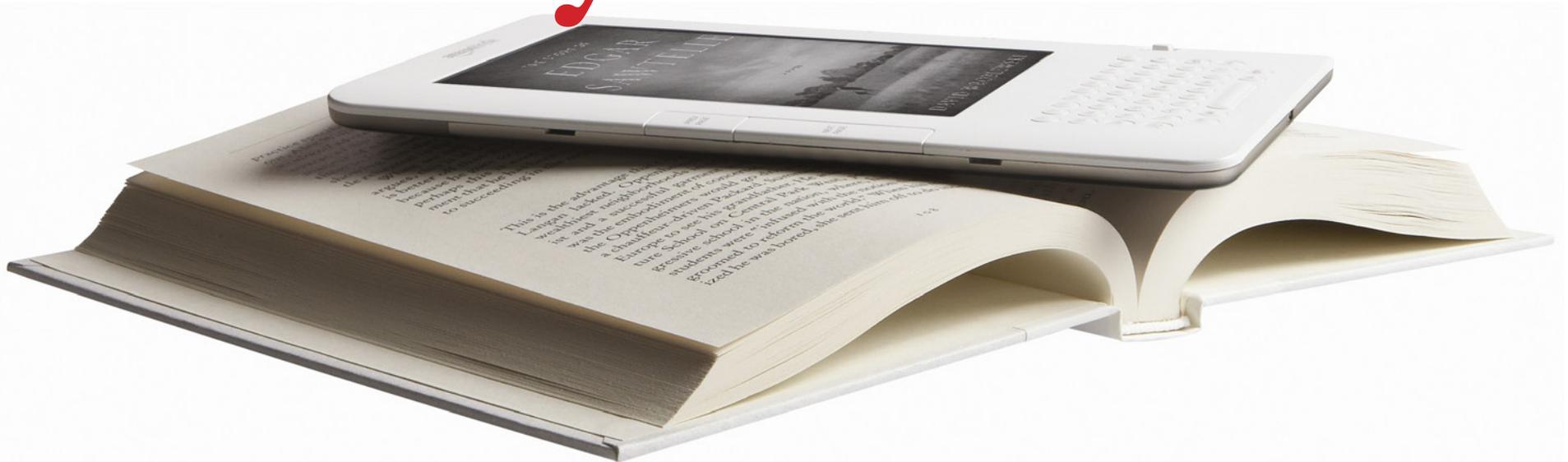




Washington Apple Pi Journal

January – February 2010
Volume 32, No. 1

Why a Kindle?





Washington Apple Pi Journal

January – February 2010
Volume 32, No. 1

President Jay Castillo
president@wap.org

Treasurer Thomas Carlson
treasurer@wap.org

Secretary Gordon Nord
secretary@wap.org

Directors Len Adler
leonard.adler@wap.org
Richard Allen
richard.allen@wap.org
Jonathan Bernstein
jon.bernstein@wap.org
Neil Ferguson
neil.ferguson@wap.org
Ken Goldman
kenneth.goldman@wap.org
Bob Jarecke
robert.jarecke@wap.org
Larry Kerschberg
l.kerschberg@wap.org
Brent Malcolm
brent.malcolm@wap.org
Richard Orlin
richard.orlin@wap.org
Charles Reintzel
c.reintzel@wap.org
Mike Schnieble
mike.schnieble@wap.org
John White
john.white@wap.org

Managing Editor Bob Jarecke
editor@wap.org

Editor Lawrence I. Charters
maceditor@wap.org

Senior Copy Editor Patsy Chick
patsychick@verizon.net

Copy Editors Jay Castillo
joseph.castillo@wap.org
Bill Bailey
william.bailey@wap.org

Design & Production Nora Korc
nora.korc@wap.org

Photo Editor Richard Sanderson
richard@sandersoncomputer.com

Deadlines

Writers' submissions:

March–April 2010 — January 30, 2010
May–June 2010 — March 30, 2010

Copyright Notice

© COPYRIGHT 2010, by Washington Apple Pi, Ltd.

Anyone wishing to reprint material from this publication must first obtain permission. Such requests may be sent by E-mail to maceditor@wap.org or by postal mail to the Pi office care of *Washington Apple Pi Journal* Editor. When reprinting any portion of the contents herein, proper author, title, and publication credits must be given. A copy of the article as printed must be sent to Washington Apple Pi, 12022 Parklawn Drive, Rockville, MD 20852.

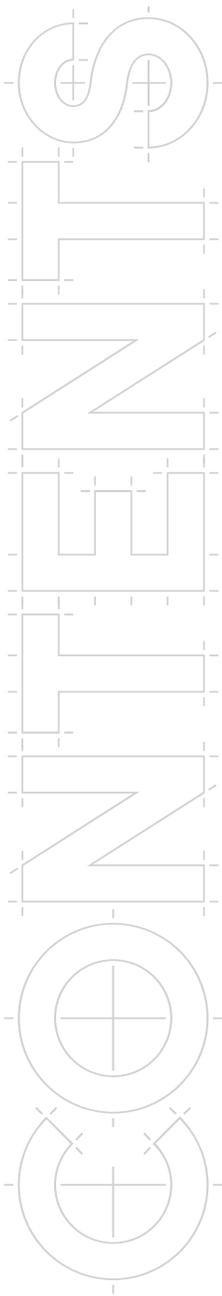
Contacting Washington Apple Pi

Washington Apple Pi, Ltd.
12022 Parklawn Drive
Rockville, MD 20852
Business Office: 301/984-0300 [message]

Web address: <http://www.wap.org>

E-mail address: office@wap.org





Editor's Column By Bob Jarecke	5	Should I Defrag my Hard Drive? By Pat Fauquet	14
Letters to the Editor	6	HDMI Cables Cost How Much? By Pat Fauquet	15
New Feature...well, kinda	6	Pi Photo Contest Needs New Leader(s) By Tom Carlson	17
From the President: 2010 a year of promise? By Jay Castillo	7	iFixited my iPod By Ken Goldman	18
Why a Kindle? By Travis Good	8	Tips & Tricks: Finder Column View and More By Bob Jarecke	20
Pi Humor: Map of Online Communities	10	Q&A Forum By Bob Jarecke	23
Trojans Still Need a Horse By Robert "Bo" Huttinger	11	Help Wanted – Inquire Within	26
A Book Review: Take Control of Your iPhone Apps By Jay Castillo	13	Comic Pi	28
		Washington Apple Pi Meetings	29



PI SCHEDULE PUMMELED

Washington Apple Pi Calendar

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
29	30	1	2	3		
6	7	8	9	10		12
13	14	15	16	17	18	
20	21	22	23	24	Christmas	26
27	28	29	30	31	New Year's Day	2

IT'S NOT NICE TO TRY AND OUTGUESS MOTHER NATURE!

WATUKEI
WOTHEK

- 10:00 Open House Journal Tribute
- 10:00 GASIG
- 1:00 Afternoon Learners SIG

Editor's Column

By Bob Jarecke

Well, here it is, another copy of the *Journal* for your reading pleasure. This is the inaugural edition for 2010, albeit, a tad late. There are the usual informative articles, a couple of cartoonish items, and club stuff, such as a comprehensive list of volunteer opportunities — more on this topic later.

The *Journal* has a long and storied history. This Pi staple has been a part of our club for most of the 32 years the organization has been in existence. To acknowledge the passing of the printed version of the *Journal*, we held a tribute on December 12th at the Pi Clubhouse, to acknowledge the many folks who have contributed to the *Journal* for these many years. Ironically, we are currently suffering a prolonged authoring dry spell, and it threatens the continued existence of the *Journal* as we know it. There are just too few articles being submitted for publication, and too few members contributing to that effort. A redoubling of effort is needed.

Lawrence Charters has been the *Journal's* bellwether for nearly 20 years. We realized just how much we have depended on him to keep the *Journal* going when, this month, for perhaps the first time, Lawrence was unable to contribute a substantive article. Fortunately, Pat Fauquet provided two pieces to fill the void, a contribution that we welcome. We would like to encourage those of you who

have contributed articles in the past to return to the fold, and those of you who have not written for the *Journal* to please consider doing so. Without broad-based support for the *Journal*, producing it becomes less and less a labor of love, and less and less doable on a bi-monthly basis. Please help — we have a noble and long-standing tradition to uphold.

Speaking of the *Journal's* noble tradition, we note that there was a spike in the number of members who downloaded the last issue of the *Journal*. Hurrah! I am guessing it had to do with the extra reminders that we sent out to the membership. Recently, I learned of a member who had not downloaded the *Journal* because of difficulty reading on screen for extended periods of time. I reminded her of the option to print the *Journal*, and more specifically to print, in black and white, only the pages in which she was interested.

Over the last year, we have gone to great lengths to transition the *Journal* from a printed publication to an electronic copy. Feedback tells us that the membership is more than pleased with the final result. I can only stress how important it is for the *Journal* readership to let the editors, or other Pi managers, know if there are problems or issues that need to be addressed. Just use the feedback link at the bottom of any page of this publication.

Enough already. Enjoy your *Journal*!





Letters to the Editor

Dear *Journal* Editor:

Thank you for the article on Snow Leopard Upgrade: Spectacularly Boring, by Lawrence I. Charters.

