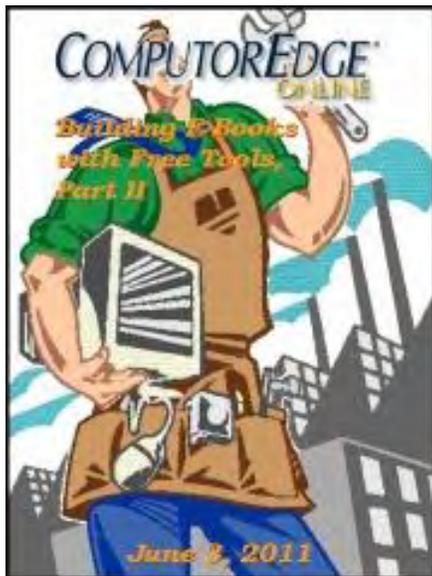


ComputerEdge™ Online — 06/03/11



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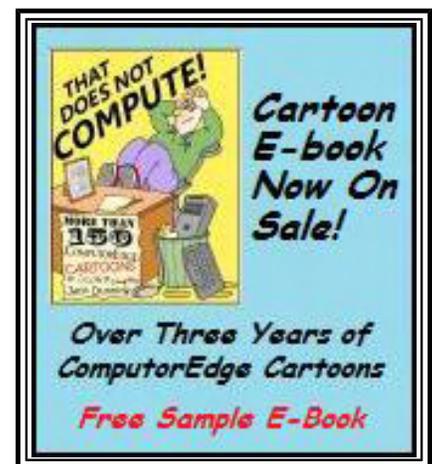
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Switching the Keyboard from English to Spanish . . . and Back Again.

Tony offers short Linux scripts called ENGLISH and SPANISH for quickly changing the keyboard language set.

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Printer Problems and Other Human Errors

The evolution of printers began in 1938. Since then, people have struggled to learn and use them properly, much like any other aspect of technology. Marilyn shares some humorous anecdotes about problems people have encountered while using printers.

DEPARTMENTS:

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

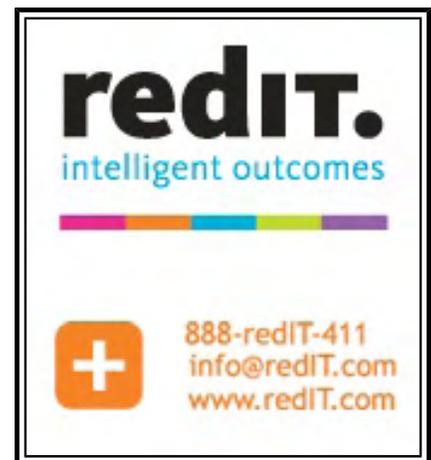
ComputerEdge Staff

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

"E-book Reader Match Up," "Thank You!"



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Send mail to cwebmaster@computoredge.com with questions or comments about this Web site.

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Digital Dave

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

Fake Virus Warnings; Self Reformatting on Update; Viewing Pictures on NY Times.

Dear Digital Dave,

This e-mail is about a problem I encountered last week and I had to include some JPGs to explain. I have included my phone number if you wish to verify I am the sender.

For years I have operated one of my PCs without virus protection for performance reasons. On this PC I don't do e-mail, I don't download anything I am not really sure of, and have never had a problem—for years. Microsoft's Windows Defender was installed and I regularly visit the Microsoft Web site for updates.

About a week after I had visited the Microsoft Update Web site, a pop-up came up:



Figure 1.

Which, I instantly closed.

But it kept up popping up, so I clicked on Clean computer (Microsoft is OK, right?). This came up:

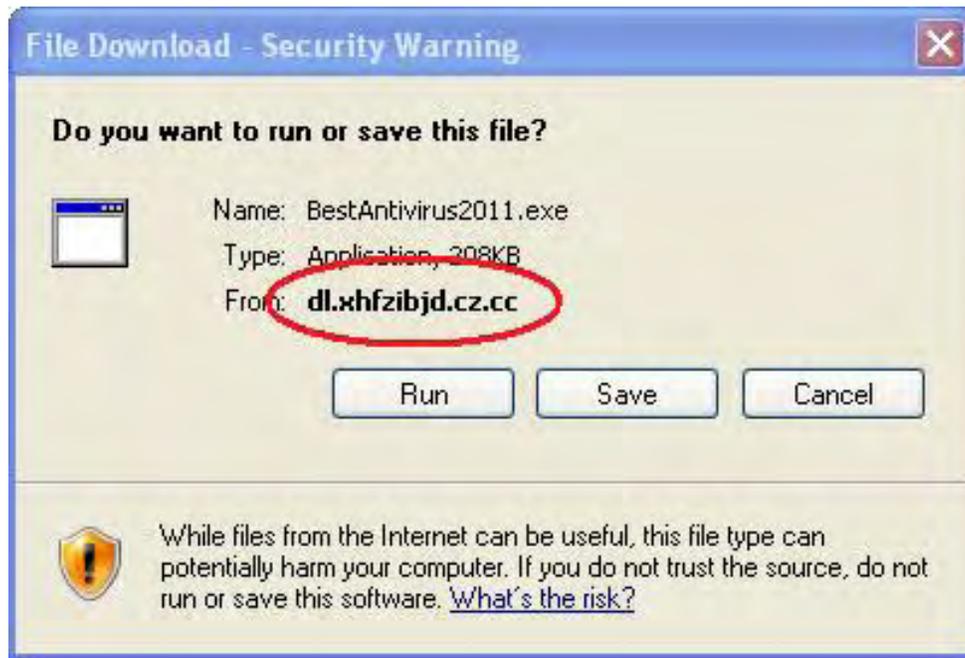


Figure 2.

The sequence of what happened next is a little fuzzy, but I remember being notified I had 408 virus infections and it would cost \$79 to remove them.

I went to the Control Panel and removed the Microsoft Security Essentials (despite the warnings). Then, after restart it came back!

Next, I went to System Restore and that seemed to fix it. But it is still there and cannot be removed. Note that the above took many hours over the better part of two days, May 15-16.

A week later (May 23) I went to Microsoft's security site, and ran their Safety Scanner download program (good for 10 days?) with the following result:

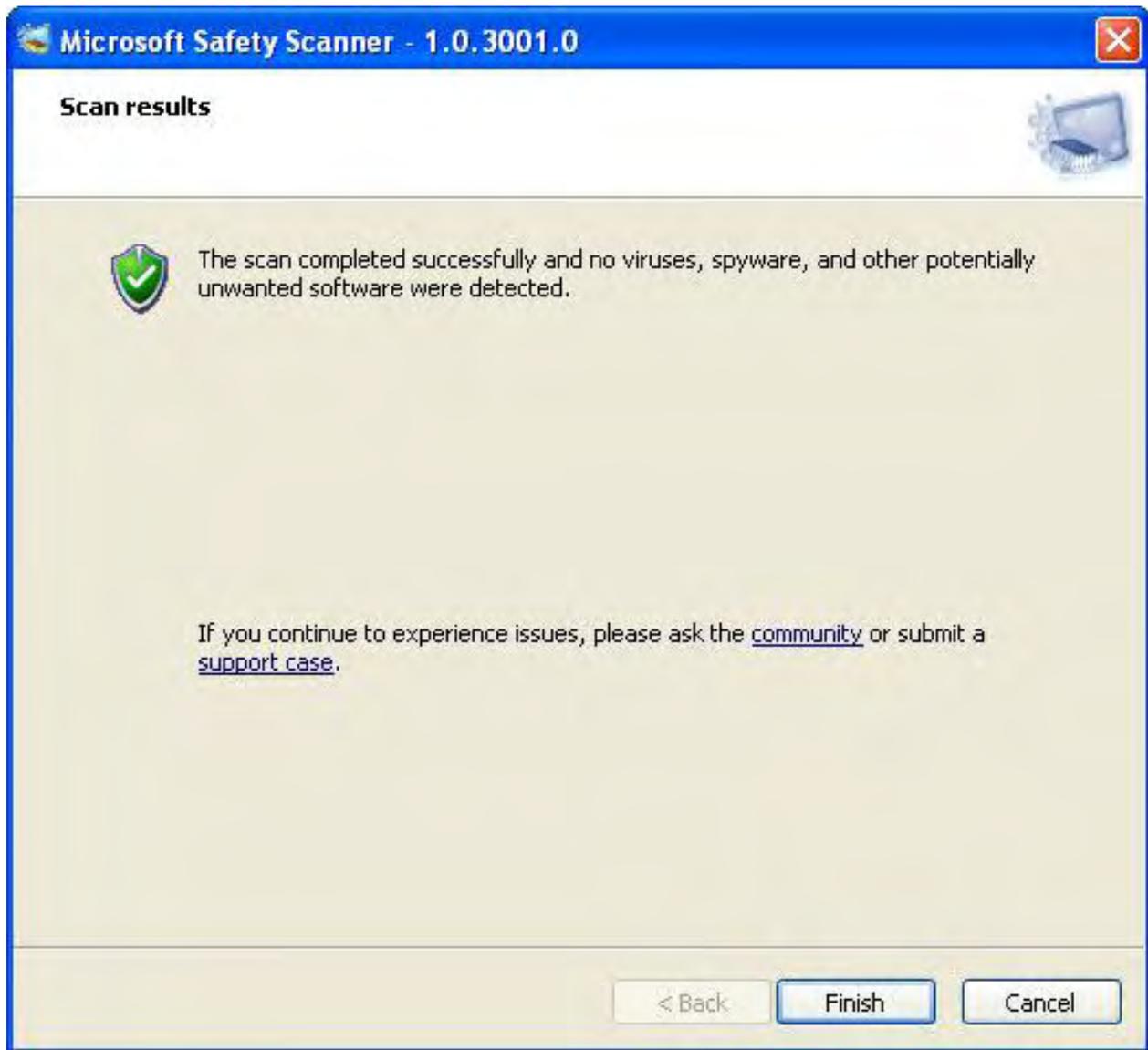


Figure 3.

Then, last night I turned on another PC for some unrelated tasks. After finishing, I started the START button shut down. On the screen were the three choices of:

Standby—Turn Off—Restart

The Turn Off was new, it had changed to include a message about installing updates on next power up, which I declined.

All of these PCs are using XP with SP3.

Do you know how I can remove Microsoft Essentials?

Bruce Osterberg

Dear Bruce,

These types of scams are designed to confuse you and apparently this one has done a pretty good job of it. Your problem is not Microsoft Security Essentials, but another program which is

masquerading as the program.

