

# **M-Discs and Lightroom**

Dennis McMahon will demonstrate an M-Disc burner and some utilities.

M-Discs are the next step up from DVDs. They hold the about the same amount of data (4.7GB) and can be read by current DVD players. But because the data is etched, rather than burned, into the synthetic material, normal DVD records won't work. We need an M-Disc drive. The data should last somewhere between 1,000 years and forever. The discs have been given DoD certification for data retention in extreme conditions. The discs themselves run about \$3 per disc.

The second part of our March program is a video presentation on things a beginner needs to know when using Adobe Lightroom. If need be, Jim Carey will pause the video to answer your questions.

Ū

Meet us at

### **Giant Food**

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

### Tuesday, March 18, 2014 6:30 p.m.

Attendance is free and open to all interested persons.

### Contents

| M-Discs and Lightroom 1   |
|---|
| Keystone MacCentral Minutes by Gary Brandt                                    |
| How Apple Protects Your iPhone from Your Employer                             |
| <i>by Rich Mogull</i>   |
| iPad Versus MacBook for the Mobile Writer by Julio Ojeda-Zapata. 6 - 9        |
| How to Solve Wi-Fi Connectivity Problems <i>by Alicia Katz Pollock</i> 9 - 11 |
| February Software Review  |

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 Inc. Copyright © 2014, Keystone MacCentral, 310 Somerset Drive, Shiresmanstown, PA 17011.

Nonprofit user groups may reproduce articles form 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

### Keystone MacCentral Minutes February 18, 2014

### Business Meeting

Vice President Tom Owad brought the meeting to order and board members gave their reports. Gary Brandt reminded members that the election of board officers would be held at the May 2014 meeting. Any members interested in serving on the board can contact one of the current board members.

### Q&A & Comments

Gary asked about applications that could disable sound from a browser, so he could listen to iTunes while web surfing without any unwanted embedded videos or ads playing. Tom Owad mentioned SoundBunny. Further investigation revealed that Hear for Mac and Audio Hijack for Mac could be other options. Tom said that Gary might also want to check out Ad Block Plus.

### Program Notes

Wendy Adams began the February program by showing us the Pass.us web site, and the PASS application. The application prepares your photos for sharing on the web site. Account setup is free and you can add galleries that are online for free for 30 days to share your photos with other Pass users. There is a fee of \$29 for each gallery you want to keep online for one year. That fee also includes 10 years of secure online backup. You need a free account to view photos another Pass user shares with you.

Dragging a folder of picture files into the PASS application allows you to create a gallery that can be uploaded to the Pass site. You would then send emails to anyone you want to share that private gallery with. Prints can be ordered from the Pass site, with the person sharing the photo getting a portion of the fee. The PASS software can be downloaded in mobile and desktop versions.

Wendy also mentioned darktable, an open source photography workflow application to organize and adjust photos with non-destructive editing. This could be an alternative to Adobe Lightroom or Apple's Aperture. The Photography Corner portion of our meeting was a Keynote presentation by Jim Carey on resizing photographs for printing and for screen use. Resolution and file size were discussed. Pixel dimensions are used for screen use and document size is used in printing.

A useful rule of thumb is that it is alright to reduce pixel size but you probably will not get good results increasing pixel size. If you must enlarge something, be sure to resample the image. This option is found in the Image Size dialog box. Try to keep width to 1200 pixels or so for an image to be displayed in an email.

When it comes to changing document size, you would want to turn off resampling to resize a printed document. Changing the width will change the resolution. A minimum of 125 pixels per inch is desirable for printing on desktop printers. For web-based viewing an image can be resized to 72 dpi. There is an option in Adobe Acrobat Pro to reduce the file size of PDF files for the web.

Jim mentioned some of the limitations the new version of Keynote has. He suggested a Google search on how to add auto-updating of web pages to new Keynote presentations. He touched on the concept of the responsive web design, the capability of having a web site automatically resize web pages to fit the device used for viewing them. The Hershey Camera Club web site is designed with this in mind. Jim showed us the differences when viewed on a laptop and an iPhone.

Jim continued with the rest of the February program, which was based on a Terry White presentation on *Ten Things Beginning Photographers Want To Know About Photoshop CS6*. Adobe Bridge is included with the purchase of Photoshop. Blemishes can be removed in several ways. The spot healing brush is one option. It will work better with a drawing tablet than with a mouse or trackpad.