I am a long-time Mac user, but timid. Although I had purchased Snow Leopard, it remained sitting on my desk. With the New Year came the decision to install it. As a final procrastination, I started to read the *Journal* for October November, and there I found Lawrence's article.

I said to myself, "Boring, that's for me," and I set right out to follow the directions. Piece of cake! I shall now move on to my iMac which is spectacularly cluttered, but I expect that installation to go smoothly.

Thanks again,
Gene Haddon

Editors: Thanks for your comments! Our pleasure, Gene.

New Feature...well, kinda

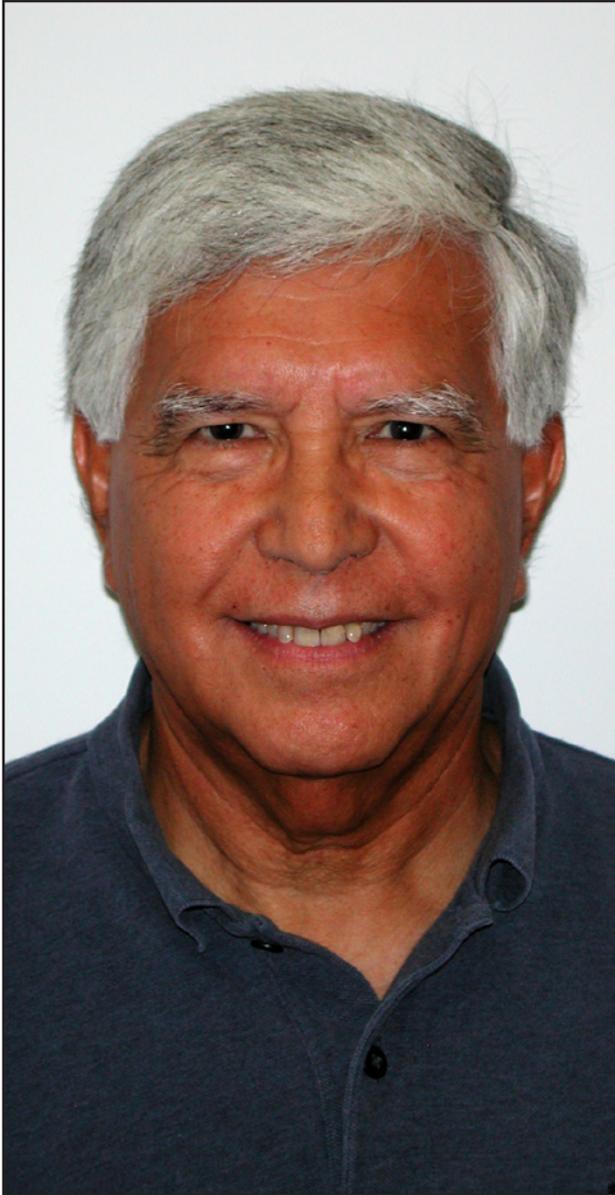
Near the end of this *Journal*, you will find a new section, called Q&A Forum. We had something similar in the printed *Journal* (remember it) that featured questions from the TCS, our Pi member forum. That feature was left out of the electronic *Journal* because it was repetitive of information the member could read elsewhere on the Pi Web site, and we did not want to unnecessarily bloat the electronic version of the *Journal*.

But, we also realize that many of our members do not access the TCS, even though it is a great place to find interesting questions and equally enlightening replies. Also, besides the TCS Forums, there are other venues, like our monthly meeting Q&A session, where questions of general interest arise. For these reasons, we are trying out a new *Journal* section to present some interesting questions and answers from various in-house sources.

Oh, one more thing: when available, questions from the monthly meeting may be provided in video or audio format. The below image of a video file is representative of the size of one of the answers as a QuickTime movie. Let us know what you think. And, of course, if you have questions, don't hesitate to ask!



An example of a QuickTime movie file with Lawrence answering a question. Go to page 24 to view the QuickTime movie.



From the President: 2010 a year of promise?

By Jay Castillo

Happy New Year, fellow Pi members! The year past was a good one for the Pi, and an interesting time for me, as I learned how to be President. It wasn't that painful after all.

We now have one year of experience with the electronic publication of the *Pi Journal*, and the membership comments have been predominantly favorable. Our new General Meeting venue at George Mason University has also been favorably accepted for the most part. The second Pi Photo Contest was a great success, and the winning photos are on display at the Pi Clubhouse for your viewing pleasure. If you have not visited the Clubhouse, please take the opportunity to do so. I think you'll be impressed.

The most important message I can send you for 2010 is the need for your continuing participation in Pi activities, and as volunteers. Everything we do is a result of the commitment and hard work of volunteers. Actions as simple as suggesting General Meeting topics or speakers are very helpful. We are constantly seeking articles for the *Journal*, so try out your writing skills. Our editors can work wonders with the submissions.

One of the most important events of 2010 will be the election of the Pi Board of Directors. The Bylaws state that:

The business and affairs of WAP shall be managed by its Board of Directors, which may exercise all powers of the Corporation and perform all lawful acts and things which are not by law, the Articles of Incorporation, or these Bylaws directed or required to be exercised or performed by or are conferred upon or reserved to the members.

The Board consists of 15 members who serve three-year staggered terms. Each year, five new Board Members must be elected. The Board meets on a quarterly basis, or more often if necessary. The particulars of the Pi Board of Directors are described in the PI Bylaws, which you can find at <http://www.wap.org/about/pibylaws0807.html>.

The qualifications for Board membership are simple: You must be a regular member in good standing when you stand for election and while you serve. You can nominate yourself, or someone else can nominate you, for election to the Board. Nominations for Board Members must be received no later than March 31st. Please join us, then: the few, the proud, the Pi Board of Directors.



Why a Kindle?

By Travis Good

I'm not a reader. That is, prior to owning a Kindle I read very few books a year. Long-form reading was just not what I spent my time doing in this world of short-form media. The Web and email, magazines and newspapers, podcasts and YouTube all conspired to shorten my attention span — and consume my life. Don't get me wrong, I love to read, but I tended not to focus long enough to plow through books. The Kindle changed that.

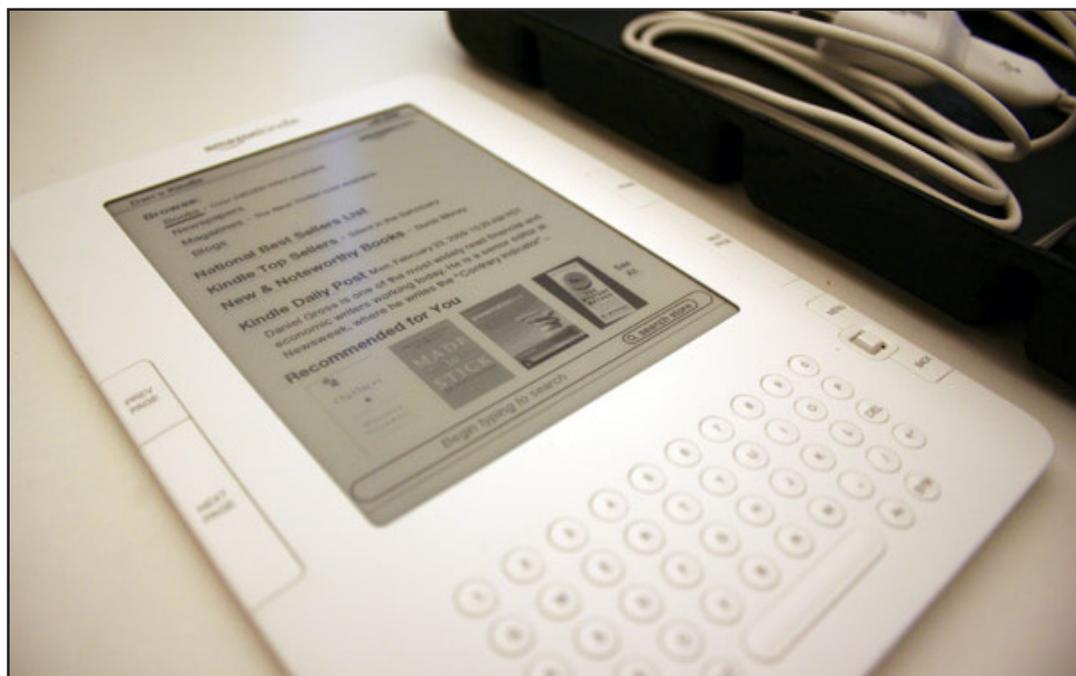
Before I explain how the Kindle revolutionized my reading, let me explain what caused me to spend the money. Seriously, why would a person who didn't read books spend \$350 (then, \$260 now) on a device meant primarily for reading books? My hope was that somehow the Kindle would get me to read more books. However that was mere hope; it was unproven and certainly not justification enough to spend the money. Believe it or not, what convinced me was the perceived value I saw in features I now rarely use.

Bundled into the cost of the Kindle is unlimited 3G data service and a Web browser. In theory, this would allow me unlimited wireless browsing and email in a tiny package as I roamed. How incredibly valuable for my travels! I'm an audio fan so the text-to-speech feature offered the prospect of having my books read to me as I drive. Sweet! If I was

going to carry it around anyway then I could even listen to podcasts on it because it's also an MP3 player. My justification went something like this: "If I still don't read books then at least the Kindle will still be valuable." So, sucker that I am, I bought a Kindle.