There are various ways that these Trojans can get on your computer, but the primary enticement is the fake warning (Figure 1 in your letter) that you have viruses on your computer. These warnings make it look like it's coming from a Microsoft program, but most likely it is coming from a pop-up associated with a Web site or another virus. (There are other ways that these can get onto your computer, but the most common is a pop-up from a Web site.) The object is to get you to load the fake scanning program onto your computer. If you download the program, it will continue to tell you that you have problems until you spring for the supposed resolution—usually \$60 to \$80 dollars.

The key point at which you got sucked in deeper is shown in Figure 2 from your letter when you gave permission to download. If it were an actual Microsoft program, you would have seen name Microsoft in the circled area in your Figure 2. This is the point at which it would have been better to cancel, then go directly to Microsoft's Web site for the Security Essentials. If there were a problem on your computer, it's quite possible that it would have been detected by Security Essentials.

As it is, my best guess is that you never did install Microsoft Security Essentials, but rather the program listed in Figure 2, BestAntivirus2011.exe, which is no doubt the source of the problem. Due to the nature of this virus, it is difficult for most antivirus programs to detect it. Check out this Web page (<http://www.articlesbase.com/security-articles/how-to-remove-bestantivirus2011exe-bestantivirus2011exe-manual-removal-step-by-step-4529229.html>) for steps to removal, but also do a search on "bestantivirus2011.exe removal microsoft", which will yield more results for removal. Look over the various instructions until you are comfortable with the procedure.

Basically, you will need to start up in Safe Mode and remove the infected entries in the Registry. You do need to take some care, since you are working with the Registry. A misstep could cause you other problems.

For more information on these types of scams, see the Microsoft Web site (www.microsoft.com/security/pc-security/antivirus-rogue.aspx).

Also, install some actual antivirus software. The real version of Microsoft security essentials would be fine. The performance hit is negligible and it should protect you from viruses that you might get through no fault of your own, as well as, those you're tricked into installing.

Digital Dave

Dear Digital Dave,

I have an interesting question. When I shut down Windows XP the other night, Windows did an automatic update. When I started up the computer the next morning it appeared that my hard drive had been reformatted! Everything I had, pictures, favorites, documents, programs, everything was gone! I had also downloaded Constant Guard from Comcast the same day as the update.

XP is no longer supported, so I can't get any info from Microsoft unless I'm willing to pay

anywhere from \$50 up to \$500 (after hours), just for asking a question about what happened!

Does any of this make sense to you?

I did not lose software programs, just the info that was in them. Also, it gave me a new recovery point.

Thanks,

*Dean Lassek
Littleton, CO.*

Dear Dean,

First off, your hard drive did not reformat. If it had, you would have lost everything including all your programs and operating system. A re-installation of Windows would have been required.

As for your problem with losing data on your hard drive, something has certainly done something it shouldn't have. I would certainly suspect some type of virus may have infected you. Hopefully, you have been doing regular backups and will be able to quickly restore your data files. However, there are a few things which I would check before restoring.

- Use the search capability to look for specific files names which you know existed in your data files. It is possible that all of your data folders and files were moved into another folder which is not easy to recognize.
- Check the Recycle Bin for accidental deletion.
- Check your Folder Option => View setting to make sure that your data folders and files haven't been changed to Hidden.
- Maybe you're logged in as a different user. If all of your pictures, etc, are in your profile folder, then they would appear to be gone. You can check in c:/documents and settings/.
- Conversely, do you have more than one drive? Maybe your data drive is no longer mounted?

Any of these could be responsible for losing sight of your data, but if nothing turns up, then you should run through all of your antivirus procedures before restoring backups. If you do have an infection, then you want to get rid of it first. In the worst case scenario (and last resort if nothing else works), you may want to actually reformat the drive and reinstall the operating system. This is the surest way to clean up a drive.

Also, it appears that Constant Guard from Comcast has been related to some unusual problem, although I didn't find yours mentioned. Do a search on "constant guard problems" with Google. You might want to uninstall it to see if that helps.

Digital Dave

Dear Digital Dave,

I cannot view pictures on the NY Times articles. I have asked half a dozen computer experts. They cannot help me resolve the problem. I have a PC running Windows XP SP 3 operating system and use Firefox. I can view videos fine, but not pictures. The text shows up, but no picture. I have downloaded the latest version of Flash, but no change. However, sometimes it keeps asking me if I want to download Flash. Changing to IE doesn't fix the problem. I would appreciate a solution as this has been bugging me for almost a year.

*Tad Tsukid
San Diego*

Dear Tad,

It is unlikely that your problem has anything to do with Flash which is used primarily by animations and videos, not picture graphics (img). The fact that you are always getting Flash download messages probably has to do with the fact that there are always updates coming out for Flash.

The most common reason for the pictures not appearing on a Web site is some type advertisement blocking software. It can be either in the form of a Web browser setting or plug-in, or an installation of anti-spyware software which has an ad blocking feature.

One of the ways that these programs block ads is by preventing the display of graphics—which would include the pictures in the NY Times. Graphics are often used for banner ads and other types of Web advertising.

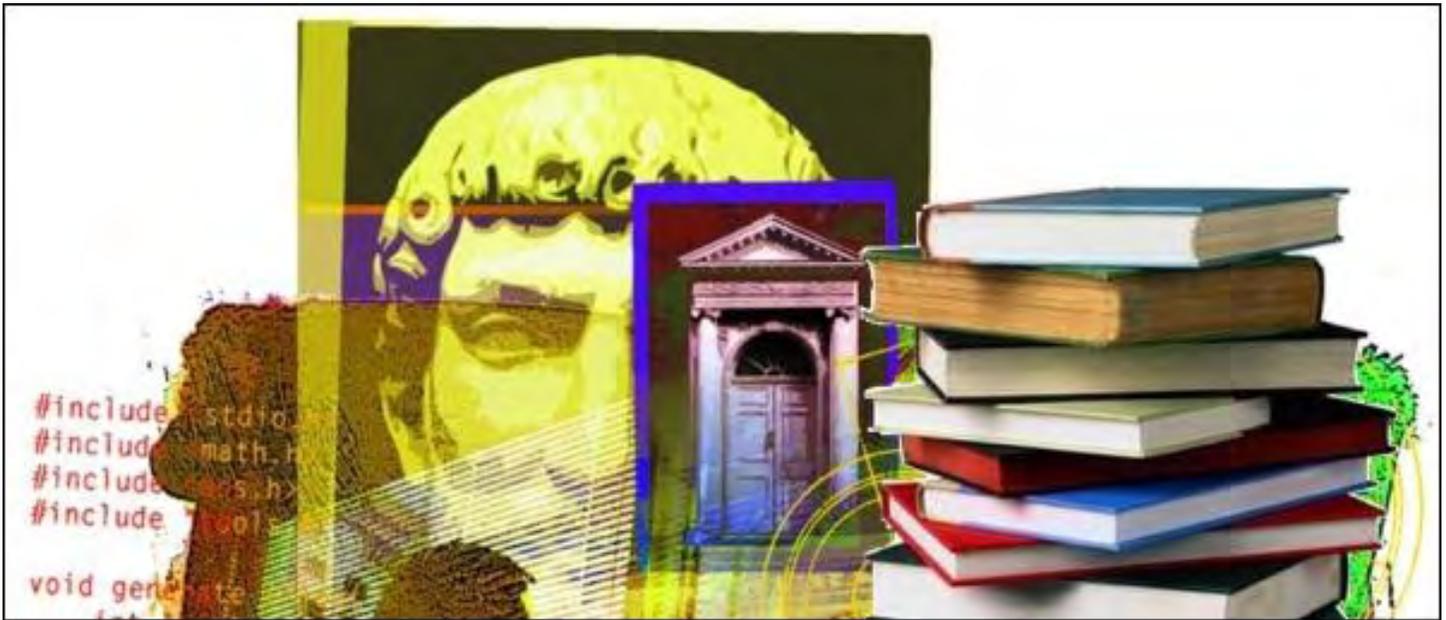
If the images are only getting blocked on the NY Times site, then I would guess that somehow that site has become blacklisted in one of your programs. If images are blocked on all Web sites you visit, then it is probably an overall setting.

My guess is that you loaded on some software about a year ago that has the ad blocking feature. All you should need to do is change the setting in this software to allow the display of images.

If it's not an anti-spyware program, then check the settings of your Web browsers. The browsers also include settings which allow the blocking of images.

Digital Dave

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Quirks in Building E-Books

“The Ins and Outs of E-book formatting.” by Jack Dunning

Jack continues with his e-book project, and through the learning process he tests the free programs and e-book processing methods. From converting ComputerEdge into EPUB format to using Sigil as a e-book editor, Jack shares his findings.

A while back I offered an introduction to e-books, "Building E-Books", in which I highlighted free software for formatting e-books. Since that time I've spent a great deal time with the free software mentioned (Calibre and Sigil) and learned many of the quirks of the programs. If you're planning to publish you own e-books, it's helpful to know what these programs will and won't do. Also in the intervening time, I've written a Web-based program which formats *ComputerEdge* issues for the EPUB standard directly from the Web site. (You can find the links for downloading the e-books of the magazine in the header at the top for the *ComputerEdge* Web page for both EPUB and MOBI (Kindle) formats.)



I'm so happy! He signed his e-book with permanent marker on my iPad screen!

As it turns out, converting directly from the Web is one of the best ways to build an e-book. The EPUB essentially uses HTML (the programming language of the Web), and ultimately will bypass many of the intermediate steps for e-book publication, taking the process from editing directly into EPUB. When I produce the e-book in MOBI format, used by Amazon Kindle, I still need to convert it in Calibre. I have a bug in my current program, but, no doubt, I will soon work it out. I'm now working on a program which will take past

I'm so happy! He signed his e-book with permanent marker on my iPad screen!

ComputerEdge editorial and build e-books for the *ComputerEdge* Books catalog. In particular, I'm looking at

turning Digital Dave, Windows Tips and Tricks, and other series of columns offering tutorials and tips into e-books. They would be handy for reading on a tablet or Kindle.

I've found that it's convenient to have two computers when working on a new project. The work can be done on one computer while the tech manuals and Web references may be read on the other. This eliminates the usual jumping between windows on the same computer. A small computer, tablet or netbook, is ideal for the second computer. Being small and light, the tablet, which doesn't take up much space and can be used as a reference while working on the more capable computer system. (A Kindle or any other e-book reader can also serve this reference purpose.) It will soon be commonplace for businesses to use tablets as handy devices for reading technical libraries going wherever they are needed.

