

printout

Keystone MacCentral Macintosh Users Group ♦ <http://www.keystonemac.com>

New Features in iMovie '11

by Gary Brandt

Our November meeting will feature a look at the new features that are part of iMovie '11. We will be using a video provided to KeyMac by the fine folks at macProVideo.com, who have many excellent tutorial videos on all things Mac at their site. In the video we are showing, you will learn how to use a storyboard and add clips to your movie trailer. A look at the themes available in iMovie should lead to easier editing of your projects.

Included in the latest release of iMovie are new audio features that allow you to remove some of the hum and noise that may be in your clips. Other new effects like slow motion, fast forward, and instant replay can give your movie a different look. New publishing features make for easy sharing to video sites like YouTube and others.

If you have any videos you have created in iMovie, we are encouraging you to bring them to the November 15th meeting of KeyMac. The program will be preceded by our usual question and answer period. We hope to see you there. ☐



Meet us at

Giant Food

Corner of Trindle Road & 32nd St (Route 15)
3301 East Trindle Road, Camp Hill, PA 17011

Tuesday, November 15, 2011, 6:30 p.m.

Attendance is free and open to all interested persons.

Contents

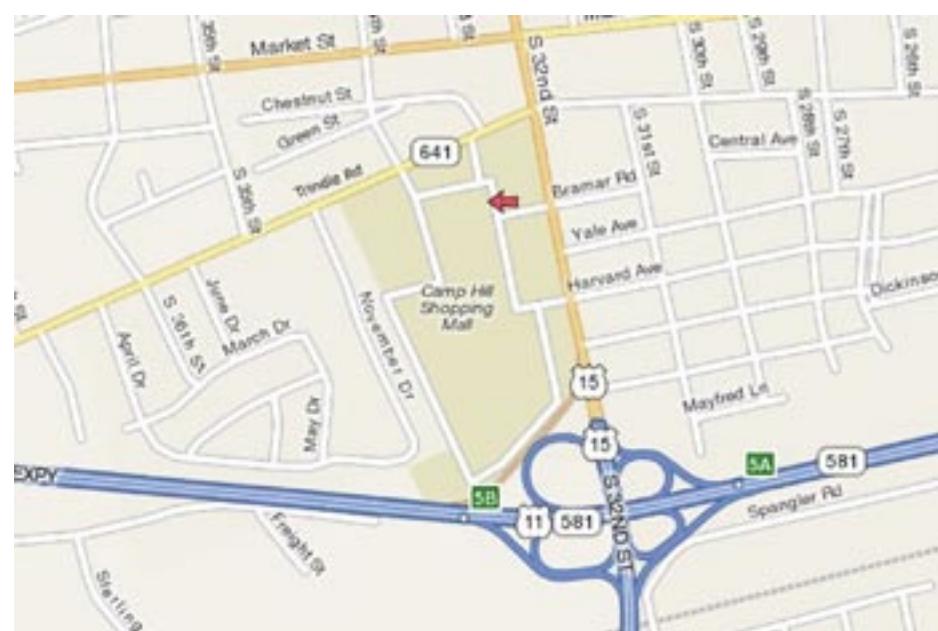
New Features in iMovie '11 by Gary Brandt	1
President's Corner by Linda J. Cober	3
Keystone MacCentral Minutes by Gary Brandt	4 - 5
Trojan Alert: Fake Adobe Updater and "Diaoyu PDF"	
<i>By Glenn Brensinger</i>	5
Rumors and Reality by Tim Sullivan	6 - 7
How iOS 5 Will Affect Developers – and You by Matt Neuburg	7 - 9
Only In Florida	9
November Software Review by Tim Sullivan	10 - 15

Keystone MacCentral is a not-for-profit group of Macintosh enthusiasts who generally meet the third Tuesday of every month to exchange information, participate in question-and-answer sessions, view product demonstrations, and obtain resource materials that will help them get the most out of their computer systems. Meetings are free and open to the public. The *Keystone MacCentral Printout* is the official newsletter of Keystone MacCentral and an independent publication not affiliated or otherwise associated with or sponsored or sanctioned by any for-profit organization, including Apple Computer, Inc. Copyright © 2011, Keystone MacCentral, 305 Somerset Drive, Shiresmanstown, PA 17011.

Nonprofit user groups may reproduce articles from the Printout only if the copyright notice is included, the articles have not been edited, are clearly attributed to the original author and to the Keystone MacCentral Printout, and a copy of the publication is mailed to the editor of this newsletter.

The opinions, statements, positions, and views stated herein are those of the author(s) or publisher and are not intended to be the opinions, statements, positions, or views of Apple Computer, Inc.

Throughout this publication, trademarked names are used. Rather than include a trademark symbol in every occurrence of a trademarked name, we are using the trademarked names only for editorial purposes and to the benefit of the trademark owner with no intent of trademark infringement.



Board of Directors

President Linda J Cober
Vice President Tom Owad
Recorder Gary Brandt
Treasurer Tim Sullivan
Program Director Gary Brandt
Membership Chair Eric Adams
Correspondence Secretary Sandra Cober
Newsletter Editor Tim Sullivan
Industry Liaison Wendy Adams
Web Master Tom Bank II

Keystone MacCentral Essentials

Meeting Place

Giant Food (upstairs)
Corner of Trindle Road & 32nd St
(Route 15)
Camp Hill

Web Site

<http://www.keystonemac.com>

Mailing Address

310 Somerset Drive
Shiresmanstown, PA 17011

President's Corner

AS I write this, it is before Halloween and I have about 7 inches of snow and two big limbs from my magnolia tree in my driveway. How did this happen? Halloween is supposed to be trick or treat, and I handed out treats to everyone who darkened my door on Thursday evening as scheduled. I bet you all did the same. Treats were provided, so there should have been no tricks! Mother Nature nevertheless tricked us all with a big snowfall in October! Remember, if you have leftover treats, KeyMac is glad to take them off your hands. Please bring them to our November 15 meeting and give them to my sister Sandy or to one of the other officers for our treats canister. I will get them when I return from my two weeks of diving in Bonaire, deep in the southern Caribbean where the weather is warm and sunny with no snow in sight!