I've now read more books in the past year than in the prior 10 years combined.

Why? What makes the Kindle so special for reading books? For me it all starts with the screen. The black on light grey are quite readable and similar to the print on a book page. This means I can stare at it for hours and not get eye fatigue. More importantly, I can choose the font size and column width of the page of text. This was critically important to transforming my reading habits. By being able



to create a narrower column of larger font text I was able to read much more effectively. While this means I had to change pages more frequently, the buttons on the Kindle make that effortless. Since the device is so light and comfortable to hold in one hand, I can just read read read with little effort.

The Kindle bookstore is the second reason the Kindle is special. It's just a store, true, but it's open 24-hours a day and provides instant free delivery of your purchases. More than anything this has an appealing psychological effect on me. When I've just enjoyed a book, I can go seek out more books by the same author directly on the Kindle. Often I'll buy the next book in a series. When I read a good review or someone recommends a book to me I can buy it right then and there. Best of all, most books are cheap and even best-sellers are almost never more than \$9.99, which is a huge savings over their hardback pricing. Lastly, Amazon often has promotions where books are free, and the Amazon public domain library continues to grow.

There are a myriad of lesser features that I also like. The battery on this thing lasts forever compared to what we're used to. The e-Ink technology only uses energy when you turn pages making it possible for the Kindle to function for a week with wireless turned off, or three days with it turned on. Never before have I been able to stop thinking about my battery and just trust that it will last. Very nice! Buying books on the fly is really gratifying because I am building a library on my Kindle, which can hold up to 1,500 books. The built-in dictionary will instantly look up any word on the page, which I find remarkably useful, especially with historical fiction. The Kindle also works as a PDF reader, so I keep camera manuals and other PDF files on it for ready reference. The fact that I have Kindle readers on my iPhone and Mac gives me additional options for when I don't have my e-reader with me. Via the Kindle Store, the books all stay in sync, so when I switch from one device to another I never miss a beat. The list goes on but these are the biggies.

All these accolades prompt the question, "What are the Kindle's drawbacks?" Well, there are several. The screen is only six inches in diagonal, which is relatively small. This works fine for books, but it isn't great when layout is important. Magazines and newspapers published to the Kindle lose their formatting and become more book-like. Textbooks don't make it past first base. The Kindle DX is a partial answer as its display is a much larger 9.7 inches, but it too lacks color, another drawback of the Kindle family of e-readers. The biggest drawback, though, is the lack of openness. Other than PDF documents, you can't easily add content from sources other than Amazon. Also, while I don't feel the pain yet since Amazon is the 800-pound gorilla of eBooks, if ever I choose to change allegiances then I put all my prior purchases at risk. Amazon uses a proprietary digital rights management (DRM) so I can't "take my books with me". This is reminiscent of the days when Apple's DRM kept our music locked to the iPod. Getting publishers to cooperate is as necessary a stage of development in print publishing as it was in music publishing. For now, I just hope this portability constraint loosens with time, as it did for music.

So in the end do I use the features, which originally justified my purchase? No, and it makes little difference to me. The Kindle has been a fabulous book-reading tool and I enjoy it immensely. It's a very simple device but it's transformative. Much like the original IBM PC or the first Palm, someday we'll look back on the Kindle and realize it was the beginning of something big. Signs of this were all over this year's Consumer Electronics Show in Las Vegas, where e-book readers were everywhere. There were at least a dozen new devices announced and that is on top of the big three that are already out there: Amazon's Kindle, Sony's Ebook, and Barnes & Nobles' Nook.

I can't tell you the Kindle will work a miracle in your life. However, I can tell you it worked one in mine.





Trojans Still Need a Horse

By Robert “Bo” Huttinger

recently got a call from a friend who asked, “Why do I keep getting pop-ups in my browser?” As the tech support guru for family and friends, I thought to myself, “This will be easy, and I’ve got five minutes to spare.” So my friend fired up Safari, and away we went.

I started with the obvious things. Had he checked the option to ‘Block Pop-up Windows’ under the Security tab in Safari Preferences? Yep, he had (see Figure 1).

“What site are you going to?” I asked, and checked that Web page to see if I could find anything out of the ordinary. A look under the hood [Safari < View < View Source] revealed some Javascript, but no redirects, or modifications.

“Let’s clear the cookies and cache.” Done and done.

“Reboot your machine.” Okay.

“Is it happening in other browsers?” Nope.

Now I needed to see first hand what was happening on my friend’s Mac, so I began a screen-sharing session; I wanted to see the “Page Storm” that they were getting. However, the remote screen-sharing option did not work reliably. We did a little triage by checking to see if he was on the right network. I also had him turn off his wireless Airport connection and reconnect to the Internet via Ethernet. Now it was time to get my hands dirty.

The next step was to change his DNS servers temporarily to make sure his problem wasn’t an Internet Service Provider issue. We went to System Preferences/Network, selected Ethernet

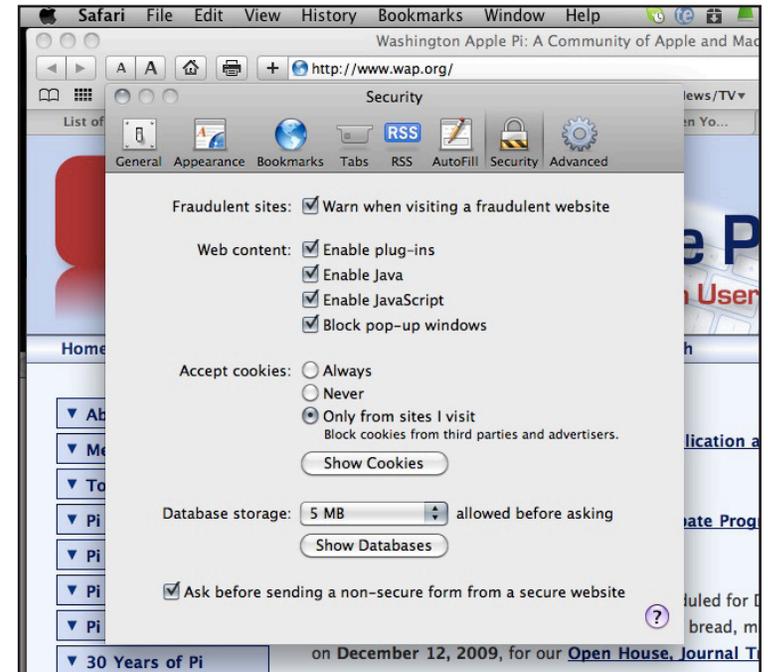


Figure 1.

(see Figure 2), and used the DNS addresses from OpenDNS [<http://www.opendns.com/>]. Still no luck. This was getting uglier and uglier, but still I didn’t think that whatever was causing the problem was really that bad.

“So, let’s open your hosts file.” I warned my friend to follow my directions explicitly, and to not do anything unless instructed. At this point we were putting on the headgear and going deep into the bowels of the operating system. Nothing there! It was the

Anytime you download something from an unknown source, NEVER give your administrator password, no matter how much you want to install it.

vanilla hosts file that comes with the installation. Now I am really scratching my head. What can it possibly be?

“Open your Terminal application.” I said warily. “Now type the following exactly.”

```
sudo crontab -l
```

My friend replied with a screenshot of the results. It looked like this:

```
* * * * * "/Library/Internet Plug-Ins/
plugins.settings">/dev/null 2>&1
```

So I did a little searching, and discovered that there is a Trojan horse out there ‘infecting’ Mac OS X! The Macworld Web site had an article about it a little over two years ago, which you can read at:

<http://www.macworld.com/article/60823/2007/10/trojanhorse.html>

After a little prodding, I found out that my friend has a penchant for downloading things that he probably shouldn't. I surmise this is how the offending Trojan got into his system. Well, I'm not the “thought police,” just a friend trying to help. So I trudged on after issuing a stern warning:

Anytime you download something from an unknown source, NEVER give your administrator password, no matter how much you want to install it.

