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Parallels Desktop for Mac

by Bruce Gordon – Technology Coordinator
Mechanicsburg Area School District

Summary of Parallels Desktop

Parallels Desktop is a virtualization software application which permits users of Intel-based Macs to run other operating systems, such as Microsoft Windows XP, without having to reboot. Parallels takes advantage of Intel's virtualization technology within their chipset which allows for much better performance over older emulation products such as Virtual PC. Users create "virtual machines" which run in a self-contained window or may be run in full-screen mode. A virtual machine exists a single file on the Mac HD so it may be easily transported to other machines via external hard drive or DVD. This makes imaging large quantities of Macs very easy. Printing, networking, and USB connectivity are all supported and work extremely well.

Implementation at Mechanicsburg School District

When I became supervisor of the technology department for Mechanicsburg School District in 2005 I wanted to introduce some of the tools of the Macintosh platform in the classrooms. The challenge I faced was that we had a number of legacy Windows-only applications that needed to remain in use. I had introduced a very limited number of pre-Intel based Macs, but in early 2006 I had no good solution for a large implementation of Macs. Boot Camp was then introduced. We immediately installed it on an Intel Mac Mini and began to test functionality, ease of use, stability. During out testing period is when Parallels beta was introduced. The appeal of Parallels was not having to reboot a machine every time a user needed to launch a Windows application as well as ease of

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Meet us at

Gannett Fleming

Gannett West Building
209 Senate Ave ❖ Camp Hill

Tuesday, April 17, 2007, 6:30 p.m.

Attendance is free and open to all interested persons.

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Keystone MacCentral is a not-for-profit group of Macintosh enthusiasts who generally meet the third Tuesday of every month to exchange information, participate in question-and-answer sessions, view product demonstrations, and obtain resource materials that will help them get the most out of their computer systems. Meetings are free and open to the public. The *Keystone MacCentral Printout* is the official newsletter of Keystone MacCentral and an independent publication not affiliated or otherwise associated with or sponsored or sanctioned by any for-profit organization, including Apple Computer, Inc. Copyright © 2007, Keystone MacCentral, 305 Somerset Drive, Shiresmanstown, PA 17011.

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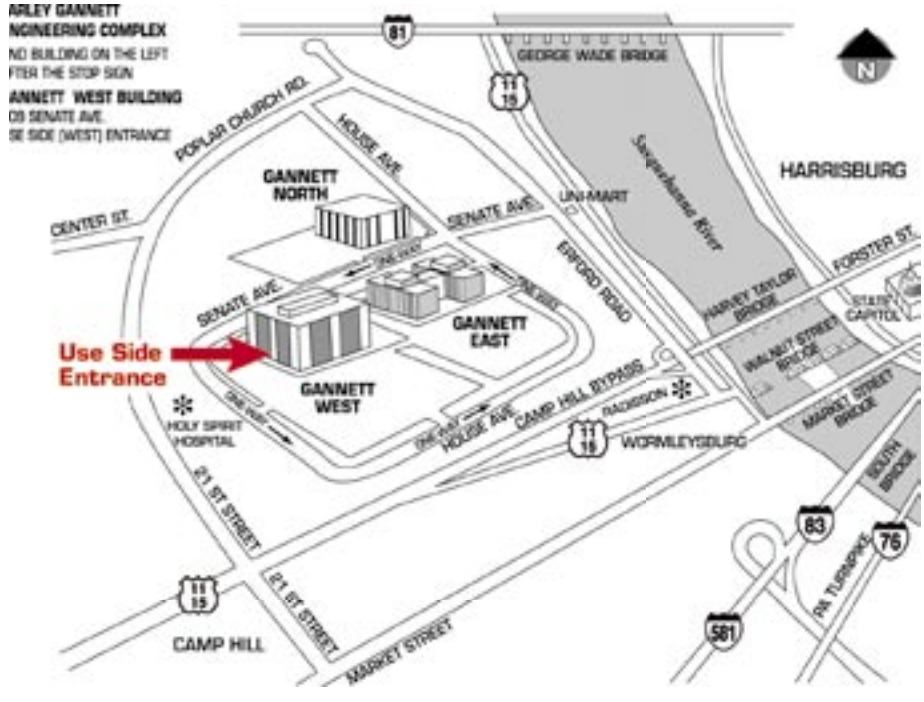

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by Linda J. Cober

President's Corner

As you have seen from our meeting announcement, our April 17 meeting will be an especially good one. Bruce Gordon, the Technology Coordinator at Mechanicsburg Area School District, will be presenting a program on Parallels, the application that allows those who need to run Windows programs but prefer Macs to do both. While still working for West Shore School District, first as a social studies teacher and then for the Tech Department, Bruce presented other programs for us, and we have always enjoyed his presentations and learned a lot in the course of the evening too. I hope you will join us and perhaps bring along a friend, especially one who may have shown interest in your Mac and the cool things you can do with it but who has been forced to stick with Windows because of a needed application.

We will be auctioning off a copy of Toast Titanium 8, the premiere application for burning data, music and photo CDs and DVDs, and now Blu-ray discs as well as TiVo to go. I have been a Toast fan for years now and am still running Toast 5 on my System 9 iBook. You may wonder why I like Toast so much when Apple provides software for burning CD's and DVD's. The simple answer is "Toast is easy to use." If one chooses to use the advanced features of Toast, there are plenty available. For example, one can make custom DVD menu backgrounds, make full quality photo archives with slideshows, use Roxio pro-quality audio mastering tools, make dynamic DJ-style crossfades and transitions etc. These are just a few of the features in Toast Titanium 8, but you get the idea. I installed the program onto my MacBook running 10.4.8 and just for fun decided to burn a CD of favorite songs to leave in my car. I can do this with the Apple application, of course, but wanted to see if Toast 8 still provided the easy-to-use options of the earlier versions. Yep. For example, the time between songs is set to 2 seconds, and I set them to 1 second just by selecting all and using the drop down menu. When I went to burn the CD, a polite message informed me that the time for the first song must be set to 2 seconds and "would you like me to fix this"? I clicked "Yes" and it was done. I am playing this CD as I write. I don't like to leave my original CDs or my iPod in the car, but this CD will be handy in my storage compartment. If time allowed before I had to write this column (and if I had TiVo) I could just as easily have also set up a transfer from TiVo and burned a DVD of missed TV shows to take along when I travel. Since my copy of Toast Titanium is a review copy, you will find me bidding against you for the boxed copy kindly donated by Roxio. I guess that shows how much I like Toast; I am willing to put my money where my mouth is to get it!

See you on April 17 for a great meeting and a mini-auction to boot!

