Washington Apple Pi

Journal

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Lionspeak:
Voice Synthesis in Mac OS X 10.7 Lion

Washington Apple Pi Journal

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Washington Apple Pi
Journal
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A Pi Testimonial

Editor's note: A dedicated Pi member, Mike Lerhman, sent us a gracious email following the September General Meeting. He gave us permission to reproduce it here.

Bob

I saved 90 minutes in commuting time and participated in the meeting courtesy of UStream.

The production was first class — great work. Many thanks for putting it on. I hope the streaming of the meetings will help with the falling membership problem. I will always remain a member of the Pi if for no other reason than gratitude for the help that you gurus have supplied. But the streaming ought to provide an inducement to remain a member to those on the margin.

As for content, the substance of the more important elements of Lion as distilled by Lawrence and Larry was extremely useful to this perpetually perplexed hostage of the digital revolution. There is so much to learn and so little time to learn it. It was first class tutoring.

I have to do something to soup up the definition of my monitor. I could not resolve the fine print on the screen shots, which were third generation images on my monitor. I set up a second computer to display a plain vanilla screen, which provided clues to what was going on so I did come away with useful insights.

I wonder whether Apple realizes how valuable the "missionary" work is that the Pi does? The Club House meetings parallel what the Genius Bar does, and offer less pressured and equivalent quality to what the Genius Bar delivers. You might want to incorporate my comments in the membership development effort.

Kindest regards,
Mike Lehrman

Editor's Column

Jay Castillo

Getting a Pi *Journal* edition to press is often a challenge. We always need more articles from our members, and our volunteer editorial staff has real life to deal with, which occasionally disrupts our process. But we usually succeed, and I am always impressed with the quality and relevance of the results. This edition is a fine example. I hope that you, the readers, share our evaluation and appreciation. Let us know what you think via **feedback@wap.org**. Keep those articles coming, and if you would like to volunteer as part of our editorial staff, jump right in.

We have a good mix of articles for you. Our cover story by Lawrence Charters presents his always insightful views of Lion OS X capabilities, highlighting voice synthesis. There are practical uses, such as assistance to the visually impaired, and fun uses as well. Lawrence also continues his expert advice on secure computing with the Mac, "Mac Security in an Age of Cyber War and Cyber Crime." Heed his advice!

Ken Goldman tells us how he has lightened his technology load as he takes advantage of his iPad when he travels. Two of our members tell us about using external hard drive docks to increase storage capacity without much expense or need for technical knowledge. For the more technically inclined, we have an article on "Practical HTML5: Video for Everyone." Here is how to see *Flash* video on your mobile device, as well as any other video format. Our reprint article covers a handy application for printing from your Apple mobile device. Rounding out this issue, Bob Jarecke informs us in "Tips & Tricks" about image adjustment, time-saving keystrokes, and *iPhoto* problems.

All Is Change

Jay Castillo

In the July edition of the *Journal*, I wrote about impending change. Changes have a way of happening sooner than we expect or would like. The death of Steve Jobs gives us pause to consider his legacy and wonder about the future of Apple. Managing change well is a hallmark of an effective organization, as well as of an authentic individual. There are few business leaders of the caliber of Steve Jobs, but an Apple company without him was inevitable. So they will march on, hopefully sustaining the elegance and functionality of Apple products.

We in the Pi march on as well. The club membership continues to dwindle—below 600 members at this time—so we are now at, if not beyond, the break-even point where budgeted outlays will exceed membership income (dues plus donations). To maintain a sound fiscal position, we need to cut costs. Next on the chopping block is the current Clubhouse space. It is hard to justify paying over $15,000 a year for a space that is used so infrequently (usually, less than 30 hours per month). Hence the Management Committee recommended that the Pi move out of the current Clubhouse leased space and rent space as needed for club activities and meetings. The Pi Board of Directors has accepted the recommendation. To give us some time beyond our current annual lease, we have arranged for a three-month extension with an expiration date of December 31, 2011. We have examined numerous spaces in Maryland, and selected the Unitarian Universalist Church at 9601 Cedar Lane in Bethesda, Maryland. See the article on page 20 for specific location and details. As we start the New Year with a new Clubhouse location, be prepared to join us there.

> *As we start the New Year with a new Clubhouse location, be prepared to join us there.*

Lionspeak: Voice Synthesis in Mac OS X 10.7 Lion

© 2011 Lawrence I. Charters

Speech synthesis has been with the Mac since the very beginning. When the Macintosh was first introduced to the world in 1984, the machine itself spoke to the assembled audience:

Hello. I'm Macintosh. It sure is great to get out of that bag.

Unaccustomed as I am to public speaking, I'd like to share with you a maxim I thought of the first time I met an IBM mainframe. Never trust a computer you can't lift.

Obviously, I can talk, but right now I'd like to sit back and listen. So, it is with considerable pride that I introduce a man who's been like a father to me: Steve Jobs.

In 1984, this was nothing less than an epic monologue for any computer, much less the tiny computer that Jobs had just pulled out of his bag. The Macintosh operating system, System 1.0, was the first operating system in the world to incorporate speech synthesis.

More than a quarter century later, the Macintosh is still with us, and the Macintosh operating system still includes speech synthesis. Leopard and Snow Leopard included roughly two dozen voices you could select. But with Mac OS X 10.7 Lion, the Mac's ability to talk has taken some big leaps. Lion offers the ability to customize speech synthesis by downloading dozens of entirely new voices. If you are interested in English-speaking voices, Lion offers voices with Australian, Indian, Irish, Scottish, South African, and British accents. If you want other languages, you can pick Arabic, Chinese, Czech, Danish, Dutch, Finnish, French, German, Greek, Hindi, Hungarian, Indonesian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Romanian, Russian, Slovak, Spanish, Swedish, Thai, and Turkish voices.

All of these voices are free, although you do need to download them, and the download itself is non-trivial. Mikko, a Finnish female voice, is over 870 megabytes,
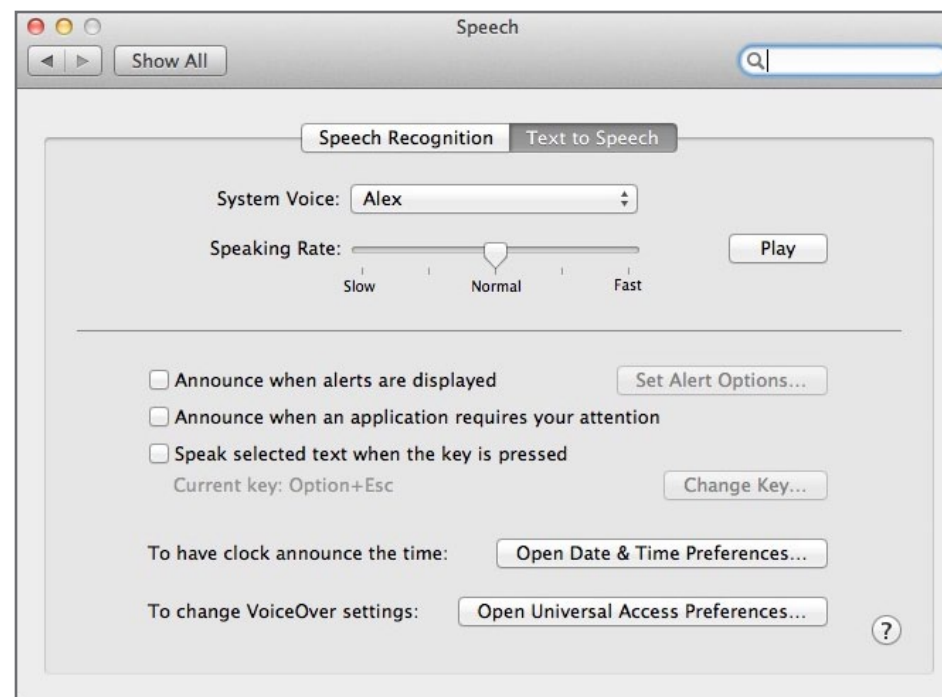
Figure 1: The Speech System Preference pane has the icon of a microphone. Once you select it, click the Text to Speech option. The System Voice, by default, is usually Alex. The slider below controls the speech rate (how fast the voice talks). The Play button plays back a short sample of that voice.

and Karen, an Australian female voice, is almost 430 megabytes. If you collected all the voices that are available as of this writing, they'd occupy 20 gigabytes on your hard drive. Be prepared to spend some time waiting for them to download.

A good question at this point might be, "OK, so why, exactly, would I need voices on my Mac?" It is tempting to say that they are better than voices in your head, but
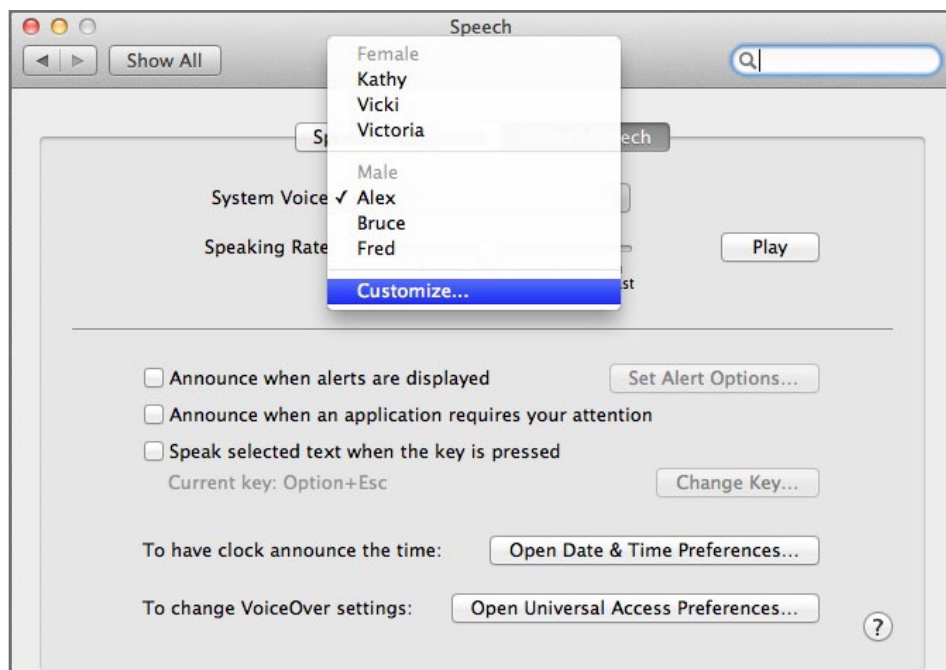
Figure 2: If you scroll to the bottom of the list of System Voices, a Customize... selection appears. This is the gateway to adding new voices to Lion.