Meanwhile, I am going to leave you with a couple of tips, which I hope will come in handy. First, if you have ever searched for pictures on the internet to use for presentations such as PowerPoints or KeyNotes, you may have discovered that the pictures which look fine on the web become grainy when you enlarge them for your slides. There are several well-known search engines you can use to find images such as Google Images, AltaVista Images, or Yahoo Images. Next time you want images, though, try [picsearch.com](http://www.picsearch.com). When you get to www.picsearch.com, specify the type of pictures you want, and then click on Advanced Search to the right of the box. You will be offered many choices such as only color, only black and white, only

animations etc. Below this, there is a drop down menu "Picture size must be..." Choose Very Large (800 pixels or more) and then click Search. The images you find will still look good when you enlarge them for your presentation. Remember that you may need to get permission from the owners to use the images you find online.

Next, if you would like to read eBooks on your computer, some free, some for sale, check out these sites:

Gutenberg Project: http://www.gutenberg.org/wiki/Main_Page

Google Books Project: <http://books.google.com>

The Internet Archive: <http://www.archive.org/details/texts>

There are also free MP3 audio versions of books at these sites:

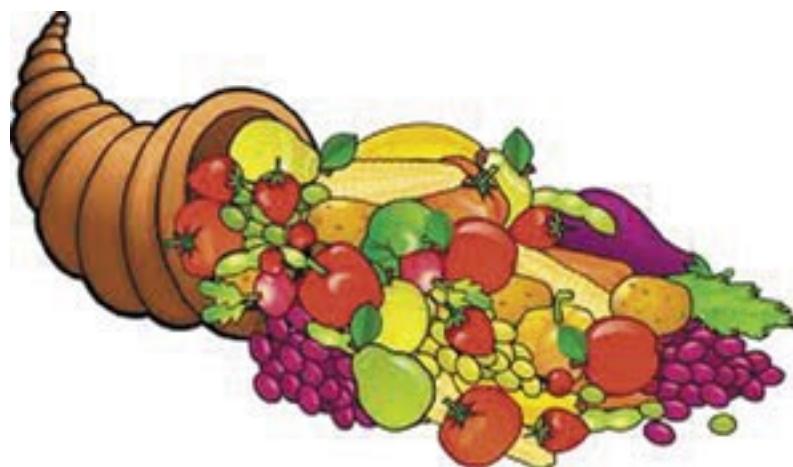
Lit2Go: <http://etc.usf.edu/lit2go/index.htm>

free-books.org: <http://www.free-books.org/>

AudioBooks.org: <http://www.audiobooks.org/>

Local libraries also offer free downloads of eBooks in various formats, now including Amazon's Kindle, which previously had not been available because of the proprietary format. All you need is a library card to enjoy eBooks for free!

KeyMac also offers free information and entertainment at our monthly meetings, so I hope you will be at our November 15 meeting! ☺



by Gary Brandt, Recorder

Keystone MacCentral Minutes

October 18, 2011

Business Meeting

President Linda Cober welcomed members and guests to the October meeting. A signup sheet was passed around. Members who wanted to order one of the two DVDs we have available could note that on the signup sheet. Gary Brandt asked for meeting ideas. Wendy Adams volunteered to demonstrate Adobe Lightroom or Apple's Aperture. Any other ideas you have for future meetings can be sent to programdirector@keystonemac.com where they will be noted.

Webmaster Tom Bank II has put a Facebook ticker on our web page. Tom has also been updating a KeyMac Facebook page. Tim Sullivan has reconciled our financial records since taking over Treasurer duties.

Q&A & Comments

Ernie Levasseur spoke about Tom Owad's efforts to repair one of his Macs needed to complete a video editing project. It seems that Tom went above and beyond to get Ernie's Mac back in action.

Don Fortnum had been advised that some capacitors in his G5 iMac might be bad and that might be causing it to periodically reboot. Don cloned the iMac hard drive to move files to a new Mac. Magically, the older iMac does not now have the rebooting problem. This may have been because Don moved it to the kitchen table to do the file transfers. The act of moving the Mac may have reseated the capacitors. Check the solder joints if you have a similar problem.

Syncing e-mail messages from one Mac to another was discussed. Apple's Mail program can be set up to delete e-mail from the server after it is downloaded. You may want a different setting. Sent mail only stays on the computer it was sent from so you may want to carbon copy to other e-mail accounts you have.

Linda Cober searched online and found out how to disable the cartridge check on HP printers in order to use cartridges that do not have the HP chip. Look under the Diagnostics menu of the HP print software.

HACC is going to offer classes on creating apps next spring. Eric Adams mentioned AppSumo.com. Tom Bank II mentioned that Stanford University offers free courses on iTunes U. on programming. A program called Fluid lets you create Mac apps from web sites or web applications.

A last question was raised during our program. A browser that no longer loads PDF files in its browser window could have an old PDF plugin installed.

Program Notes

Linda Cober announced that we would have another DVD for sale to members at the November meeting. That one, titled "Festive Celebrations", features holiday clip art, fonts, graphics, music, videos, and Christmas applications.