The EPUB Format

While the language of EPUB is virtually the same as that of Web pages, the structure is much more rigidly enforced. An EPUB is actually a zip (compressed) file with a set of folders and files within the EPUB file. With a non-encrypted (no Digital Rights Management) EPUB, you can rename the "epub" extension to "zip" and open the zip folder to view the structure and files. (You can try this with any of the EPUB issues of *ComputerEdge*, which can be downloaded from the link at the top of our Web page. Be sure to change the extension back if you want to later use the file in an e-reader.) If the structure of the set of files is not correct, it is unlikely that the EPUB will function properly.

Coded Web pages can be very forgiving when loaded in Web browsers. If the HTML code is correct, it will generally display properly, even if all of the details which make a Web page technically compliant are not included. EPUBs are more rigid and more difficult to debug if they do not displaying properly. (Google offers a free tool, EpubCheck (code.google.com/p/epubcheck/), which will detect many types of errors.) This format sensitivity makes it highly unlikely that you would attempt to hand code an e-book, although you can do it. The chance of human error and the process for recreating the EPUB between checks would become extremely tedious.

While I'm not going to delve into the detailed structure, you can get a better understanding of the EPUB format through the article, "Build a Digital Book with EPUB (www.ibm.com/developerworks/xml/tutorials/x-epubtut/index.html)," which is available on the IBM Web site. The tutorial takes the reader through the EPUB structure and acts as a guide for building a simple e-book. I used this article to develop the understanding I needed to write the EPUB generator I use for *ComputerEdge*.

EPUB Format Note: One of the key steps in creating the EPUB which the article did not make clear was how to make the final compressed file in Windows. First select both the META-INF folder and the OEBPS folder inclusive, right-click and select Sent To => Compress (zipped) Folder. Name the new zipped folder as appropriate. Next drag the MIME type file (uncompressed) into the new zipped folder. Rename the zip extension to epub. Voila, you have an EPUB e-book.

Calibre Conversion Software

The free Calibre e-book (calibre-ebook.com/) program acts as a personal library for anyone who cares to install it. However, for e-book publishers, the library is not the software's primary strength. The power of Calibre comes in its format conversion features. It is capable of converting to and from all of the major e-book formats—the two most important being EPUB (for almost everyone) and MOBI (for Amazon Kindle).

Calibre is *not* an e-book editor, although you can do limited editing of the metadata included in the e-book. (Metadata is the information about the e-book which is not actually part of the readable sections. This includes title, author, editor, publisher, ISBN book identification number, etc.) There are capabilities to generate a Table of Contents and to do search and replace functions, but I've haven't yet played with these. I either generate the Table of Content within the Web program or use the Sigil EPUB editing program discussed in the next section. Sigil is much more suited to setting up a Table of Contents or doing general editing of EPUB e-books.

The primary use I make of Calibre is to convert the EPUB format to MOBI format for reading with the Kindle. Once there is a good copy of the EPUB file, then Calibre does an excellent job of creating the Amazon compatible format. I've noted that for the same e-book the MOBI format is a slightly larger file than the EPUB format.

With Calibre I've converted technical manuals (www.winbidpro.com/Training.htm) directly from the OpenOffice.org ODT format into EPUB (see Figure 1). It does an excellent job, but I needed to edit the EPUB with Sigil since there were problems with properly breaking chapters and the inclusion of headings in the Table of Contents.

The screenshot shows the GDS Storefront Estimating website. The main header is "GDS Training Solutions". On the left is a blue navigation menu with categories: NEWS, PRODUCTS, SUPPORT, TRAINING, PARTNERS, and VENDOR RELATIONS. The main content area has a blue header "Take Advantage of our Training Options" with two icons: "Training Seminars" (a green chair and desk) and "Training Services" (a red apple on a book). Below this is a section "v15 Training Documents" with "Program Documentation:" containing links for "WinBidPro Getting Started Guide" (PDF file), "Apple iPad eBook" (circled in red), and "Amazon Kindle eBook".

Figure 1. Click the appropriate link to download a sample e-book technical manual.

I don't know if these Calibre formatting problems occur with Microsoft Word document conversions since I don't use any Microsoft Office products. I suspect that there are a number of such issues with most word processing formats. Full featured software throw in a lot of extra non-essential formatting into word processing files that can't be used by EPUB—but they can cause problems in the conversion process. (If you have experiences with conversions from other programs and would like to share, I want to hear from you. Please use this comment link (webserver.computoredge.com/editorial/prg/letters.mvc?article=cover&issue=2922) or the link at the top or bottom of this article.) I did find that the Calibre conversion did an excellent job of handling the OpenOffice.org Writer captions which have been added to the included screen shots.

Sigil EPUB Editor

In most cases, I put would an EPUB into Sigil (pronounce "sid-jil") e-book editor (code.google.com/p/sigil/) before posting it to the Web. One of the most important reasons for doing this is that Sigil automatically corrects many errors in an EPUB. As previously mentioned, my program for generating EPUB e-books of *ComputerEdge* has an unresolved bug (I know ... I'll get to it). By

merely, loading the file into Sigil and saving the file, the unknown error disappears. This has helped me avoid many headaches, but the automatic correction feature does have its downside.

If you would like to add audio or video to your e-books (currently supported in iBooks on iPad), then you won't be able to use the current version of Sigil. As part of its auto correction capability, Sigil strips out all of the audio and video tags. You can still re-engineer the file by changing it back into a zip file, unzipping, adding the tags to the appropriate sections, then recreating the e-book as per the EPUB Format Note above.

One of the best features of Sigil is that you can either edit a file in a WYSIWYG (What You See Is What You Get) mode or directly edit the HTML code. However, since everything you do is converted on the fly, the WYSIWIG (pronounced wizz-ee-wig) mode may introduce some strange results. Fortunately, if you have a little knowledge of HTML, you can fix these problems by cleaning up the code directly in the HTML editing mode.

Sigil also automatically creates HTML style sheets for the formatting found in the text. (I think style tags are the initial source of the bug in my *ComputerEdge* program.) In most cases this conversion works great. However, if you add more text or apply additional style features, Sigil will create even more style sheets. This is especially true if you add the parameters directly to the HTML code. When looking at the code in Sigil, you may see a number of different style tags—all of them offering the exact same set of parameters.

When we built the e-book for Jim Whittings cartoons (download a free sample e-book (www.computoredgebooks.com/Humor-Computer-Cartoons_c2.htm)), we used both Calibre and Sigil. While the initial accumulation, sorting and categorization of the cartoons was done in OpenOffice.org Draw, then converted to a PDF, some of the most important formatting didn't pass through to the EPUB in Calibre. If you are building a cartoon e-book, it's important that each cartoon have its own page. Otherwise, cartoons and captions may appear in a disjointed fashion. The only way to guarantee proper alignment of the cartoons was to make each panel its own e-book chapter. This was done by breaking the initial file into chapters with Sigil. Also, the titles in List of Cartoons in the back of the e-book which links to each cartoon page needed to be added by hand in Sigil.

Once the editing is completed in Sigil, the EPUB is brought back into Calibre for conversion to the Kindle compatible MOBI format. I am not sure if I will need to look at any of the MOBI editors. The MOBI file of the cartoon book works fine on the Kindle and was accepted by Amazon for distribution. At this point, I don't see any reason to mess with too many formats. EPUB will cover the majority of the e-book readers and MOBI does Amazon Kindle.

E-Book Distribution and Marketing

We have started on the e-book distribution problem and will begin our marketing efforts soon. However, these are topics for another time. We are in the process of starting up *ComputerEdge* E-Books, which will provide editing, formatting, distribution and marketing for those who don't want to take the time to do it themselves. At this point we are only accepting a limited number of projects. We are currently working on a child's e-book which will include audio on each page and a technical e-book which includes video tutorials. Of course, we will need to address some of the issues brought up in this article, the resolution of which will be the subject of yet another article.

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

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Wally Wang's Apple Farm

Wally Wang's Apple Farm

“Desktops and Tablets vs. Laptops” by Wally Wang

Tablets replace laptops; strange bedfellows; the fallacy of a college degree; getting free information; creating HTML5 files; Alaska Airlines and the British Army adapts the iPad; developer fatigue; drag and drop shortcut.

In *The Art of Critical Decision Making* (www.amazon.com/gp/product/1598035398/ref=as_li_tf_tl?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=217145&creative=399349&creativeASIN=1598035398), Professor Michael A. Roberto tells an interesting story about Polaroid. For years, Polaroid defined the instant photography market. With a Polaroid camera, you could just take a picture, wait a few seconds, and see your picture develop right before your eyes.

When digital photography arrived, Polaroid employees tried to get the company interested in this new form of instant photography. For over five years, Polaroid's upper management kept dismissing digital photography because it didn't fit into their business model. Polaroid sold cameras with marginal profits, but made the bulk of their money through selling film for those cameras.

So when Polaroid's employees urged the company to pursue digital photography, Polaroid's upper management kept asking them, "But how can we sell digital camera customers any film?"

Not surprisingly, Polaroid clung to their outdated thinking until it was too late (en.wikipedia.org/wiki/Polaroid_Corporation#22Chapter_11.22_controversy), but not too late to drive the company into the ground while still retaining just enough money left over to pay all of Polaroid's executives hefty bonuses for their fine job missing the entire digital photography market.

Polaroid's sorry tale looks ludicrous in hindsight, but their downfall stemmed from their rigid assumption that instant cameras could only be profitable if you could sell film for those cameras. It's easy to see how Polaroid failed because of digital photography, but it's just as easy to see how assumptions can lead anyone astray.

For years, sales of desktop PCs kept falling while sales of laptop PCs kept rising. Companies such as Acer bet heavily on the assumption that this trend would continue. Then Apple came out with the iPad and sales of laptop PCs have plummeted (although sales of Macintosh laptops continue to rise).

Curiously, Digitimes reports that as people buy tablets like the iPad (www.electronista.com/articles/11/05/27/notebook.growth.may.drop.16.50pc.due.to.ipad.more/), laptop sales are falling but desktop sales are actually increasing. Apparently people are buying desktop computers because they're cheaper and more feature-packed than laptops. Then instead of buying a laptop for computing on the road, people are choosing a tablet like the iPad for their mobile computing needs.