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Parallels Desktop for Mac

imaging a single partitioned drive. Performance with processor and memory intensive applications such as Microsoft Access was quite respectable. Parallels Desktop does not have the graphics support for gaming but that was not our intended usage. We ended up purchasing 140 MacBooks configured with 1GB of RAM. We used Bombich's Carbon Copy Cloner and NetRestore to perform our imaging. The only hitch we ran into was that an identical MAC address was cloned on every Parallels equipped Windows XP machine. As we attempted to add the Windows XP virtual machines to our domain we kept receiving error messages that prevented successful binding to our Windows 2003 domain. Fortunately, my systems administrator found the error and the fix was to go into the network preferences in Parallels and change the last four digits of the MAC address to a unique number. Parallels itself has been extremely reliable and bug free. According to Parallels, Mechanicsburg was one of the first school districts to mass deploy their product for client users.

Some thing we have learned:

• 2GB of RAM works best, especially to run "Coherence" mode.

• Operating systems we have tested in Parallels: Vista, Windows XP; Ubuntu Linux; Windows 3.1.

• Processor and graphics intensive applications such as Movie Maker run marginally well.

• Firewire is not supported yet.

by Gary Brandt, Recorder

Keystone MacCentral Minutes

March 20, 2007

Business Meeting

We were back in our original meeting room at Gannett Fleming for the March meeting. Although construction was not quite finished, the room now allows us to project video from our Mac to two screens in the enlarged meeting room.

Webmaster Linda Smith showed us our updated web site. The new widget pick of the month she posted in March, "This Day In History", displays interesting tidbits of history that happened on the selected day. Clicking on a link that the widget displays will take you to more information from the World Book Encyclopedia if it is installed on your Mac. The iStat Pro widget was also shown. This widget displays the information that your Mac's internal sensors have gathered. While showing us the widgets, Linda also explained how to set up the Desktop & Exposé preference pane for active corners that are used to control the display of windows. Another widget that may be of interest is Sol 1.01, which gives dawn/dusk and sunrise/sunset times for selected cities. Linda has a widget archives page for the widgets that have been featured in prior months.

President Linda Cober announced the program for the April meeting. We will have a presentation on Parallels Desktop done by Bruce Gordon, who has done other demonstrations for us in the past. If you know anyone who recently got an Intel Mac, please invite them to attend. In April we will also be auctioning a copy of Roxio's Toast 8, a full featured CD/DVD burning program.

Q&A & Comments

Elizabeth Reinecker asked about methods of translating a letter from English to German. She was informed that online translation programs would not be good enough at translating idiomatic speech. Linda Cober offered her assistance to Elizabeth.

Jim Carey recommended Belkin models when asked about KVM switches. He also mentioned that Kodak would be bringing Easyshare all-in-one printers to market for Macs and PCs. Kodak inks are expected to cost about half what Epson inks cost. Hopefully, a little competition will bring down the cost for those of us using Epson and H-P inks. While shopping for ink, someone noticed that he could find a better price in the Staples aisle in Giant food stores than at the Staples store.

We talked about CD label printing. Someone mentioned no problems encountered when printing directly onto lots of CDs with a capable Epson printer. Another option is using a LightScribe CD burner with the appropriate media. Those models can burn labels in black and white onto a layer of the CD.

Gary Brandt asked if anyone had upgraded to Mac OS X 10.4.9. Members who had upgraded reported no problems. We heard of some problems with Carbon Copy Cloner – with better results using SuperDuper! to copy hard drives for transfer to another drive or Mac. Another problem was reported with H-P scanners and Tiger. An option would be to try using Vue-Scan software with the H-P scanner.

Jim Carey has been using Adobe Lightroom software since it was released. At this point he rates it as better than Apples's Aperture. A visitor had problems with Spotlight not finding files on an external drive. Spotlight needs to index a drive to be effective. Tom Bank asked about software to synchronize folders and he was referred to ChronoSync. Tom was looking to take items from two different folders into a third folder without duplicates but no one knew of a program capable of that.

Program Notes

In April we watched a portion of the DMTS training video covering iDVD 6. When starting, iDVD presents options for creating a new project, making a OneStep DVD, or making a Magic iDVD. The OneStep DVD is used when all you want to do is download unedited video from a video camera and burn it to DVD for archival purposes. With the Magic iDVD you choose the theme and image and movie files you want to use for the project and iDVD assembles everything into a project, complete with music and chapter titles. You can use the Magic iDVD as a starting point and perform additional editing.

Starting a new project by selecting from the Apple supplied themes allows for the most customization. Other themes are also available online if Apple's themes do not suit your project. Most Apple themes can be used to make a DVD in either standard or wide screen format. Some of

the themes have sub-pages, adding to a more unified look for a project. When creating a project in iDVD, you can view the DVD map to check for proper navigation. Files are dragged from iDVD's Media Browser into drop zones. Editing a slideshow in iDVD is similar to editing in iPhoto.

Chapter markers for the DVD can be created at specified intervals, but it might be easier to create chapter markers in iMovie before that movie is imported into an iDVD project. You would need to use the "Share iDVD" command in iMovie to allow for this to work in iDVD.

The individual image files from a slideshow can be added to a DVD as DVD-ROM content if space allows. Other files not featured in the DVD can be added in this way. This DVD-ROM content can be edited from the Advanced menu. The Project Info pane in iDVD shows the basics of a project. Projects can be archived to another location as you start to run out of hard drive space. Basic reminders from the training video were to check the project for errors before burning it to DVD and to save frequently as you work on a project.

by Adam C. Engst
<ace@tidbits.com>

Apple and EMI Offer DRM-Free Music via iTunes

In a press conference today in London, Apple and EMI Music announced that starting in May 2007, EMI Music's entire digital catalog of music will be available for purchase in DRM-free versions from the iTunes Store worldwide. Removing Apple's FairPlay digital rights management system from the tracks comes with a price, though. DRM-free tracks will cost $1.29 rather than $0.99, although they will also feature higher quality 256 Kbps AAC encoding, which Apple claims makes them indistinguishable from the original recording. 128 Kbps versions with Apple's FairPlay DRM will remain available for $0.99, giving users the choice of which track to purchase.

All EMI music videos will also be available without DRM, with no change in price. iTunes will provide a one-click option for customers to upgrade previously purchased EMI songs for 30 cents per song.

Commenting on the announcement, Apple CEO Steve Jobs said, "We are going to give iTunes customers a choice - the current versions of our songs for the same 99 cent price, or new DRM-free versions of the same songs with even higher audio quality and the security of interoperability for just 30 cents more." The move comes a mere two months after Jobs posted his widely read open letter about the ills of DRM and Apple's opinions about it (see "Steve Jobs Blasts DRM," 2007-02-12).

The removal of DRM from EMI's content sold through the iTunes Store is a significant event in the short history of online music sales, given the iTunes Store's leading position in the market. Customers purchasing DRM-free songs will be able to play them on any digital music player that supports unprotected AAC (and you can bet that the capability will be added soon to any that currently don't), thus starting to eliminate the complaint about how Apple required the use of the iPod to play iTunes Store purchases. Other usage restrictions that disappear for EMI songs include being able to play purchased songs on only five computers and burn playlists containing purchased songs only seven times. Needless to say, the removal of DRM does not mean that it's legitimate to copy music in ways that violate copyright law, but that's not new.