Photoshop comes with many filters to add artistic effects. The Liquefy filter is used to push pixels around. The History brush can be used to paint in undos. Adjustments are made in layers and masks are also used. Removing an unwanted object from a photo was demonstrated in a video. The process begins with a selection tool. Expanding the selection and using a content aware fill was shown.

## How Apple Protects Your iPhone from Your Employer

In the deep dark past, when you used technology at work, you used what your employer gave you. In recent years, that has started to change, with the emergence of a concept called "Bring Your Own Device" (BYOD) where employees use their own hardware and the IT infrastructure of the organization adapts. Both the rise of BYOD and the ways IT has adjusted are in large part due to Apple's influence, as I'll explain.

But first, so you have a sense of what it was like until recently, here's what I went through a mere 7 years ago. My mobile phone, BlackBerry (yes, I juggled both), and my computer were all owned and managed by my employer (Gartner). While someone who was non-technical might have been well served by having everything provided, it was frustrating for me, since I was restricted to approved devices, and they rarely matched what I would have chosen for myself. That said, Gartner was actually pretty good, giving me a decent choice of dumb phones and a relatively up-to-date BlackBerry. My laptop was an IBM (later, Lenovo) ThinkPad, replaced every 3 to 4 years.

Not only did I not get to choose my devices, but I also had no control over how they were configured. I could install most of the software I wanted on the ThinkPad, although some restrictions forced me to keep a particular configuration. For example, I made sure to eat lunch at noon every Wednesday when the antivirus scan kicked off and my laptop became unusable.

Having more of a technical bent than many of my colleagues, I managed to remove most of the corporate management and tune the computer to my needs. Then, after Apple released the first Intel-based MacBook Pro, I bought one for myself, virtualized my work computer and moved it to the MacBook Pro, and flaunted my newfound freedom at work events. I'm still not entirely certain how I managed to get away with that.

Since those days, we've seen an explosion of employeeowned devices in the workplace — hence the "Bring Your Own Device" phrase. Much of this was driven first by Apple's Macs and iOS devices, later joined by Androidbased smartphones and tablets, along with other platforms. Knowledge workers in particular expect more freedom to choose and configure the tools they need for their jobs.

Five years ago when I walked into a major corporation for a meeting, I generally had the only Mac in the room. These days Macs are a common sight, as are a range of smartphones. Sometimes companies allow employees to bring their own devices to enable them to enhance their productivity; at other times, having employees provide their own hardware is more seen as a way to cut costs.

As great as BYOD is for most employees, who hate having to carry and manage multiple mobile phones and laptops, it's often a hassle for the IT department. Although many IT people personally appreciate the freedom to use whatever device one wants, such freedom drastically complicates support, compliance, auditability, and security. The compromise has been to force device management onto employee-owned devices through a variety of techniques, many of which degrade the native device user experience.

**Apple's BYOD Philosophy** — With the release of iOS 7, Apple now divides business customers into two categories. There is BYOD, and there are enterprise-owned devices, with nearly completely different security and management models for each, defined by ownership of the device.

In Apple's BYOD model, users own their iOS devices, their employers own work data and apps on the devices, and the user experience never suffers. Users allow the enterprise space on their devices, and the enterprise allows the user access to enterprise resources. No dual personas. No virtual machines. It's a seamless experience, with data and apps intermingled, yet sandboxed apart from each other across the personal/work divide. The split is so clear that it is actually difficult for the enterprise to implement supervised mode on an employee-owned device, and employee data is always protected from IT department interference or snooping. This model is far from perfect today, with one major gap (AirDrop), but iOS 7 is a clear expression of this direction.

In contrast, when the enterprise owns the iOS devices, Apple changes gears to give absolute control to the IT department, even down to the experience of setting up a new device. Organizations can remove or degrade features as necessary, but the devices will, to the extent that's allowed, still provide the complete iOS experience.

Here are a few examples to highlight the different models.

#### On employee-owned devices:

• The enterprise sends a Configuration Profile that the user can choose to accept or decline.

• If the user accepts the Configuration Profile, certain minimal security can be required, such as passcode settings.

• The user gains access to corporate email, but she can't move messages to other email accounts without permission.

• The enterprise can install managed apps, which can be set to allow data to flow only between them and managed accounts. These can be internal enterprise apps, or enterprise licenses for apps from the App Store. If the enterprise pays for it, the enterprise owns it.

• Apart from the corporate email and enterprise-managed apps, the user otherwise controls all her personal accounts, apps, and information on the device.