While some people need a full-featured laptop, many others do not, so the lightweight and extreme mobility of the iPad can more than make up for its limitations. Personally, I only use my MacBook Air when I need to write programs or want to use a CD or DVD. Otherwise the iPad is far easier to carry everywhere with much longer battery life as well.

Rather than buy a desktop computer and a tablet, some people might just prefer a single, full-featured laptop. My friend bought the 17-inch MacBook Pro as her main computer so she can have complete access to everything wherever she goes. Despite its hefty weight (6.6 pounds) and bulk (15.47 inches wide), she values the ability to use a single computer for both a desktop and a laptop.

Whether people choose a desktop and tablet or a single, full-featured laptop, not as many people are choosing both a desktop and a full-featured laptop any more. The world of mobile computing now includes smart phones, tablets and laptops so the companies that thrive will likely be those that can dominate all three markets.

Strange Bedfellows

Everyone thinks that rival companies are battling as hard as they can against each other, but like in politics, the computer industry creates strange allies. First is Apple and Google's battle for the smart phone market. Despite the battle between iOS and Android, Apple still relies on Google's Maps and YouTube to make the iPhone more useful.

While Apple's iOS and Android dominate the smart phone market, Microsoft's Windows Phone 7 hasn't demonstrated mass appeal yet. Oddly enough, due to patent agreements, Microsoft reportedly makes more money from patent royalties (www.pcworld.com/article/228890/android_windfall_leads_to_150_million_payday_for_microsoft.html) off sales of Android phones than they do from sales of their own Windows Phone 7 phones.

According to PC World, Microsoft makes between \$5 to \$12.50 per Android phone sold while making \$15 per Windows Phone 7 phones sold. Yet since more people are buying Android phones than Windows Phone 7 phones, Microsoft is actually making more from the sale of Android phones.

Horace Dediu of Asymco created a vector-based graph that highlights different phone manufacturer's profit (www.asymco.com/2011/05/25/a-disruption-is-not-sufficiently-described-by-the-success-of-some-others-must-fail/) vs. market share. While Apple is clearly the leading manufacturer in both market share and profitability, many companies, such as Nokia, are losing both market share and profitability while others, such as Research in Motion, are trailing far behind Apple despite their profitability.

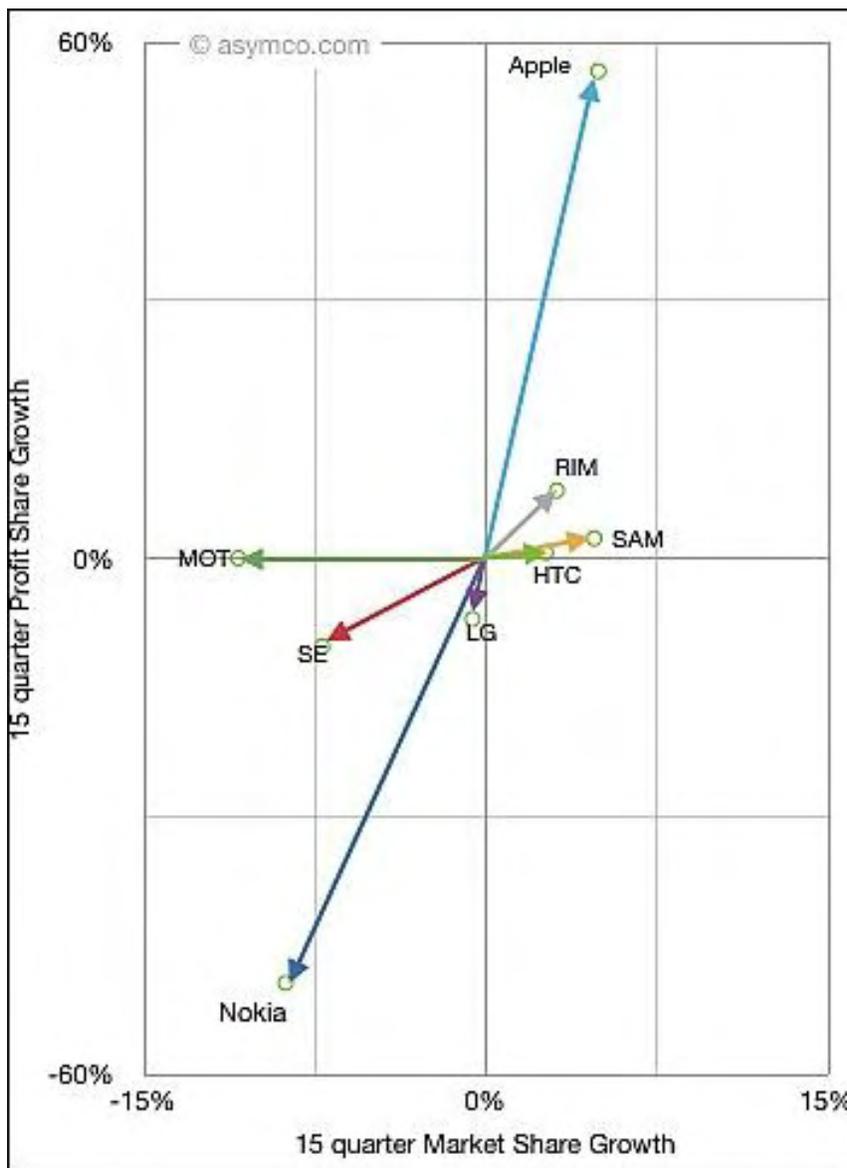


Figure 1. Apple dominates both market share and profitability in the smart phone market.

With Apple making money from the iPhone and Microsoft making money from both Windows Phone 7 and Android sales, there's not much money left for anyone else. Microsoft even made an agreement with Research in Motion's Blackberries to use Bing as the default search engine (www.pcmag.com/article2/0,2817,2384812,00.asp) in addition to their earlier agreement for Nokia to sell Windows Phone 8 phones.

While Apple and Google grab all the headlines in the smart phone market, Microsoft is still profitable despite lagging far behind with Windows Phone 7. The real losers of the smart phone market are the other manufacturers forced to pay royalties to Microsoft for using Android and Windows Phone 7 along with Hewlett-Packard, which still has to jump start their WebOS smart phones and tablets.

The Fallacy of a College Degree

Peter Thiel, the co-founder of PayPal, recently chose twenty college students to drop out of college (lifeinc.today.com/_news/2011/05/25/6717536-the-entrepreneur-whos-paying-kids-not-to-go-to-college). In return for their promise to start a company, Peter will provide each student

entrepreneur with \$100,000 to skip college for the next two years.

Most people assume that a college education is crucial for success, yet the world is full of rich college dropouts including Bill Gates, Michael Dell, Steve Jobs, Steven Spielberg and many more. If a college education is so important, how come so many billionaires are not college graduates?

Clearly a college education isn't necessary to succeed in life, but college graduates reportedly earn more than high school graduates. That comforting statistic keeps thousands of people lining up for college and taking out massive student loans in the process. The real key is that while college graduates earn more on average than high school graduates, a college degree is no guarantee of any job whatsoever.

Many students go massively into debt with student loans, graduate from college, and then find that their student loans keep them burdened for the rest of their lives. Unlike traditional loans, you cannot clear away student loans with bankruptcy so the interest charges keep piling up.

When two college graduates marry, they bring both of their student loan debt together, preventing them from buying a house since their student loan debt is often equal to a house payment by itself. The only difference is that a college degree holds no intrinsic value like real estate does.

While the media warns people about common phishing scams where strangers will send e-mail messages to trick people into losing their money to Nigerian con games, few people in the media are warning students about student loan traps.

Colleges continue increasing tuition faster than inflation because so many people believe that a college degree is worth the cost. Then they graduate with so much debt that they can never pay it off through most of their lifetime. In that situation, is a college degree worth the price any more?

For more information about how the rising cost of tuition is sinking so many college students in debt, read CNBC's "The Price of Admission (www.msnbc.msn.com/id/40772705/ns/business-cnbc_tv/)." The student loan bubble may be next to burst in much the same way that the real estate bubble burst with so many people unable to pay off their debt.

To get a college education for free, consider visiting MIT's Open Courseware (ocw.mit.edu/index.htm). From this site, you can download and learn from actual MIT courses. While you won't get the "credibility" of a college degree, you will still get an education without the crushing student loan debt that normally comes with it.

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FEATURED COURSE

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Prof. Shuguang Zhang is one step closer to large-scale production of a clean and carbon-free fuel. The [MIT News Office explains](#) how he is making algae produce hydrogen at 400 times their normal rate.

Learn more about bioengineering from Prof. Zhang in [Molecular Structure of Biological Materials](#) on OCW.

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10

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Figure 2. MIT's Open Courseware can give you a college education for free.

Rather than spend the time and money for a college degree, many people just go through a diploma mill instead. Since so many organizations value a college degree in lieu of the actual ability to produce meaningful results, people often use bogus college degrees (www.usatoday.com/money/workplace/2003-09-28-fakedegrees_x.htm) to get a job or advance further in a corporation.

As long as organizations are more impressed by credentials (whether real or not) than what you can do with your skills, there will always be a market for fake college degrees to help people appear more credible. In the meantime, the rest of us can focus on developing our skills, whether through school or through free sites like MIT's Open Courseware, because the real guarantee of job security isn't a piece of paper but your ability to produce results in whatever field you choose.

Getting Free Information

One of the more useful features of the iPad is its ability to display both PDF and EPUB files. While you can purchase e-books through Apple's iBookstore, you can also find free classic

novels and non-fiction books at the EPUB Books site (www.epubbooks.com/).

The screenshot shows the EPUB Books website interface. At the top, there are navigation links: Home, eBook Readers, Buy eBooks, Blog, and Donations. The main header features the EPUB Books logo with the tagline 'Unleash your books' and four categories: Books (for reading), Authors (for discovering), Genres (for choice), and Buy eBooks (get bestsellers). The main content area is for the book 'Rights of Man' by Thomas Paine. It includes a book cover, a 'DOWNLOAD EPUB' button, and a box with statistics: 87,241 words, 224 pages, added on 2010-07-11, and social media buttons for Like and Tweet. Below this, there are options to 'GET THIS TITLE IN DIFFERENT FORMATS' with buttons for Books (Kindle / Kobo Books / B&N nook) and Audiobooks (Audible). A 'BOOK SUMMARY' section follows, describing Paine's role as an agent provocateur. Below that is a 'BOOK EXCERPT' starting with 'Among the incivilities by which nations or individuals provoke and irritate each other...'. On the right side, there is a 'Featured EPUB Reader' section for 'Bookeen Cybook Opus' and a 'Similar Books' section listing titles like 'Candide', 'The Napoleon of Notting Hill', 'The Book of Tea', 'A Modern Utopia', and 'The American Crisis'.