The increased price presumably helps EMI feel better about the possibility of increased copying, and I wouldn't be at all surprised if Apple and EMI will be tracking the number of songs from the iTunes Store that appear on the peer-to-peer file sharing services. More important, increasing the price to $1.29 while keeping the DRM-protected versions available for $0.99 creates additional revenue, which the music labels had been pushing for, while letting Apple hold fast to $0.99 as the base price.

From the research perspective of determining consumer attitudes to DRM, it's a little unfortunate that Apple increased the encoding rate for the DRM-free versions of EMI's songs. Had DRM removal been the only change, it would have provided a clear-cut answer to the question of how customers value the legally granted rights that DRM restricts. Of course, since quality has never been a significantly limiting factor in working with digital music for most people, the popularity of DRM-free music will still offer worthwhile insight into consumer attitudes. Personally, I plan to pony up the additional 30 cents per track for all the EMI music I've purchased from the iTunes Store.

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Apple and EMI Offer DRM-Free Music via iTunes

It's unsurprising that the first chink in the iTunes DRM armor comes from EMI, since EMI has been dabbling with DRM-free music since late 2006, selling a few songs without DRM via Yahoo Music. The question is, will EMI's move to the anti-DRM camp convince other major labels to follow? Jobs said that Apple expects to have more than half of the five million songs on iTunes available in DRM-free versions by the end of 2007, so the implication is that Apple is negotiating with the other major labels as well. Even so, the terms - FairPlay DRM or an additional 30 cents per track - seem quite set now, since I can't see Apple offering music from different labels for different prices.

Despite the removal of DRM from EMI's music videos, Jobs made no comment on whether Apple would be negotiating with the TV and movie studios to remove DRM from other music videos, the 350 TV shows, and the 400 movies currently available through the iTunes Store. (And for anyone following the numbers, Apple says it has sold over 2 billion songs, 50 million TV shows, and 1.3 million movies from the iTunes Store so far.)

Staff Roundtable — [**Glenn Fleishman**] Adam's research curiosity aside, I'm especially happy Apple and EMI coupled an increase in audio quality with the increase in price and removal of DRM. For me, this makes the decision to upgrade my EMI content even easier. At 256 Kbps, according to several audiophile sites I checked, an AAC should be indistinguishable from the data encoded in a typical audio CD. I suspect the quality will be even higher, though, because preprocessing - optimizing audio or video quality for a particular compression algorithm - from the original digital masters could produce even better results. Apple and EMI haven't said anything on this front.

The other question for me is whether EMI and Apple will digitally watermark the non-DRM audio files. Digital watermarking subtly modifies the media data to overlay encrypted or in-the-clear information that can be retrieved. The idea is that the watermark can't be removed without also affecting the overall quality of the music encoded in the file. One attempt by the record industry at watermarking was definitively defeated by Princeton professor Ed Felten, a notable critic of DRM and other schemes.

[**Jeff Carlson**] Glenn points to the potential for dramatically higher-quality recordings, but so far we don't know whether Apple or EMI are using masters to create the files. It wouldn't surprise me if there are three interns grabbing CDs from the archives and ripping them in iTunes (I doubt that's the case, but it wouldn't surprise me). The first movie I purchased from the iTunes Store when video became available, Grosse Pointe Blank, didn't look like it was encoded from any sort of master print, even taking into account video compression.

Frequent TidBITS contributor Andrew Laurence noted that this shift to non-DRM music makes it possible to play back music purchased from the iTunes Store on hardware devices such as the Slim Devices Squeezebox or the Sonos Digital Music System.

I also wonder (without any information to back it up) whether other music companies or services are planning to announce DRM-free offerings soon. The Apple/EMI event wasn't announced until the day before it happened, and the new tracks won't be available on the iTunes Store until May. To me, it sounds like Steve Jobs hopped a quick flight to England to make sure Apple and iTunes garnered the first headlines.

by Tim Sullivan

Wikipedia and Citizendium

I'm quite sure that I could lose myself and many hours rummaging around in Wikipedia.org. If somehow you have missed the site, it is a free encyclopedia. It has mushroomed into one of the Web's most astonishing successes, with 1.7 million articles in English alone.

Recently it has been getting some bad press. In some schools, students are not allowed to reference the site in their papers. Because the site is democratic, anyone can submit or modify articles. This immediately leads to three problems.

- People who don't have the least clue can pass themselves off as experts and contribute articles.
- "Graffiti Kids" can vandalize the articles.
- Not everyone can write a clear and concise article that gets the message across.

Larry Sanger, who has been associated with Wikipedia, wants to set up an alternative, citizendium.org. Like Wikipedia, Citizendium will be non-profit, devoid of ads and free to read and edit. Unlike Wikipedia, Citizendium's volunteer contributors will be expected to provide their real names. Experts in given fields will be asked to check articles for accuracy.

If you would like to read more about Citizendium and Wikipedia, check here:
<http://news.yahoo.com/s/ap/wikipedia_alternative;_ylt=AsjME0mP6_dERn5bcrVSbd2s0NUE>
or
<http://tinyurl.com/2qj6sj>

By Scott Armstrong

What Is The Best Archival Media To Buy?

What brand discs should one should buy if they want their data to last for years and years? First, the issue of quality depends upon what kind of data you are wanting to store on the disk. Then there is the price. If you want to share some photos or some data with someone and it doesn't have to last a lifetime, then I use the TDK disks from Costco. Costco has a "buy one get one free" special sometimes. That makes them a great deal. I found the TDK disks to be very good.

I don't ever buy the store brand disks. I have also had a lot of problems with the Imation brand of disks.

As for Archival Quality disks there are two brands: Mitsui and Taiyo Yuden. They are different because they use a Phthalocyanine dye or Cyanine dye. This gives the disks a bluish green color. The cost of the dye and the process of making the disks make them cost more. But, it is the dye that makes the disks last a long time, therefore Archival. The Mitsui disks are made right here in the United States actually in Colorado. You can purchase the disks directly from their online store at www.mam-a.com.

The Taiyo Yuden disks come in two flavors, the Premium disks and the Value Line. When disks are manufactured, a batch is checked for manufacturing defects and quality. If the batch passes the quality test then they are sold as the Premium disks. If the batch has too many defects then the batch is sold as the Value Line at a reduced price. Both types of disks are available from www.supermediastore.com.

The Taiyo Yuden 16x Silver Thermal or White Printable DVD-R disks sell for about 49 cents each in the 100 pack. They are usually sold in 2 50-pack cake boxes. We have purchased the value line disks for less than 24 cents each. But we bought 300. The value line disks are sold shrink wrapped in a stack.