• All this is done without exposing any user data (like personal email or an iTunes Store account) to the enterprise.

• If the user opts out of enterprise control (which can be done at any time), she loses access to all enterprise features, accounts, and apps. The enterprise can also erase its footprint remotely, whenever it wants (such as in the event of a layoff).

• The device remains tied to the user's iCloud account, including Activation Lock, to prevent anyone, even the enterprise, from taking the device and using it without permission.

• However, the enterprise can still initiate a remote device wipe, making it important for the user to keep independent backups.

### On enterprise-owned devices:

• The enterprise controls the entire provisioning process, potentially from even before the box is opened (if the device was purchased through a special Apple program).

• When the user first opens the box and turns the provided device on, the entire experience is managed by the enterprise, even down to which setup screens display.

• The enterprise controls all apps, settings, and features of the device. That includes even disabling the camera or restricting network settings to prevent access to external Wi-Fi networks.

• The device can never be associated with a user's iCloud account for Activation Lock; the enterprise owns it.

This model is quite different from how security and management was handled on iOS 6, and runs deeper than most people realize. While there are gaps, especially in the BYOD controls, it's safe to assume these will slowly be cleaned up over time following Apple's usual iterative improvement process. The big hole today is that the enterprise can't restrict AirDrop or certain other sharing options through which data could leak off a device.

**How Apple Enables Device Management** – There are five key features that Apple uses to implement these two models of device ownership:

• **Supervised Mode** enables an organization to control an iOS device completely. It lets the IT department manage all settings, what apps can be installed and run, what kinds of networks can be accessed, and even which screens you see when setting up a new device. This is the option for enterprise-owned devices, and is used for everything from iP-hones provided to employees to iPads used by classrooms or in store displays. Supervised mode can be triggered by connecting the device to a Mac and using the Apple Configurator utility, or by purchasing the device through a special Apple program. Once enabled, supervised mode can be disabled only by reconnecting it to the same Mac and turning it off with Apple Configurator.

• A Configuration Profile is a small file placed on an iOS device to manage certain settings. It's the hook an organization uses to tie a device into its Mobile Device Management (MDM) system, using some standard connection methods provided by Apple (push notifications to trigger updates, and a Mobile Device Management API for managing settings). The Configuration Profile is what allows an employee-owned device to access enterprise email and other resources, and in exchange it can enforce certain settings (like the aforementioned passcode requirement). But Apple never exposes any of a user's personal information, apps, or accounts back through this channel, and the user can remove the profile at any time (and thus lose access to work resources).

• Apple's Volume Purchase Program enables organizations to purchase apps, books, and other iTunes content in volume, and then hand licenses out to employees. When a license is given to an employee-owned device, Apple ties together the user's personal Apple ID with the organization's licenses so users can download the apps from the App Store directly, without their personal information being permanently tied to work, or otherwise exposed. Alternatively, MDM can automatically push these apps onto a device, so the user doesn't need to install everything manually. When you leave a job and the enterprise reclaims its license, you have a period of time to purchase your own version of the app before it is removed from your device.

• Managed Accounts are your work email, calendar, and contacts accounts. Although these accounts are still accessed using the native Mail, Calendar, and Contacts apps, the enterprise, using MDM and the Configuration Profile, can lock these accounts down so you can't move email messages or other content into folders of your personal accounts. It can also restrict the apps in which you can open email attachments to Managed Apps.

• Managed Apps are apps licensed on your device through the Volume Purchasing Program, or apps written by and distributed directly by the enterprise outside the App Store. An enterprise can designate Managed Apps and then restrict them to exchange data only with other Managed Apps, or with Managed Accounts. Managed Apps can also pull down configuration settings for both mundane options and those that the enterprise cares about deeply, such as tying the app back to an enterprise server.

Here's how it all fits together. A enterprise-owned device is fully managed and restricted. That's entirely appropriate for many types of organizations.

But when it's not, when BYOD is in play, the employee accepts a Configuration Profile, which establishes certain device settings. These may include access to a work mail server and apps licensed by the organization. The organization can then keep all work-related material within a sandbox of a sort, allowing it to be accessed only by Managed Accounts and Managed Apps. The device owner has to opt into this, can opt out any time, and doesn't have to worry about the IT department being able to snoop in personal accounts or data.