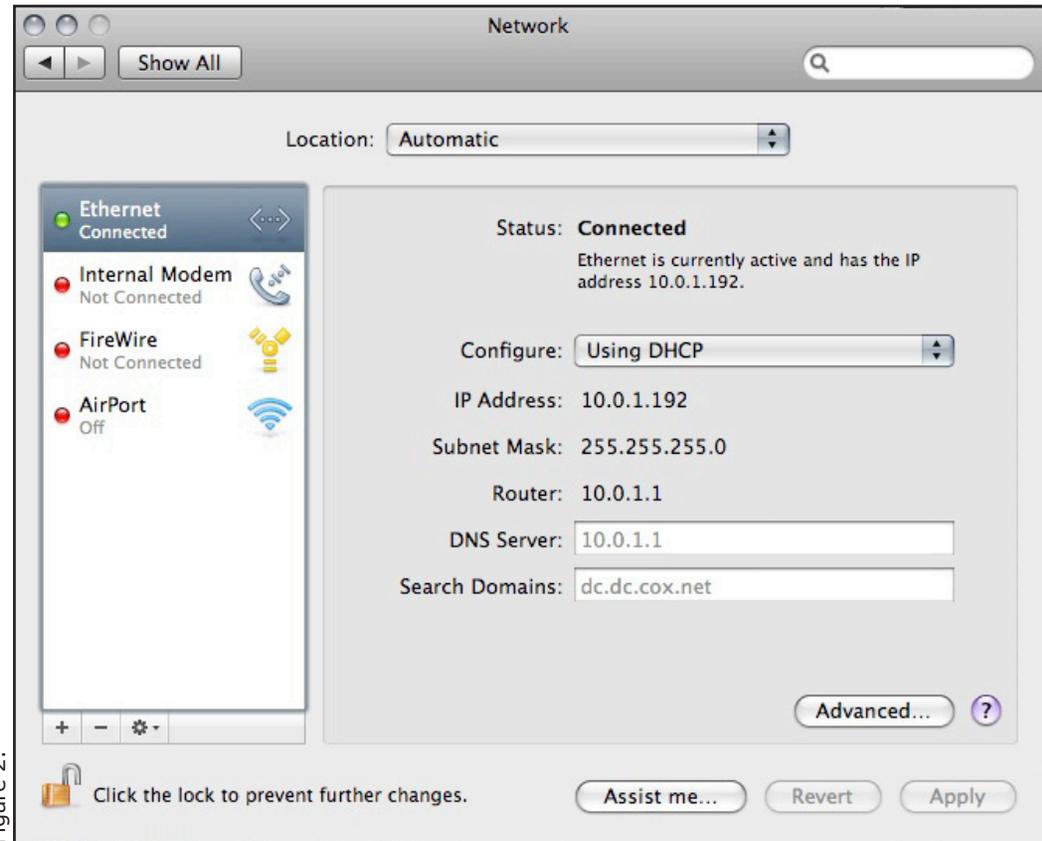


Figure 2.

And then I continued trying to fix the problem. We removed the CRON job, the offending Internet plug-in, emptied the trash, and rebooted. All was working fine.

An hour later we were wrapping it up. “Just one more thing,” I said. “Once you’ve been compromised, there is no way to ensure you are free and clear. If I were you, I would reinstall Mac OS X from the install disk and would change ALL my passwords immediately. Have a great weekend!”

“Thanks for the help,” my grateful friend replied. “No problem, I learned something new today,” was my retort.

It’s a wild woolly world out there. What’s that about people in ivory towers or glass houses? Although it’s rare, we Mac users can get bitten too; be wary, and don’t get caught!

A Book Review: Take Control of Your iPhone Apps

By Jay Castillo

In this e-book from TidBITS Publishing, Jeff Carlson aims to provide the reader all the information needed to take advantage of the most important of the iPhone's built-in applications. Except for the cellular modem and camera functions, most of the information, applies to the iPod touch as well. The book seems intended for the most basic user of these devices, assuming little or no experience. I found the book to be useful but mundane. After all, it is an instruction manual.

Take Control of your iPhone Apps is brief (118 pages) and modular. The author begins with a short section on shared iPhone operating system features — syncing essential information, and marking a spot with location services. Syncing can be done via *iTunes*, connected to your computer, or wirelessly, using *MobileMe* or *Microsoft Exchange*. Carlson discusses the pros and cons of each, and gives detailed how-to instructions. Location services combines data from three sources: GPS; Cellular; and Wi-Fi. Even without the GPS function, the iPod touch can determine its location based on nearby Wi-Fi networks, although this method is not as accurate as the others.

The remainder of the book consists of instruction modules for the primary iPhone operating system applications: *Calendar*; *Phone* and

Contacts; *Safari*; *Mail*; *Messages*; *Camera and Photos*; *Maps and Compass*, iPod; and *Remote*. The reader can skip to any application of interest without loss of relevant information. The general format for each section is a sequence of numbered steps, accompanied by numerous screen-shots. The text is quite legible, with plenty of white space. For each application, Carlson shows how to set it up, explains its functionality, and offers customizing alternatives. He helpfully provides tips and links to additional information or third-party applications of interest.

I think that the author provides a good service to the reader. The book is easy to read, the instructions are clear and well illustrated, and you will be a well-informed iPhone or iPod touch user. I learned things about the Map function that will be very helpful in the future. For example, I didn't realize that I could display step-by-step directions between two locations on my iPod touch. I don't have to print out my computer map application results, and remember to take it when I get in the car. Keeping up with email is easy and convenient, and for me is one of the most important capabilities of the iPhone operating system. The *Mail* section is extensive, with many tips for maximizing the utility of the application, and working around some of the inherent limitations, such as the inability to

filter spam, and to mark and file messages automatically. I don't have a compass on my iPod, but I thought that section was really cool!

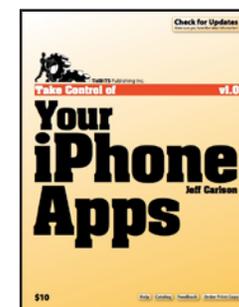
I recommend this book, especially for someone brand-new to the iPhone/iPod touch experience. It will make the experience much more enjoyable, and considerably shorten the learning curve. For ten bucks, it's a bargain.

Take Control of Your iPhone Apps (Version 1.0)
By Jeff Carlson

122 pages
Published by TidBITS Publishing Inc.,
November 2009

ISBN: 161542-006-3
Price: eBook \$10; print version \$20.99
Available at:

www.takecontrolbooks.com



Take Control

You
iP
A

\$10

Should I Defrag my Hard Drive?

© 2010 Pat Fauquet

I received an email recently with this very question. The person who asked is a long-time and very experienced Windows user, who purchased his first Macintosh a couple of years ago. I get the same question from long-time Mac users, though. The bottom line is that, if you are running Mac OS X, you don't need to worry about this. If you are running Windows or an older Mac operating system, you do. It all has to do with how your operating system stores and retrieves files.

Most commonly used operating systems store files around the hub of the hard drive in the order in which they were saved. A directory file on the hard drive keeps track of where files are stored, and keeps track of free space. When you edit a file, the operating system saves the new version to a different area of the hard drive. The directory is updated, and the space where the old file was stored is marked as free space. When you save another file to the hard drive, the directory looks for the first space large enough to fit the new file and uses that space. If there is extra space remaining from the old, larger file, that area is left empty.

Over time, as files are written and rewritten or deleted, there are more and more little chunks of space that are too small for new files to be written into. Then the operating system begins dividing large files into smaller fragments so it can store them. This means that the directory has to remember where the fragments are stored, and has to pull them together

when you open or copy the file. This is why, over time, hard drives tend to slow down when the user tries to open, save, or copy large files.

There are utility programs designed to clean up this file mess. They are called disk optimizers or disk defragmenters. They rewrite the files stored on the hard drive to put files of the same type together. In the process they eliminate the free space, so that there is room for new large files. They also put files that are stored in fragments back together.

Mac OS X, by contrast, arranges files in bands around the drive, depending on their function, and leaves free space for future files of the same type between the bands. In addition, Mac OS X is written so that it uses some of its free time to keep your hard drive organized. When your computer is on but not busy, Mac OS X is working in the background defragmenting and rearranging the files to keep your hard drive running at its best. If you were to use an optimizing or defragmenting program in Mac OS X, that program would rearrange the files on your hard drive according to what its programmer thinks is "right." When you quit the program, Mac OS X would take over again and rearrange the files the way the engineers at Apple determined was "right." This is not good!

There are, of course, some situations in which you want your drive to be completely defragmented, even more so than it would ordinarily be if you are using Mac OS X. An example would be if you were trying



to capture audio and video files for serious editing in programs like *Final Cut* or *Logic*. In that case, it is best to use an empty drive as a working drive for capture and editing. Because there are no other files on the drive, the large files you are working with will not be fragmented as they are written. After you are finished editing the file, you can move it to a regular hard drive for storage, and erase the working drive with Apple's *Disk Utility* before you process any new files. It is also helpful to have an empty drive for *Photoshop* to use for the temporary files that program produces as you edit images. If *Photoshop* is working correctly, it will delete the temporary files when you quit. If the temporary files are not discarded properly, you can erase the hard drive where the temporary files are stored, and this will speed up *Photoshop*.

Apple has an area on its Web site called Support, where it stores articles about questions like this one. If you would like further information, check out the article at the below link. It is a little old, but things have not changed since it was written.

<http://support.apple.com/kb/HT1375>

Editor's note: This article was adapted from an entry on Pat Fauquet's blog.

HDMI Cables Cost How Much?

© 2010 Pat Fauquet

It's funny how a Christmas present can make you spend money on just a few more things. In our family's case, the children gave my husband a Blu-ray player for Christmas, to be used with our

High Definition TV (HDTV). This was a Phillips, 42" Plasma HDTV that I had bought for my husband about 5 1/2 years ago when we moved into our new home. It was not the very top of the line, but it had most of the latest bells and whistles available at the time, and it has served us well.



HDMI video cable.

It does not have a High Definition Multimedia Interface (HDMI) port, though; when we bought it HDMI was just being introduced, and was not generally available. And we needed that port for the Blu-ray player. We could connect the new Blu-ray player to our old HDTV using a set of Component cables, but if we wanted to see the full picture quality, we needed to use an HDMI cable. Time to go TV shopping!