At KVEW we use them to put a :30 second commercial on it just for the client to view their commercial. So we use the value line just for the cost. I couldn't find any brand anywhere cheaper than 23 cents each. They play fine for our use. However, I made some data backups and had a lot of data mismatch errors on verification in Toast. So I wouldn't use the value line disks for really important data.

The Taiyo Yuden Premium line of disks are excellent and I have had no burn errors at all. I use the Taiyo Yuden disks for archiving my client photos and important computer data for my photography business.

The Taiyo Yuden disks can be made in either Japan (the really top quality ones) or Taiwan (a lesser grade). When you purchase the Taiyo Yuden disks check the white paper at the top of the disk stack in the Cake Box; it will have English and Japanese type and the words "Made in Japan" clearly marked. These are the ones to get.

You can also get disks from www.meritline.com. But SuperMediaStore has them for less. What makes a disk Archival is the dye and the quality of the disk manufacturing and the testing standards. A disk is made up of 5 layers. The top layer that the label is printed on, a lacquer, a reflective layer, a dye layer and the bottom protective layer. A laser burns or pits the dye layer with the digital information. It is the stability of the dye layer that makes a disk archival. For information on the manufacturing process go to the Mam-a website and click on the manufacturing link. It's great reading.

Things that can destroy a disk are gouges in the bottom layer, alcohol based markers used to write on the top layer (such as a Sharpie), or excessive exposure to the UV rays and sunlight. The data layer is very close to the top layer so a sharpie ink can eventually bleed thru to the dye layer and make it difficult for the laser to read. Excessive sunlight can fade the dye layer and also make it difficult for the laser to read.

The Phthalocyanine dye used is the Mistui disks are the most stable dye available. The Cyanine dye of the Taiyo Yuden disks come in a very close second.

For very important data, use an Archival CD or DVD such as those from Mitsui or Taiyo Yuden. Use a water based disc marker for making the label, keep the disk in a jewel case for protection and out of the sunlight and in a moderately tempered room. Don't store disks in the garage in the heat and cold and don't leave them sitting bottom up on a table in the direct sunlight. Don't buy generic name or cheap store brand disks.

With good brand disks and correct storage your disks should last for decades. Now the problem will be reading the old disks in 30 years when you don't have a working DVD drive anymore. Have fun and happy burning.

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By Tim Sullivan

Rumors and Reality

Corporate powerplays: European antritrust proceedings against Microsoft have offered a peek inside the corporate offices of one big business.

A confidential 1997 internal e-mail from Bill Gates to the head of Microsoft's Mac Business Unit. Relations between the two companies were strained that spring. Office 97 for the Mac was running behind schedule and Microsoft was threatening to drop it all together — a prospect, the memo reveals, that Microsoft was well aware would "cause a great deal of harm" in Cupertino.

Microsoft executive in charge of Mac Office, Ben Waldman: "The pace of our discussions with Apple as well as their recent unsatisfactory response have certainly frustrated a lot of people at Microsoft," writes Ben Waldman, the Microsoft executive in charge of Mac Office. "The threat to cancel Mac Office 97 is certainly the strongest bargaining point we have, as doing so will cause a great deal of harm to Apple immediately."

However, there were some advantages to continuing the development. "We can experiment with Mac Office. Because Mac Office is so much less critical to our business than windows, we have the flexibility to test out new things in the product and in its marketing before we try them on Windows. Setup-less install, for example..."

TrueDisc introduced TrueDisc for Mac OS X. The company claims the software to be the world's only archival-quality optical format. They further promise that files burned to disc with TrueDisc can sustain disc damage as high as 90% and still restore the original file.

TrueDisc burns standard files to CD-R, DVD-R, DVD+R, and DVD+R Double Layer in a special damage-resistant format. These files, called "master copies", can be read back off the disc only through the use of TrueDisc software. If disc damage prevents some of the file from being read, TrueDisc automatically uses patent-pending algorithms to reconstruct the missing data. This allows TrueDisc to restore the original file even when the disc is damaged due to age or abuse.

TrueDisc will automatically use any available space on the disc, so you always get the maximum possible damage-resistance. When you burn less amounts of data to disc, lots of redundant cells can be added. When you burn a lot of data to disc, less redundant cells will be available for TrueDisc to substitute later if there's file damage. Either way, TrueDisc provides the best damage-protection possible. The TrueDisc format supports burning up to 600MB of data to CD and up to 4.1 GB of data to DVD. TrueDisc is priced at $89.

Rechargeable batteries that run on sugar: Researchers at Saint Louis University in Missouri are testing batteries that run on sugar and have the potential to last up to four times longer than lithium ion batteries, according to PhysOrg.com.

Electrochemist Shelley Minteer, Ph.D., is heading up the project and notes that in addition to running on nearly any sugar source, the batteries are also biodegradable. "It demonstrates that by bridging biology and chemistry, we can build a better battery that's also cleaner for the environment," she said.

The batteries work in a similar fashion to living organisms by using enzymes to break down sugar into energy - in this case, electricity. Once the sugar supply is depleted, users simply add a new sugar source, like plant sap or sugar water, and the battery recharges.

Dr. Minteer expects that sugar-based batteries will first show up as portable cell phone battery rechargers, and later make their way into portable electronic devices replacing the potentially toxic batteries used today.

Should the testing and technology refinement continue to show improvement, sugar-based batteries could be ready for commercial use in the next three to five years.

Flash Mob Party: Flash mobbing first came to my attention when I read the headlines "Four vanloads of police broke-up an iPod flash mob party in London last night." Using the internet and e-mails to promote the party, participants gather in a public place, to their thing, and leave. "Doing their thing" can take a couple of minutes to several hours.

The party I mentioned had 4,000 people gathered at Victoria station in London. After a loud ten-second countdown before the scheduled time, 6:53 pm, the concourse erupted into whoops and cheers. They then danced to their own drummer on their iPods and other MP3 players. It goes without saying that some commuters were less than amused.

Not an isolated event, the flash mob phenomenon has spread across Europe, the Americas, and Asia, with 200 potential mobs registered on websites like www.yahoo.com and www.flashmob.com.

At this time, the primary goal is to "breath fair and balanced life and vibrance into the dull corners of modern life" i.e have fun, enliven the day for spectators. If emitting a spark of hilarity in our streets is the sole aim, these events are a resounding success.

by Tim Sullivan

April Software Review

PDF (Portable Document Format) is an open file format created by Adobe Systems in 1993. It is used for presenting paper documents in a device independent and resolution independent fixed-layout document format. That means that just about anyone can read a PDF file, no matter what kind of computer they use. Each PDF file encapsulates a complete description of a 2D document (and, with the advent of Acrobat 3D, embedded 3D documents) that includes the text, fonts, images, and 2D vector graphics that compose the document.