Figure 3. You can download classic literature in a variety of e-book formats.

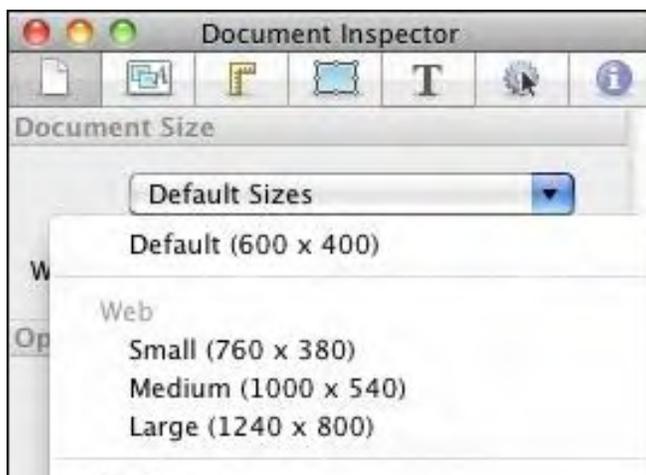
The EPUB Books site even offers many books in a variety of formats so you can listen to the audiobook version or download the Amazon Kindle or Barnes & Noble Nook version. If you download the EPUB version, you can just drag this file over the Books category in iTunes. Then when you connect your iPhone or iPad to iTunes on your computer, you can transfer the EPUB file to iBooks on your iPhone/iPad.

For another site that provides free information, visit the Witness to War site (www.witnesstowar.org/), which contains text, audio recordings, and videos of World War Two veterans telling their own war stories. By reading, listening, or watching these stories, you can learn what World War Two was really like from the perspective of fighter pilots, infantrymen, and prisoners of war in a way that no textbook could ever provide.



Figure 4. Witness to War provides eyewitness accounts from World War Two veterans.

Creating HTML5 Files



While smart phone and tablet users continue waiting for a version of Flash that works as seamlessly on mobile devices as it does on desktop computers, the rest of the world is gradually shifting to HTML5. However, talking about HTML5 is different than actually creating and using HTML5, so to get HTML5 into the hands of more Web designers, a pair of former Apple employees have started their own company and released a \$29.99 HTML5 editor called

<p>Web ComputerEdge</p> <p>Small (760 x 380) Medium (1000 x 540) Large (1240 x 800)</p>	
<p>Devices</p> <p>iPad Safari Widescreen (1024 x 690) iPad Safari Portrait (768 x 946) iPad Full Widescreen (1024 x 768) iPad Full Portrait (768 x 1024) iPhone Safari Widescreen (480 x 236) iPhone Safari Portrait (320 x 396) iPhone Full Widescreen (480 x 320) iPhone Full Portrait (320 x 480)</p>	
<p>Displays</p> <p>VGA (640 x 480) SVGA (800 x 600) XGA (1024 x 768) SXGA (1280 x 1024) UXGA (1600 x 1200)</p> <p>High Definition</p> <p>480p (640 x 480) 720p (1280 x 720) 1080p (1920 x 1080)</p>	
<p>Rectangles and Pop-Ups</p> <p>Medium Rectangle (300 x 250) Square Pop-Up (250 x 250) Vertical Rectangle (240 x 400) Large Rectangle (336 x 280) Rectangle (180 x 150) 3:1 Rectangle (300 x 100) Pop-Under (720 x 300)</p> <p>Banners and Buttons</p> <p>Full Banner (468 x 60) Half Banner (234 x 60) Micro Bar (88 x 31) Button 1 (120 x 90) Button 2 (120 x 60) Vertical Banner (120 x 240) Square Button (125 x 125) Leaderboard (728 x 90)</p> <p>Skyscrapers</p> <p>Wide Skyscraper (160 x 600) Skyscraper (120 x 600) Half Page Ad (300 x 600)</p>	

Figure 5. Hype lets you define the optimum size for your HTML5 animation.

Hype (tumultco.com/hype/).

The whole purpose of Hype is to make it easy to create HTML5 animation simply by dragging and dropping items on a page. Then you let Hype worry about creating the actual HTML and Javascript code. When you're done, you just need to upload a folder and copy three lines of HTML code to insert on your Web page to display HTML5 animation on your Web site. Best of all, HTML5 animation can play on the iPhone and iPad.

To create an HTML5 animation, you can define the size of your animation based on the type of device you want to target (such as an iPhone or iPad), the type of display (such as VGA or SVGA), or a fixed dimension (such as a banner or button).

Creating animation in Hype is amazingly simple. Just drag and drop an image, click a Record button, and drag the image anywhere you want. Your dragging motion defines how the image moves. For added appeal, you can make an image shrink or grow as it moves.

Hype also lets you create buttons to create interactive animation, such as creating a button that displays or hides an image, or displaying an image that users can click to enlarge that picture. To help you align the different objects in your animation, Hype displays guidelines to show you precisely the distance between your various items.

You can test your Hype pages within the program itself, or click a Preview icon so you can see how your HTML5 files appear and behave in a real browser. By hiding the complexity of HTML coding, Hype gives anyone the power to create HTML5 animation without the nuisance of learning HTML and Javascript.

As Flash continues struggling on mobile devices, HTML5 will become more important to reach iPhone and iPad users. If you're a Web designer using Flash, you can ignore the potential of HTML5 and hope that Flash eventually proves feasible on mobile devices, or you can expand your skills and learn to

create animation in HTML5 while still retaining your Flash animation skills.

Other HTML5 editors are available, but Hype is designed solely for Mac OS X and designed for novices to use. View the tutorials on the Hype Web site and you may be convinced that Hype really can make HTML5 animation simple, easy and fun.



Figure 6. Hype displays guidelines to help you align item on the screen.

Alaska Airlines and the British Army Adapts the iPad

Alaska Airlines is the first major U.S carrier to replace paper flight manuals with PDF files stored on an iPad. The move from paper to the iPad lets pilots shed 25 pounds (for paper manuals) to 1.5 pounds (for a single iPad). Besides the savings in weight, the iPad can also be easily updated, which paper manuals cannot match.

Alaska Airlines hopes to transition all of its pilots to iPads by June. Depending on how pilots react to the iPad in the cockpit, Alaska Airlines may also include navigational charts on the iPad to make the cockpit completely free from paper. If the iPad proves successful with Alaska Airlines, you can be sure that other airlines will replace their paper manuals with iPads as well.



Figure 7. Alaska Airline pilots will soon be using the iPad instead of paper manuals.

The British Army has also been experimenting with iPads and discovered that soldiers learn better with iPads (en.wikinoticia.com/Technology/Apple/55469-ipad-the-british-army-uses-to-train-its-soldiers-in-afghanistan) than they do in a traditional classroom. For those wondering why the British Army used iPads instead of netbooks, the answer lies in this quote:

"It's a bit ridiculous that a soldier is able to learn better with an iPad with a class, but it seems that it is. Apparently it was impossible to make a computer application to do the same as the iPad to teach soldiers (note the irony)."

Developer Fatigue

Everyone knows that the two leaders in the smart phone market are Apple and Google with everyone else either struggling (such as WebOS) or falling behind (such as Research in Motion's Blackberries). So it's no surprise that most developers are focusing their attention on both iOS and Android (moconews.net/article/419-mobile-app-developers-seeing-two-horse-ios-android-race/). As a result, according to a survey by Appcelerator and IDC, fewer developers have the time to learn yet another platform and programming tools to develop apps for a third platform.

That means no matter how good WebOS or Windows Phone 7 might be, the top developers will simply chase the most lucrative markets because they don't have time to take a chance with much smaller markets. Part of the reason is that few developers can master so many different programming languages, operating systems and tools such as learning Objective-C to write iOS apps and Java to write Android apps.

To simplify matters, look at LiveCode (www.runrev.com/products/livecode/new-in-461/). Just write a program once in LiveCode and compile it for either iOS or Android as easily as selecting

a check box.