We headed out to Costco, Best Buy, and an independent TV dealer, to find the best deal. We bought a Sony Bravia 52" LCD TV. The TV is not the top-of-the-line unit, but it has four HDMI connectors, and that was my minimum specification.

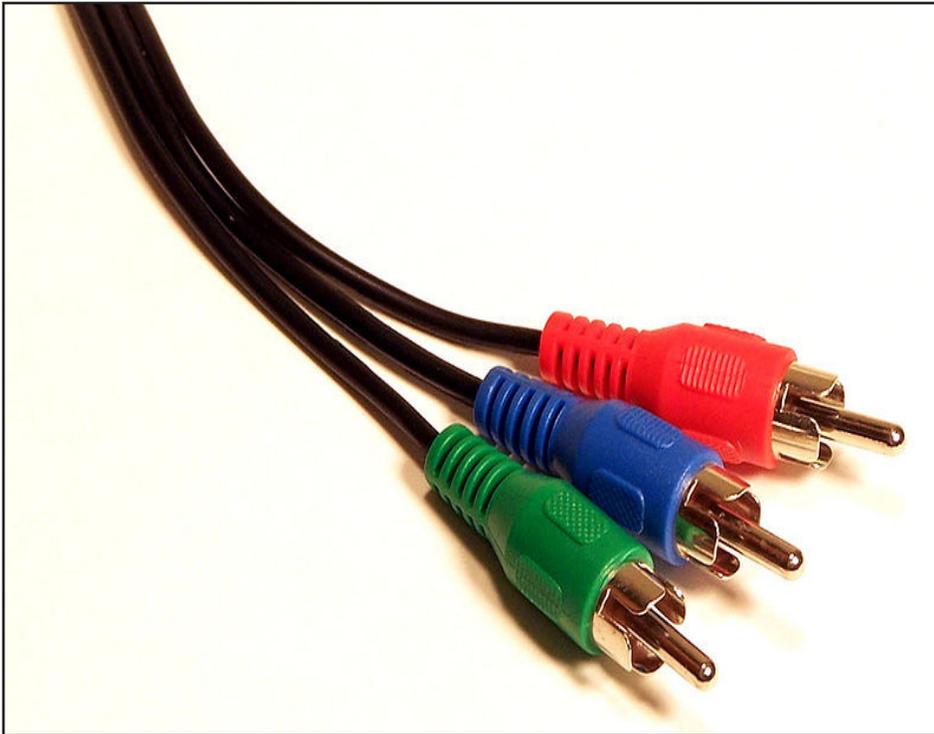
So, why did the set need four HDMI connectors? We will use one for our Cox cable box; this will give us a picture that is vastly superior to the one we get when we connect the box with the standard coaxial cable. We will use one of the others for the Apple TV unit, and one for the new Blu-ray player. That leaves one spare HDMI connector so we can connect a computer to the new set, using an HDMI to DVI cable. As with the Blu-ray player, this will give us a signal

that is leaps and bounds better than the one we would get if we attached the computer to the HDTV using a VGA to DVI connection.

And this brings us to the main topic: where do we get HDMI cables and how much will they cost?

We already had two HDMI cables, which we bought when we purchased our Apple TV. When Apple announced the introduction of Apple TV, it also announced that the Apple Store would be carrying HDMI cables for \$19.00 to \$29.00. This was a substantial savings over cables being offered in other retail outlets. I decided this was a good reference point to use while shopping for cables for the new TV.

Costco offered a deluxe cable kit for \$89.00, that included two HDMI cables along with several other cables. It also offered HDMI cables in several lengths ranging in price from \$25.00 to \$40.00, but they were only available online. Best Buy provided their usual, far-ranging shopping experience. They offered a host of cables at a wide range of prices. The salesperson quickly led us to the *Rocketfish* brand cable area



Component video cable.

and suggested that these were the minimum acceptable cables. Prices ranged from \$69.00 to \$99.00, and she quickly pointed out that real videophiles always bought *Monster* brand cables, which ranged in price from \$69.00 to \$199.00. She told us that the *Rocketfish* and *Monster* cables were THX certified, but there was very little information on the packages to explain the difference between the \$199.00 cables and the less expensive ones, or to explain what the THX certification meant (more on this in a moment).

I pulled out my trusty iPhone and used Safari to check the Apple Store. It had Belkin brand HDMI cables in two lengths, and the prices were \$19.00 and \$29.00. These cables met the latest HDMI 1.3 standards, and the reviews were outstanding. We decided to go home with the TV, *sans* cables, and do some more research.

When it comes to quick research, I turn to Wikipedia. The articles are well-written in most cases and the readers make sure that they are accurate. I looked up THX

<<http://en.wikipedia.org/wiki/THX>>,

and quickly found out that they do not set standards. Instead, they have a quality assurance system, and it has more to do with venues than cables for home TVs. I then looked up HDMI

<http://en.wikipedia.org/wiki/HDMI_cable#Cable>

and found lots of good information, including what to expect from an HDMI 1.3 cable. In checking the information, I concluded that the \$19.00 cable from the Apple Store was more than adequate to meet my needs. I was able to buy four fully certified cables that I needed for the price of about one at Best Buy.

The TV has been mounted on the wall now. The picture quality is exceptional and using HDMI connections instead of Component cables has made reading the menus on the Apple TV *iTunes* Store so much easier! As for the Blu-ray player, I would rather buy or rent my movies over the Apple TV. I think the picture quality is as good or better. But I love the new HDTV! The old HDTV is now in the basement, near my sewing area, and the grandkids love having the *Wii* hooked up to a big TV. As for the *Wii*, that's a whole other story.

Editor's note: This article was adapted from an entry on Pat Fauquet's blog.

Resources

http://en.wikipedia.org/wiki/HDMI_cable#Cable

Pi Photo Contest Needs New Leader(s)

By Tom Carlson

We need one or more volunteers to lead the Pi Photo Contest 2010.

We have had two Pi Photo contests so far, and both have been great successes — great participation, great fun, and great photos. The first contest had co-leaders; the second did not. I spearheaded the most recent contest, and I had as much fun as any of the participants, but unfortunately I am unavailable to lead the contest this year. If we want to continue this fine (and fun) tradition, someone else has to step up to the plate. We can offer guidance at every step along the way, and we can offer you the opportunity to help the Pi sustain a fun and entertaining program.

There are a lot of things that need to be done, but please, don't let that discourage you from volunteering. There is plenty of latitude in how you manage things, and you will be free to use your imagination in selecting categories for the contest and including any novel features to make the contest more fun for everyone.

If you are interested in being a photo contest leader or being part of a group advising the contest leader(s), please contact the Pi President, Jay Castillo, at president@wap.org.

Some of the winning images from Pi Photo Contest 2009.

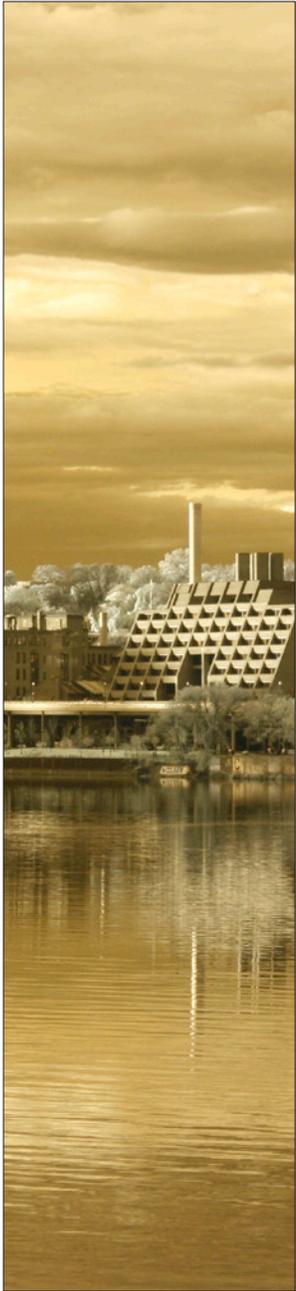




Figure 1.

iFixited my iPod

By Ken Goldman

I have a 4+-year-old iPod photo that I like to use at the gym. Much as I love my sleek iPod touch, I find the simpler controls on the iPod photo easier to use when I am bouncing up and down on an elliptical machine, wearing weight-lifting gloves, or doing something else that makes me sweat.

Recently, I noticed that the iPod's battery wasn't holding a charge very well at all. It wasn't making it through my workout, nominally an hour. I thought about getting an iPod nano to take its place, but then I heard about iFixit.com. That Web site has replacement parts and step-by-step instructions on how to repair most Apple products. Why not give it a try?

Online I was able to buy a new battery and the T-6 torx screwdriver I would need to do the work for about \$18. I found an online coupon for free shipping. Pretty good so far. The job also required two iPod opening tools, which were included with the battery. iFixit recommends using a spudger to help pry out the battery, but I didn't buy one and didn't miss it. For a picture of the iPod with the tools used to replace the battery, see Figure 1.