Figure 3: To add new voices, just check the appropriate boxes. Do note, however, that many of these voices are hundreds of megabytes in size and, depending on the speed of your Internet connection, could take hours to download.

in fact there are practical uses for these voices. There are also entirely impractical but fun uses. Whatever your reasons for using the voices, you start by going to System Preferences and clicking on Speech. Then select the Text to Speech tab at the top of the window (see Figure 1). Now you can select the system speaking voice and the rate of speech. You can also direct the system to speak when alerts are displayed or when an application requires your attention, to speak selected text when a key is pressed, and to announce the time. The big button at the bottom, "Open Universal Access Preferences," enables VoiceOver Utility, which is an assistive technology designed to "speak" the Mac interface for those with vision problems.

All of these options are useful. What about entirely useless applications? The first fun thing to do is to customize the system voice. Go back to the Speech preferences pane and click the drop-down box labeled System Voice. This gives you a modest number of choices, plus a Customize button at the bottom (Figure 2).

The Customize button is the key to adding voices and wasting vast amounts of time. Just check off the voices that seem interesting (Figure 3) and wait for them to download. Go to a movie, or perhaps fly to Alaska, while things are transferred. As with fresh chocolate cookies right out of the oven, I started with a few, but eventually…

The Play button, shown on the same line as the Speaking Rate slider, will play a voice-specific sample for each voice. This is quite entertaining. But after a short while, you will want to do more.

Experiment #1
Fire up *TextEdit*. Write something, anything. Within *TextEdit*, go to the Edit menu and scroll down to Speech > Start Speaking. It shouldn't take you long to think of things you can write that sound perfectly ridiculous when spoken.

Experiment #2

Fire up *Mail* and select a message; bureaucratic messages are the best. In *Mail's* Edit menu, select Speech > Start Speaking. Particularly egregious messages may inspire you to pick a suitable voice. Depending on the message, the Novelty voices (Bad News, Bahh, Bubbles, Deranged, Good News, Hysterical) are a good bet. On the other hand, having Milena, the Russian voice, read a software license agreement makes it *way* more interesting and does nothing to reduce the clarity.

Experiment #3

Go to the Apple menu, select App Store, and browse. Search for an application called *Text2Tape*. Download it (it is free). Now write something in *TextWrangler* (also free from the Mac App store) and save it as a text file. Fire up *Text2Tape* and have it "read" the text written in the file. *Text2Tape* will create a sound file for you with the same name as the text file, in AIFF (Apple sound file) format. Double-click the resulting file to hear what it says, or email the file to someone, or — you'll think of something.

If you'd rather see, or hear, what Lion's new voices sound like first, I have placed several files, created with various English voices as well as with several non-English voices, on the Pi web site at
http://www.wap.org/journal/lionspeak/

Many of these sound files use the same text as a starting point but vary the voice. The text file used to test the voices was, "I am lion! Hear me roar! I am the kitty of your dreams, the feline of your fears, the cunning cat that ate the canary. I am the pride of the pussy world. I am lion! Hear me roar!"

All of the samples use female voices (because I like listening to female voices), and a great many voices are not represented. Note in particular what happens when the sample text is read by a voice not intended for English; you'll be fascinated.

The Mac's first speech, mentioned at the start of this article, is also available in two different voices, and there is a link to the YouTube video of the introduction of the first Mac. Alas, the original *MacInTalk* voice of 1984 is no longer available.

Finally, if you've ever wanted a custom answering machine message designed to screen all your calls, a very lovely Scottish voice provides a most comprehensive answering machine greeting. Alex, a male voice, provides a different, simpler message. Feel free to use either.

Or create a better one.

Note on technique: To create the sound files found on the Pi web site, I created text files using *TextWrangler*, free from the Mac App store, and saved them to disk. I then launched *Text2Tape* to "read" the files and save the resulting AIFF audio files to disk. I then used *Audacity*, an open source audio editor, to convert the AIFF files to MP3 files for use on the web.

Resources

Video of the introduction of Macintosh, including the Mac's first public speech, January 1984
http://www.youtube.com/watch?v=G0FtgZNOD44

Text2Tape
http://web.me.com/nilesmitchell/Text2Tape/Welcome.html

Audacity
http://audacity.sourceforge.net/download/mac

TextWrangler
http://www.barebones.com/products/textwrangler/
(or Mac App store)

Mac Security in an Age of Cyber War and Cyber Crime

© 2011, Lawrence I. Charters

Security of Macintosh computers hasn't been much of a concern over the past decade. Mac OS X is a difficult target compared to most versions of Windows. Yet there have been occasional threats, one of which prompted the *Washington Apple Pi Journal* to publish a three-part series on Mac Security in 2005: "Mac Security: Physical, Mental, Spiritual." Those articles, on the Washington Apple Pi Web site, are still valid today: http://www.wap.org/journal/security/

However, the situation is changing. Windows 7 has better security than any version of Mac OS X before Snow Leopard (Mac OS X 10.6), and Mac OS X is increasingly becoming a target for criminals and vandals. A number of sensational headlines over the past six months prompted Pi management to schedule an entire General Meeting devoted to security in June 2011. What follows is an outline – just an outline – of that presentation. The full presentation is available as an audio and a video podcast from the Pi Connect web site: https://connect.wap.org/

Name your Mac

When you first set up your Mac, it asks for your name, and if you do nothing to change things, the initialization process will name your Mac something like "Lindsey's Mac" (assuming you gave your name as Lindsey). Since your Mac broadcasts the name across the network or, in the case of wireless networking, over the radio, you now have two problems: potential attackers learn that Lindsey's machine is nearby, and that it is a Mac.

Deer defend themselves by blending in, so blend in and don't broadcast anything valuable. Go into the System Preferences > Sharing preferences pane and rename your Mac. Name it after a favorite goldfish or character in a novel. Name it after the Zen term for one-handed clapping. Name it anything that isn't obviously associated with you, and doesn't scream "Mac."

Name your hard drive

The installation process also automatically names your Mac's hard drive "Macintosh HD." Again, this is bad, since it is possible to transmit the name across a network. Knowing the name of the hard drive can also make some types of evil scripts easier to execute, since the attacker doesn't need to guess at the name of the volume.

The name of the hard drive can be the same as, or different from, the name you gave your computer in the Sharing preferences pane. Simply click on the name of your hard drive, wait a second, and then type in a new name. For a variety of reasons, it is recommended that the name consist only of letters and contain no spaces, punctuation, or anything else.

Don't install unnecessary software

If you don't know what a piece of software does, don't install it. For example, when you first install Mac OS X, you are given the option of installing *X Window*. If you don't know what *X Window* is, don't install it. (*X Window*, by the way, is a graphical interface used by traditional Unix computers, but it bears no resemblance to the Mac interface, and even Unix gurus have a love-hate relationship with it.)

Be very wary of shareware or freeware that installs items in the menu bar, or installs System Preferences panes, or wants Internet access. Mac OS X can become unreliable if software is inserted into the menu bar or System Preferences, and such software can even prevent proper system updates.

As for software that wants Internet access, ask yourself: why? The little utility or game or whatever may say it is checking for updates, but it could very well be transmitting your personal information. Install software only after vetting its legitimacy; ask on the Pi's TCS forums or at a General Meeting.

However, the situation is changing. Windows 7 has better security than any version of Mac OS X before Snow Leopard (Mac OS X 10.6), and Mac OS X is increasingly becoming a target for criminals and vandals.

If you don't use a piece of software, trash it. Outdated software packages are prime targets for exploits by hackers.

Use unique account names

If your name is Bob, the login name for your machine should not be "Bob." It is far too easy to guess. A first initial and full last name is more secure. Or a first name and last initial. Or something random, like "Berrybush." Logging into your Mac requires both an account name and a password; don't make the job easier by using an obvious account name. Under absolutely no circumstances use an account name of "Admin" or "Administrator" or (horrors) "root."

Use unique passwords

Forget all the nonsense you read about creating gibberish passwords with mandatory upper and lower case characters, numbers, and special characters. Complex passwords make security harder, since people won't remember them.

Instead, use long passwords — 12 or more characters – avoiding simple dictionary words or words that can be associated with you. If you like to fish, "fisherman" is obviously a poor password — a dictionary word, too short, connected to you personally and directly. But "Lake fisherman" is easy to remember, easy to type, 14 characters long (the space not only counts as a character but increases the complexity for cracking programs), and secure. "Fishing in 2011" is even more secure.

Passwords should be unique; never use the same password for more than one service. If you believe having several passwords is too complicated, then vary the password by the service involved. For example, use "Fishing in 2011 FB" for Facebook and "Twitter Fishing in 2011" for Twitter. That way, a hacker who steals account names and passwords on one service can't use them to hack your computer or your account on another service.

You can check password strength using the built-in *Password Assistant* in System Preferences > Accounts (or Users & Groups) or use one of these web sites to check on how safe a password is:
http://www.passwordmeter.com/
https://www.grc.com/haystack.htm

Store passwords securely

It is ever so tempting to use a Post-it note stuck on the monitor to store passwords, but don't. Use something like the commercial utility *1Password*, or Apple's *Keychain Access* (which can also store encrypted notes), or create an encrypted disk image using Apple's *Disk Utility*.

One big advantage of an encrypted disk image is that you can email it to yourself, or store it on your MobileMe site, or put it on a USB drive, so that you have access to it in multiple locations. Obviously,

Forget all the nonsense you read about creating gibberish passwords with mandatory upper and lower case characters, numbers, and special characters. Complex passwords make security harder, since people won't remember them.

the password to the encrypted disk drive should be impossible to guess but easy to remember. Try for a phrase that you are unlikely to forget, such as "Mary had a little lamb" or "Four score and seven years ago" or "An apple a day" or "I still don't forgive John for dumping me."

Disable automatic login

It is absolutely vital that you disable automatic login for laptops, iPads, iPhones, and iPod touches. These portable devices are not only *portable*, but also easy to steal, and they contain a great deal of personal information, from your address book to your income tax returns. You don't want to make it easy for a thief to break in.

You should also disable automatic login for desktop machines at home. While the security risk is lower than with a portable device, forcing someone to log in helps keep out children, relatives, visitors, the maid service, the plumber, the painter, the house burglar, etc.

Every user should have an account

Users should have their own accounts. Yes, that means:
- An account for you
- A separate account for your spouse
- A separate account for each child
- A separate account for each visitor who uses the computer

No exceptions. You don't share toothbrushes; don't share accounts, either.

Delete unused accounts

When your child moves out, or when your guest leaves, delete the account. Unused accounts are a common vector for taking over computers.

Disable "Allow guests to connect to shared folders"

What was Apple thinking when they enabled this by default? Disable it.

For laptops, always set a master password

The master password (set in System Preferences > Security> FileVault in Mac OS X 10.6 and earlier) gives you access to the computer if you forget a password. But — not setting a master password can allow someone else to deny you access to your own computer by setting the master password and then encrypting your machine.

Disable Bluetooth

Disable Bluetooth if you are not using it. If you are using it, turn off "Discovery" after you've synced your devices. While it is amusing to sit in a coffee shop and use a Bluetooth mouse to play with other people's laptops, the victims don't like it, and you won't either.

Disable AirPort

If you aren't using wireless networking, disable it. Wireless is convenient. Wired networking is infinitely more secure — and faster.