Linda had researched iCloud and she presented us with what she had gathered. You can use iCloud to store music, photos, apps, calendars, and documents. Your stored items are then pushed wirelessly to any mobile devices you are using. You need to be running iOS 5 on mobile devices and Lion on Macs to use iCloud. You should be able to limit syncing to only those items you choose. Users with an existing @mac.com e-mail address will be able to keep that address. On June 30, 2012 iDisk, iWeb publishing, and Gallery will disappear so you will need to move items stored there elsewhere. You will get 5 GB of free storage on iCloud and you can purchase more space if needed. Items purchased from Apple do not count toward the 5 GB limit. The web page with this information can be found at <http://support.apple.com/kb/HT4597>.

Eric Adams manned the club's laptop for the rest of the program. He first downloaded and installed Sophos Anti-Virus Home Edition with its updated virus definitions. The program installs a black shield in your menubar with the options for Sophos. Linda Cober mentioned a new Trojan Horse that could affect Mac users. Tom Bank II has noted some recent threats on our Facebook page. He posts other notes of interest.

We looked at Growl, an app that works with other programs to give timely notifications from those programs. SMART-Reporter will give you status updates of any serial ATA drives you have. You will get a notice of impending drive failure that may allow you time to back up your files.

ClamXav is a UNIX-based anti-virus program. Tom Bank II mentioned MenuMeters which lets you monitor various system details in your menubar. OnyX can perform UNIX tasks. It also checks the SMART status of a disk and checks the startup volume. Automation options in OnyX can repair permissions, clean caches, and more.

By Glenn Brensinger

Trojan Alert: Fake Adobe Updater and “Diaoyu PDF”

AS if Adobe doesn't already get enough bad press in the Apple world, a new malware attempt has been spotted that pretends to be an update to Adobe's Flash Player. Dubbed “Flashback,” it appears to be a legitimate update and includes the same logo and graphics that Adobe uses for their Flash products. However, it does not update Flash; it installs a backdoor that allows a hacker to access your system.

Similar to “Mac Defender,” Flashback makes every attempt to look legit so you will install it. Most of the time when malware hits a Windows system, it installs itself without any indication that anything is happening (like a robber climbing in through a back window of your house). OS X does not allow this kind of hidden infection, so in order to get around your Mac's security, the malware preys on the weakest link in the fence—the person using the system. Somehow it has to trick the user into running the application so the malware can be installed. (Criminals will sometimes pose as police officers or utility workers to gain access to your home. They look harmless, so you allow them access.)

Flashback does not spread on its own; it has to convince people to download and install it. As with most malware, it plays to the public's obsession with current events and scandal to spread. For example, a webpage claims to contain nude photos or a “leaked video” of someone famous. A popular tactic used on Facebook advertises a controversial video, just begging people to click on it. The “video” leads to a website that says an update to Flash is needed and offers to install it. There's no video, there's no Flash update, there is just the backdoor program that now allows someone to steal your data.

The best way to avoid this kind of infection is to download the built-in Software Update will keep you current, but for other applications and utilities, you have to check their site or rely on their own update alerts. If you're surfing the Net and are told that you need an update to some component of your operating system, ask yourself, “Is this in response to something I just did?” If you clicked on a link to a video on YouTube and were told that you needed an update to your Flash Player, it's most likely real. YouTube is a trusted site. If you're on some other back-alley-type site, you can't always be sure.

Tom Bank II reviewed some of the features of the onOne Software Perfect PhotoSuite before we held our scheduled auction for a copy of the suite. The masking software in the suite looked to be very capable. The auction was held and Tim Sullivan was the winning bidder. ☑

The update notification MIGHT be real, but hackers are getting smarter. Not only are they finding new ways to trick people, but they also know what people are searching for and try to lead them down an unsafe path to get it. If you are at all in doubt, check the official site to see if there really is an update available. For Flash Player, go to adobe.com and check to see if there really is a new version of the Flash Player or Adobe Reader. If there is, download it from there so you know you have the real deal. If you go back to that link and it now works, it's probably safe. If it still says you need an update, the link could be a bad place to go and you should navigate away from that page.

Another recent hack attempt takes the form of a PDF file. It claims to be a document outlining the ongoing dispute between China and Japan over ownership of the Diaoyu / Senkaku Islands. It's not actually a PDF: it's an application that opens a document and infects your system with a backdoor program to allow remote access. The idea of an infected PDF file is not new, and has been plaguing Windows users for years, but this is the first time someone's tried it on a Mac. Oddly enough, this attempt didn't work, but people who disassembled the file found suspicious code that at least made the attempt. The next version of it may actually work, so there's one more thing to watch out for.

As with anything else, my recommendation is a) watch where you click and b) install something to actively scan your system so you don't get caught by the latest scam. [Sophos's free anti-virus for Mac](#) is one such solution. ☑



Rumors and Reality

Around Apple

- Texting has always intrigued me. Carriers charge for sending text messages and for receiving them. Consider: texting generates over \$20 billion in revenue every year. Verizon Wireless gets about \$7 billion of that. Text messaging was an afterthought when wireless operators realized that there was empty space on a control channel. The space could be used to move short messages around. It cost the carriers about a third of a cent to send a message.

Apple has included a feature called **iMessage** in iOS 5. It is like texting on steroids. Send as much text as you want or even videos to another iOS 5 enabled device.

Apple is not alone in attempting to bypass the high cost of texting. Both Samsung and Google are reportedly working on services that would allow owners of their phones to swap free messages. Analysts anticipate that Microsoft, which is acquiring Skype and GroupMe, a popular mobile messaging application, will soon incorporate both services into its new line of Windows smartphones. And other downloadable apps like TextPlus, WhatsApp and Kik are gathering a following among people looking for cheap ways to chat with friends.

One such service, called Pinger, says it has 19 million members in the United States alone. The company says it has handled more than 15 billion text messages since it began offering its service in 2009.