Once I received the battery, it sat on my desk for several weeks; I was a bit leery about doing the work, and the iPod was still doing the job, more or less. Then one day the iPod barely made it through half of my workout. The screen died, and then came back with an obscure-looking code, followed by a display telling me that there was not enough power in the battery to continue. I figured the time had finally come to take the plunge.

The iFixit Web site has very clear step-by-step directions accompanied by photographs as shown in Figure 2. Opening up the iPod and replacing the battery was actually a lot easier than I had imagined, and the whole operation took less than half an hour. There are twelve steps on the Web site, which can be grouped into the six basic parts of the operation:

1. Remove the front panel
2. Disconnect the headphone jack ribbon cable
3. Disconnect the old battery
4. Remove two torx screws from the logic board; you need to lift the board as the battery cable is threaded under it
5. Remove the old battery (this is the hardest part as it glued down and takes a bit of oomph to remove)
6. Then, as it says in the online instructions, “To reassemble your device, follow these instructions in reverse order”.... which is actually easier than it sounds

The battery arrived totally discharged, so I had to charge it up for several hours. Once I had power to the iPod I ran some basic tests. The menus all came up and everything was present and accounted for, just as I had left it. I plugged in a portable speaker, and the iPod played normally. It seemed as if everything was working just fine!

I followed up with an initial field test, and the results were very positive. After a normal workout, the battery barely indicated any discharge at all. The new battery is advertised as having a higher capacity than the original, so I fully expect it will hold a charge as long, or longer, than the original battery did when it was new. With any luck, I can get several more years of service out of the iPod.

Right now I’m feeling pretty good about having been able to pull this



Step 12

- Lift the battery out of the front case by pulling it up by the battery leads.
- If necessary, grab the battery to pull it off the adhesive securing it to the front case.
- It may be helpful to use a spudger to pry the battery up off its adhesive.
- Lift the battery up and out of the front case.





Congratulations!

To reassemble your device, follow these instructions in reverse order. For more information, check out the [iPod 4th Generation or Photo device page](#).

Share your repair story!

[facebook](#) [twitter](#)

Figure 2.

off. In retrospect, it was really an easy fix. I am also feeling good about giving several years more life to a device that was still working well in all respects except for the battery.

So, if you have something Apple that needs a repair, and if you’re willing to dig in and take stuff apart, you might want to check out:

<http://www.iFixit.com/>



Finder Column View and More

By Bob Jarecke



Okay, you are working in the *Finder* application — yes, it’s an application! You may be manipulating folders or files, looking for something, or just cleaning house. Here are a few of my techniques for working in *Finder*.

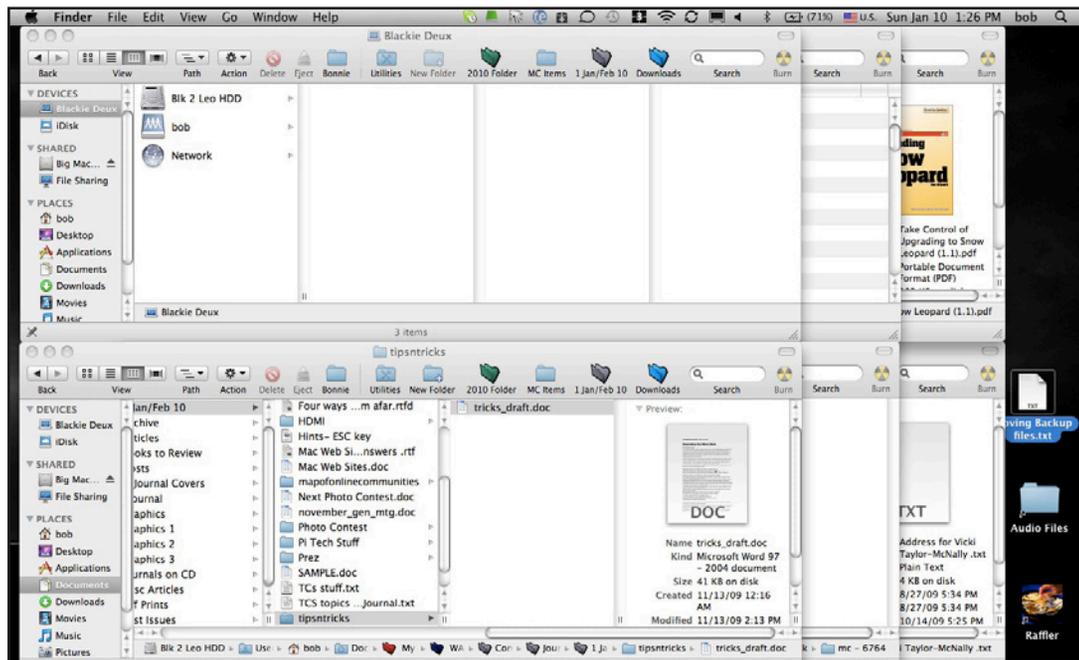
1. Change *Finder* View to Column

How and Why? You can change your *Finder* window to Column view in several different ways: using the *Finder* toolbar, using the drop-down menus, or using the keyboard. To use the toolbar, locate View on the *Finder* toolbar. This is a row of buttons — four buttons in Leopard or Snow Leopard, three buttons in Tiger. Select the button that looks like a

little box with vertical lines, and you will have Column view. Alternatively, you could go to View in the *Finder* menu, and select “as Columns”; or if you are a keyboard person, like I am, simply type Command (⌘) - 3.

Why do I think Column view is best? Column view allows you to see the full path of files, folders, applications, etc. on the screen. By using multiple *Finder* windows stacked on top of each other, you can navigate the hard drive’s hierarchical structure and see exactly which item(s) you need to work with and exactly where you may want to move them. No more guessing which folder you are in or waiting for spring-loaded folders to open, or close unexpectedly. Figure 1 shows my MacBook’s screen which has several open *Finder* windows. (OMG! Is he serious?)

Figure 1.



A possible problem: in Column view, you may have file names that are too long to fit in the default column size. In that case, the name gets truncated to fit in the column. You can see this by looking at the highlighted file name in my Downloads folder shown in Figure 2; that highlighted file name is exceedingly long. A simple double click at the bottom of the column divider to the right expands the column width so it is wide enough to show the largest file name completely. You can see this in Figure 3.

A couple of other tips for manipulating files in *Finder*: first, don’t forget the basic keystroke ⌘ - Z. This is the Undo command. If you just did something with a file or folder that ended with you saying, “Ah, crap,” this command will put things back the way they were before you can quietly utter, “Excuse me.” If you are primarily a mouse person, the Undo command is in the *Finder* menu under Edit. Also, pay attention to the back and forward arrows at the top left of the toolbar. If you have painstakingly navigated to a particular location in a *Finder* window, and then navigated away from it, the back arrow will take you back to where you were — a neat tip that could save you lots of consternation!



2. Finding things in *Finder*

Finding things is pretty straightforward: You can type keystrokes $\text{⌘} - F$; or you can go to File in the *Finder* and click on Find, near the bottom of the menu; or in the latest versions of Mac OS X, you can use the powerful *Spotlight* search feature. Apple describes how this works in Snow Leopard as follows:

In the Finder window search field, just type in a word or phrase to search your Mac for. Your Mac will begin to find any items that contain what you have typed in. Refer to the above Finder Preferences section for information about how to configure your default search.

You can refine your search further with just a few clicks and selected options. This custom search can then be saved as a Smart Folder on your sidebar that automatically updates with new items when you click it.

You will note that, when doing a search, the *Finder* window transitions to List view. Column view is not an option. I conjecture that search results in *Finder* contain more information than just the file name, and Column view does not accommodate this presentation.

The information quoted above is from an Apple Web page entitled *Mac OS X v10.6: Mac 101 - Finder and the desktop*. That page contains a lot of other useful information on using Snow Leopard *Finder*. The link is here: <http://support.apple.com/kb/HT3737>.

3. A Kinder, Gentler *Finder*

In talking with folks about using the Mac, it surprises me when I learn that some have hardly used *Finder*. *Finder* is the foundation application on your Mac. As described by Wikipedia, “*The Finder is the default application used on the Mac OS and Mac OS X operating systems that is responsible for the overall user-management of files, disks, network volumes and the launching of other applications.*”

So it goes without saying that the more you can customize *Finder* to suit your needs, the easier it is for you to manage files, folders, etc., on your Mac. Figure 4 is another screen shot of a *Finder* window on my MacBook. Let me point out a couple of customizations that make endless trips to-and-fro in *Finder* a lot less complicated.

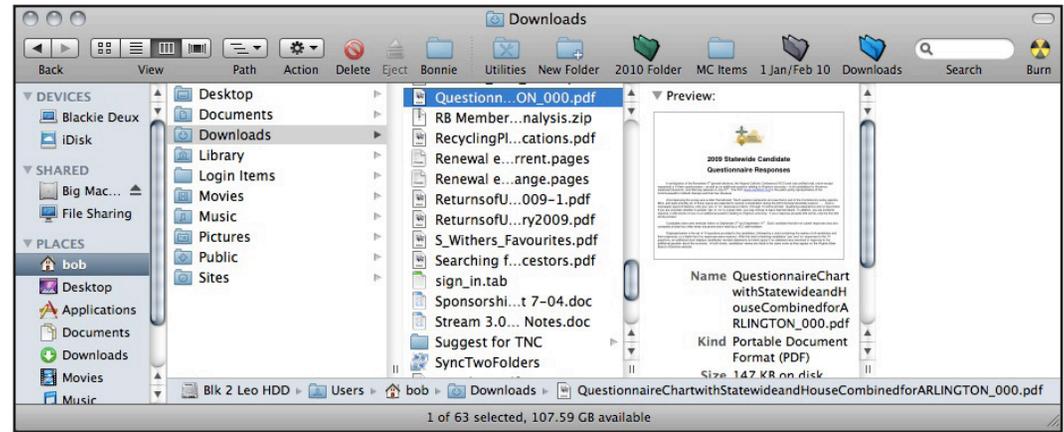


Figure 2.

