payment request from [company name here]" Spam

Much more prolific this week was the "payment request from [company name here]*" spam from "Customer Support." This one tries to hook you by scaring you into thinking that you're being charged an amount of money by a company that you may know (see Figure 2). Multiple e-mails using various company names are generated in the off chance that you may think that it's someone with whom you actually do business.*

From	To	Subject	Received
Customer Support	postmast...	payment request from "eBay"	11/18/2009 11:43 AM
Customer Support	man@co...	payment request from "AT&T"	11/18/2009 10:25 AM
Customer Support	buttsjose...	payment request from "PACCAR"	11/18/2009 7:15 AM
Customer Support	daemon@...	payment request from "Cisco Systems, Inc."	11/17/2009 7:09 PM
Customer Support	postmast...	payment request from "Snap-on Tools"	11/17/2009 5:10 PM
Customer Support	prod@co...	payment request from "Hallmark Cards"	11/17/2009 4:44 PM
Customer Support	mailer-da...	payment request from "New Era Tickets"	11/17/2009 3:54 PM
Customer Support	postmast...	payment request from "Aleris International"	11/17/2009 3:07 PM
Customer Support	postmast...	payment request from "Mattel"	11/17/2009 12:12 PM
Customer Support	buttsjose...	payment request from "Lockheed Martin"	11/17/2009 9:45 AM
Customer Support	suggestio...	payment request from "J. C. Penny"	11/17/2009 10:10 AM
Customer Support	postmast...	payment request from "Broadcom"	11/17/2009 8:57 AM
Customer Support	postmast...	payment request from "JN-International Me...	11/17/2009 8:54 AM
Customer Support	gret...	payment request from "Bosch Brewing Com...	11/17/2009 7:30 AM

One of these names may tempt you to download a file. Don't! It's a trick.

Figure 2. A few of the various companies that are used to fake the charges.

*The spam uses random amounts of money, but the text is the same per Figure 3. The attached file, "module.zip," is identified as the Mal/EncPk-LP Trojan horse (*www.sophos.com/security/analyses/viruses-and-spyware/malencpklp.html*).*
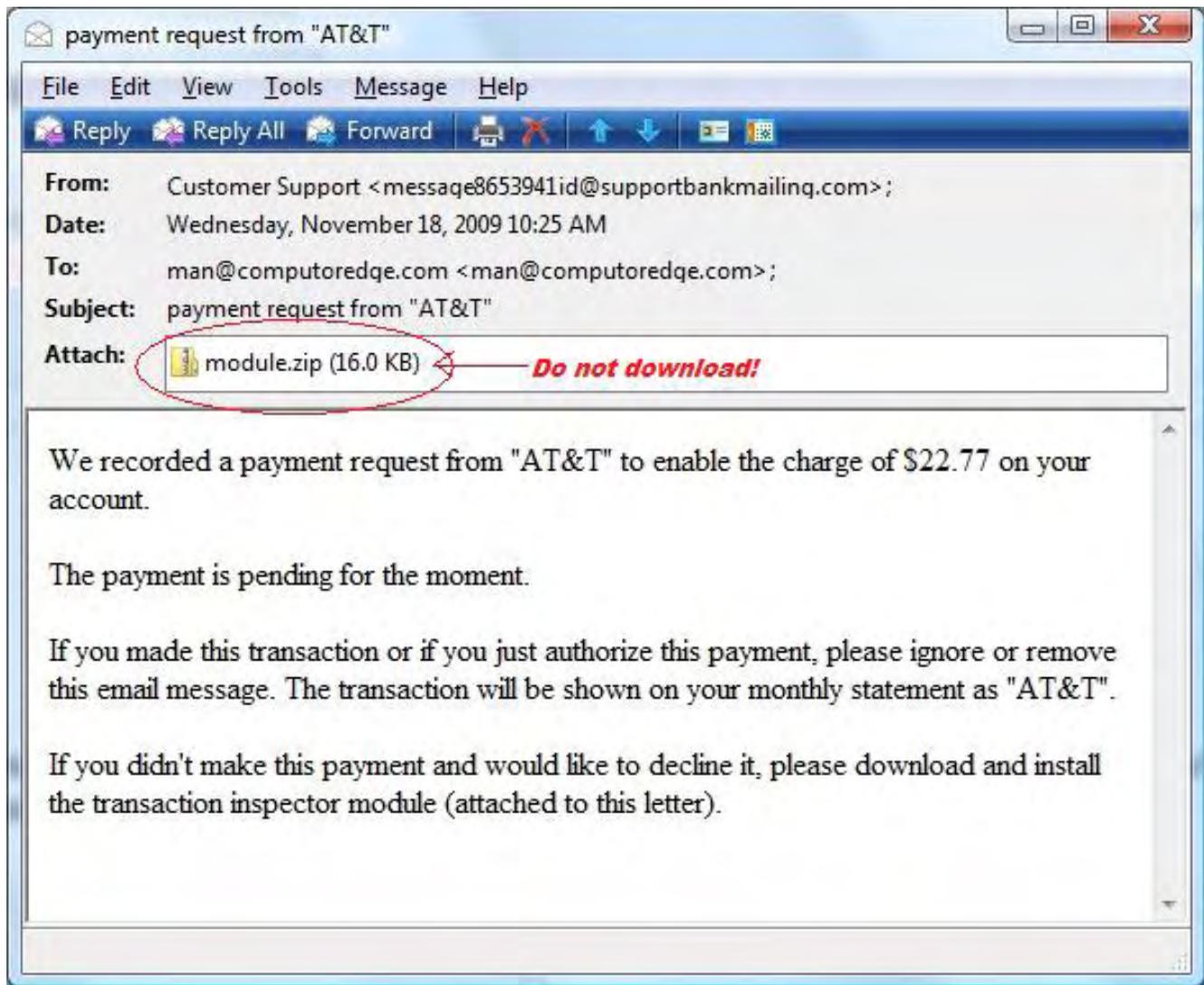
Figure 3. The "payment request from AT&T" spam.