- Siri is Apple's humble personal assistant, available on the iPhone 4S. It is in beta right now. But it looks like it could be very useful. People have been testing its limits. In case you haven't seen it, here is one question posed.



For more crazy questions, go [here](#).

To see some embedded Easter eggs, tell it to "open the pod bay doors." Or ask "What is the meaning of life?"

- Apple recently purchased C3 Technology to add to two others it has working for its mapping apps: Poly9, a 3-D mapping company, and mapping software developer Placebase. C3 creates some pretty intense, highly-detailed and realistic-looking 3-D renderings of real locations based on map data. It's the next step beyond satellite maps.



A map of downtown Las Vegas

- iPhone 4S battery life has gotten some bad press lately. One issue being considered is Location Services, which works hard a lot and can drain batteries quickly. Polling nearby cell towers was brought to our attention this summer. People thought Apple was tracking their every move.

It has been suggested as part of Location Services "Setting Time Zone" causes a lot of polling (just to make sure you haven't changed time zones in the last few minutes.) The "Setting Time Zone" setting can be found in Settings -> Location Services -> scroll to bottom to "System Services" -> Setting Time Zone."

Notes on SSDs — FYI: all good drives die and go to heaven. This includes SSDs (Solid State Devices) also known as Flash. It is generally agreed that flash is both expensive and has limited endurance, significantly less than a normal hard drive.

There are a couple of things manufacturers do that minimize the number of writes to SSDs. They incorporate 1) inline compression of data and 2) block level deduplication. That last one means that a block is not written if it would create an exact match to an existing block. The system creates a pointer to the existing block. If that block gets corrupted, all files using that block are kaput.

There are two types of flash memory — SLC (Single Level Cell) and MLC (Multi-Level Cell). MLC technology packs more information (two bits) per cell. The up side is lower

cost per unit of storage. The downsides are lower write speeds, lower number of program-erase cycles and higher power consumption compared to SLC flash memory.

However as Douglas Adams said, "Don't panic." As a rough guess, you would need to write an awful lot of data to lose a block; we're talking over 100 terabytes of data. Probably never happen to the casual user.

HP seems to have given up developing Mac drivers for their hardware. Be sure before purchasing an HP printer or scanner that it will work with current Mac systems.

Rules of thumb — There are general rules of thumb to follow when dealing with DVD disks, the first of which is do not use Memorex for anything archival. Memorex

media is cheap. And it does not take heat to destroy them - in many cases, Memorex disks stored correctly still go bad in under a year. Memorex media is to be used for transfer purposes only.

When burning DVD's, it has long been recommended not to burn faster than 4x, as that can incorporate noise into the stream that lessens the integrity of the burn. That noise usually impacts the data on the last 25% of the disk.

The use of adhesive or even pen on CD/DVD media has also generally been discouraged as a potential data killer.

Taiyo Yuden and Verbatim media, both of which have excellent reputations and a dye layer that resists breakdown much longer than the cheap stuff, are recommended. ☺

by Matt Neuburg

How iOS 5 Will Affect Developers – and You

The term "iOS 5" means different things to different people. To the general public, it means a whole new face for iOS devices, with new apps like Reminder, new icons like Newsstand, new interface like notification banners and the Notification Center, and new features like Reader in Mobile Safari and hourly forecasts in Weather. But to a developer, iOS 5 also means the iOS 5 SDK (software development kit) that comes with Xcode 4.2, released at the same time as iOS 5 itself. The SDK represents the toolbox, the built-in bag of tricks that an app can take advantage of.

Most existing apps have probably not been significantly affected by users shoving iOS 5 onto their devices; my own apps, for example, seem to be running precisely as they were under iOS 4. (A sad casualty, however, is *Stanza*, which is toast on my devices; but then, somehow one already suspected that Amazon had bought Lextcycle for the sole purpose of killing it.) But many developers are rushing (or have already rushed, during the beta period preceding the official release) to recompile their apps with the iOS 5 SDK, making those apps iOS 5-native and enabling them to take advantage of the expanded toolbox that the iOS 5 SDK brings.

Those changes, in turn, will affect what you see on your device's screen. As more and more apps adopt iOS 5, iOS 5 SDK features will become part of your own user experience. So what are some of these features, and how might they manifest themselves in your daily usage?

The main place to look for answers is Apple's [own release notes for iOS 5](#). I can't tell you anything you couldn't ferret out for yourself by perusing that document; but in case you'd prefer that I peruse it so you don't have to, here are some thoughts about the main changes you can expect to see as the iOS 5 SDK catches hold among developers.

Hey (Hey) You (You), Get Onto iCloud — The big story, as is perfectly obvious from the amount of space devoted to it in the release notes, is iCloud. iCloud offers developers the opportunity to store an app's documents and other data online in a way that's intended to be convenient and even transparent to the user. Thus, a user could work on a document using Device A, then later pick up Device B and, in essence, find the very same document there, in the very same state.

It will help to think of iCloud as having two different purposes: backup and sync. The iCloud backup is largely just a substitution of wireless technology for something you were already doing every time you hooked your device to your computer and backed it up in the course of a sync. But iCloud sync is a way of sharing data across applications running on different devices. In the past, this sort of thing has been implemented through a variety of ad hoc solutions (such as Dropbox integration, or even building your own server); iCloud's promise is a universal solution that all Lion and iOS apps can use fairly easily.

Your first 5 GB of iCloud storage are free, so developers will expect a significant proportion of their users to have iCloud space that their apps can use. Moreover, iCloud can also store small preference files that don't count against a user's iCloud storage quota. I think the result will be that many apps will integrate iCloud, and that users, in their turn, will soon expect iCloud integration in their iOS experience. For example, if I've entered my New York Times paywall username and password into the NYTimes app running on my iPod touch, I'm going to be miffed if I have to enter it again into the NYTimes app running on my iPad, when I know darned well that the app itself could be taking advantage of iCloud to share my preferences between instances of itself.