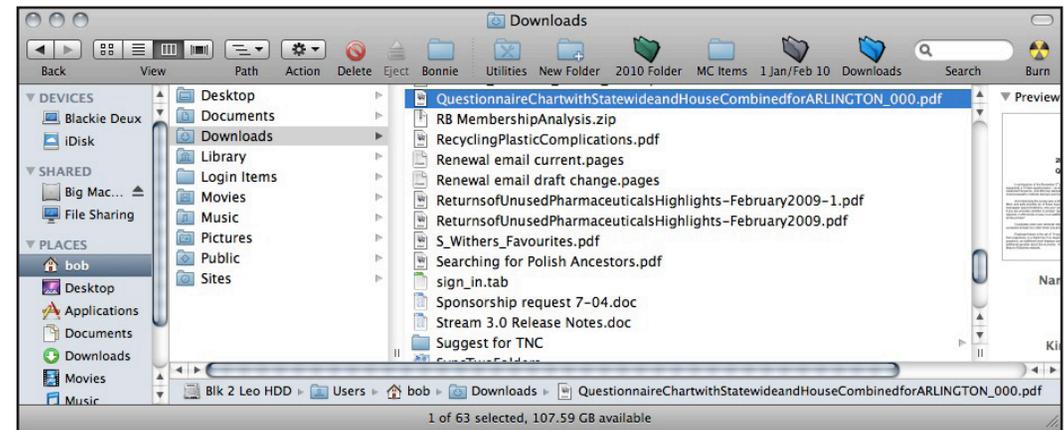


Figure 3.

First, I customize the Toolbar at the top of the *Finder* window by adding some all-important tools that are not part of the default set: Delete, Eject, and Burn. How to do this? Go to the View menu item, and select “Customize Toolbar.” Figure 5 shows what is available for custom tools. You simply grab and drag the ones you want to the toolbar. You may need to be patient, as it might take a moment or two before *Finder* will grasp what it is you want to do and make a space for the tool to fit. You should note that you have the option at the bottom of this customization window to adjust the size of the tool and to have text displayed too. Because my MacBook’s screen is small, I opt for the small icon with text. I could save a smidgen more space if I chose to display the tools as only an icon or only text, but I like having both displayed.

What purpose do my custom tools serve? I find the Delete key indispensable. When not deleting files using a Control key contextual menu, it is much simpler for me to highlight the item to be deleted and click on the Delete tool. The selected item then goes to the Trash without my having to drag it the length and breadth of my screen. Simple, elegant! I use the Eject and Burn tools much more sparingly, but I do use them. (Mmm, I might have to rethink their honored position on the toolbar, as space is at a premium.)

Now, as you look at my *Finder* toolbar, you will note that there are more items on it besides tools. I attach certain, often-accessed folders to this location. This is easily done: Click and drag a folder to the toolbar; let the toolbar adjust the spacing; and then, when *Finder* accepts the positioning, drop it there. If you want to adjust the position or remove a folder, hold the Command (⌘) key and click and drag the folder to the new location or off the toolbar.

Some experienced *Finder* users will note that I could place common use items in the *Finder* sidebar. Yes, very true, but I find the toolbar at the top more centrally located. Also, since I prefer two, flattened *Finder* windows stacked atop one another, I don’t want so many items in the Sidebar that I have to scroll down to view them. Anything to save moving my hands off the keyboard; I am a stickler about this.

Well, that’s enough for now. If you have other “Tips” or “Tricks” that make your Mac computing easier or more efficient, other members might like to learn about them. Please pass them along to me, so we can include them in a future edition of the *Journal*. Send your tips or tricks to: editor@wap.org.



Figure 4.



Figure 5.

Q&A Forum

By Bob Jarecke

This article is the first in a series about questions and their all-important answers. Whether it's Lawrence (or his substitute) taking questions at the General Meeting Q&A session, an electronic inquiry on the TCS Forums (you do log into the TCS, don't you?), or simply a face-to-face encounter, Pi members have tons of questions. Provided below are some recent questions that have been posed.

The format will be simple: question then answer (duh). But to add some dimension to the series, there may also be audio or video files involved. Really? Since, we are currently recording or video-taping the General Meeting Q&A sessions (as well as other sections of the meetings), we are now able to present questions and answers live. This approach is new, and it will be up to you to decide whether it is a good idea. Read and listen to the below questions, and let us know what you think.

Question 1.

Source: General Meeting; Topic — Multiple iPhoto Libraries

(QuickTime audio file, length 2:20 minutes)

The question is stated at the beginning of the audio file below. Double click on it and listen to Lawrence's answer. Note: We recommend listening with earphones so you can hear the audience comments that were made at a distance from the microphone.



Question 2.

Source: TCS Forums; Topic — Sending Images in a Reply Email

"How do I reply in Mail 3.6 to a message with pictures (picture attachments, I guess) in such a way that the pictures are automatically part of the reply? As it is now, I have to copy and paste, sometimes laborious."

The question generated three replies:

- A. An easy way to send the pictures back is to use the Forward function rather than Reply. If you forward the message back to the sender (or anywhere else) the pictures will remain attached.
- B. Edit, Attachments, Include Original Attachments in Reply.
- C. Sort of aside from the topic at hand, it's good to know when to use Redirect instead of Forward. Consider it kind of a super-Forward that preserves more of the original message intact; even if it's a complex HTML newsletter.

Question 3.

Source: TCS Forums; Topic — Verizon Changes to Outgoing Email

This TCS question (#6278 in Computing Conference, Mac Union Board) was posted because of then changes by Verizon to enhance security of outgoing email from their Internet service subscribers. The item thread has ten replies to the original question, some of them responses from the questioner. The principal gist was that the individual, who considered himself "barely computer literate," made changes to Apple *Mail* Preferences as prescribed but was still not able to send out emails.

The most cogent replies are provided below.

- A. For reference: Member is referring to this thread about wap.org e-mail setup when accessing wap.org from a Verizon network.

And needs step-by-step help.

<<http://tcs.wap.org/topic?b=union&top=6270>>

One thing maybe worth mentioning is that those who were already configured to access wap.org e-mail per our instructions were not affected by Verizon's internal changes. Our existing settings correctly handled both circumstances.

<<http://www.wap.org/config/email.html>>

B. To use my WAP email address through my Verizon account here are my settings.

[Editor's Note: The member's account name settings were changed for privacy reasons.]

Account Information:

- Account Type: POP
- Description: xxx.xxxx@wap.org
- Email Address: xxx.xxxx@wap.org
- Full Name Xxx Xxxx
- Incoming Mail Server: mail.wap.org
- User Name xxx.xxxx
- Password: 00000000
- Outgoing Mail Server (SMTP): smtp.wap.org:xxx.xxxx
- Check "Use only this server."

Mailbox Behaviors:

- Check "Store notes in Inbox" (whatever that means).
- Erase copies of sent messages when: Quitting Mail
- Junk, Erase messages in the junk mailbox when: Never
- Trash, Check move deleted messages to a separate folder, Erase deleted messages when: Quitting Mail

Advanced:

Check:

- Enable this account
- Include when automatically checking for new mail.
- Remove copy from server after retrieving a message: Right away
- Port: 110
- Authentication: Authenticate POP (APOP)

C. All's well — don't change a thing. But for the record, just a couple notes:

>> Under description, putting my email address instead of POP account<<

The description is solely for your benefit, for you to label and differentiate your accounts in the application using whatever notation is comfortable to you. That label only shows up in menus and dialogs as displayed on your screen. It doesn't actually affect how any mail is composed, delivered, or processed.

>> Under outgoing adding smtp. in front of wap.org:(member.name)<<

If this used to say wap.org, that would explain the failure to send outgoing e-mail. We try to be clear to enter mail.wap.org instead, for consistency and because such a huge percentage of our members historically misspelled "smtp" as "smt" and couldn't see the difference even when advised to look for that. But smtp.wap.org should work, even though we officially recommend mail.wap.org.

>> changing [POP] Port to 110.<<

This tells me that SSL is now disabled. If you enable the SSL checkbox there, the 110 should magically

switch to 995. (But there are other similar-looking fields and checkboxes in other places, and that's how people wind up entering anything other than 110 or 995 here by mistake. It's all about context.)

I won't make a big production about leaving SSL disabled and failing to encrypt your sessions, since both of you at least have Authentication set to something safer than Password. (APOP -isn't much-safer; MD5 Challenge-Response is.)

So officially these settings don't match our best/safest recommended settings, but they should continue to work and I see little reason to disturb them.