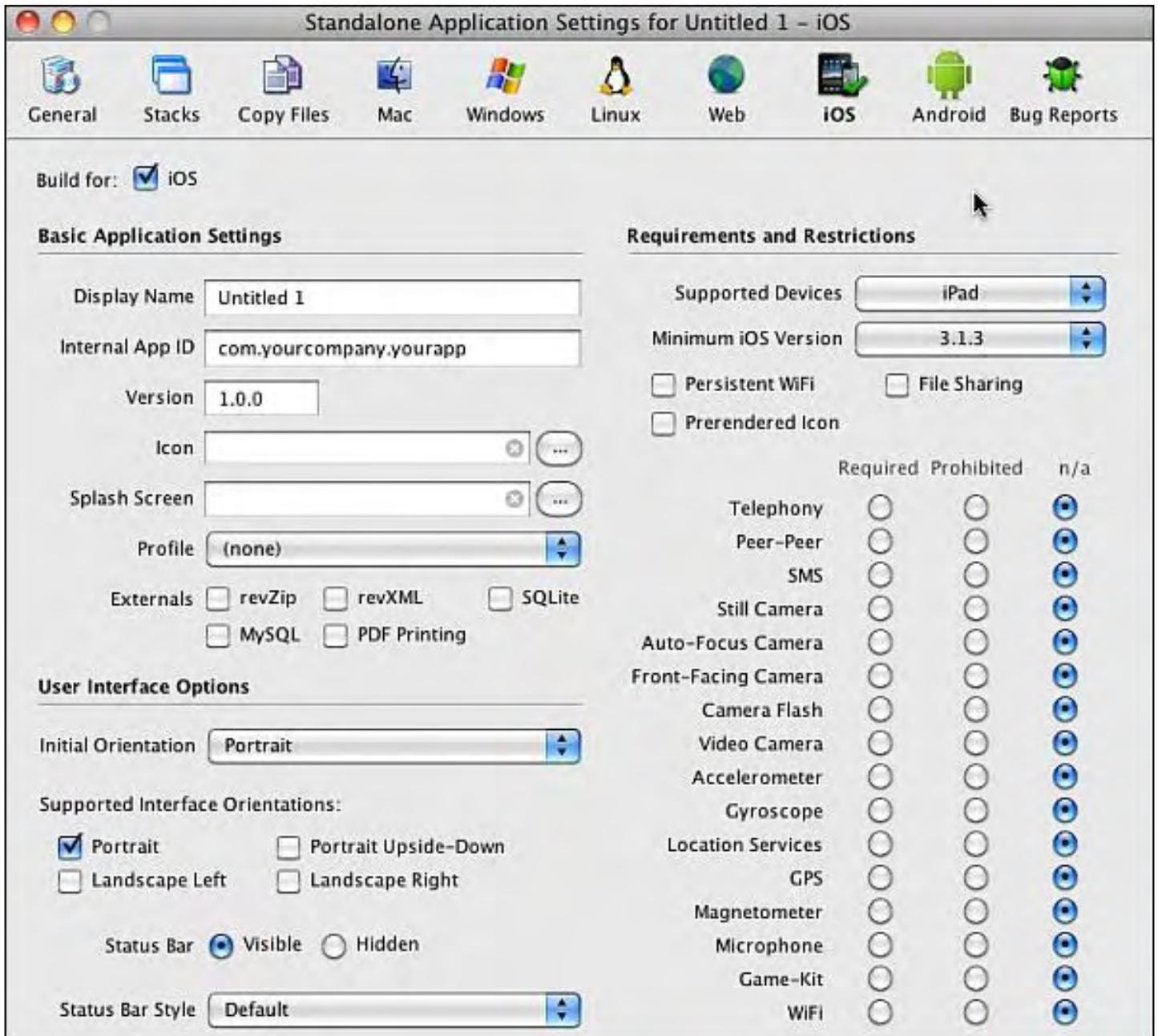


Figure 8. LiveCode can create an iOS app for the iPhone or iPad.

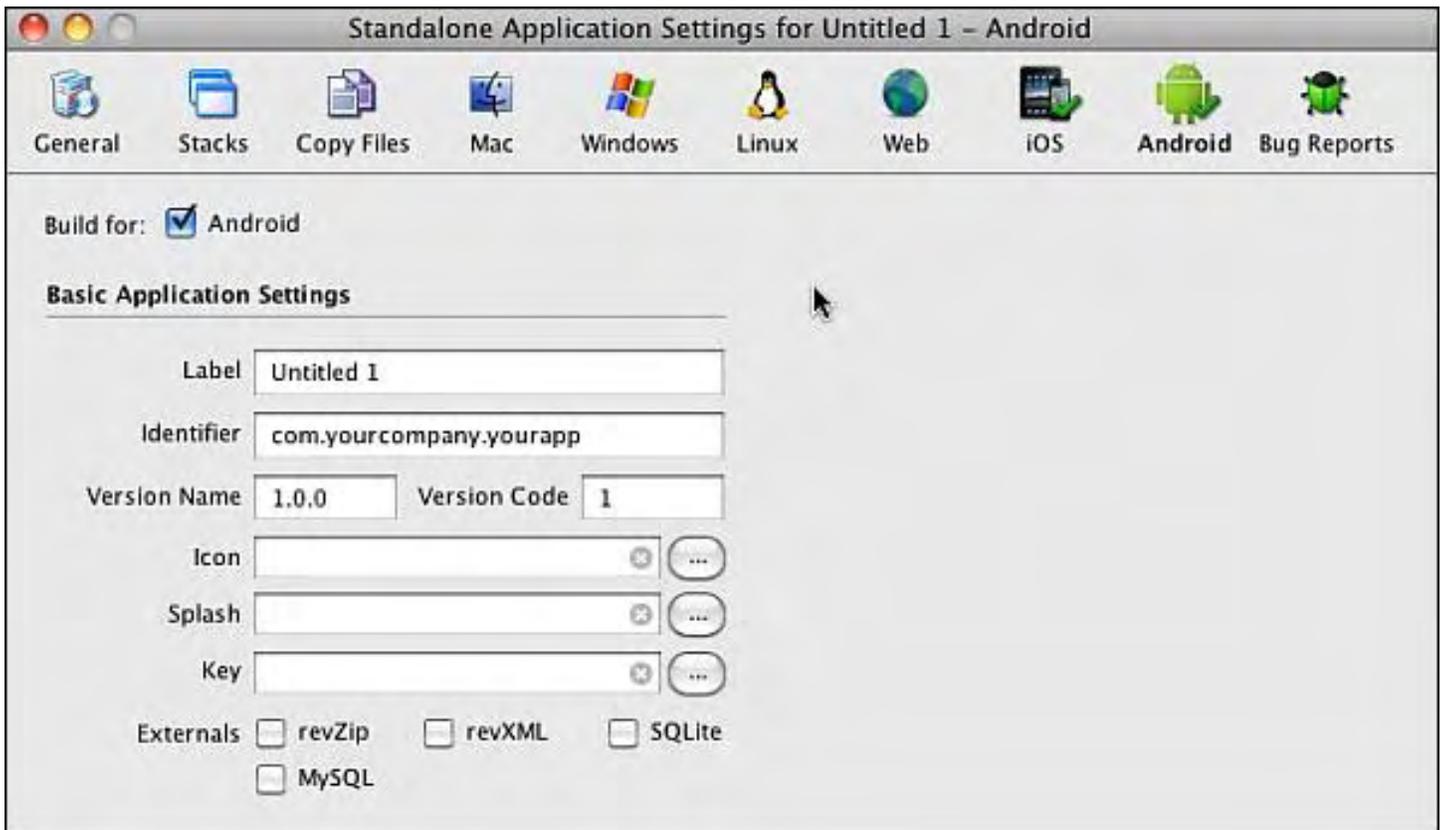


Figure 9. LiveCode can create an Android app.

By simply learning LiveCode once and writing a single program, you can churn out iOS and Android apps quickly and easily. Now you can focus more on designing your apps and less time getting them to work.

* * *

On the Macintosh, you can accomplish most shortcuts by dragging something and dropping it where you want it. This drag and drop shortcut doesn't always work, but when it does, it can save you time.

When using Safari, you may find a site that you want to bookmark. You could click the Bookmarks menu and then choose Add Bookmark. However, if you want to store the currently displayed site as a bookmark on the Bookmark bar, just highlight the currently displayed address and drag and drop it over the Bookmark bar.

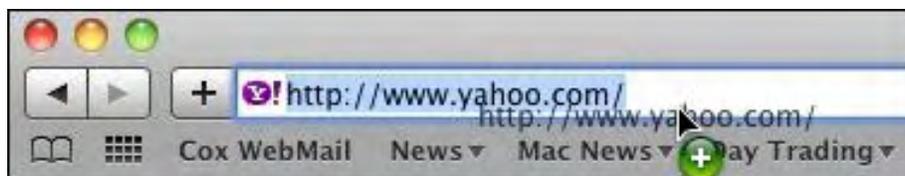


Figure 10. Drag and drop a Web site address on the Bookmark bar.

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:

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),

My New iPad (www.amazon.com/gp/product/1593272758?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1593272758),

Steal This Computer Book 4.0 ([www.amazon.com/gp/product/1593271050?ie=UTF8&tag=the15minmovme-](http://www.amazon.com/gp/product/1593271050?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1593271050)

[20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1593271050](http://www.amazon.com/gp/product/1593271050?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1593271050)),

Microsoft Office 2010 for Dummies ([www.amazon.com/gp/product/0470489987?](http://www.amazon.com/gp/product/0470489987?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470489987)

[ie=UTF8&tag=the15minmovme-](http://www.amazon.com/gp/product/0470489987?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470489987)

[20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470489987](http://www.amazon.com/gp/product/0470489987?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470489987)),

Beginning Programming for Dummies ([www.amazon.com/gp/product/0470088702?](http://www.amazon.com/gp/product/0470088702?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470088702)

[ie=UTF8&tag=the15minmovme-](http://www.amazon.com/gp/product/0470088702?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470088702)

[20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470088702](http://www.amazon.com/gp/product/0470088702?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470088702)),

Beginning Programming All-in-One Reference for Dummies ([www.amazon.com/gp/](http://www.amazon.com/gp/product/0470108541?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470108541)

[product/0470108541?ie=UTF8&tag=the15minmovme-](http://www.amazon.com/gp/product/0470108541?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470108541)

[20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470108541](http://www.amazon.com/gp/product/0470108541?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470108541)),

Breaking Into Acting for Dummies with Larry Garrison ([www.amazon.com/gp/](http://www.amazon.com/gp/product/0764554468?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0764554468)

[product/0764554468?ie=UTF8&tag=the15minmovme-](http://www.amazon.com/gp/product/0764554468?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0764554468)

[20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0764554468](http://www.amazon.com/gp/product/0764554468?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0764554468)),

Strategic Entrepreneurism with Jon Fisher and Gerald Fisher ([www.amazon.com/gp/](http://www.amazon.com/gp/product/1590791894?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1590791894)

[product/1590791894?ie=UTF8&tag=the15minmovme-](http://www.amazon.com/gp/product/1590791894?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1590791894)

[20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1590791894](http://www.amazon.com/gp/product/1590791894?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1590791894)),

How to Live With a Cat (When You Really Don't Want To) ([www.smashwords.com/books/](http://www.smashwords.com/books/view/18896)

[view/18896](http://www.smashwords.com/books/view/18896)).

Mac Programming For Absolute Beginners ([www.amazon.com/gp/product/1430233362?](http://www.amazon.com/gp/product/1430233362?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1430233362)

[ie=UTF8&tag=the15minmovme-](http://www.amazon.com/gp/product/1430233362?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1430233362)

[20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1430233362](http://www.amazon.com/gp/product/1430233362?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1430233362))

The 15-Minute Movie Method

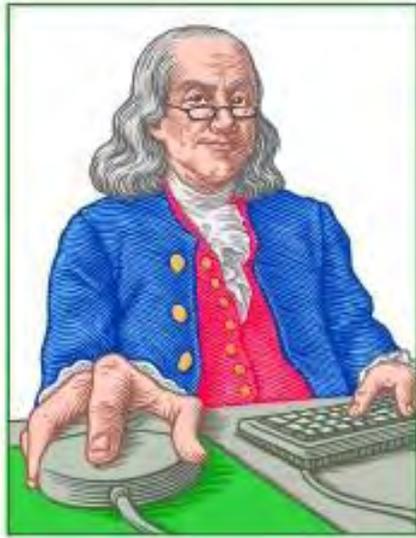
([www.amazon.com/gp/product/B004TMD9K8/ref=as_li_tf_tl?ie=UTF8&tag=the15minmovme-](http://www.amazon.com/gp/product/B004TMD9K8/ref=as_li_tf_tl?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=B004TMD9K8)

[20&linkCode=as2&camp=1789&creative=9325&creativeASIN=B004TMD9K8](http://www.amazon.com/gp/product/B004TMD9K8/ref=as_li_tf_tl?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=B004TMD9K8))

In his spare time, Wally likes blogging about movies and writing screenplays at his site "The 15 Minute Movie Method" (www.15minutemoviemethod.com/) along with blogging about electronic publishing and how authors can take advantage of technology at his site "The Electronic

Author." (www.wallacewang.com) Wally can be reached at wally@computoredge.com.