While PDF can describe very simple one page documents, it may also be used for many pages, complex documents that use a variety of fonts, graphics, colors, and images.

If you are using a reasonably current OS, it is very easy to create your own PDF. When printing a document, choose "PDF" from the print dialog box. Voila, your file will be "printed" to a PDF file.

There are some very good reasons for creating PDF files.

First, as we pointed out, anyone with a computer should be able to read them.

Second, hopefully this format will be around for a long time. Saving current stuff to PDF will allow me to archive files that I want to keep. I have a whole bunch of files created with WriteNow (an OS 9 application.) They are almost not readable in OS X – too much garbage interspersed with the text. I need to convert all of them soon before my G4 laptop bites the dust.

This month we offer two programs that help manipulate existing PDFs. The first, PDFLab, allows the user to assemble or dissemble PDF documents. The second,CocoaBooklet, is an aid to printing booklets from PDFs.

PDFLab 2.0.3r2
http://www.iconus.ch/fabien/pdflab/
Requires OS X 10.3.9 or higher, Java 1.4.2

PDFLab lets you split and join PDF documents as well as insert images and blank pages. You will also be able to easily create PDF documents out of several images.

Its usage is really simple. You add your files in a list, select the pages you wish to include, order them the way you want and create a new PDF document.

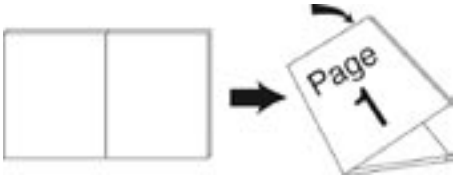
PDFLab also ships with tools that let you quickly split a document into many documents, (one document per page or one document for odd pages and one for even pages), encrypt or decrypt a document, add a watermark, interleave several documents.

CocoaBooklet 2.0.4
http://www.iconus.ch/fabien/cocoabooklet/
Requires OS X 10.3.9 or higher, Java 1.4.2

This program lets you create a booklet out of a PDF file, a process known as pages imposition. It is a useful tool to reduce the number of pages that has to be printed, which lets you save a lot of paper.

A booklet is book that is bound in the middle. Which means that a booklet has four pages printed on one sheet of paper (two on each sides). If you have for example a PDF file with 8 pages, you booklet will look like this:

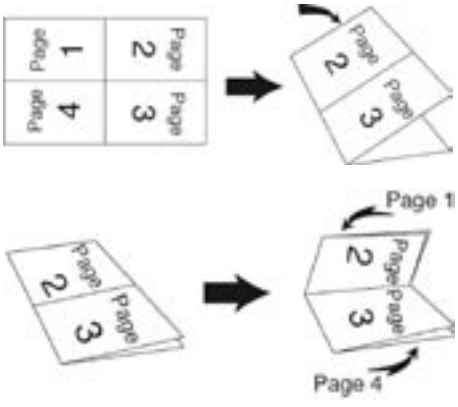
• First sheet, first side: pages 8 and 1



• First sheet, second side: pages 2 and 7
• Second sheet, first side: pages 6 and 3
• Second sheet, second side: pages 4 and 5

The bottom line is that you simply print your booklet, staple it by the middle, fold it in two and you have a book:

CocoaBooklet also lets you create a minibooklet. This is especially useful for printers that cannot print on both sides. What you will get is this:



Before Upgrading System Software

Apple currently uses two versions of updates:

• The Update version contains the complete versions of all files/packages to be updated. It is used only for updating the immediately previous version of Mac OS X. It is

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a smaller download and will thus download more quickly. For example, this month Mac OS X Update 10.4.9 should be just used to update Mac OS X 10.4.8

• The Combo Update version update contains the complete versions of all files/packages to be updated, as well as all updated files/packages from all preceding updates to your version. For example, this month Mac OS X Combo Update 10.4.9 will update any version of OS X 10.4.

We recommend the following procedure when applying a System Update

1. Consider backing up your current system with Carbon Copy Cloner or SuperDuper. OS X cannot be backed up using drag and drop — there are many important, but invisible, files that will not get backed up.

2. Make sure your hard drive is in good shape: Boot from the OS X Install CD (your original OS 10.4.whatever CD) and run Disk Utility's Repair Disk function (or use a third-party drive utility such as DiskWarrior or TechTool Pro).

3. If you have any FireWire devices connected, turn them off and disconnect them before installing the update. This includes iPods, as the iPod is a FireWire hard drive.

4. Install the update.

5. Do not interrupt the update process. The installation of incremental Mac OS X updates (or any significant system updates for that matter) should never be interrupted by putting the system to sleep, quitting the installation application, or even performing other system operations that could potentially interfere with the process.

5. After rebooting, again run Repair Disk Permissions.

6. If you have significant problems with the new updated OS, remembered the often repeated last resort advice from MacFixIt: Re-apply Combo!

Using this update procedure avoids many of the common problems incurred after each update to OS X.

Apple Updates

AirPort Base Station Update 2007-001 for Mac
03/29/2007

System Requirements
- OS X 10.4 or later
- AirPort Utility 5.0

The AirPort Base Station Update 2007-001 includes general fixes and compatibility updates for the following applications:
• AirPort Utility
• AirPort Admin Utility for Graphite and Snow Base Stations
• AirPort Disk Utility
• AirPort Disk Agent

Note: Only previously installed software from the list above will be updated. AirPort Utility v5.1 for OS X 10.4.x or later software supports the AirPort Extreme Base Station with 802.11n, AirPort Extreme Base Station and AirPort Express Base Station.

iTunes 7.1.1 for Mac
03/16/2007

System Requirements
- OS X 10.3.9 or later

iTunes 7.1.1 addresses a stability issue and minor compatibility problems in iTunes 7.1.

iPod Reset Utility 1.0 for Mac
03/15/2007

System Requirements
- OS X 10.3.9 or later

Use iPod Reset Utility to restore the following iPod models back to their factory settings, when iTunes is unable to do so:
• iPod shuffle (1st Generation)
• iPod shuffle (2nd Generation)

Security Update 2007-003 (10.3.9 Client)
03/13/2007

System Requirements
- OS X 10.3.9

Security Update 2007-003 is recommended for all users and improves the security of the following components:
• ColorSync
• CoreGraphics
• Crash Reporter
• cups
• Directory Services
• DiskImages Framework
• Flash Player Plug-in
• Foundation
• gnutar
• OpenSSH
• Print Center
• QuickDraw
• sudo

iPhoto 6.0.6
03/13/2007

System Requirements
- OS X 10.3.9 or later
- iPhoto 6.0.5

This update to iPhoto addresses issues associated with EXIF data compatibility and Photocasting.