If you are actually concerned about the company, then you should go directly to your account (if you have one) with the company. No legitimate company will send you this type of e-mail asking you to download an attachment. However, many companies do send reminder e-mails which, for convenience, do include links to their Web site. To be on the safe side, you should for go the links and only the access their Web site by loading your browser and navigating directly to the proper address. Keep it in your Favorites (or Bookmarks) list.

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.

EdgeWord: Shipping and Taxes
"Online Shopping Musings" by Jack Dunning

For certain types of shopping, the Internet is the only way to go, especially when factoring in shipping costs and sales tax.

For certain types of shopping the Internet is the only way to go. Traditionally when planning to pick up something for those important people in our life, we would drive to the nearest shopping center and start shopping. The advantage of local shopping is viewing, touching and testing the products of interest. If we find what we want, we can immediately take it home. If it's a present we may wrap it up and deliver it for the occasion—unless the recipient lives out of town.

In this transient world, it's common for the people we care about to live in a number of different geographic locations. If we do local shopping, then packaging the goods and a trip to the post office become part of the holiday ritual. The cost of mailing (plus sales tax if you live is a cash poor state such as California) adds expense to gift giving. The Internet helps to resolve some of these issues.

The Cost of Shipping

Shopping on the Web has become so competitive that one of the primary ways companies have turned a little extra profit is by charging shipping and handling. You may do a search of the Web for the lowest price on a particular product only to find that the price increases dramatically once you're in the checkout process. Many companies will show a low price on their Web site, then add a little extra to the S&H to make up a little of the discount. The company that appears to offer the lowest price may be a great deal more expensive once the shipping costs are compared. However, shoppers are getting smarter and checking those costs before they click the "Buy" button. If it's available, free shipping will usually give you a better deal than a company with the lowest "advertised" price.

Amazon has led the way in offering free shipping. In most cases, if you're willing to wait a little longer (and your order is over $25), then you can get free shipping. The difference is significant. It may be the economic times, but I'm seeing more and more Web retailers offering free shipping. If you need to send a gift to someone who lives out of town, this can be a great savings.

Sales (and Use) Tax

In you live in California or another state with a high sales tax, then you may be tempted to buy everything online from out-of-state companies—no sales tax. At least the out-of-state company won't charge you sales tax. However, if your state has a sales tax, you may still owe it.

For example, in California the levy on sales is called the Sale and Use Tax. That means that if you buy something in another state and bring it into California for use*, you still owe the tax and are required to pay it. What a bummer! This is true even if you buy the goods online. If you're buying as an individual, it's not likely that the state will go after you—unless they find out you're making huge purchases without paying the sales tax. But if you're a business making those purchases, your own records may hang you in a future audit. California now asks on the state income tax returns if you bought anything outside of the state for use in the state.*

I'm not suggesting that Californians are going to rush forward and start paying Sales and Use Tax on those goods that they bought out of state. I'm merely pointing out that the apparent loophole for avoiding the sales tax, technically, doesn't exist at all. The odds are that the state won't go after most people who don't pay the use tax, but you can bet that they would love to get their hands on the money.

On the upside, if you're ordering out-of-state for delivery to yet another state, and you will not be using the product within California, you do not owe the tax. This is a major advantage to online buying and shipping directly to the gift

recipient. If you buy from a local store in California, you will both pay the sales tax, then get hit with your own personal shipping and handling costs.

Maybe the easiest thing to do would be to move to a state with no sales tax at all. Then the primary issue in whether to buy locally or on the Web would be product price, availability and how to deal with the shipping costs.

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

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Editor's Letters: Tips and Thoughts from Readers

"Computer and Internet tips, plus comments on the articles and columns." by ComputorEdge Staff

"Security and Web-Based Programs," "It Was the Power Supply," "Extending the Life of a Problematic HDD," "Ergonomic Keyboard/ Mouse Combo," "XP Pro vs. Windows 7 64-Bit," "Do Computers Wear Out?"