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LINUX LESSONS

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

Linux Lessons: Tips and Tricks from Users

**"Switching the
Keyboard from
English to
Spanish . . . and
Back Again."** by Tony
J. Podrasky

Tony offers short Linux scripts called ENGLISH and SPANISH for quickly changing the keyboard language set.

This time Tony offers Linux scripts to switch the keyboard between English and Spanish.

Filename(s): ENGLISH, SPANISH

Use: Switch your keyboard between English and classic Spanish.

Are you bilingual? If so, have you ever had a need to type something in the other language? Here is a shell script that will load the keyboard with the specified language's font. Linux supports a wide variety of languages. Do a `<locate us.map.gz>` to find out where the keyboard maps are on your machine and then `<cd>` there to see what languages are available on your version of Linux. I chose Spanish because it is my wife's native language and when we compose e-mails we can put all the Spanish special characters.

You might want to do a `<man>` on "loadkeys" and "setxkbmap" to get an idea as to what is going on.

Messing with your means of communication with the O/S can be a bit on the dangerous side: you could do something that no longer allows you to communicate with the kernel. That's the worst scenario because you either have to give it a CTRL-ALT-DEL (if you can) or bring it down hard. The good news is when you reboot all will return to normal. You might want to create the ENGLISH shell script first and test it out to make sure that after executing it that you still have a reasonably working keyboard. Calling it "E" instead of "ENGLISH" while you are testing things is a good idea—so if things get squirrely, you can type an "E", and regain control. Also, these scripts load the X keyboard map for a pc105 style keyboard (Microsoft Natural). If you are using a different type you will get different results. When testing the keyboard, open a `<vi>` session and type in that. `<vi>` is smart enough not to put some of the control characters on the screen, unlike a regular xsession.

HOW IT WORKS:

```
#!/bin/csh -f                                Use the csh interpreter.
/bin/loadkeys /lib/kbd/keymaps/i386/qwerty/ Load the keyboard translation table with the us.
us.map.gz                                    map codes.
/usr/X11R6/bin/setxkbmap -layout us -       Set the keyboard extension with the US layout for
model pc105 -option                          a PC105 keyboard.
```

ENGLISH File:
 _____CUT HERE_____

```
#!/bin/csh -f
/bin/loadkeys /lib/kbd/keymaps/i386/qwerty/us.map.gz
/usr/X11R6/bin/setxkbmap -layout us -model pc105 -option
```

_____CUT HERE_____

SPANISH File:
 _____CUT HERE_____

```
#!/bin/csh -f
/bin/loadkeys /lib/kbd/keymaps/i386/qwerty/es.map.gz
/usr/X11R6/bin/setxkbmap -layout es -model pc105 -option
```

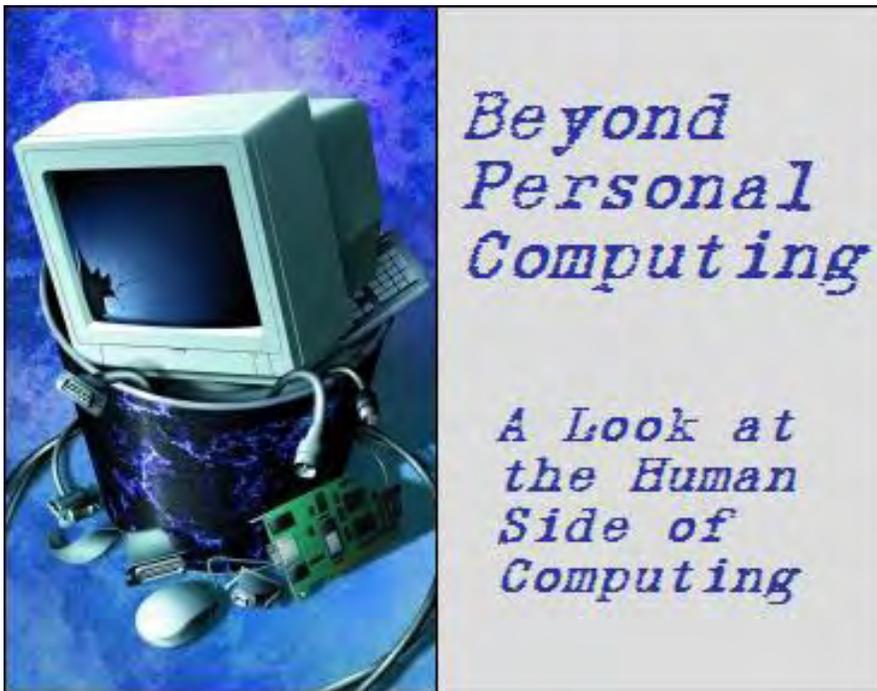
_____CUT HERE_____

As always, do a `<chmod 755 ENGLISH>` to make it executable.

NOTE: I give my shell files uppercase names so that *I know* they are my shell files and not the system's binaries. For example, when I save the data (the commands between the "CUT HERE" lines, which is the actual shell file) I might call it "VI", which is *not* to be confused with the system's "vi" file—but I call it "VI" because it calls (or uses) the system's "vi editor."

Tony has been in the computer field since 1976 when he started working for Data General Corp as a field engineer. Later going on to design hardware interfaces, write patches for operating systems, and build networks. It was in 1995 while working with the military on several projects that he ran into a "spook" who showed him a laptop that ran a then-unknown O/S called "Linux." "A laptop running a form of UNIX tony = a marriage made in heaven!" Tony can be reached for questions at Linux Questions for Tony (hunybuny@netzero.net).

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Beyond Personal Computing

"Printer Problems and Other Human Errors" by Marilyn K. Martin

The evolution of printers began in 1938. Since then, people have struggled to learn and use them properly, much like any other aspect of technology. Marilyn shares some humorous anecdotes about problems people have encountered while using printers.

Those of us who love our computer printers have one Chester Carlson to thank. In 1938 he invented a dry printing process called "electrophotography." That became the very first Xerox Copier, but it was the foundation technology for laser printers to come.

In 1953, the first high-speed printer was developed by Remington-Rand (yes, the electric razor guys). They correctly predicted that when the government purchased monster computers, they would want a way to print-out what had been "computed."

Especially since Remington-Rand had just financially bailed out computer inventors J. Presper Eckert and John Mauchly, who already had a computer contract with the Census Bureau, but still had no finished computer. R-R bought their unfinished computer project, and let Eckert and Mauchly complete the computer. Then R-R renamed their brand new computer corporation the "Univac Division of Remington-Rand."

From 1969 to 1971, Gary Starkweather of the Xerox Palo Alto Research Center added a laser beam to electrophotography, and invented the first laser printer, called EARS. By 1976, the first IBM 3800 Printing System was installed in the central accounting office at F.W. Woolworth's North American data center in Milwaukee, Wisconsin. It was the first high-speed laser-printer, and operated at speeds of more than 100 impressions-per-minute. IBM claimed that it was the first public printer to combine laser technology and electrophotography. And the rest, as they say, was history.

Today, printers seem almost idiot-proof. How hard can it be, to hook up your PC to a compatible printer with color-coded cables and ports, install ink cartridges and start printing? But when customers first started buying printers to hook up to their PCs, there was a virtual gulf of misunderstanding between printers and printing.

Inky Problems

A customer took his printer back to the computer store where he'd purchased it, complaining that it wouldn't print. The Salesman opened the ink cartridge bays, and found only sponges dripping with ink. The baffled Salesman held up an unsold ink cartridge from their stock. "Where are your ink cartridges, that look like this?" The customer nodded at the sponges dripping with ink. "That's them, without the casing."

Then there was the Printer Support Tech who absolutely couldn't figure out why a woman's office printer wouldn't print in yellow. The colored ink was fine, all the more baffling since green (a mixture of cyan and yellow) printed just fine. The drivers were deleted and reinstalled, the Tech consulted manuals and other Techs, but nothing seemed to work.

Finally, the frustrated Tech asked the woman to send one last color job to the printer, before he yanked the printer and took it in for repair. Her response was priceless: "OK. Should I try printing on a piece of white paper this time, instead of yellow paper?"

Then there was the message posted in a Help Blog: "I have chosen white text color in a word document, because I want to print white on black paper. The printer accepts the file, but it prints a blank document. It won't print the white text. I guess because it is unable to mix white ink, since it prints all the other colors just fine. Any ideas?"

Another customer called a Printer Help Desk to complain that their color printer wouldn't print the color red. The Tech led the user through a few unsuccessful cleanings. Then the Tech asked the customer to remove the red tank and see how much ink was in it. "Oh, there's no ink in there," the customer calmly replied. "On page 130 in the printer manual, it said to do some extensive cleanings. So I drained the ink and filled it with water to clean it."

Or how about the user who called a computer repair shop about a non-working printer. The Tech was astonishingly helpful, telling the user that it sounded like his printer just needed cleaning, which the user could do himself by following the instructions in the manual. That would spare the user a \$50 fee to have it cleaned professionally by the repair shop.

The user was astonished by such helpfulness. "That's great! I appreciate your honesty. But does your boss know that you are discouraging business with advice like this?" Then the truth came out. "Uh, actually," the Tech admitted, "It was the boss's idea. We usually make more than \$50 on repairs after the customer tries to fix things on their own."

One Service Tech was at a park district pool to complete a computer survey. But he got approached by a fuming manager to fix the printer in the poolside office. The irate manager said that one employee, who fashioned himself as some kind of "computer demigod," had tried to fix the printer, but had apparently only made things worse.

The Tech opened up the printer, and quickly discovered that the "demigod" had ripped the top off the toner cartridge, by trying to yank it out without releasing the hold-down clips. This had resulted in a cloud of toner that went everywhere—inside and outside the printer, all over the walls, windows and computer. The "demigod" had then grabbed a wet towel and tried to wipe up the toner, leaving black smears everywhere that couldn't be cleaned off.