D. Over my years on the TCS I've learned not to doubt recommendations, they've always been helpful to me. So I made the following changes and they also work.

>> But smtp.wap.org should work, even though we officially recommend mail.wap.org. <<
Changed it to mail.wap.org and it worked.

>> If you enable the SSL checkbox there, the 110 should magically switch to 995. <<
And it did.

>> (APOP -isn't much- safer; MD5 Challenge-Response is.)<<

Changed it to MDS Challenge-Response. First time I used it after this change it asked for my WAP password and if I wanted to add it to my keychain. Entered my password and answered yes to adding to keychain. Second test email I sent using these settings did not ask for my password.

E. Well done! This way neither your password nor the contents of your e-mail will be visible to prying eyes as they pass by on the wires or in the air.

Question 4.

Source: General Meeting; Topic — Initial Set Up of a Hard Drive (either external or in a new computer)

(QuickTime video file, length 2:17 minutes)

**Question 5.**

Source: TCS Forums; Topic — Time Machine Curiosity

“When I am away from my computer, Air or iMac for hours I imagine that it is just sitting there waiting for me.

Nevertheless, I notice that every hour Time Machine does a back up—which usually takes a whole 5 to ten seconds. That is a whole lot of computer cycles.

What is my computer doing when I think it is doing nothing that takes a whole 5 to 10 seconds to back up? What changes did the computer make all by itself during that hour that Time Machine found it necessary to back up?

Or, perhaps there were no changes and it took Time Machine that amount of time to discover that there were no changes. Might that be the case?”

One reply was all that was needed to explain it all. Read on!

A. That’s a reasonable way to think about it. If you were backing up to a network volume, it’d take 5-10 seconds just to mount the remote target image, let alone use that to assess what that particular target

image thinks about how much time has passed or what work was accomplished since the snapshot that appears there.

The night shift may not have much work to do, in the grand scheme of things. But it still has to punch in, jiggle a few doorknobs, initial a few forms, and return to its post. It needn’t do so in a rush, just slow and steady.

Meanwhile, in between rounds, your Mac is indeed thinking to itself. Observing outside events, scribbling notes in logs, and sometimes even real housekeeping. There’s almost always at least a few dozen kilobytes to introduce to any given snapshot. And don’t forget old snapshots may be culled during any given round.

This process is almost imperceptible compared to a normal full-directory scan by any normal backup tool. You’d only run those manually and/or overnight, because it’s so heavy weight. You seem to be applying old expectations to this different thing. Resist that instinct. Time Machine takes a lot of support from the kernel.

If any of the above material has helped you out, let us know. If any of it has confused you, let us know. And, if you have questions, ask them at Pi meetings, on the TCS, or via email. Who knows, you might see them in print right here in the *Journal*, together with any answers you got.

Has your Mac got a bug? A flu bug, that is?

Keep your Mac in the pink. You can learn about disinfecting your computer’s keyboard, mouse, or trackpad, at the Web address below:

<http://support.apple.com/kb/HT3988>

Help Wanted – Inquire Within

Volunteers are the lifeblood of the Pi. Plain and simple, we need more dedicated volunteers to carry the water. There are small tasks, big tasks, and medium-sized tasks. Your interest and talents dictate what you do, but for certain, all your efforts will be appreciated. Please consider making a commitment to ensure that the Pi remains a strong, viable, and energetic club dedicated to helping its members. Jump in; the water's fine!

Assistant Bookkeeper

No previous training is required. The Pi's bookkeeping is not complex, and as long as numbers don't bother you, you're golden. Copies of the required software will be provided, and there is even a well-documented, bookkeeper's manual to keep you on the straight and narrow. We need someone to learn the bookkeeper duties and be available to share the bookkeeping tasks with our current volunteer, Brent. Someone needs to be in place before May 2010, when Brent will be unavailable for an extended period. This isn't rocket science, just some messing with numbers!

Contact brent.malcolm@wap.org for more details.



Journal Copy Editor

Editing copy takes a lot of time, concentration and diligent work. Our current Senior Copy Editor, Patsy, could use some dedicated help, especially when all the *Journal* material comes due. Editing experience is essential and familiarity with MS Word would be a plus.

For more information, Email robert.jarecke@wap.org.

Journal Design Editor

Our current Design Editor, Nora, is in need of an understudy. Experience with page layout and design, as well as Adobe CS applications, is essential. Nora is great to work with; she has lots to share, and you will be learning from the master. Embark on a new opportunity with the Pi.

Email nora.korc@wap.org to get the low-down.



General Meeting Manager

Our General Meeting programs need someone dedicated to the planning and managing of these important club events. The job includes coordinating meeting activities, making any necessary arrangements, and managing the behind-the-scenes specific tasks. While it sounds like a job for Superman, that really is not the case. If you have juggled a household or been an office administrator, you've got the skills. While another Pi manager emcees the meeting, you will be making them look good!

Because this volunteer activity needs to be approved by the Pi's Management Committee, this person will serve as an adjunct member of that committee. This volunteer opportunity is guaranteed to keep you busy, and when the meeting is over, lunch is on the Pi!

Send your inquires to robert.jarecke@wap.org.





Administrative Assistant

The title is generic and so is the job. This person would be asked to do a variety of administrative tasks that would involve contacting members, collecting lists, entering data, and just about anything else the Management Committee can dream up. Well, not really, but if you have worked in an office and had to deal with the public, you're well-qualified.

Let's talk! Email robert.jarecke@wap.org.

Social Media Manager

We are looking for someone who can post information and updates to our social media Web sites such as Facebook, Meetup, and Twitter. This activity would require staying abreast of Pi activities and coordinating with the Management Committee. The time investment would be minimal and you can do it right on your Mac at home.

Interested? Bo Huttinger has more for you at r.huttinger@wap.org.



All of these opportunities can be accomplished primarily in the comfort of your own home.

If any travel is required, it can be scheduled to be as convenient as possible.

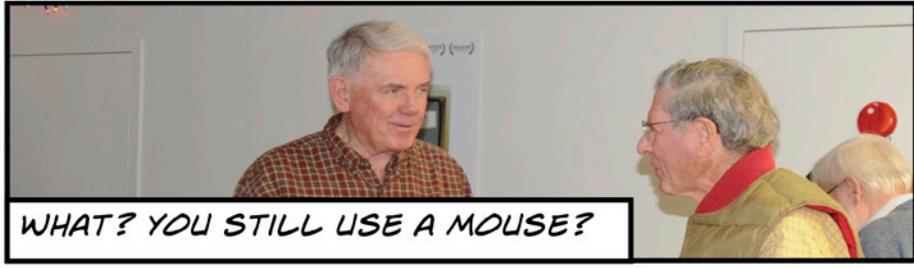


Video Production Editor

We are dabbling in a couple of video projects such as short tutorials and movies of the General Meetings. We need a dedicated volunteer to assist in the video editing and with post-production efforts. Experience with making movies would be helpful, but this job also could be an opportunity to learn how to produce videos and prepare them for distribution. This activity takes time, especially in the beginning, but the results should be rewarding for the volunteer and a real service to those who get to see the videos. This is potentially a game changer activity. Care to be part of it?

Send inquires to robert.jarecke@wap.org.

WASHINGTON APPLE PI HOLIDAY PARTY!



Washington Apple Pi Meetings



**Presentation by
The Washington Post
Technology Columnist
Rob Pegoraro**

**January 23, 9:30 a.m. at
George Mason University**

When Rob Pegoraro first started writing technology stories for *The Washington Post*, he looked more like a bright teenager than a columnist for an international paper. Years later, he still looks something like a bright teenager, but his *Faster Forward* blog and technology columns have gained a vast audience, and his reviews and opinions are taken seriously by corporate bigwigs as well as by hobbyists and other computer users.

Rob tells us he will talk about “covering Apple: What it’s like to deal with the company, what it’s like to hear from its more... enthusiastic users, and why I miss Macworld.” Sounds like a wide-ranging presentation with lots of latitude for questions. You won’t want to miss this one!

This month’s meeting will be returning to our regular GMU location, Enterprise Hall, Room 178. Check the Pi Web site for details and a map on how to get there.

<http://www.wap.org/events/jan2010/>

Bo’s Great Macworld Adventure

February 27, 9:30 a.m. at George Mason University

While most all of us won’t be traveling to Macworld in San Francisco, we will be treated to information from the event by Pi member Bo Huttinger. He promises to take copious notes and enlighten us on some of the below-the-fold action. He will share his experiences and reveal his Top 10 best products featured at the conference. Of course, he will also be hobnobbing with some famous Mac personalities, so he may have some interesting, insider tidbits to share with all of us who stayed behind. This should be a fun meeting. Come on down!

This meeting will be held at our usual watering hole: GMU campus, Enterprise Hall, Room 178. Go to the below Web site for more details and any updates.

<http://www.wap.org/events/feb2010/>

Pi General Meetings are planned and executed by Pi volunteers. Please, consider helping at these events, as well as at other Pi activities. Volunteers, welcome!

Macworld 2010
February 9-13 | San Francisco

As always, check the [Pi Web site](#) for additional, updated details on these meetings.

Washington Apple Pi



members
helping
members