... not setting a master password can allow someone else to deny you access to your own computer by setting the master password and then encrypting your machine.

Create an admin account and a standard user account

The admin account should be used only for things like system updates. The standard user account should be used for day-to-day activities. The accounts should have different names, and of course different passwords.

Careful about MobileMe

Do not set up MobileMe for admin accounts. Make sure your MobileMe password is strong; change it on your birthday. Make sure the MobileMe password is unique and not shared by any other service.

Make sure that system time and date are correct

The System Preferences > Date & Time preferences pane offers to automatically sync your Mac's clock with an accurate time server. Use it. Accurate time is vital for syncing between machines, for syncing MobileMe services, and for other routine chores. It is also vital for *Time Machine* backups, system updates, and many kinds of security checks.

Install all system updates

Before installing major system updates, check your computer's health. Run *Disk Utility* and ask it to Verify Disk. Install the system updates only after *Disk Utility* has given your drive a clean bill of health. But install *all* system updates. "But I heard rumors," you protest, "that the new update melted pet kittens." Ignore the rumors; system updates are vital for security, whereas rumors are just rumors.

Set password for screen saver

Set your screen saver for a reasonable period (it should come on after 10-15 minutes of idleness). Set the Security preferences pane to require a password for access after the screen saver is activated. Set a Sleep corner for the screen saver (recommended: lower left corner).

Being able to force the screen to "sleep" and blank your desktop is a valuable privacy and security feature, but it only works if you set it up and use it.

Set security preferences

The System Preferences > Security preferences pane has several options, some of which were mentioned above:
- Set Require password to wake from screen saver
- Disable automatic login
- Set master password on laptops
- Turn on firewall
- Optional: turn on stealth mode (under Firewall settings)

Turn off everything in sharing

Turn off file sharing, screen sharing, web sharing, etc. These should be turned on only when needed — and then turned off again.

Enable check for updates

In the System Preferences > Software Update pane, enable "Check for updates - weekly." When prompted by a new update, read the message; don't just dismiss it as an interruption.

Configure Time Machine

Follow these steps:
- Get an external drive.
- Turn on Time Machine
- Make sure it is backing up.
- Ignore it. Don't fiddle with it.

If you have a laptop, Apple's Time Capsule is even better; it combines wireless networking and wireless backup all in one box.

Safari

Disable "Open safe files after downloading." Make sure downloads are always downloaded to the "Downloads" folder. Apple goes out of its way to segregate downloads (potential vectors for attacks) from everything else, so don't mess this up by changing the settings.

Virus Checkers

If you are required by work to have a virus checker, install whatever your employer requires. For everyone else: if you want to have a virus checker, try *VirusBarrier Express*, free from the Mac App Store. *VirusBarrier Express* can be configured so that it only runs manually, rather than all the time. If you have a concern, run it; otherwise, ignore it. The first time I ran *VirusBarrier Express*, I was surprised to find viruses on my computer. My Google Gmail account had, in the spam folder, a dozen messages containing Windows viruses. These represented no threat at all to Mac OS X, but I promptly deleted them anyway.

And in conclusion

It is worth knowing that the very first computer virus ever released in the wild was aimed at Apple computers — Apple II computers. The year was 1981. Thirty years later, viruses are not a threat to Mac OS X, but there are other, more potent and subtler dangers. You can protect yourself, but only if you correctly parse that phrase: *you* can protect *yourself*. Nobody else will.

Hot Links

Find a Replacement for *Quicken*
If moving to OS X Lion has made your Quicken software obsolete, don't despair (yet). Take a look at what nine developers of personal finance software have to offer. Caveat! None provide on-line bill paying.
http://tidbits.com/article/12503

I Really Want a Wireless Keyboard For My iPad
So you are a heavy-duty touch typist, and not only a consumer of content, but a producer as well, and maybe you have fat fingers. Not to worry. Here is a review of five wireless keyboards for your iPad.
http://www.computerworld.com/s/article/9220146/Hands_on_5_wireless_keyboards_for_the_iPad

Create a handwritten Signature for your Documents
Perhaps you weren't paying attention when Apple representative, Aaron Davis, showed us how to use *Preview* in OS X Lion to create a handwritten signature for our documents. Or maybe you have just forgotten. In any event, it's easy, and here's how to do it:
http://www.tuaw.com/2011/08/10/mac-101-capture-your-signature-using-os-x-lions-preview-app/

What's Going On With My Wi-Fi?
OS X Lion has a handy application that provides diagnostics for your wireless network. Take a look at it.
http://www.macworld.com/article/162117/2011/09/monitor_wi_fi_with_lions_hidden_tool.html

Neat Stuff About iOS 5
We have been talking about iOS 5, with a focus on the premier features, but here are some interesting lower-level capabilities worth noting:
http://www.macworld.com/article/162341/2011/10/five_new_things_your_device_will_be_able_to_do_in_ios_5.html

Hard Drive Docks for Computers

Jonathan Bernstein and Neil Ferguson

In the September/October 2011 *Journal*, we wrote about how to add external hard drives to your *Time Machine* backup. In that article we also talked about buying hard drives, and said that the least expensive option was to buy an internal hard drive and a hard drive enclosure, and install the drive in the enclosure yourself. Another option is to buy internal hard drives without enclosures and mount them using a hard drive dock.

A hard drive dock is a flexible mount for hard drives. Picture a box with one or two slots in the top, like the ones shown in Figures 1 and 2. You just stick an internal hard drive in the slot, and you're off. Now that's convenient!

There are many types of hard drive docks. Some support a single hard drive; others will support two hard drives. Most docks can accept either 2.5" (laptop-size) or 3.5" (desktop-size) internal hard drives, and support SATA drives rather than the older IDE drives. A primary consideration in purchasing a hard drive dock is the type of connection it supports. Available connections include USB 2.0, USB 3.0, Firewire 400, Firewire 800, and SATA. Hard drive docks have transfer rates up to 480Mbps with USB 2.0 and 3Gbps with SATA.

Prices of hard drive docks can vary from $16.00 to $85.00. Most support USB 2.0; with the addition of other types of connections the price goes up. These docks can be purchased with or without a hard drive,

Figure 1: A dock with both large and small drives.

Figure 2: A dock that includes a card reader.

the cost of which starts at around $90.00 for a 500 GB USB 2.0 drive or $120 for a 500 GB Firewire drive. There are also hard drive docks that come with USB hubs and card readers (for SD Cards). A nice feature of most of the hard drive docks is that they are hot swappable.

Computer users who want to save increasingly large video or other media files will find hard drive docks very useful. If you store lots of data and quite easily fill up your internal hard drive, you can purchase another internal hard drive, insert it into a hard drive dock, and keep on storing large amounts of data. If you maintain different types of accounts or projects and want to keep them separate, you can use several internal hard drives and store the different types

of accounts or projects on separate drives, labeling them appropriately, of course. The hard drive docks that have two drive openings in the top will facilitate copying the contents of one hard drive to another and also cloning one hard drive to another.

Make use of spare SATA hard drives. Storage is cheap, much less than a dollar per gigabyte. Everyone from you to your grandmother is archiving music and video at home. Consequently, hard drives are being upgraded constantly, and quite a few end up discarded. These small hard drives are still useful though. Slip a spare hard drive into the hard drive dock, and it mounts as an available volume on your Windows, Mac OS, or Linux computer, via either a USB, Firewire, or SATA connector.

Where can you buy a hard drive dock?

Here are some manufacturers, with links to their websites:

- **Vantec**
  http://www.vantecusa.com/
- **Icy Dock**
  http://www.icydock.com/index.php
- **StarTech**
  http://www.startech.com
- **Kingwin**
  http://www.kingwin.com/
- **Aluratek**
  http://aluratek.com/
- **Thermaltake Technology**
  http://www.thermaltakeusa.com/
- **Diablotek**
  http://www.diablotek.com
- **Voyager by NewerTech**
  http://www.newertech.com/

Here are some resellers that Pi members have had good experiences with:

- **MacSales**
- **Amazon.com**
- **Newegg.com**
- **Microcenter**
- **CompUSA**

Print and More from iOS with *Printopia 2*

Jeff Carlson

This article originally appeared in TidBITS on 08-31-2011. The permanent URL for this article is http://tidbits.com/article/12460

Printing from an iPhone, iPad, or iPod touch. The idea sounds anachronistic: Why, with a device that delivers everything digitally, would you want to sully the experience with the inconvenience of paper? Well, sometimes you need to review something on paper instead of scrolling around on an iPhone screen, or perhaps you

Figure 1: Select printers for Printopia.

need to hand a copy to a colleague who doesn't have ready access to a computer or handheld. Or maybe, like me, you're lazy. I've purchased airline tickets using my iPad in the living room and needed to print boarding passes. I could have gone upstairs to my computer, but when I'm nestled into a corner of the couch late in the evening, extricating myself and trudging to my upstairs office sounds like an awful lot of work. (The printer is up there, too, but I can grab the printouts later, or even the next morning.) In iOS 4, Apple introduced AirPrint [1], a technology for printing directly to a printer from an iOS device — that is, as long as you have a specific AirPrint-enabled HP printer. I don't print nearly enough to buy a new printer just for iOS wireless printing.

Before you start to worry, let me assure you that I did not have to force myself off the couch. Instead, I printed the tickets using Ecamm's Printopia 2 [2]. But that's not all Printopia can do. In fact, I've only rarely used Printopia to output something to paper, as you'll soon discover.

Print to a Printer

Perhaps surprisingly, Printopia is a Mac OS X preference pane, not an iOS app, and luckily, it requires little setup on the Mac and none on iOS. After you install Printopia on your Mac, it recognizes any printer that the computer can print to (see Figure 1). [3] On an iOS device, open a document, email message, Web page, or other content that you want to print. Provided the app you're using supports the print functionality of iOS, tap the Share button (sometimes known as the Action button, a rectangle with a curved arrow coming out of it) and then tap the Print button (see Figure 2). [4]

In the Printer Options popover that appears, tap the Printer button to choose the printer accessible by your Mac, choose
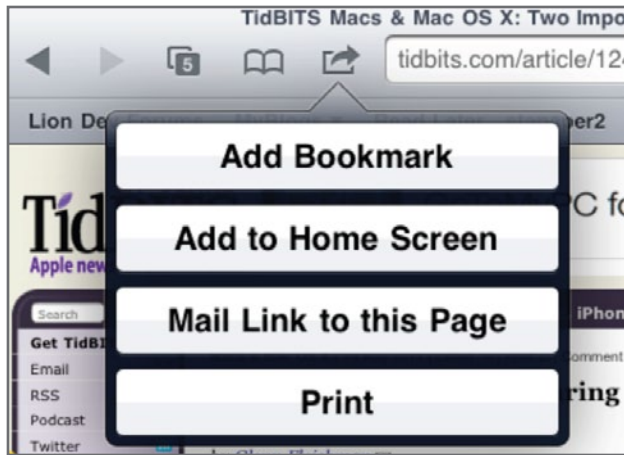
Figure 2 : Tap the Share icon and choose Print.