The flying-toner had also shorted out the main circuit board in the printer. It had also fried the keyboard, which the "demigod" had rinsed off in the sink, and then plugged back in to the

computer. The toner cloud had also descended into the wall-mounted air conditioner, and shorted out its electronics as well. The manager was even angrier when the Tech diagnosed the original printer problem: It was simply out of paper.

Paper Problems

Printers that run out of paper are, for many users, another mysterious problem. A typical exchange starts when someone calls a Tech and says, "I'm getting error messages, lights are flashing all over the printer, and the stupid thing has stopped printing!" Techs are prone to mutter under their breath, and then ask calmly "Have you tried filling the paper tray?"

Then there was the Computer Lab Tech who watched a student go through all the proper steps to print and then stand staring at the computer. "You know," offered the Tech, "You might have better luck if you walked over to look for your printed pages AT the printer." Sure enough, a couple dozen identical pages of the student's print job were waiting at the printer.

One university Computer Lab had a rule that only the Supervisor could change the paper in the Lab's printers. That policy came into sharp focus the day that an aging laser printer jammed up, and no one was getting their documents printed. The Supervisor opened up the printer, expecting to find the usual paper jam.

Instead, he discovered that someone had not only violated the paper-refill policy, but had stuffed the laser printer paper tray with continuous, lined printer paper, all the pages connected with perforations dividing one page from the next. Someone had just torn off the holed perforations to the sides of the connected sheets, and figured, "Heck! This paper fits!"

Printing on "Other"

Strange stories abound about creative users who decide to try printing on ... something other than paper. Such as the customer who returned his printer to the computer store, complaining that it had paper-feed problems. The user complained that he had tried to print on "a plain white tea towel," and the printer had jammed. And there sat the printer on the counter, with the towel still jammed inside.

Pity the Help Desk Tech who got this call one day. "I stuck a tortilla in my printer, and now it doesn't work." The Tech asked calmly why the customer did this. The user replied, "I own a tortilla business. And I thought it would be cool to print my logo on a tortilla."

One university office had a new laser printer installed. But the college's Computer Tech soon got a call complaining that the printer was printing everything on college letterhead paper. "Are you sure it's printing the letterhead? Or are you using pre-printed letterhead in the paper tray?" asked the Tech. "No, it must be printing it, since I see the bottom of plain white paper in the tray," the office worker assured the Tech.

The amused Tech headed to the office to check out his hunch. Sure enough, there was pre-printed college letterhead in the print tray, colorfully embossed in three colors. The office worker was surprised. "But I told the computer I didn't want a 'header.' And it still shows up anyway, huh?"

Which Way Did That Printer Go?

Several versions of these first jokes exist. One starts out with a man setting up his new printer, but he keeps getting an error message on his monitor, "Cannot Find Printer." He finally calls up Tech Support and complains, "I moved my printer right in front of my monitor, and my computer still says it can't find it!"

Then there was the officer worker who called Tech Support, that her computer also couldn't locate the printer. The Tech asked, "Are you working under windows?" To which she answered, "No, I'm near the door. But the guy in the next cubicle is working under a window, and his printer works just fine."

Another Tech got a call one day from one of his company co-workers. "I can't print my document out," she complained. The Tech started to ask troubleshooting questions, but she just replied, "I don't know about all that computer stuff. Could you just come over? I'm in Room 123." The Tech obliged, entered Room 123, and immediately assessed that ... there was no printer anywhere. "Uh, just where did you expect the printed paper to come out?" the Tech asked the lady. She shrugged, "The television?"

Miracle Printers

A Computer Salesman got a call one day from a frustrated gentleman who stated, "I don't understand why my inkjet printer keeps printing blank pages." The Salesman went over the proper steps, to make sure the printer had ink, and that it was installed properly. "OK, Sir, now tell me exactly what you did at your computer to send the job to the printer."

The user was confused. "What computer? What are you talking about?" The Salesman was incredulous. "You don't have a computer, Sir? So why did you buy just a printer?" "Well, 'cause I saw this printer in a store," the customer explained. "And all I had to do was press this button, and it would print out pretty pictures."

An office-worker complained to IT one day, that his file wouldn't print. The Tech asked if his printer was on the network. "That shouldn't matter," answered the user, "Since the network is down right now, so no one else should be trying to use that printer."

Animals Love Printers Too

One Tech ran a Junior High Computer Lab, and took care of all the campus computers. After the school's Science Department got new computers and printers, the Tech got a standard "Our printer's not working," call. The Tech ran through his litany of questions, ending with "Anything unusual happen lately?"

"Uh, yes," responded this particular Science Lab's teacher. "The printer smells like mouse urine." The Tech immediately remembered that upon visiting that Science Lab last time, he'd almost stepped in a glue trap intended for an escaped classroom mouse.

"That's probably the problem," the Tech summed up. "Mice do like to chew. And it probably nibbled a printer wire, so now the printer doesn't work." The Tech then dialed the school principal to urge him to call an exterminator immediately, before feral lab mice feasted on anymore printer

wires.

Then there was the story of the Printer Tech who opened up a company's printer and took off running. There was a snake curled up in the bottom of the printer. (Hey, I guess it was warm in there for that cold blooded critter.)

Radical Printing

Then there was the lady in an office who complained that the bottom half of her printed sheets were coming out blurry. The Tech arrived and walked her through the print process, and they both headed to the printer for the test print-out. As the paper started coming out of the printer, she yanked it out. And the bottom half was indeed blurry. The Tech carefully suggested that she just wait for the paper to emerge from the printer, without that helpful yank.

How to raise your IT person's blood pressure: When the printer won't print, by all means send the same job to the same printer 30 times. When the printer still won't work, send the job 30 more times to each of the 160 printers in the entire company. Logically, one is bound to work. Then play innocent when a company-wide e-mail goes out to tell everyone to stop sending work to their printers, since almost every printer in the company is now jammed.

Computer Salesmen, IT and Lab supervisors have heard it all, when it comes to bizarre questions by users about printers:

"Could you please come over and assign my C drive to the laser printer?"

"Do your printers have Adobe Readers?"

"How do I set my laser printer to Stun?"

"Is this ink cartridge compatible with Windows Millennium Edition?"

"I'm having problems printing. Does this have anything to do with the meteor shower?"

"My printer is too slow. Could someone come out and adjust the 'speed screw' on my printer?"

(Many of these amusing anecdotes can be found on multiple computer humor sites. But special thanks to *Rinkworks.com*, *Inventors.about.com*, and *Techsupportforum.com*)

Marilyn is a freelance writer and humorist with many interests. She has sold teen anti-drug articles, as well as had numerous esoteric articles published. She has almost seventy mini-articles on *Helium.com* (www.helium.com/users/573405/show_articles), and is writing a humorous Young Adult Science Fiction series, *Chronicles of Mathias*. Volumes One and Two have received a "Gold Star for Excellence" from *TeensReadToo.com* (www.teensreadtoo.com/ReptilianRebirth.html), and are available from most on-line bookstores.

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Editor's Letters: Tips and Thoughts from Readers

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

"E-book Reader Match Up," "Thank You!"

E-book Reader Match Up

[Regarding Jack Dunning's May 20 article, "E-book Reader Match Up":]

A friend showed me her Kindle a couple of years ago. So I looked at the readers available then. My conclusion: Nook is more versatile than the Kindle and it's much less expensive than the iPad, so I bought two Nooks for reading when we travel. It was a good choice at the time. Now, what do I want? A color Nook or the Samsung Galaxy? Still much less expensive than the iPad with Android advantages.

-Frank Phillips, San Diego, CA

When my wife decided that she wanted an e-reader, we looked at the Kindle and the Nook. What finally made the decision for us is that the Nook will let us download, for free, books from our library, while the Kindle would not. And Free is good. We also chose the black and white version, as all she wanted to do was read books, and the sales person said that if that is all we wanted, the quality of the image was better in black and white. I don't know about library books on the Galaxy, but she loves her Nook.

-David, Westminster, CO

Thanks to Jack Dunning for his useful reader device analysis!

-Elv, La Mesa, CA

As a somewhat avid reader and all around techno geek, I researched for quite a while before I decided on buying my Barnes & Noble Nook, over all I have been quite pleased with the experience, it is absolutely great for reading. It is easy to purchase books right from the device. It also works well with the Calibre (*calibre-ebook.com/*) e-book management program. I find the non-back-lit e-ink screen is much easier on the eyes and I prefer it to the screen on an iPad or other such device. It truly is like having a never ending magic book.

With the recent closing of "Borders" I could not pass up the low, low prices they were selling the "Kobo" readers for, so I purchased one. I am just as pleased with the Kobo as I am my Nook. I have also found that the best thing about purchasing books via the Kobo store is they go right on the Kobo reader, but you can also go to the Web site and download the Adobe Digital Editions which will transfer right onto my Nook without issue.

I highly recommend both of these e-readers, if you are looking to spend the least amount of money, then the Kobo is the way to go.

-Chris Varney

Not very balanced. The only two items that ring true from this article is that the iPad will use more power and cost more overall. Aside from that, most of the arguments for a Kindle were skewed. The iPad has a brightness adjustment that allows you to read in the dark without any disruption of others, and in bright sunlight, you can read it easily. Granted, not as well as a device with e-ink that stands out so well in sunlight, but it isn't unreadable. As for the weight, at just over a pound, I don't see it as some great challenge compared to holding a real book for long periods of time.

I'd say that a better comparison would be made with one dedicated e-reader to another, rather than a multi-featured device like the iPad and the Kindle. Although the article dismissed it as a mobile device like a laptop, you can utilize almost any kind of app on the iPad that is prevalent on a laptop, be they Office, Banking, or navigation apps. Compare the iPad to other similar devices to get an idea as to its overall functionality. (Blackberry just came out with one.)

The Kindle has its specific use, but if you want the best of both worlds, just get the iPad. You can get the Kindle app for free and sync it with Amazon easily. If you want to compare e-readers, don't hold up the iPad to a Kindle; it's like putting a bicycle next to an RV. They'll both get you where you want, but one will do it with tons more bells and whistles.

-Al, San Antonio, TX

Thank You!

Thank you for explaining this subject.

I feel better already...unless, of course, sir, you have purposely understated the level of surveillance online. As a matter of fact—hey, who's that at my window? Go on, get outta here already!!

-Richard Tibbitts, San Diego, CA

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