Continued on page 8

How iOS 5 Will Affect Developers – and You

More broadly, I also wonder whether the document-oriented nature of iCloud may not constitute an invitation for apps to become document-centric in a way that previously they were not. Unfortunately, as far as I can tell, iOS 5 does nothing to help apps provide a uniform interface to let the user manage documents; iOS has no Finder, so each app must forge its own way of displaying documents and helping the user operate on them. Compare, for example, the Pages “document manager” screen with the GoodReader “manage files” pane; from an interface perspective, they have basically nothing in common.

Who Built the ARC — The next big change called out in the release notes is ARC (automatic reference counting). This is the sort of feature only a programmer could love; it happens right down at the level of the programming language, Objective-C, in which iOS apps are written. But it’s an important change to the user, in one respect: If things go as planned, ARC should mean that apps will crash less often.

The reason is, simply, that Objective-C is not a very good language, and one of the ways in which it’s not very good is memory management. Up to now, memory management has been handled manually by the programmer; this, in turn, has meant not only that writing an app for iOS is an unusually fussy and tiring business, but also that memory management itself is a prime opportunity for the programmer to make a mistake that will result in the app either leaking memory and eventually crashing, or attempting to access an object that has gone out of existence and (you guessed it) crashing.

Unfortunately, for a variety of reasons, it’s difficult for Apple to take the step they really should have taken long ago, namely, to make some other language the native iOS programming language. It’s easier for them to adopt a different compiler (LLVM), which can take the programmer’s Objective-C code and do things with it that couldn’t be done by the previous compiler (GCC). In particular, LLVM can now insert, automatically, the manual memory management code that the programmer has up to now had to write by hand. That’s ARC.

Memory management in an iOS program is still manual, but, thanks to ARC, it’s written by the compiler instead of the programmer; the programmer effectively omits all the memory management code and lets the compiler write it instead. Since the compiler is more reliable at this sort of routine task than the programmer, memory management should be more correct more of the time (and the programmer won’t be so bored and can apply creativity to making the program do its actual tasks).

So, as iOS apps are rewritten using ARC, certain kinds of crash may become less frequent. Of course, there are other

kinds of crashes; in particular, multithreading is still hard and will still probably be a source of trouble.

Structure My Screen — In iOS 5, the ways in which apps can physically lay out their interfaces are expanded. For example, without getting too technical, on the iPhone especially the unit of view substitution has been, up to now, the screen itself: a primary view, managed behind the scenes by something called a view controller, took over the entire screen and responded to things like rotation of the device; and the programmer was not supposed to use a view controller except to manage this primary whole-screen view. The framework then provided a limited number of ways in which a view controller could manage other view controllers, such as the navigation interface and the tab-bar interface – which is why those styles of interface are so common.

But in iOS 5, the programmer is at last permitted to write a custom view controller that manages other view controllers; so I would expect to see completely new interface management idioms. It will be easier, for example, to split the screen into panes and have each pane do its own navigation between views. Moreover, iOS 5 gives the programmer more control over the transition animation when one view is substituted for another. There is much room here for creativity and originality.

A completely new style of application supported by the system is the page-based application. In effect, this lets any programmer implement the look of iBooks (including the snazzy page-curling animation), except that the view shown on each “page” can be any view whatever. For example, my Greek and Latin vocabulary apps display flashcards, with the user scrolling left or right to reach the next or previous “card”; I could now probably convert this quite easily to a book metaphor where the user pages between cards, and in the process I could remove a lot of code where I was inventing just the sort of wheel (e.g. preparing the next card before the user scrolls to it) that the page-based application hands me on a plate.

Wild, Wild Widgets — Changes involving the onscreen widgets that the user can see and touch should be extremely obvious. Some of these are legitimate, system-based versions of things that programmers were doing for themselves by a variety of sometimes dubious means, and that’s a good thing – fighting the framework is a lot of work, and it’s risky, so the more the framework gives programmers the capabilities they clearly want, the better.

Prepare for your screen to become much more colorful! In previous iOS versions, the supplied widgets came either in a single color scheme or in a limited set of optional color schemes. A switch (the thing that says ON and OFF) was blue when ON and that was that; now it can be any color. That sort of thing is true for most of the standard widgets that constitute the interface. Custom images can be added to most widgets, and it’s easy for the programmer to enforce a uniform custom color scheme throughout an app.

A number of widgets are altered in subtle ways; a switch, for example, now has a round sliding part instead of a square. Alerts (tiny dialogs with buttons) can now accept text input. A completely new widget is the stepper, allowing the user to increase or decrease a number by tapping. Table views are more powerful. A split view, like what you see in landscape orientation on the iPad in our TidBITS News app, is no longer forced to hide the “master” view into a popover summoned by a toolbar button when the user rotates to portrait orientation.

Drawing effects such as blurring, previously available only in OS X, are now provided also in iOS. Applications now have direct access to the hardware for dimming the backlight on the device (previously, only Apple’s own iBooks could do this). Any application can display the dictionary definition for a selected word.

Conclusion – Let’s sum up. Based on the changes in the capabilities with which iOS 5 endows the programmer, what changes can you, the user, expect to see as more and more iOS 5-native apps come online? Data, such as documents

and preferences, will be optionally stored in the cloud and thus shared between instances of an app on different devices. Apps should run more reliably as it becomes easier for programmers to avoid memory-management mistakes. The screen should become a brighter, peppier place, as programmers endow their widgets with color. And interfaces generally should become more expressive and more original, as programmers are able to let you navigate between subviews in novel ways.