OS X 10.4.9 Combo Update (PPC)
OS X 10.4.9 Combo Update (Intel)
OS X 10.4.9 Update (Intel)
OS X 10.4.9 Update (PPC)

The 10.4.9 Update is recommended for PowerPC and Intel-based Mac computers currently running OS X Tiger versions 10.4.0 through 10.4.7 and includes general operating system fixes, as well as specific fixes or compatibility updates for the following applications and technologies:
• Application launch times
• RAW camera support
• Updated ATI and NVIDIA graphics drivers
• Handling of large or malformed images that could cause crashes
• Image capture performance
• Mouse scrolling and keyboard shortcuts
• Font handling
• Dashboard stability
• Playback quality, and bookmarks in DVD Player

• USB video conferencing cameras for use with iChat
• Bluetooth devices
• Browsing AFP servers
• Apple USB Modem
• Windows-created digital certificates
• Open and Print dialogs in applications that use Rosetta on Intel-based Macs
• Sharing using AFP, SMB/CIFS, NFS and FTP file sharing protocols
• Login and authentication in a variety of network environments
• Connecting to Cisco VPN servers using IP/Sec and NAT
• AirPort including connectivity to EAP-FAST networks
• Searching iWork '06 and Microsoft Office documents using Spotlight
• Viewing of QuickTime streaming media behind a firewall
• Audio playback in QuickTime, iTunes, Final Cut Pro, and Soundtrack applications
• Determining the space required to burn folders
• Synchronizing contacts, bookmarks, and calendars to .Mac and mobile phones
• Mounting and unmounting iDisk volumes
• Time zone and daylight saving for 2006 and 2007
• Security updates

AirPort Extreme Update 2007-002
03/08/2007

System Requirements
- OS X 10.4.8 or later
- Intel-based Macintosh

This update is recommended for all Intel-based Macintosh computers and improves compatibility with AirPort Extreme base stations and networks.

QuickTime 7.1.5 for Mac
03/05/2007

System Requirements
- OS X 10.3.9 or later

QuickTime 7.1.5 delivers numerous bug fixes and addresses critical security issues. This update is recommended for all QuickTime 7 users.

Backup 3.1.1
03/01/2007

System Requirements
- OS X 10.3.9 or later

Backup 3.1.1 is highly recommended for all users of Backup 3. Significant areas addressed are backup and restore with external drives, memory management, and restore of bundled file types.

Recent Upgrades to our Library

Alarm Clock Pro 7.9.9
http://www.koingosw.com/products/alarm_clock_pro.shtml
Three different clocks can be displayed on your desktop.

Arctic Quest 1.0
http://www.exclusivegames.com/arctic-quest-mac.html
Arctic Quest for Mac is an inlay puzzle where you have to liberate tropical islands from the rule of the cunning Snow King.

Art Text 1.2
http://www.belightsoft.com/arttext
Art Text is an application to create high quality headings, logos, icons, banners and buttons.

Boinx iStopMotion 1.10.3
http://www.boinx.com/
iStopMotion provides for stop motion and time lapse recording.

BurnAgain DVD 1.0.1
http://freeridecoding.net/
BurnAgain lets you add files to your CD, CDR, or DVD+RW multiple times easily.

Business Card Composer 4.1.3
http://www.belightsoft.com/products/composer/
Business Card Composer is a Mac OS X tool to create and print business cards.

Camino 1.0.4
http://caminobrowser.org/
Camino is a browser for Mac OS X.

ChronoSync 3.3.5
http://www.econtechnologies.com/site/Pages/ChronoSync/chrono_overview.html
Automatically synchronize files and folders between your laptop and desktop volumes, or schedule automatic, simple backups of important files.

Default Folder X 3.0.4
http://www.stclairsoft.com/
Default Folder X improves the Open and Save dialogs in Mac OS X.

DEVONthink Personal 1.9.9
http://www.devon-technologies.com/download/commercial.php
It's a notepad, outliner, scrapbook manager, information manager, free-form database, archive, bookmark manager and image database.

EarthBrowser 2.10.6
http://www.lunarsoft.com/
Earth Browser is a three dimensional model of the Earth that is constantly monitoring conditions around the globe.

Fetch 5.2
http://fetchsoftworks.com/?VersionTracker
Fetch is an easy-to-use, full-featured file transfer client for the Apple Macintosh.

Firefox 2.0.0.3
http://www.mozilla.com/firefox/
Firefox is an award winning preview of next generation browsing technology from mozilla.org.

Google Earth 4.0.2736
http://earth.google.com/
An interactive map of the world with many overlays that provide additional data.

googol-Choo-Choo 3D 2.03
http://www.googolplex.co.jp/
googol-Choo-Choo 3D is a 3D model railroad simulation program.

GraphicConverter X 5.9.5
http://www.lemkesoft.com/en/index.htm
Converts graphics to and from a variety of formats.

GyazMail 1.5.4
http://www.gyazsquare.com/gyazmail/download.php
GyazMail allows you to filter out spam before it downloads to your machine.

Hardware Monitor 4.11
http://www.bresink.de//products.html

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April Software Review

An application to read out all available hardware sensors in Macintosh computers.

iSwipe 1.7.9.sit

http://www.hillmanminx.com/

iSwipe searches and downloads from the Web.

JiXii 2.9

http://www.loos.li/trollin/

This game is for people who are fanatics about jigsaw puzzles.

Klondike 10.2.1

http://www.casteel.org/

Klondike is the original solitaire game for Macintosh.

LimeWire X 4.12.11

http://www.limewire.com/

Enables individuals to search for and share computer files with anyone on the internet.

Little Snitch 1.2.4

http://www.obdev.at/products/

When an application tries to establish a network connection, Little Snitch intercepts the attempt and brings up an alert panel.

Monolingual 1.3.7

http://monolingual.sourceforge.net/

Monolingual is a program for removing unnecessary language resources from Mac OS.

One Finger Snap 1.3.3

http://www.oldjewelsoftware.com/

You can do everything with a single-button mouse that you can do with a 2-button mouse.

OnyX 1.7.8

http://www.titanium.free.fr/pgs/english.html

OnyX is a utility of maintenance, of optimization and personalization for Mac OS X.

Opal 1.0.7

http://a-sharp.com/opal/

Opal lets you organize just about anything in the form of an outline.

Password Generator 3.0.1

http://www.versiontracker.com/dyn/moreinfo/macosx/10166

Generator will generate passwords of any length, in any quantify that you specify.

Postage $aver 7.1.5

http://savepostage.com/psinfo.html

Postage $aver sorts one or more data files according to U.S. postal service (USPS) requirements for third class bulk mail.

PTHPasteboard 4.2.0

http://pth.com/products/pthpasteboard/

PTHPasteboard is a simple but powerful automatic multiple pasteboard.

Romi 6.2.1

http://www.romi.ca/index.html

Romi lets you play Rummy Tile (RummyCube, Rummikub, Rami) games against the cumputer at 3 different levels.

Secret Generator 1.0.5

http://www.versiontracker.com/dyn/moreinfo/macosx/22956

Generates passwords.