Figure 3: Select your desired printer and the number of copies.

Figure 4: You can deselect "Open Sent Files Automatically.

the number of copies to make, and then tap the Print button. The print job is sent over your wireless network to your Mac, which then prints the pages in the background (see Figure 3). [5]

Send to Folders on Dropbox or a Mac
As I noted earlier, much of the world is moving on from paper, so Printopia offers ways to "print" a document to digital destinations. For me, the most useful alternative has been to save a file to my Dropbox [6] folder. When I'm creating a lot of iOS screenshots, such as those for my book "*Take Control of Media on Your iPad* [7]," this feature enables me to bypass the need to connect the iPad or iPhone via USB. (Printopia wouldn't be necessary if the Photos app supported sharing directly to Dropbox, but it doesn't, unsurprisingly for Apple.) After you take a screenshot (by pressing the Home and Sleep buttons simultaneously), the image is saved to the Camera Roll, which is accessible within the Photos app. Tap

the image to open it, tap the Share button, and specify the Send to Dropbox on Mac option before tapping Print.

Better yet, you can send a bunch of images at once. Instead of viewing one image at a time, tap the Share button when viewing the Camera Roll (or any album). Tap to select all the images you want to send, then "print" them. In a few seconds, the files appear in your Dropbox folder. One downside is that the images appear as "Photo.png" and "Photo-1. png" and so forth, so you need to rename the files on the Mac. Printopia also has a preference to open each file automatically as it arrives, which quickly becomes annoying. However, that's easily fixed. In the Printopia preference pane, select the Dropbox option, click the Action pop-up menu (with the gear icon) below the list, choose Printer Properties, and turn off the Open Sent Files Automatically option (see Figure 4). [8]

Printopia places the files it receives in a new Printopia folder within your Dropbox folder, but you can specify a different folder by clicking the Change Save Location button. If you don't have a Dropbox account, another option is to "print" to any folder of your choosing on your Mac. I prefer the Dropbox approach, because then the files are backed up and automatically copied to other computers I've set up. Particularly helpful is Printopia's capability to set up multiple Dropbox or Mac folders as possible destinations. Click the Add (+) button and choose either Save to Folder on Mac or Save to Folder in Dropbox to specify a new location. If you work on multiple projects, or want to separate personal and work items, for instance, you can create multiple print destinations.

Send to an Application or PDF Workflow
Often, the destination you choose when sending a file from an iOS device to your Mac is a way station

before you open the file in some other application. Printopia can bypass that step by sending jobs directly to a program. For example, suppose you purchase something online and want to "print" a receipt to a snippet-keeper such as *Evernote* or *Yojimbo* on your Mac? In the Printopia preference pane, add a new printer, but choose Send to Application and choose the destination app. When you print to that application, an image file or PDF is sent directly to the app.

Another option is to pass the job to an Automator workflow by choosing Add PDF Workflow when setting up a new printer in the Printopia preference pane. You could send print jobs directly to the Web Receipts folder that Mac OS X put in your Documents folder if you've ever chosen Save to Web Receipts Folder from the PDF pop-up menu in a print dialog. Or, use Automator to create your own Print Plugin that acts on the PDF file that you send.

Password Optional

When Printopia is running on your Mac, you can turn off sharing for any of the services by clicking the checkbox to the left of the printer name. But what if you want to restrict who can print to your printer, or if you don't want just anyone saving files to your Mac or Dropbox folder? Every virtual printer can be password-protected by choosing Setup Password in the preference pane. When it's enabled, you must first provide a user name and password to be able to print (see Figure 5). [9]

When Printopia first appeared, I thought it would be helpful every once in a while when I needed to push something to a printer, but the utility has turned out to be much more useful. It has saved me hours of work dealing with screen shots, and also made it possible for my wife (or anyone else visiting our house with an iOS device) to print documents or easily send them to Dropbox.

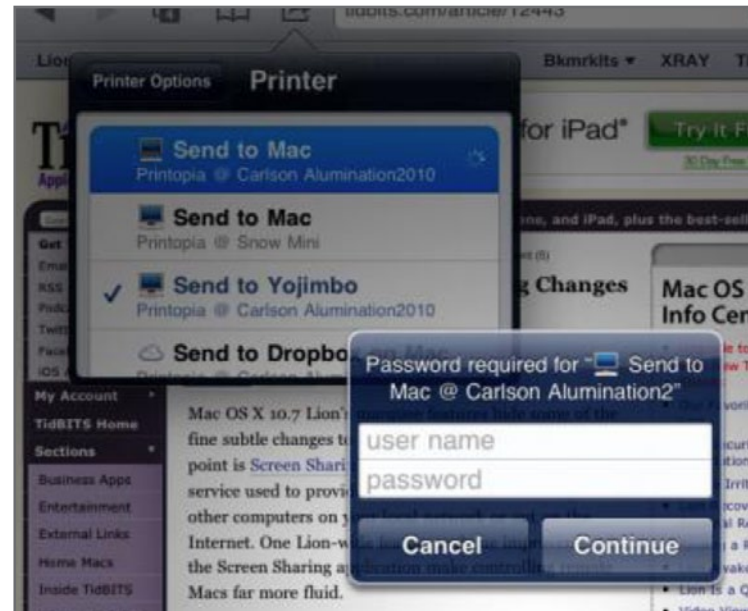Printopia costs $19.95; a demo version that works for 7 days is also available.

Figure 5: Password protect printer access.

Resources

[1]: http://www.apple.com/iphone/features/airprint.html
[2]: http://www.ecamm.com/mac/printopia/
[3]: http://tidbits.com/resources/2011-08/printopia_prefpane.png
[4]: http://tidbits.com/resources/2011-08/printopia_share_button.png
[5]: http://tidbits.com/resources/2011-08/printopia_print_popover.png
[6]: http://www.dropbox.com/
[7]: http://www.takecontrolbooks.com/ipad-media
[8]: http://tidbits.com/resources/2011-08/printopia_open_auto.png
[9]: http://tidbits.com/resources/2011-08/printopia_password.png
Permanent article URL: http://tidbits.com/article/12460

Pi Membership Benefit #1

Pi Email Account

Did you know you have a full-service email account with your membership in the Washington Apple Pi?
Some folks aren't aware of this benefit or tend to overlook it. The advantages of using this email account are many.

- It gives you an alternative email account to use should your primary email account be unresponsive.

- It gives you a secondary email address to use for such things as registering with a web site, thus limiting your primary email address for family and friends.

- The Pi email address has no limitation on the size of attachments.

- The Pi's email server employs a well-regarded spam filter application called *SpamAssassin,* which can make dealing with email spam a whole lot easier.

If you aren't already using your Pi email account, consider trying this important benefit of Pi membership. Volunteers are available to help you set it up if needed.

Change Comes to the Pi

Pi management has been contemplating moving our clubhouse for some time now, since the first time our landlord said he wanted our space back. That was the impetus for our move upstairs a couple of years ago. Now, with all the technological advancements that are available to us, and the strides the Pi has made in implementing such things as our *iChat* server and our podcasts, the Pi's leadership has determined that we no longer a need our own, full-time Clubhouse. We will be better served by using facilities that we rent on an as-needed basis.

To that end, we have arranged to rent space at the Unitarian Universalist Church at 9601 Cedar Lane in Bethesda, Maryland, to use on an ongoing basis for our clinics, tutorial sessions, and social gatherings. You will see from the map (Figure 1) that the location is very near the Beltway, and in fact is closer than our Clubhouse is to the center of the Pi's local area demographic.

The room we are slated to use is just inside the church's lower level entrance, and is very comfortable and a good size for our typical meetings and clinics. Parking is ample and on the same level as the meeting room. The facility provides good Wi-Fi Internet connectivity, and we should be able to store most of our needed equipment on site.

A special thank you to Len Adler, a Pi Board member, who provided us the lead on this location. Thanks also to the Church management, which has been very helpful and accommodating. And in case you are wondering, our plans for the General Meetings remain unchanged.
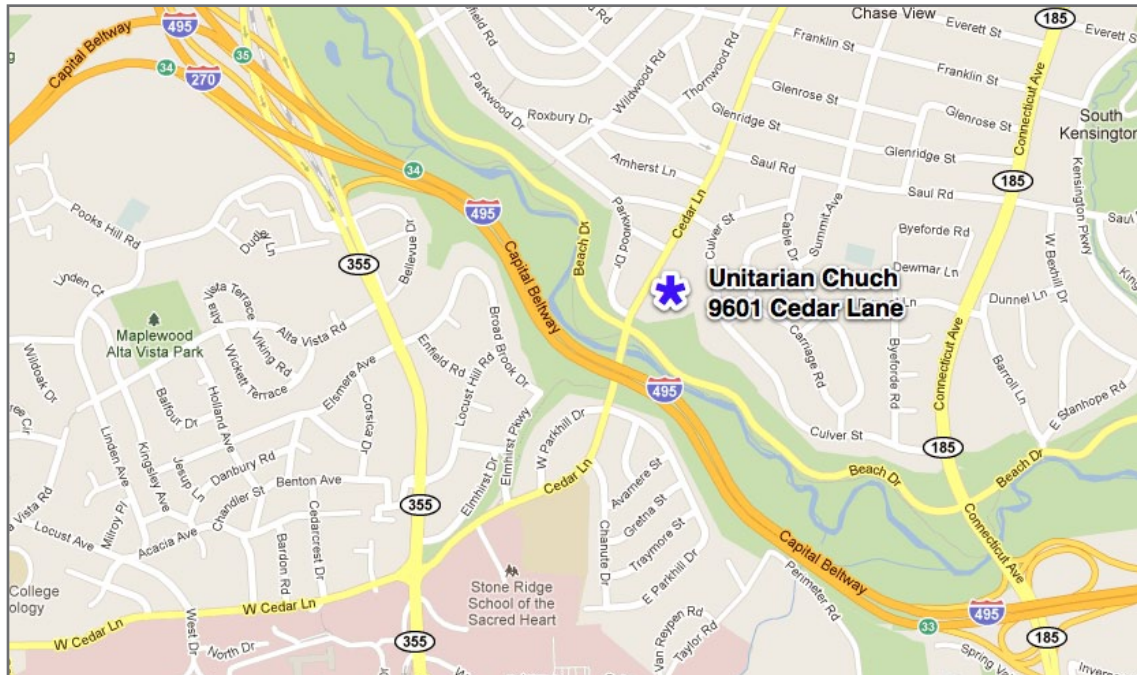
This map depicts the new location for Pi Clubhouse meetings. This location will host all Clubhouse activities to include Clubhouse Saturdays, Afternoon Learners SIG, and any other small group events.