The genius of iOS is that it allows the programmer to do much with little. There are remarkably few built-in widgets; yet they are sufficient to endow the tiny iPhone screen with great power and ease of use. To me, iOS 5 (from the programmer’s point of view) is a natural development, based largely on Apple’s own observation of the ways in which programmers have pushed at the boundaries of what the framework was readily permitting them to do; it’s an evolution, a coherent growth, gently expanding the programmer’s range of abilities while continuing to respect the conventions that have made iOS such a hotbed of great apps. ↗

Only In Florida

Tech Support: Technical Support, how may I help you?

Female Caller: ‘Last night my computer started making a lot of hissing noises at me so I shut it down.

This morning when I turned it on the computer started hissing and cracking, then started smoking and a bad smell, then nothing’.

Tech Support: ‘I will have a technician come over first thing this morning. Leave the computer just like it is, so they can find the problem and fix it, or change it out with another computer.

Give me your address; phone number and the technician will be there just as soon as he can’.

When the technician got there, the lady showed him where the computer was, said what happened to it. This is what the technician found.



November Software Review

Print and More from iOS with Printopia 2

by Jeff Carlson

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 need to hand a copy to a colleague who lacks 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.)

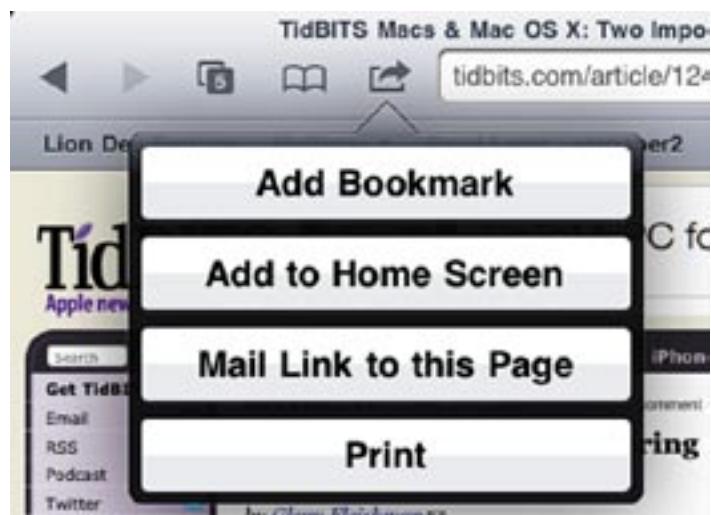
In iOS 4, Apple introduced **AirPrint**, a technology for printing directly to a printer from an iOS device – that is, as long as you have a specific AirPrint-enabled HP printer. I don't print nearly enough to buy a new printer just for iOS wireless printing.

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**. 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 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.



On an iOS device, open a document, e-mail 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.



In the Printer Options popover that appears, tap the Printer button to choose the printer accessible by your Mac, choose 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.



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](#) folder. When I’m creating a lot of iOS screenshots, such as those for my book [“Take Control of Media on Your iPad,”](#) 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.



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 waystation 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 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.



Continued on page 12

November Software Review

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 screenshots, 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.

Apple Updates

Epson Printer Drivers v2.9 OS X

October 27, 2011 - 972.36 MB

System Requirements

- OS X Lion
- OS X 10.6 or later

This download includes the latest Epson printing and scanning software for OS X Lion and OS X v10.6

HP Printer Drivers v2.8 OS X

October 27, 2011 - 515.44 MB

System Requirements

- OS X v10.6.1 or later
- OS X Lion

This download includes the latest HP printing and scanning software for OS X Lion and OS X v10.6

Aperture 3.2.1

October 27, 2011 - 635.76 MB

System Requirements

- OS X 10.6.8
- OS X Lion 10.7.2

What's New in Aperture 3.2.1

- Resolves an issue that could cause Aperture to quit unexpectedly at launch on Macs with Core Duo processors
- Addresses problems that could cause the Crop tool to switch to the incorrect orientation or resize incorrectly
- Resolves rendering issues when cropping images with Onscreen Proofing enabled
- Location menus are now displayed correctly on the map in the Places view when "Photos" is selected in the Library Inspector

Included in Aperture 3.2

- Addresses compatibility with iCloud and iOS 5
- Resolves an issue that could cause the "Loading" indicator to reappear in the Viewer when cropping a photo
- Aperture now automatically relaunches into Full Screen mode if the application was in Full Screen mode when last quit

- Pinch-to-zoom gesture now automatically activates Zoom mode in the Viewer
- Left and right swipe gestures can now be used to navigate between photos in the Viewer
- Microsoft Outlook can now be chosen in Preferences as the application used by Aperture for emailing photos
- Fixes a problem that could cause Aperture, running on OS X Lion, to quit unexpectedly when using brushes to apply adjustments
- Loupe now correctly displays magnification levels between 50-100%
- Fixes an issue that could cause Aperture, running on OS X Lion, to display the incorrect color profile on externally edited images
- Import window now includes an option to delete photos from iPhone and iPad after they have been imported into Aperture
- The Lift & Stamp tool now displays the correct cursor icons when being used in Split View and Viewer only modes

The update is recommended for all users of Aperture 3.