Smart Scroll X 2.1.2

http://www.marcmoini.com/

Smart Scroll X brings new scrolling options and enhancements to Mac OS X.

SMARTReporter 2.2.5

http://homepage.mac.com/julian-mayer/

SMARTReporter is an application that can warn you of (ATA/IDE) hard-drive failures before they actually happen.

SndSampler 5.8

http://www.sndsampler.com/

SndSampler is a sophisticated recording and editing program.

SOHO Notes 5.7.1

http://chronos.iserver.net/

SOHO Notes is a digital note-taking application and the official successor to StickyBrain.

Sound Studio 3.5.0

http://www.felttip.com/

Record and edit audio digitally on your computer.

SoundApp Reborn 0.1.0.app

http://www.versiontracker.com/

Simple, no-nonsense sound effect/audio player

Spamfire 2.30.app

http://www.matterform.com/

Spamfire automatically reduces spam by removing unwanted commercial and pornographic email.

SuperDuper! 2.1.4

http://www.shirt-pocket.com/

Use SuperDuper to copy your system to another drive.

Synk Standard 6.0.3c.app

http://www.decimus.net/

Synchronize and backup files.

Temperature Monitor 4.11

http://www.bresink.de//products.html

Temperature Monitor is an application to read out all available temperature sensors in Macintosh computers.

Tidy Up! 1.2.4

http://www.hyperbolicsoftware.com/TidyUp.html

Tidy Up! (Doublet Scan) is a utility for identifying all the duplicate files in your hard disks.

TypeIt4Me X 3.1.1

http://homepage.mac.com/rettore/ty2/TypeIt4Me3.0.html

Store frequently used text strings and a short identifier. During word processing, the short identifers will be replaced by the text string.

VLC media player 0.8.6a intel

VLC media player 0.8.6a PPC

http://www.videolan.org/

Separate downloads for PPC and Intel. VLC media player is a multimedia player for various audio and video formats.

VueScan 8.4.16.app

http://www.hamrick.com/vsm.html

VueScan is an inexpensive program that works with most scanners to produce high-quality scans that have excellent color fidelity.

WindowShade X 4.1.2

http://www.unsanity.com/haxies/wsx

WindowShade X brings Mac OS 9's popular Window Shade effect to Mac OS X.

Yank 1.41.app

http://www.matterform.com/mac_software/uninstaller/index.html

Yank is an all-purpose uninstaller for Mac OS X.

By Christopher Breen

Mac 911

Solutions to your most vexing Mac problems

Sync Address Book without .Mac *I use a Power Mac G5 at home and an iBook on the road. Both run OS X 10.4.7. Because I enter data in both machines, depending on where I am, I'd like to be able to synchronize my copies of Address Book. What do you recommend? — Via the Internet*

The obvious answer is a .Mac account, with which you can synchronize Address Book contacts, as well as iCal calendars and Safari bookmarks. Because that data is synced over the Web, you can update it from anyplace with an Internet connection.

But .Mac isn't free, and I like free. If you do, too, I suggest you take a look at Stephan Kleinert and Markus Brand's free address-o-sync. This handy little utility — which must be installed on each Mac you want to synchronize contacts with — uses Apple's zero-configuration networking technology Bonjour to establish a sharing relationship between Macs on a local network. Fire up address-o-sync on each Mac, tell it what you'd like to sync (all contacts or just selected groups of contacts), and click on the button with the familiar swirly sync icon; then the utility will get to work (see "Staying in Sync"). If duplicate contacts in your copies of Address Book contain different information (perhaps you've updated a phone number or an e-mail address on one of your Macs but not on the other), you'll have the opportunity to choose which data to keep.

A Macworld.com forum member suggests another option: Plaxo, a free Web- based service that lets you synchronize your contacts (via an Address Book plug-in) between multiple computers. Unlike address-o-sync, the free version of Plaxo won't merge and remove duplicate contacts; however, the $50-a-year Plaxo Premium will.

Find missing iPhoto pictures *Whenever I load new photos into iPhoto, I immediately put them into a new album for later viewing in iPhoto and for easier access from the Media Browser in iWeb and iMovie. Unfortunately, my wife doesn't do the same, so some of our photos seem to go missing. Is there an easy way to see which pictures have not been included in an album? If there is, I could use it to quickly sort my wife's pictures into albums. — Barrett Clark*

Smart albums to the rescue! Just choose File: New Smart Album, create the condition Album Is Not Any, and click on OK. All pictures that don't belong to any album will appear in the resulting smart album (see "Only the Lonely"). But be warned: Because smart albums update themselves, pictures in this Not Any album will disappear if they're sorted into another album.

Fix fonts in TextEdit *When I type something in TextEdit and print it (no matter what font size I choose) the text prints in extremely small type. The same problem sometimes happens when I print from Safari. What's going on and how do I fix it? — Shane Saylor*

In TextEdit, this is intentional. By default, TextEdit bases text wrapping on how wide the document window is on screen. To see this in action, type a couple of long sentences and then drag the bottom right corner of the TextEdit window to make it narrower. The text should rewrap itself to fit in the window. If you print this document, that printout will match what's on screen, down to where the words wrap. If you put a mess of text on a single line, TextEdit will automatically decrease the font size on the printout so all the text fits on that one line.

This is useful if you're entering lines of code and need those lines to print without breaking. But it's not so hot if you're using TextEdit as a word processor rather than a text editor. Fortunately, you can change TextEdit's line-wrapping behavior by choosing Format: Wrap To Page. When you do, the text will wrap to the size of the page specified in Page Setup (File: Page Setup), and fonts will print at the chosen size. (If you'd like TextEdit to always behave this way, choose TextEdit: Preferences and enable the Wrap To Page option in the New Document pane.)

As for Safari, you can increase the size of printed text by increasing the size of the browser's text on your Mac's screen. Just press Command-equal sign (=) to increase text size or Command-hyphen (-) to decrease it. Your printouts will mimic what you see on screen.

Ethernet and AirPort *Is it possible to hook up an Ethernet switch to an Apple*

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Mac 911

AirPort Extreme Base Station in order to connect more than one computer with an Ethernet cable? Will the router in the base station assign an IP address to each of the wired computers? — Stuart Landay

Sure — that's one reason Apple included the Ethernet LAN port on the back of the base station. To get the full lowdown on how to set this up, I strongly suggest that you download Apple's very helpful Designing AirPort Extreme Networks PDF document.

For those of you who are averse to reading documentation, the basic idea is this:

String an Ethernet cable between your DSL or cable modem and the base station's Ethernet (WAN) port. Run another Ethernet cable between the base station's Ethernet (LAN) port and one of the ports on the switch. String yet more cable between the switch and the computers you want to connect.