Washington Apple Pi
New Clubhouse location:

Unitarian Church
9601 Cedar Lane
Bethesda, MD 20814
301.984.0300 (messages only)

Opening first Saturday of January 2012

My New Favorite Traveling Companion: My iPad 2

Ken Goldman

Until a few years ago I traveled a great deal for work, frequently to the West Coast. Those were the days of personal IT frustration. I did not own a laptop. The Navy provided one that I had to carry with me, but I could not install software or alter many of the settings. I could not do personal email or view DVDs on the laptop, and browsing was limited. Many web sites were blocked, and those that were available were excruciatingly slow. So, in addition to my Navy laptop, I packed books, magazines, and a portable DVD player to amuse myself on the long flights and in the evenings. This was a lot of weight to carry on my travels.

It's different now. I recently made a cross-country trip for the Navy, and this time, in addition to my Navy laptop, I carried only my iPad 2. With some advance planning, the iPad replaced the DVD player, books, magazines, newspaper, and iPod. I was able to do personal email and browse the web at a reasonable pace. I had neglected to bring a camera with me and, as a bonus, I was able to take some photos with the iPad as well. The experience exceeded expectations!

I encountered one glitch early on. The iPad was not able to connect to the free WiFi network at Washington National Airport. This problem is due to the way the airport has configured the logon screens for the free WiFi network. (If you are interested in reading more about the whys and wherefores of this problem, see this thread on the TCS: http://tcs.wap.org/topic?b=hand&top=3383).

Apart from this one problem, everything worked fine, including being able to log on to the free WiFi at the Seattle airport on my way home. As an aside, Alaska Airlines offers inflight WiFi. I didn't want to pay to use the WiFi, but I did have free access to the Alaska Airlines website, a handy feature for checking on the status of flights or reservations. Based on this limited access, the speed of the inflight WiFi seemed to be comparable to most WiFi hotspots.

Using *iTivo* For iPad

Instead of watching DVDs on my trip, I watched movies and TV shows that I had previously recorded on TiVo. To get this content onto the iPad, I downloaded the program *iTivo* (http://code.google.com/p/itivo/) (Figure 1) to my Mac Book Pro. *iTivo* allowed me to

Figure 1. *iTivo* allows you to download content from your TiVo to your *iTunes* TV Library.
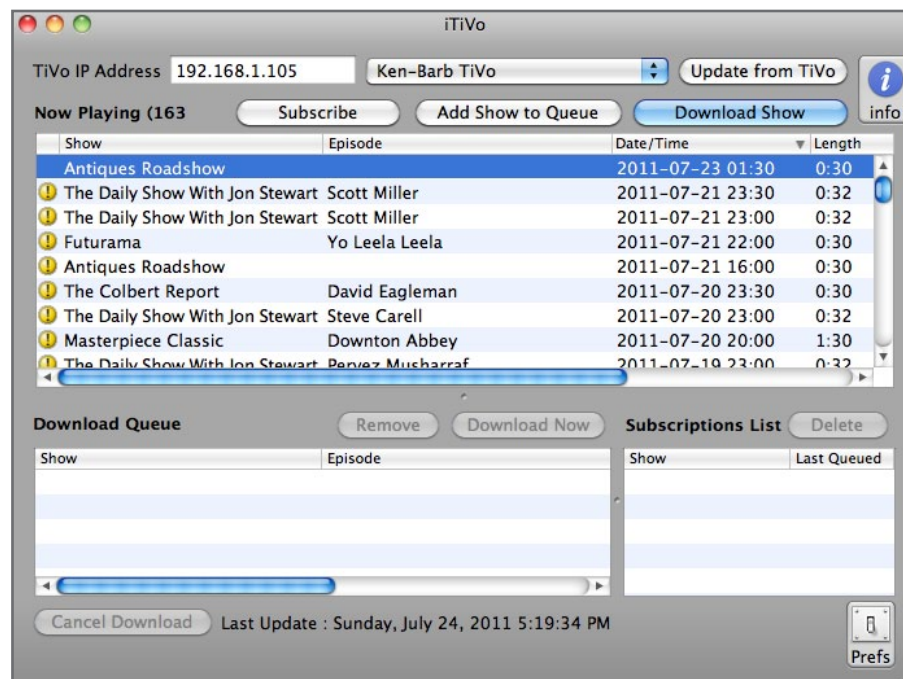
queue up programs from my TiVo and download them to the *iTunes* TV menu. Once the programs were downloaded, all I had to do was sync my iPad with *iTunes*, or let *iTivo* do this automatically. Both the picture and the sound quality (through my noise-cancellation headphones) were excellent. *iTivo* also has the ability to remove commercials from TV shows automatically, but I have not yet checked out this feature.

Reading On My iPad

I downloaded a book to read from the Montgomery County library using the *OverDrive Media Console App* (http://montgomerycountymd.libguides.com/content.php?pid=38466&sid=282450). This service is free, although it may not be the best way to put a book on your iPad. The listings are not well organized, and specific books are hard to find. Once I find a book and reserve it, I never know when it will become available. When the book does become available, I have three days to check it out and fourteen days to read it. I was able to use this on my trip only because one of my reserved books became available and I was able to check it out just before I left. Once I downloaded the book, the reading experience was very pleasant. The *OverDrive* look, feel, and interface are similar to *iBooks*; if you've used that, you would not have any problem with *OverDrive*.

I usually like to read the newspaper on the airplane. My method for copying *The Washington Post* to my iPad is somewhat laborious, but effective. If anyone can suggest a better way, please let me know. On the *Post* website I go to "Today's Paper." For each page I want to read I click on "Download Page PDF," and when the PDF is downloaded, I click the "Open in *iBooks*" button at the top right of the page. After the page is saved in *iBooks* I go back to Safari, go to the
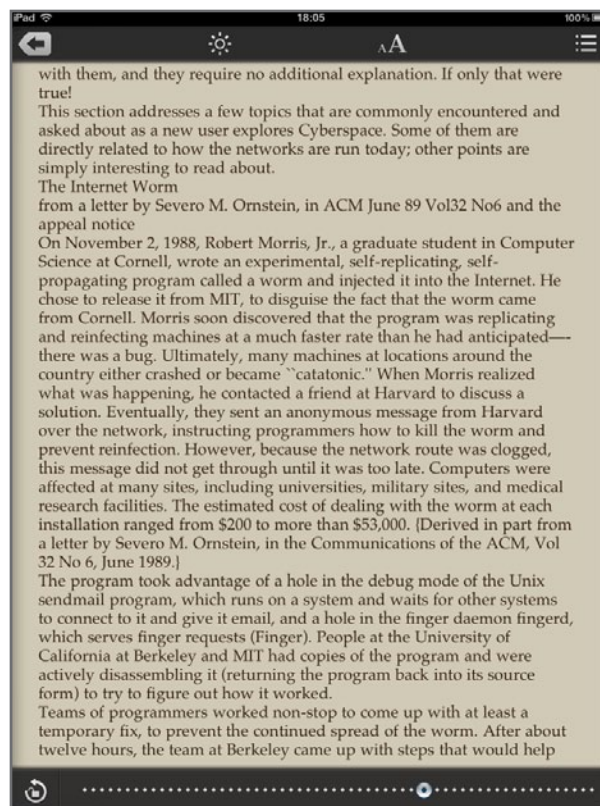

Figure 2. This is what a book downloaded for free from the Montgomery County library looks like on the iPad.

next page, and repeat the process. I usually do this in reverse order so that the pages are loaded in the correct order in *iBooks*. This is laborious, but, once I finish the downloading, it is a very nice way to read the paper, especially on an airplane. The page images are crisp, I can adjust the type to a comfortable size, and navigation around the page is easy. Also, I avoid hitting the person next to me as I turn the pages, and I don't get black ink all over my hands.

Figure 3. Here is *The Washington Post* on my iPad.

Reading magazines was quite painless. I had fallen behind with both my *Washington Apple Pi Journal* and my North Bethesda Camera Club publication, *The Lens and Eye*. Because both publications are available as PDFs, saving them to read in *iBooks* was simple and straightforward. I also have a subscription to *Wired*, and I was able to download an issue to read. Reading *Wired* on an iPad is an interesting experience, as it has an unusual interface: you scroll horizontally to move

Figure 4. I took this photo with my iPad, through the plane window, someplace in the Midwest. Note the reflection of the airplane on the engine cowling.

Figure 5. I saw these mountains sticking their heads out of the clouds through the airplane window, and was able to capture the image with my iPad.

Figure 6. I have several of Ken Ray's daily Mac News podcasts on my iPad that I was able to listen to on my trip.

from one article to another, and vertically within an article. Unusual, yes, but easy to navigate once you get the hang of it.

Other Uses for the iPad

My preference when flying is for an aisle seat, but the best I could do on my outbound flight to Seattle was a window. This turned out to be a good thing. The weather was clear most of the way, and when it was cloudy, I saw magnificent mountains sticking their heads up out of the clouds. I was cursing myself for neglecting to bring a camera, when I remembered

the iPad. With the iPad I was able to capture some beautiful shots out of the window.

For the final leg of the flight into DC, I wanted to just sit back, relax, and listen. I put on my headphones, tapped the iPod icon on my iPad, tapped Podcasts, and ended my flight listening to the melodious tones of Ken Ray's Daily Mac News podcast, *Mac OS Ken*.

I used these iPad features not only on the airplane but also in my room at the hotel (where the iPad had no problem connecting to the WiFi). I watched some TV
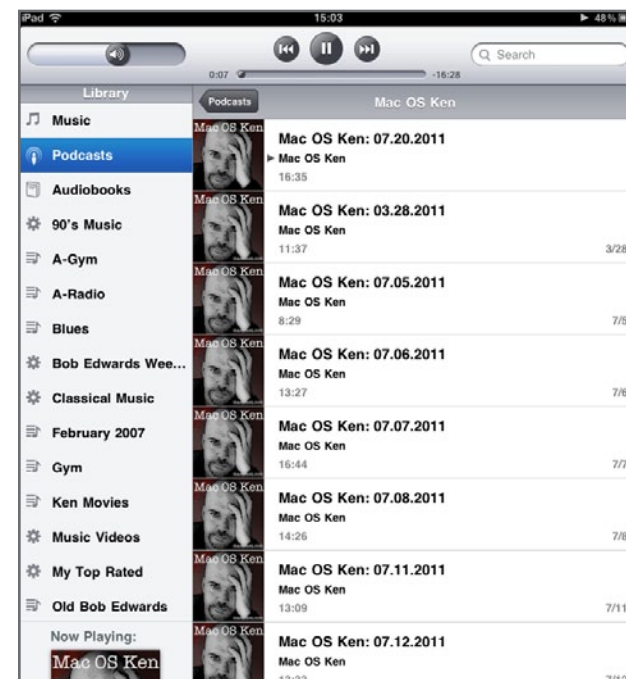
programs, did some reading, checked email, looked up local restaurants online, and in the morning listened to the podcasts for NPR's hourly news summary and Garrison Keillor's *The Writer's Almanac*.

As much as I liked and was amazed by my iPad prior to this trip, I was even more so at the end. This is truly the traveler's electronic Swiss Army knife. I feel like I have merely scratched the surface, but the fact that I could do so much in such a small package, and with an amazingly long battery life, truly has made my iPad 2 my new favorite traveling companion.