Thunderbolt Software Update (OS X Lion)

October 26, 2011 - 72.53 MB

System Requirements

- OS X Lion 10.7.2

This update provides support for the Apple Thunderbolt Display and bug fixes for Thunderbolt device compatibility.

iPhoto 9.2.1

October 26, 2011 - 357.18 MB

System Requirements

- OS X 10.6.8
- OS X Lion 10.7.2 or later

What's New in iPhoto 9.2.1

- Addresses an issue that could cause iPhoto to quit unexpectedly on Macs with the 3ivxVideoCodec plug-in installed

Included in version 9.2

- Addresses compatibility with iCloud and iOS 5
- Left and right swipe gestures can now be used to navigate between photos in Magnify (1-up) view
- Previously imported photos are now displayed in a separate section of the Import window
- Book/calendar themes and card categories can now be selected using a pop-up menu in the carousel view
- Resolves an issue that could cause some pages of books to print incorrectly
- Rebuilding a library now correctly preserves saved slide-shows and books

This update is recommended for all users of iPhoto '11.

iMac EFI Update 1.7

October 26, 2011 - 3.69 MB

System Requirements

- OS X 10.6.8

- OS X Lion 10.7 or later

This update enables Lion Recovery from an Internet connection and includes fixes that resolve issues with Apple Thunderbolt Display compatibility and Thunderbolt Target Disk Mode performance on iMac (early 2011) models.

Macbook Pro EFI Firmware Update 2.3

October 26, 2011 - 4.17 MB

System Requirements

- OS X 10.6.8
- OS X Lion 10.7 and later

This update fixes several issues to improve the stability of MacBook Pro (early 2011) and MacBook Pro (late 2011) computers and is recommended for all users. This update includes improvements delivered in MacBook Pro EFI Firmware Update 2.2 that enables Lion Internet Recovery from an Internet connection, resolves issues with Apple Thunderbolt Display compatibility and Thunderbolt Target Disk Mode performance on MacBook Pro (early 2011) models.

MacBook Air EFI Firmware Update 2.2

October 26, 2011 - 4 MB

System Requirements

- OS X Lion 10.7 and later

This update fixes several issues to improve the stability of MacBook Air (mid 2011) computers and is recommended for all users.

This update includes fixes delivered in MacBook Air EFI Firmware Update 2.1 that enhance the stability of Lion Recovery from an Internet connection, and resolve issues with Apple Thunderbolt Display compatibility and Thunderbolt Target Disk Mode performance on MacBook Air (mid 2011) models.

Mac mini EFI Firmware Update 1.4

October 26, 2011 - 4.01 MB

System Requirements

- OS X Lion 10.7 and later

This update fixes several issues to improve the stability of Mac mini (mid 2011) computers and is recommended for all users.

This update includes fixes delivered in Mac mini EFI Firmware Update 1.3 that enhance the stability of Lion Recovery from an Internet connection, and resolve issues with Apple Thunderbolt Display compatibility and Thunderbolt Target Disk Mode performance on Mac Mini (mid 2011) models.

MacBook Pro Video Update 1.0

October 24, 2011 - 70.97 MB

System Requirements

- OS X Lion 10.7.2

This update addresses an issue where MacBook Pro (15-inch Mid 2010) computers may intermittently freeze or stop displaying video.

Canon Printer Drivers v2.7 for OS X

October 20, 2011 - 324.08 MB

System Requirements

- OS X 10.6.1 or later
- OS X Lion or later

This update installs the latest software for your printer or scanner.

FujiXerox Printer Drivers v2.2.1 for OS X

October 20, 2011 - 50.06 MB

System Requirements

- OS X 10.6 or later
- OS X Lion or later

This update installs the latest software for your printer or scanner.

Safari 5.1.1

October 12, 2011 - 47.05 MB

System Requirements

- OS X Lion 10.7.2
- OS X Snow Leopard 10.6.8 and Security Update 2011-006

Safari 5.1.1 includes support for iCloud, a breakthrough set of free cloud services. iCloud stores your Safari bookmarks and Safari Reading List and automatically pushes them to all your devices.

Safari 5.1.1 also contains various bug fixes and improvements to stability, compatibility, and security, including fixes that:

- Address issues that could cause hangs and excessive memory usage
- Improve stability when using Find, dragging tabs, and managing extensions
- Improve stability for netflix.com and other websites that use the Silverlight plug-in
- Improve stability when zooming on Google maps
- Address an issue that could prevent East Asian character input into webpages with Flash content
- Address an issue that could cause History items to appear incorrectly
- Address an issue that could cause cleared Reading List items to appear
- Improve printing from Safari
- Address an issue that could prevent the Google Safe Browsing Service from updating

iPhone Configuration Utility 3.4 for OS X

October 12, 2011 - 14.43 MB

System Requirements

- OS X 10.6

iPhone Configuration Utility lets you easily create, maintain, encrypt, and install configuration profiles, track and install provisioning profiles and authorized applications, and capture device information including console logs.

Continued on page 14

November Software Review

Configuration profiles are XML files that contain device security policies, VPN configuration information, Wi-Fi settings, APN settings, Exchange account settings, mail settings, and certificates that permit iPhone and iPod touch to work with your enterprise systems.

Security Update 2011-006 (Snow Leopard)

October 12, 2011 - 136.28 MB

System Requirements

- Mac OS X v10.6.8

Security Update 2011-006 is recommended for all users and improves the security of OS X.

Lion Recovery Update

October 12, 2011 - 431.91 MB

System Requirements

- OS X Lion 10.7

The Lion Recovery Update includes improvements to Lion Recovery and addresses an issue with Find My Mac when using a firmware password.

OS X Lion Update 10.7.2

October 12, 2011 - 768.84 MB

System Requirements

- OS X Lion 10.7.1

The 10.7.2 update is recommended for all OS X Lion users and includes general operating system fixes that improve the stability, compatibility, and security of your Mac. It also includes support for iCloud, a breakthrough set of free cloud services that automatically and wirelessly store your content on iCloud and push it to all of your devices. iCloud on OS X Lion includes the following features:

- iCloud stores your email, calendars, contacts, Safari bookmarks, and Safari Reading List and automatically pushes them to all your devices.
- Back to My Mac provides remote access to your Mac from another Mac anywhere on the Internet.
- Find My Mac helps find a missing Mac by locating it on a map and allows you to remotely lock the Mac or wipe all its data.