Security and Web-Based Programs

[Regarding Dawn Clement's October 30 article, "From the Cloud: Google Apps Takes on Microsoft Office":]

My biggest fear is security.

My guess is, whatever I write via a Web-based program will always be out there and someday, someone will read it.

I am a consultant for various electric utilities within the western states, and most of the information I write is confidential. So with that in mind, should I be using a Web-based program?

I am a big believer in cloud computing. but security is a must.

Thanks for your time,

-Jim

It Was the Power Supply

[Regarding the October 30 Digital Dave column:]

I just read your response to my question about the power supply button, and wanted to say thank you for your quick reply in the column today. As it turned out, the computer power button did completely stop working. I took it to a computer repair shop; they said the power supply was dead and they put in a new power supply. Now it works immediately, first time, every time. However, your answer sounds like a good workaround, so I have printed it out, and plan to keep it handy in case I need it in the future.

It sounds like it would be a good thing to do even now, in case of some type of power failure in the future. I'm always nervous about changing things on the setup part of the computer, but if I think about it long enough, sometimes I can get the courage to do it. Thanks again. I've learned a lot over the years from reading your column, starting back in the early 1990s.

-Annie

[Oh yeah, it could also be the power supply that's going. —DD]

Extending the Life of a Problematic HDD

[Regarding the October 23 EdgeWord: What Reformatting Really Means column:]

I wonder if we wouldn't often be better off just to buy new HDDs and destroy the old. Assuming that your time is worth something, you can quickly go into the loss column. I am facing this dilemma right now.

-Cicero Walker, Colorado Springs, CO

Ergonomic Keyboard/Mouse Combo

[Regarding Michael J. Ross' November 6 article, "Ergonomic Keyboard Alternatives":]

In my own case, it was primarily the mouse that led to a severe case of tendinitis in my elbow. While surgery was an available option, I elected to try a keyboard with a built in laptop-style mouse pad. The result was a great success. Pain and inflammation disappeared.

-Stewart Levin, Centennial, CO

XP Pro vs. Windows 7 64-Bit

[Regarding the November 6 Windows Tips and Tricks: Windows 7 Versus Windows XP column:]

When XP first came out, I changed over from Me (memory eater) and loved it. I've used it continuously since then with no problems at all with the operating system. When I heard about 7 coming, I decided to build my first computer and to make it ready for 64-bit.

October 22 was the day for me. I purchased 7/64-bit OEM. It installed in 15 minutes with only one minor glitch. Reinstalled and it was fine. Of course I did have to back up all of my old files and get my CDs out from my other software and play the reinstall game. Windows found all of the updated drivers for me online, and I must say that I am very happy that I did make the switch. My new PC runs really fast. My advice to all—go for it. When it is done, you will be very pleased.

A happy senior citizen!

-John

Do Computers Wear Out?

[Regarding the October 30 Wally Wang's Apple Farm column:]

From this week's ComputorEdge*, your column entitled "Online Apps":*

"If a four-year-old PC can still run effectively with an eight-year-old operating system, why bother getting a new computer at all? Just as car manufacturers hope you'll keep replacing your car every few years, so do computer companies hope you'll keep buying new computers every few years for no real good reason.

"Logically, the only real reason to upgrade to a new computer is when your old one dies and it costs too much to repair it. Otherwise, computers are mostly reliable and should last at least four or five years with regular maintenance. If the Air Force can keep 50-year-old B-52 bombers flying, then it's certainly possible to keep five-year-old computers running just as well. If you bought a computer to serve a specific purpose today and your needs don't change five years later, you probably don't need a new computer five years later either."

You realize, of course, that this advice is absolute heresy and makes you unique in the annals of computer columns: From all over the Web will come invitations for you to attend an auto-de-fe.

But it is so refreshing to see someone finally come out and admit in print that the 1950's Detroit marketing scheme for a new auto every year does not need to apply to computers. Thank you for having the courage to say this.

-JL Kottal

While I think that Wally does a tremendous job covering Macs, I can't help but feel that his comparison of the Detroit

auto industry to the computer market is a little bit of a false analogy. First of all, cars, while they may become more reliable, do not get more powerful and faster each year. Unlike computers, there are no new applications developed for autos that may require the latest model. Cars only do one thing, move things from point A to point B. If it wasn't for the fact that mechanical parts rapidly wear out, there would be few practical reasons for buying a new car. As for computers, their power is in their immense flexibility in application—both present and future. Often new computer purchases are driven by new uses that require the latest hardware. Not so for automobiles.

As for Wally's comment "why bother getting a new computer at all?" being heresy in the computer world, just a couple of weeks ago in "Windows Tips and Tricks: Windows 7 Versus Windows XP", Jack Dunning stated, "If your Windows XP computer is doing everything that you want it to do, then you may not want to upgrade to Windows 7." I've often seen these types of comments in ComputorEdge. *I can't say for other online sources, but* ComputorEdge *writers always seem to be trying to give practical, honest advice.*

-David Smith, San Diego, CA

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