Practical HTML5: Video for Everyone

By Sheri German

If you own an iPhone or an iPod, you have no doubt encountered the message that "your device does not support *Flash*, and the video cannot load." Much as we love our iDevices, they can be frustrating, especially if there is a video you really want to view and you are nowhere near a desktop computer. There is a solution to this problem, however, and it lies with HTML5.

You have probably heard a lot of buzz about HTML5, from both its naysayers (*Flash* killer! Not ready for prime time!) and its fans, who see it as the savior of the web. The truth is that HTML5 is just an evolution of the HTML standard, and you do not need to adopt it all or nothing. Indeed, it is not even close to being a finished specification and you can *only* partially adopt it, even if you "drink all the Koolaid."

This article focuses on one aspect of HTML5 that can do a great deal of good for iDevice users — the new HTML5 video element. I will show you how you can use that feature to serve video to everyone.

Formatting Video for Everyone

Wouldn't it be wonderful if you could insert a video into a page without needing any proprietary plugins? And if, in the process, the user could see the video play natively right in the browser? In theory, HTML5 video element will do just that. Point to a source file, either between the opening and closing tags or within the opening tag (if you are serving only one format), and you're done. In practice, however, it's not that easy. First, *Internet Explorer* 6, 7, and 8 do not support the video element at all, and thus need a *Flash* fallback. Second, the browsers that do support the video element require different formats for it to work.

There are four different video formats you need in order to cover all modern browsers.

- **WebM** works in the latest versions of *Firefox*, *Chrome*, and *Opera*. *Internet Explorer* 9 will also support it if the codec is manually installed on the computer. (One can hope that this requirement won't be necessary in future IE updates.)

- **MP4** works in *Safari* (including on the iOS), *Chrome*, and *Internet Explorer* 9.

- **ogv/ogg** works in *Firefox* 3.5, *Chrome* 4, and *Opera* 10.5, as well as Linux.

- **FLV**: This is the *Flash* format that is required for *Internet Explorer* 6, 7, and 8, and is supported by all modern browsers.

This means that you have to convert your video to three different formats, as well as the FLV or SWF format for *Internet Explorer* 6, 7, and 8. Fortunately there are tools available that will do this for you:

- *QuickTime Pro* (exports FLV as well as other formats): http://www.apple.com/quicktime/download/

- Miro Video Converter (which is free and converts to ogg, WebM, and MP4): http://www.mirovideoconverter.com/

- *Flash* to create FLV files, and Adobe Media Encoder (for owners of most Adobe Suites): http:// www.adobe.com

- FileWiggler has a free online converter that will convert video to FLV, as well as the other formats you'll need: http://www.filewiggler.com/

Delivering the Video to All Browsers

There are several methods for serving video to all browsers:

- Add the video element and use *Flash* as the fallback (nest the *Flash* object inside the video element);

- Add *Flash* and use the video element as the fallback (nest the video element inside the *Flash* object);

- Use an HTML5 video player such as the Kaltura HTML5 video widget (you can find a list of 20 HTML5 video players at: http://www.net-kit.com/20-html5-video-players/); or

- Upload your video to YouTube and use its embed code to insert it on your page — You Tube takes care of device detection to serve the correct format.

I will demonstrate the second option, which is to code *Flash* video and add the video element as the fallback. This is emerging as a popular strategy because you only have to convert your video to two formats: *Flash* and MP4. That is a great resource savings, at least until the <video> supporting browsers sort out their format wars.

Most browsers support *Flash*. It has been a great means of delivering video, and we will need to continue to use it for video delivery in any case, until the use of *Internet Explorer* 6, 7, and 8 dies away. The one drawback to using all *Flash* is that the iPad and the iPhone do not support it. The good news is that there is excellent HTML5 support on these devices, including support for the HTML5 video element.
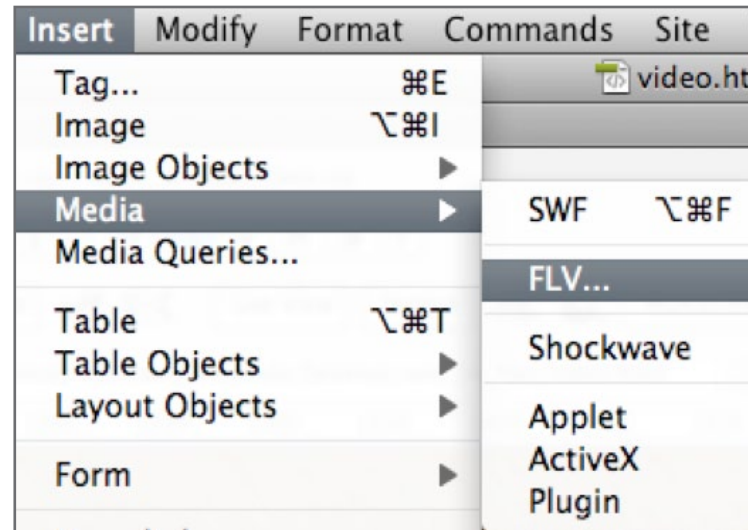

Figure 1. Once you have opened the page in which you want to insert an FLV, go to the dropdown menu under the Insert button, click on Media, and then select FLV.
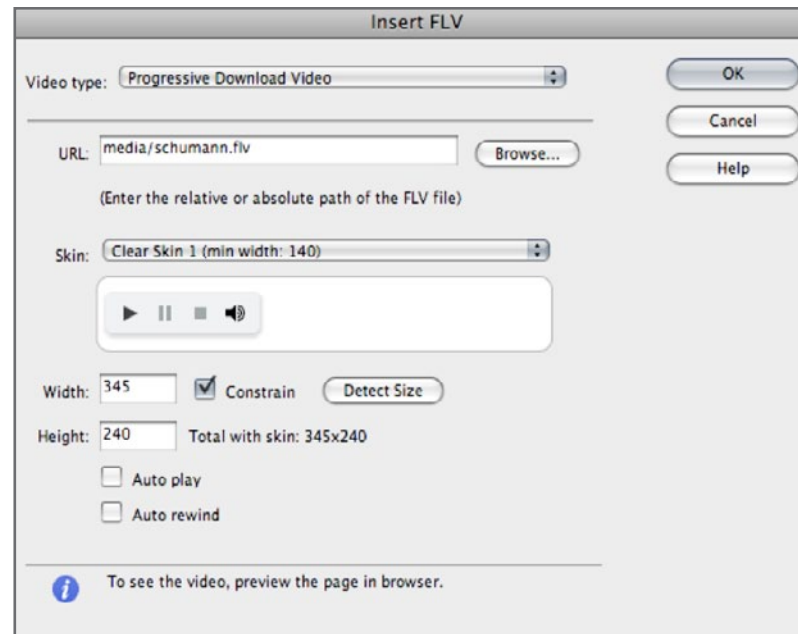

Figure 2. In the FLV dialog box, you select your video, select a skin for the Flash video player, and specify the width and height.
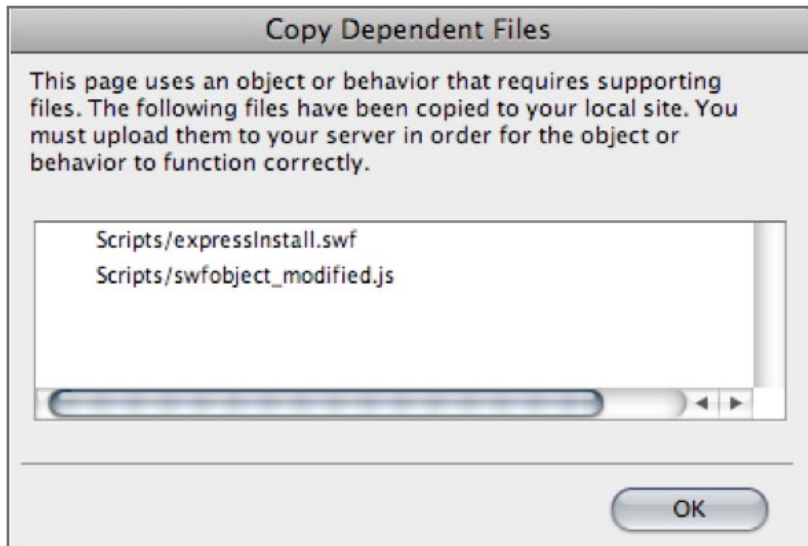
Figure 3. Be sure to upload the dependent SWF and script when this dependent files dialog box displays.

Figure 4. Preview the Flash video in a desktop browser.

In this demo I am going to use *Dreamweaver* because it provides a drop dead simple way of implementing *Flash* with a video element fallback. We can use the Insert>Media>FLV command along with HTML5 code hints to quickly add video that will play just about everywhere. It is a two-step process: The first step is to add the *Flash* video; the second step is to embed the video element.

Adding the *Flash* Video in *Dreamweaver*
The first step is to insert an FLV-formatted video into a *Flash* player skin.

1. Open the page on which you want to insert a video.

2. Use the **Select Insert>Media>FLV** command (see Figure 1). The Insert FLV dialog box displays (see Figure 2).

3. Click the **Browse** button next to the URL field.

4. Locate and select your video.

5. Select a **skin** for the *Flash* video player from the Skin dropdown menu.

6. Add in the **width** and the **height**. (There is an automatic detection feature but I find that it rarely works.)

7. Click **OK**.

8. Save the document and click OK when the dependent files dialog box displays (Figure 3). Remember that you must upload these dependent files along with your video and HTML page in order for the *Flash* video and player to work.

Preview the video in a desktop browser (Figure 4).

Adding the HTML5 Video
Now that the *Flash* video is working in desktop browsers, it's time to embed the video element inside the *Flash* object element so that iOS users can receive the video, too.

1. Click the **Code View** button in the Document window.

2. Scroll down and locate the div that includes the message to users who do not have *Flash*, or have *Flash* 6.0 or an older version:

   <!The browser displays the following alternative content for users with *Flash* Player 6.0 and older. >

<div> <h4>Content on this page requires a newer version of Adobe *Flash* Player.</h4> <p></p> **</div>**

3. Delete the code between the opening and closing div tags.

4. Place your cursor between the two now-empty div tags.

5. Type the video element: <video>. Users of *Dreamweaver* will get Code Hints to help them complete the video element and its attributes.

6. Add the following attributes, modifying them to reflect the values of your own video:

   • Width

   • Height

   • Controls – This will place playback controls on the video so that the user has control over starting and stopping it

   • Poster – browse for the image file that will provide a still image that displays until the video starts

7. Finally, close the video element: </video> and preview the video on an iPad or iPhone (see Figure 5).

Tip: If you are worried about accessibility for those who may not have *Flash*, have an older version of *Flash*, or use an older browser that cannot render an MP4 or *Flash* on the fly, you can add a link to download the video for offline viewing. You can then put this code into its own div and use CSS inside a Media Query to hide it from tablet or smart phone users.