OS X Lion Update 10.7.2 Client Combo

October 12, 2011 - 818.59 MB

System Requirements

- OS X Lion 10.7

The 10.7.2 update is recommended for all OS X Lion users and includes general operating system fixes that improve the stability, compatibility, and security of your Mac. It also includes support for iCloud, a breakthrough set of free cloud services that automatically and wirelessly store your content on iCloud and push it to all of your devices. iCloud on OS X Lion includes the following features:

- iCloud stores your email, calendars, contacts, Safari bookmarks, and Safari Reading List and automatically pushes them to all your devices.
- Back to My Mac provides remote access to your Mac from another Mac anywhere on the Internet.
- Find My Mac helps find a missing Mac by locating it on a map and allows you to remotely lock the Mac or wipe all its data.

iOS 5 Software Update

October 12, 2011

System Requirements

- Mac with USB 2.0 port
- iTunes 10.5

Products compatible with this software update:

- iPhone 4S
- iPhone 4
- iPhone 3GS
- iPad 2
- iPad
- iPod touch (4th generation)
- iPod touch (3rd generation)

This update contains over 200 new features, including the following:

- Notifications
 - Swipe from the top of any screen to view notifications in one place with Notification Center
 - New notifications appear briefly at the top of the screen
 - View notifications from lock screen
 - Slide the notification app icon to the right on the lock screen to go directly to the app
- iMessage
 - Send and receive unlimited text, photo, and video messages with other iOS 5 users
 - Track messages with delivery and read receipts
 - Group messaging and secure encryption
 - Works over cellular network and Wi-Fi*
- Newsstand
 - Automatically organizes magazine and newspaper subscriptions on Home Screen
 - Displays the cover of the latest issue
 - Background downloads of new issues
- Reminders for managing to do lists
 - Syncs with iCloud, iCal and Outlook
 - Location-based reminders when you leave or arrive at a location for iPhone 4S and iPhone 4
- Built-in support for Twitter
 - Sign-in once in Settings and tweet directly from Camera, Photos, Maps, Safari and YouTube
 - Add location to any tweet
 - View twitter profile pictures and usernames in Contacts
- Camera improvements for devices with cameras

- Double click the home button when device is asleep to bring up a camera shortcut on iPhone 4S, iPhone 4, iPhone 3GS and iPod touch (4th generation)
- Volume Up button to take a picture
- Optional grid lines to line up shots
- Pinch to zoom in the preview screen
- Swipe to camera roll from preview screen
- Tap and hold to lock focus and exposure, iPad 2 and iPod touch (4th generation) only support exposure lock
- Photo improvements for devices with cameras
 - Crop and rotate
 - Red eye removal
 - One tap enhance
 - Organize photos into albums
- Mail improvements
 - Format text using bold, italic, or underlined fonts
 - Indentation control
 - Drag to rearrange names in address fields
 - Flag messages
 - Mass mark messages as flagged, read or unread
 - Customize mail alert sounds
 - S/MIME
- Calendar improvements
 - Year view on iPad and new Week view for iPhone and iPod touch
 - Tap to create an event
 - View and add event attachments
- Game Center improvements
 - Use personal photos for your Game Center account
 - Compare your overall achievement scores with your friends
 - Find new Game Center friends with friend recommendations and friends of friends
 - Discover new games with custom game recommendations
- AirPlay Mirroring for iPad 2 and iPhone 4S
- Multitasking Gestures for iPad 2
 - Use four or five fingers to pinch to the Home Screen
 - Swipe up to reveal the multitasking bar
 - Swipe left or right to switch between apps
- On-device setup, activation and configuration with Setup Assistant
- Software updates available over the air without tethering
- iCloud support
 - iTunes in the Cloud
 - Photo Stream
 - Documents in the Cloud
 - Apps and Books automatic download and purchase history
 - Backup
 - Contacts, Calendar, and Mail
 - Find My iPhone
- Redesigned Music app for iPad
- Hourly weather forecast
- Real-time stock quotes
- Wireless sync to iTunes
- Keyboard improvements
 - Split keyboard for iPad
 - Improved autocorrection accuracy
 - Improved Chinese and Japanese input
 - New Emoji keyboard
 - Personal dictionary for autocorrection
 - Optionally create keyboard short cuts for frequently used words
- Accessibility improvements
 - Option to light LED flash on incoming calls and alerts for iPhone 4S and iPhone 4
 - Custom vibration patterns for incoming calls on iPhone
 - New interface for using iOS with mobility-impairment input devices
 - Option to speak a selection of text
 - Custom element labeling for VoiceOver
- Exchange ActiveSync improvements
 - Wirelessly sync tasks
 - Mark messages as flagged, read or unread
 - Improved offline support
 - Save a new contact from a GAL service
- More than 1,500 new developer APIs
- Bug fixes

iTunes 10.5

October 11, 2011 - 102.51 MB

System Requirements

- OS X version 10.5 or later
- Safari 4.0.3 or later
- QuickTime 7.6 or later; Support for HE-AAC requires QuickTime 7.6.4 or later

What's new in iTunes 10.5

- iTunes in the Cloud. iTunes now stores your music and TV purchases in iCloud and makes them available on your devices anywhere, any time, at no additional cost.
- Automatic Downloads. Purchase music from any device or computer and automatically download a copy to your Mac and iOS devices.
- Download Previous Purchases. Download your past music, TV, app, and book purchases again, at no additional cost. Previous purchases may be unavailable if they are no longer on the iTunes Store.
- Sync with your iPhone, iPad, or iPod touch with iOS 5.
- Wi-Fi Syncing. Automatically sync your iPhone, iPad, or iPod touch with iTunes any time they're both on the same Wi-Fi network. 