Run the AirPort Setup Assistant (in /Applications/Utilities). If the answers you provide work, great. If not, launch the AirPort Admin Utility (also located in the Utilities folder), select the base station, and click on Continue. In the Internet tab, choose Connect Using Ethernet, and then, from the Configure pop-up menu, choose either Using DHCP or Manually, depending on your circumstances. If you have a dynamic IP address, you'll pick Using DHCP. If you have a fixed address, you need to configure things manually, entering that IP address as well as the sub-net mask, router address, and DNS servers in the appropriate fields.

As for assigning IP addresses to your computers, that magic happens in the Network tab. Enable the Distribute IP Addresses option and choose either Share A Single IP Address (Using DHCP And NAT) or Share A Range Of IP Addresses (Using Only DHCP). If you choose the first option, the base station will dynamically serve, by default, IP addresses within the range 10.0.1.2 to 10.0.1.200. The second option lets you define the specific range of IP addresses if that's what you want.

Now you need to configure the computers you're connecting to that switch. If you've decided to share a single IP address, open the Network preference pane on each computer, choose Built-in Ethernet, click on the TCP/IP tab, and choose Using DHCP from the Configure IPv4 pop-up menu. The computers will then grab dynamic IP addresses as needed from the base station via the switch. If you're sharing a range of addresses, choose Manually from the Configure IPv4 menu and assign a specific address within the range you specified in the AirPort Admin Utility. You'll also want to enter 255.255.255.0 in the Subnet Mask field, 10.0.1.1 in the Router field, and the address(es) of your DNS server(s).

Run Windows safely *My wife just purchased a new iMac. She uses OS X about 90 percent of the time but also uses Parallels Desktop to boot into Windows for a few work tasks that require it. My wife never uses a browser on the Windows side, but the computer is connected to the Internet 24-7. Is Windows still vulnerable to viruses and spyware in this situation? What protection do you recommend? — Christopher Hosford*

Yes, Windows is still vulnerable. To prove it, try this: Without running your browser or your e-mail application, perform some normal tasks on your Mac and keep an eye on your DSL or cable modem's activity light. That blinking indicates that your computer is conversing with the Net, even if you aren't browsing the Web or exchanging e-mail. Furthermore, while your wife may swear she'll never launch a browser while running Windows, there'll likely come a time when she'll need to check something online and won't switch back to OS X to do it. Finally, your mention of your wife's work tasks should set off alarms. Where do these files come from, and how are they shared? A burned CD can carry a virus just as easily as an e-mail attachment.

The point is that Windows on a Mac is still Windows, which means that it's still vulnerable to all the same cooties that can plague PCs. With that in mind, if you're using Parallels Desktop, you need to behave like a regular Windows user and take precautions. Fortunately, doing so need not cost you a nickel. I have a living, breathing Windows PC sitting next to my Mac, and I've protected it for next to nothing.

Although you can buy firewall software with more bells and whistles, the free version of Zone Labs' ZoneAlarm is an easy way to block incoming threats. I rarely use a Web browser on my PC, but ZoneAlarm has logged more than 105,000 attempts to access my computer (granted, the majority of them were innocent). It also alerts you when applications or utilities try to make Internet connections and asks you for permission before it'll let them do so.

As for viruses, I used to run the Windows version of Symantec's Norton SystemWorks on my PC, but I let the subscription lapse because there are enough free alternatives. The one I chose was Grisoft's AVG Anti-Virus. If you choose a free program, you won't get virus updates as fast as you would with a product you paid for, and you won't be able to tweak settings as much. But for my limited Windows use, it's plenty good enough.

For dealing with spyware, I take yet another cheapskate route: Lavasoft's free Ad-Aware SE Personal. It works

only after the fact — that is, after the spyware or adware has infected your system and you want to get rid of it. The for-pay options — Webroot's $30 Spy Sweeper, for example — can block spyware and adware before they have a chance to touch your computer.

Migrating to a new Mac

Now that Apple has completed its transition to Intel processors, a lot of Mac users are thinking about replacing their old PowerPC machines.

Here are tools and tips that will make the job easier.

FireWire Cable When you first fire up a new Mac, Apple's Migration Assistant (found in /Applications/Utilities) will help you move your data, but it'll demand a FireWire cable to do so.

External FireWire Enclosure You have multiple IDE hard drives in your old Power Mac, yet your new Mac Pro works only with SATA drives. What to do with those old drives? Consider sticking them into FireWire hard- drive enclosures. Just slip an old drive into the enclosure, and you've got an external hard drive. Enclosures with Oxford 911 and 912 chip sets (which let your Mac boot from those drives) run from $50 to $80 and are available from vendors such as FirewireDirect.com and Other World Computing (eshop.macsales.com). Note that if you put your old Mac's boot drive into an enclosure, it won't boot your new Mac until you install an Intel-compatible version of OS X.

Drive Adapter FireWire enclosure too rich for your blood? Or maybe you need to connect your old drives to your new Mac only for a short time? Newer Technology makes a $25 USB 2.0 Universal Drive Adapter — a couple of cables that let you connect an IDE or SATA device directly to your new Mac via the Mac's USB 2.0 port.

Serial Numbers As efficient as Apple's Migration Assistant is about moving your applications from Mac A to Mac B, sometimes it misses some of the files that authorize you to use those apps. So just in case, make a note of all your applications' serial numbers. Copy documents with an iSight

"To get the $100 rebate, you must include the product's UPC label or a photocopy." "We'll need a copy of your insurance card before we can process that claim." "Do you have a copy of your receipt?" What do you do when you need to provide some sort of documentation but don't have access to a photocopier or a fax machine? The built-in iSight camera on the Intel iMac, MacBook Pro, and MacBook, along with Apple's Photo Booth software, could be the solution. Because the iSight has a very short focal length, you can stick a document or any other official object a couple of inches in front of it and get a nice, sharp picture of it.

To do so, open Photo Booth. Don't select any effects. Hold your object — box, document, business card, or whatever — up to the camera. Move it as close or as far away as you need; the iSight will quickly put it in focus. (Don't worry if you're trying to capture text and it reads backward on screen; you can take care of that later.) Hold your object steady by resting your elbow(s) on the table, and click on the Camera button to begin the three-second countdown.

Once the picture is taken, drag it to your desktop from Photo Booth's tray. You'll see that it's a JPEG file. If you aren't trying to capture text, you can use that JPEG as is. If you are trying to capture text, double-click on the image to open Preview, select Tools: Flip Horizontal, crop as needed, and save the file. — Jay Lindell

[Senior Editor Christopher Breen is the author of Secrets of the iPod and iTunes, fifth edition, and The iPod and iTunes Pocket Guide (both Peachpit Press, 2005).

Find Chris' books at www.amazon.com and www.peachpit.com. Get special user group pricing on Macworld Magazine! Subscribe today at http:// www.macworld.com/useroffer.]

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Keystone MacCentral meetings are held at 6:30 p.m. on the 3rd Tuesday of the month at Gannett Fleming, 209 Senate Avenue, Camp Hill.