The completed code should look like this (with your own video and attributes, of course):

    <div><video src="media/schumann.mp4"
    width="345" height="240" controls poster
    ="media/schumann.jpg"></video> </div>

Or, here is the code with accessibility messages:

    <div><video src="media/schumann.mp4"
    width="345" height="240" controls poster
    ="media/schumann.jpg"></video>

    <div class="hide"><h4>Content on this
    page requires a newer version of Adobe Flash
    Player.</h4>

    <p><a href="http://www.adobe.com/go/
    getflashplayer"><img src="http://www.
    adobe.com/images/shared/download_
    buttons/get_flash_player.gif" alt="Get Adobe
    Flash player" /></p><p>Can't see the
    video? Download <a href="media/schumann.
    mp4">Schumann Quintet here.</p>
    </div>

Figure 5. The video plays perfectly on the iPad.

I hope this look into a practical use for HTML5 video will be of value to you. Although I used *Dreamweaver* for my example, you should be able to easily adapt the instructions to your own web-authoring tool of choice. And note: If your web-authoring tool doesn't have a WYSIWYG way of adding *Flash* video, you can get an SWF code example at http://animation.about.com/od/flashanimationtutorials/qt/embedswfwebpage.htm

In the next *Journal*, we'll continue exploring ways that HTML5 improves the experience of iDevice users as we look at HTML5 forms. I hope to see you back then!

Figure 1. The *Preview* toolbar Select option gives you several choices for outlining selected areas of an image. The Rectangular Selection is the simplest of choices as it allows you to start at one corner and drag to the other. After you make your selection, you can adjust the area by clicking a corner and dragging it to refine the area, or just move the entire outlined rectangle by clicking within the box and moving it around over the background image.

Adjusting Images, Time Saving Keystrokes, and Troubleshooting *iPhoto*

Bob Jarecke

The Tips & Tricks series is designed to share things we have found that make our computer experience easier or more efficient or more satisfying. This month we deal with image manipulation, keyboard shortcuts, and *iPhoto* libraries. We hope you will emerge one step closer to being a computing genius!

And in the spirit of members helping members, if you have some computing techniques or tricks, pass them along via an email to [feedback@wap.org.](mailto:feedback@wap.org) I am sure there are readers who would benefit from your experience.
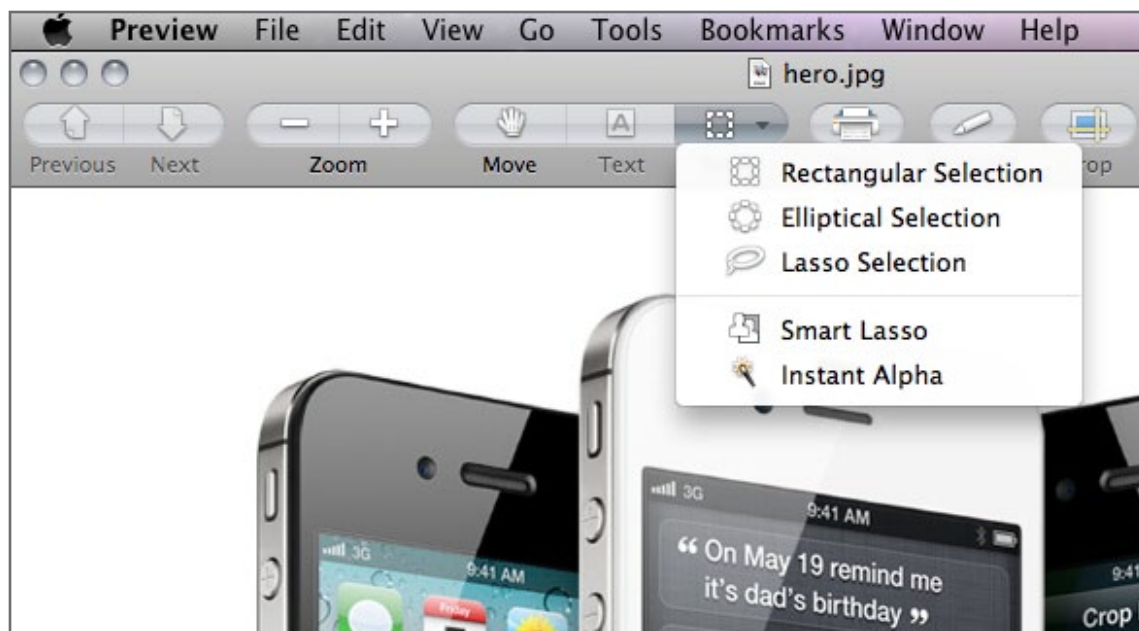

Crop and Resize Images with Preview

How many times have you had an image that you wanted to modify slightly before sending it off or posting it online? Nothing fancy, just a quick crop or resize to dress it up. The thought of launching an application like *Graphics Converter*, *iPhoto*, Adobe *Photoshop*, or *Photoshop's* cheap cousin, *Photoshop Elements,* is daunting though. After an interminably long wait for the application to open, you would have to labor through its image manipulation steps and exporting process. Yes, the result would be a better image for the viewer, but is it worth the time and effort? What to do, what to do? Enter *Preview*!

Preview starts in a heartbeat. It might even be as simple as double-clicking the image file icon, if you haven't messed with the Mac OS X default setting for opening image files. With the file open, move on to the task of cropping and resizing.

To crop an image, click on the toolbar button labeled Select. If you don't see a square on this button, click, hold, and opt for the Rectangular Selection as shown in Figure 1. Click and drag over the area you want to retain. The defined area will have a hash line around it and you can then resize the shape by dragging one of its corners or moving the outlined rectangle to better center the subject on the image. Next, choose Tools: Crop (or keystroke Command-K) and, if you are happy with the result, save the file. If the cropping is not what you want, press Command-Z or choose menu option Undo to go back to the original image.

As for resizing the image or changing its resolution, choose Tools: Adjust Size from the application menu. Enter a width or height in
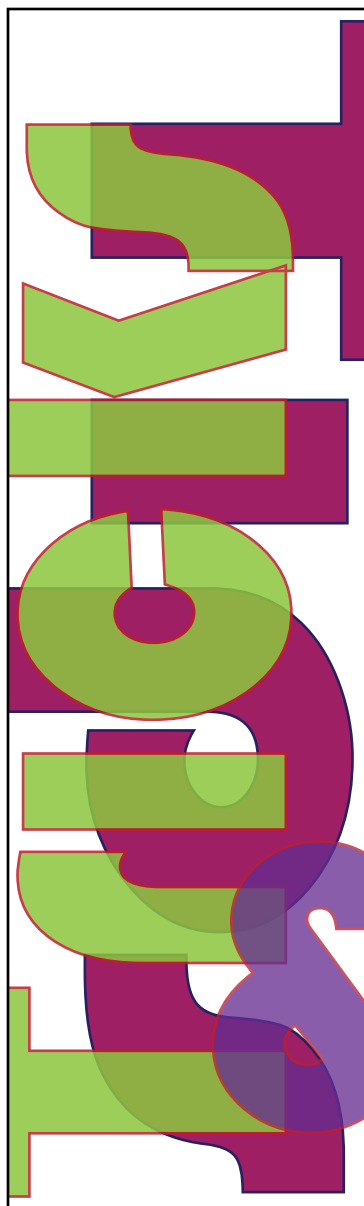
pixels, inches, or other units as displayed in the dropdown menu. To keep the same image proportions, make sure the Scale Proportionally box is checked ; to make an image smaller without losing quality, keep Resample Image checked.

Note: This tip works in Mac OS X 10.5 and above.

Keyboard Shortcuts

Much about computing requires keyboarding. While a lot can be done with the mouse and its many buttons or with a trackpad, especially the newer, larger ones, these input devices fall short when it comes to the written word. Short of using voice commands, we need keyboards to tell the computer where you want it to go, and what you want it to do, and therefore the easier it is to use the keyboard, the better. For those of you who skipped or didn't pay attention during typing class and are now paying the piper, here are a few rudimentary and not-so-rudimentary keyboard shortcuts that might help save you some time.

Fundamental keystrokes

For starters, everyone should know the following four Command (⌘) key shortcuts. Hold the "Apple" or Command (CMD) key and then tap:

Z = Undo

X = Cut (delete)

C = Copy

V = Paste.

Note that these four essential task keys are conveniently grouped on the far left of the bottom row of the keyboard, close at hand to the all-important Command key, as well as the important Control and Option keys.

Another useful shortcut is Command – A. This highlights all content within the active application; it is the equivalent of the menu selection Edit/Select All. As an example, this keystroke shortcut is good for cleaning out spam emails efficiently. There are three easy steps: Scan the latest batch of emails in your spam folder to ensure there is nothing of importance. If nothing is worth keeping, type CMD – A and then CMD – X. Now all the spam emails are where they belong — in the Trash!

Many of you readers are already familiar with these keystroke shortcuts. If you are on the computer much, the time you save by using these keystrokes could add up to years — okay, so I exaggerate a little, but you get the picture.

Web browsing keystrokes

There are a few other keystrokes that are good to know when you are using a web browser, any web browser. Command – R will refresh the current web page. Command – Left Arrow will bring back the previous page. Command – L highlights the current web address, With these last two, you will find it easier if you use your right hand and the right Command key, since it is located close to the task keys.

When using the Command – L keyboard shortcut, remember that you do not need to clear the current URL in the address block; it will disappear the moment you type the first letter of the new address. You will marvel at how few keystrokes it takes to bring up a new web page. And to make matters simpler, did you know that you don't have to type in the standard lead-in text — the http – colon –- slash-slash — for a web address? Just type in the principal word of your web address and smack the Enter/Return key. Most web browsers by default insert http:// before any entry and attach a .com suffix.

Finally, a simple keyboard shortcut using only one key — the spacebar. Did you know that while web browsing you can scroll down the equivalent of one web page just by just tapping the
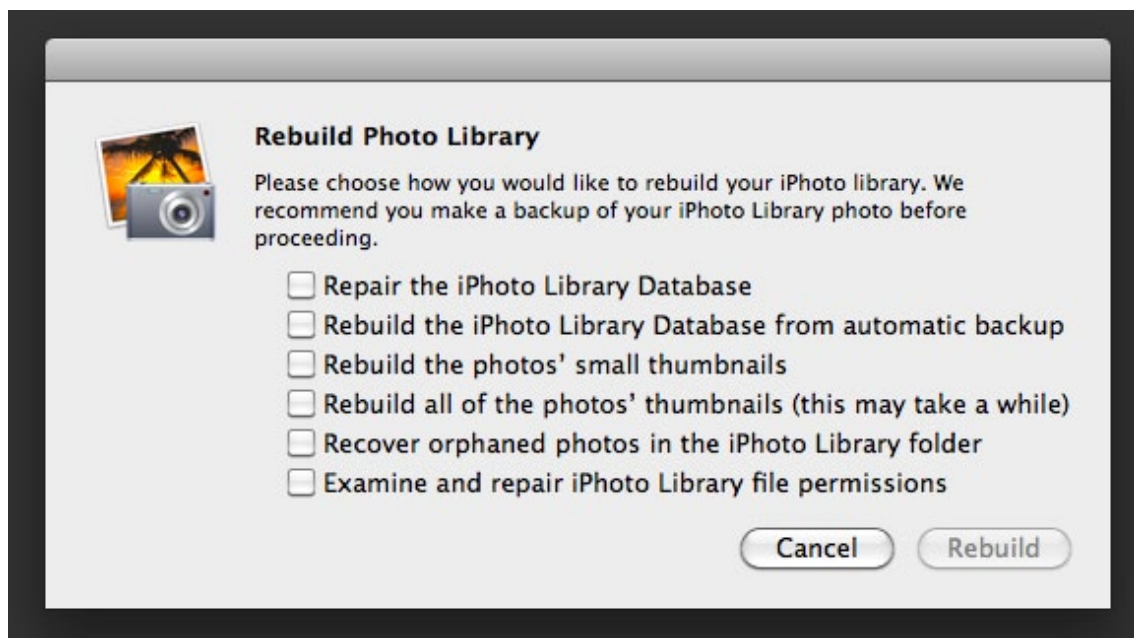
Figure 2. Starting *iPhoto* while holding down the Command and Option keys will produce several options for rebuilding the application's library. Note the second sentence about backing up your *iPhoto* Library — always a good thing to do.

Stop pulling your hair out and cursing. Don't give up on the import. Calmly quit *iPhoto* and back up your *iPhoto* Library (if you haven't already done so). Now, while holding down the Command and Option keys, restart *iPhoto*. What will happen is that *iPhoto* will start in a maintenance mode and give you options for rebuilding your photo library (see Figure 2). Pick one, cross your fingers, and wait out the process. Hopefully, your full set of photos will be returned to you ready for use.

Do you have some tricks of your own? Let us know so we can share them with other readers; just use the feedback option at the bottom of page 2.

spacebar? To return, hold the Shift key as you tap the spacebar and you will go back up to the previous page(s).

Give all these shortcuts a try, and before you know it you will be browsing on steroids! Also, if you are intrigued about learning more on the subject, there is a great article on shortcuts on the MacWorld web site. Here is the URL: <http://www.macworld.com/article/134160/2008/07/keyboardshortcuts.html>

Rebuilding your *iPhoto* Library

Picture this: You are attempting to import some images and, instead of the photos showing up, all you see is a black triangular icon around an exclamation point. Further checking in the Console utility reveals the following message: <Error>: CGContextSet-CompositeOperation: invalid context 0x0. What could possibly be causing this?

Washington Apple Pi Meetings

Upcoming Pi Meetings

Where is Apple going? Its latest Mac OS X and iOS updates offer clues, as does its new online service dubbed iCloud. Is a revolutionary change in computing taking place? If so, what will it mean for you? Get insight and answers at the next couple of General Meetings.

iCloud and Cloud Computing
November 19, 9:30 a.m. at George Mason University

Apple is putting MobileMe out to pasture and replacing it with iCloud. iCloud replaces most, but not all, MobileMe services. Several, such as web hosting and Galleries, are being discontinued. iCloud also will fill the role the now–demoted Mac has historically played in synching with iOS devices. What does this mean? How does this change affect you?

The November General Meeting will feature Pi members who will show you all the in and outs of this new service. They will demonstrate what iCloud can do for you, and, maybe just as important, what it won't do for you. Come learn.

Reviewing Recent Apple Technologies
January 28, 9:30 a.m. at George Mason University

In the Pi tradition of members helping members, the January General Meeting will focus on what members have learned about the new operating systems and iCloud. By the start of 2012 we'll have lived in the new world of Apple products and services for several months. Many of us will have made discoveries worth sharing.

Come to the meeting prepared to share your favorite insights. This is your chance to give back to the community and help others grow.

As always, check the Pi website for additional, updated details on these meetings.
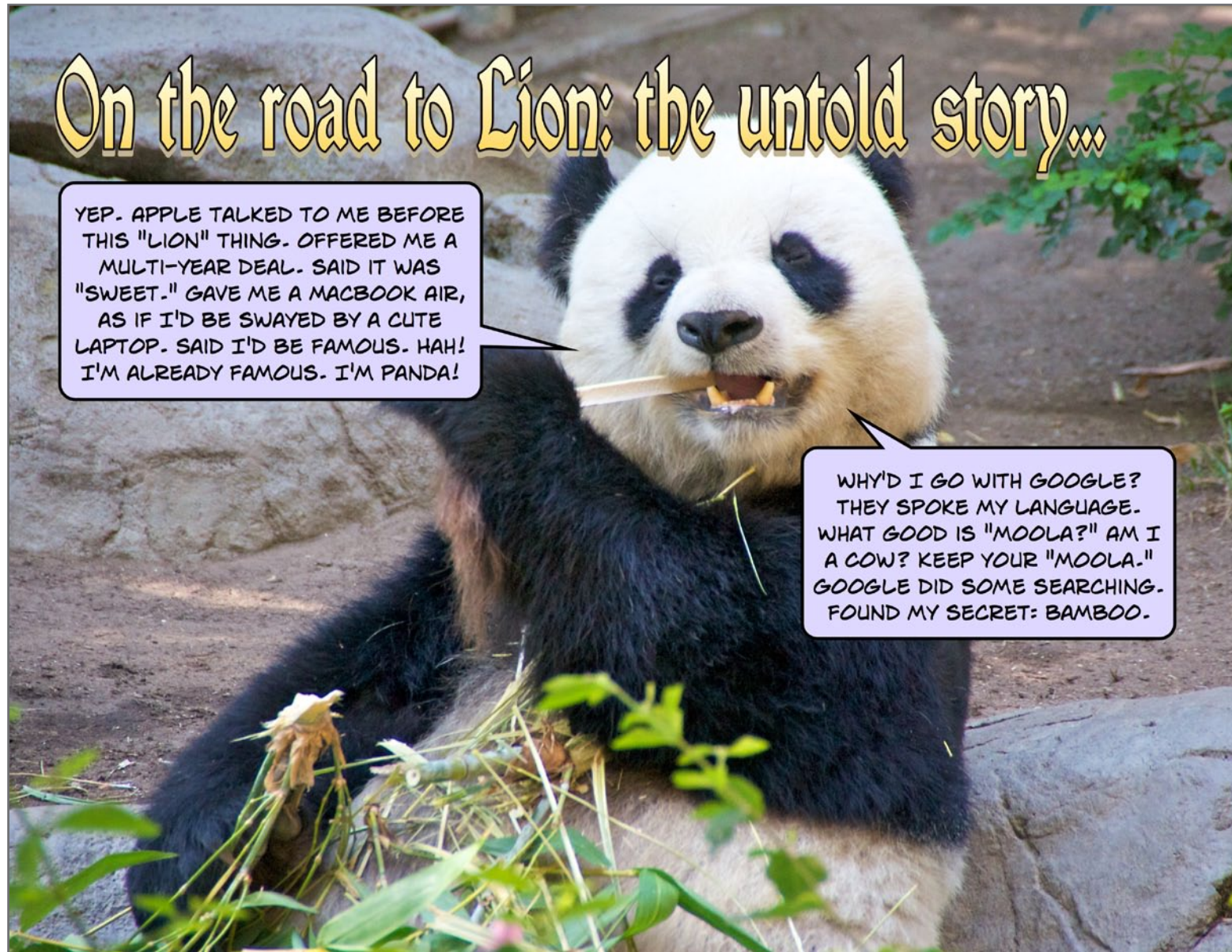
Members Helping Members

Dedicated volunteers are the lifeblood of the Pi. Whether it is installing a hard drive at a Clubhouse Saturday event, answering questions at a General Meeting, or placing advice on the TCS Forums, there are many ways to pitch in and help, depending on a member's interests and talents. Please consider making a commitment to ensure that the Pi remains a strong and energetic club dedicated to helping its members. All volunteer efforts are appreciated. Check out these areas where assistance is needed.

Featured Position – General Meeting Webcast Director

The Pi currently captures its General Meetings on videotape for future viewing by members who cannot attend the meetings. Using the same camera, we are able to concurrently produce live webcasts so members can view the meeting in real time via the Internet. We need a dedicated volunteer to oversee the technical and production aspects of this webcast.

There are various technical components to putting up the video on the Pi's *Ustream* web page. The Webcast Director needs to that ensure that the equipment is properly set up and functioning, and needs to monitor the audio and video streaming production from start to finish (or designate someone to do this) to ensure satisfactory audio and video quality. The Webcast Director will not be responsible for any other part of the General Meeting program, but will focus exclusively on the webcast production.

Any previous experience in TV or video production would be advantageous, but is not required. A basic understanding of video and audio equipment and how to connect them would be helpful, but the contracted cameraman has primary responsibility for equipment hookup. The Webcast Director needs to make sure that the meeting presenters do not stray from their predetermined stage positions, so they remain adequately illuminated for the entire presentation. Also, this person should be available in case of a technical or other problem that would require the speaker to temporarily suspend their presentation. Case in point: the Webcast Director will stop the action when the cameraman indicates that a new tape needs to be swapped out in the video camera.

If you are interested in helping out with an eye on taking over this important position, contact Bob Jarecke at **robert.jarecke@wap.org.**

Journal Managing Editor

The *Journal* is an established, time-honored publication of the Washington Apple Pi and it is in need of someone to take over as Managing Editor, leading a team of dedicated and highly skilled volunteers. The *Journal* is published on a bi-monthly basis so most of the activity occurs in the three weeks leading up to the publication date. In addition, this person will be a member of the Pi's Publications Committee, which has oversight of all printed material published by the Pi. The job is challenging, but very rewarding.

If you enjoy writing and want to help the Pi progress, this is the job for you. If you enjoy working with enthusiastic colleagues on meaningful projects, apply today.

Contact the interim *Journal* editor, Jay Castillo, at **editor@wap.org** with any questions or to express your interest.

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 tasks. While it sounds like a job for Superman, that really is not the case. If you have juggled household duties or been an office administrator, you have the skills. While another Pi manager emcees the meeting, you will be making him or her look good!

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

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

Contact **office@wap.org** to express interest and we'll go from there.

iChat Help Volunteer

Apple's *iChat* application offers a way for Pi members to help other members from the comfort of their own home. Interested? Read on.

iChat is an ideal means for direct communication using text, voice, video, or, in the last two versions of Mac OS X, screen sharing. With the Pi having commercial grade servers and server software, we now have the means to host our own *iChat* network. We are currently testing the capability of this interactive networking software, and the first results are positive.

So what will Pi *iChat* Help volunteers do? Basically, the volunteer helps members who have questions or a problem, but instead of meeting face-to-face, you handle the matter using *iChat*. What's that? You don't use *iChat* or haven't even launched it yet? No problem, we will train you. We will also be providing guidance on how to deal with common issues, and on problem-solving techniques, and will supply a list of associate helpers who can help with particular issues. All you need to bring to the equation is your people skills and a genuine desire to help.

If you have even the slightest interest or any questions, contact the Management Committee Chair, Bob Jarecke, at **robert.jarecke @wap.org**.

Washington Apple Pi

Journal