This may sound obvious and sensible, but it's a new development with iOS 7. Previously, the options were quite different. The organization could always fully manage a

device, and some tried to force employees into handing over control of their personal devices since there were no other good management options. As an alternative, an employee could still install a Configuration Profile that would implement organizational settings, but there was no way for the organization to restrict which apps accessed corporate data, and many settings could significantly degrade the iOS user experience. Some enterprises instead installed custom apps to replace Mail and lock down corporate data, but this irritated many users who preferred the native apps.

With BYOD in iOS 7, Apple split the difference. Organizations can protect their property, employees can use their own devices, and everyone enjoys the full iOS experience, with no compromises. It's a new way to look at BYOD, and one I suspect will be quite popular with both users and IT departments.

If you want more technical details on how this works, take a look at my new whitepaper **Defending Data on iOS 7**.

### by Julio Ojeda-Zapata

## iPad Versus MacBook for the Mobile Writer

It takes only a glance at Apple's quarterly financials to realize that the era of traditional desktop and laptop computers is waning. Last quarter, Apple sold 26 million iPads, over five times more than the 4.8 million Macs shipped in that time period. And that's with the Mac doing pretty well, growing 19 percent in the last year while global PC sales declined by 10 percent (see "Apple's Record Q1 2014 Sales Disappoint Wall Street Again," 27 January 2014).

The rise of the iPad has me thinking: What is the perfect mobile computer for a journalist? Or, more generally, the best device for someone who needs to write, take photos and video, and communicate with colleagues, sometimes in unpredictable, uncomfortable situations and under deadline pressure?

As a tech journalist for the **St. Paul Pioneer Press**, I'm in a good position to ponder this question with loaner hardware always cycling through my home office. Since I get to play with the latest and greatest, but can't keep any of it, nor afford to buy much of it, I have to focus: what is the best use of my limited personal tech budget in the service of my journalism?

I've weighed that question for a quarter century in the news business, and the answer has changed in interesting ways over that time span. I even wrote a book, "The Mobile Writer," in search of the answer. Over the years, I've dabbled with many kinds of mobile computers. My tech-loaner arsenal has recently included a range of such devices – Chromebooks, the Google notebooks with a Web-centric Chrome OS based on the popular Chrome browser; Android tablets in all shapes and sizes; and Microsoft's Surface Pro devices that are full Windows PCs as well as iPad-style tablets. I'll be talking about some of those for future articles in this informal series looking at today's post-PC hardware from an Apple user's perspective. But before I reveal my current favorite for mobile productivity, a quick look back.

As a newspaper reporter fresh out of journalism school in the late 1980s, I availed myself of a machine that still is regarded with reverence in some newsrooms: a TRS-80 Model 100, a thick slab of a computer with no tilt-up screen, only a keyboard and narrow LCD panel capable of displaying a whopping eight lines of dim text.



Filing a story from the field — say, at a Michael Jackson concert at the dearly departed Met Stadium in Bloomington, Minnesota — required cramming a wired-telephone handset into acoustic couplers for the painstakingly slow transmission to my newsroom.

In the years and decades hence, I experimented with a variety of other devices, including Apple's Newton with an add-on physical keyboard; a laptop-like, translucent-green Newton cousin called the eMate 300, which I still regard as one of the most beautiful mobile computers ever produced; and a pre-Jobs-era Apple PowerBook that I rented from a computer store and detested due to its stiff keyboard.



In recent weeks I've reached for a different kind of computer when heading out of my newsroom on a reporting assignment — the iPad Air. This came as a surprise to me. The iPad, is, at least for me, an unexpected choice for mobile journalism.

Historically, I've leaned more toward the Mac than the iPad. Given a hard choice between a MacBook Air and the iPad Air for personal (not professional press) use, I would choose the former every time. And yet, when I'm preparing to head out for field reporting, I've ended up picking an iPad almost every time.

The reasons have a good bit to do with Apple's new "Your Verse" television commercial, which promotes the iPad Air as a primary computer, not a secondary one.



Many have seized on one iconic image in the ad, a shot of a videographer who has mounted an iPad Air on a tripod and added other video-recording accoutrements, such as a boom mike. Some have scoffed at this. Just because you're able to harness an iPad in this way, such folks sputter, doesn't mean you should do so with far-better video cameras available.

When I saw that image, though, I was reminded of a reporting gig in 2006 when my digital camera conked out and I had no image-capturing device other than a MacBook (one of the beloved matte-black ones). I was reduced to the awkwardness of aiming the inner-lid iSight camera at my subjects to take tech-blog photos using Photo Booth. (This was all the more embarrassing since the particular gig was the opening of an Apple store at Ridgedale Center in Minnetonka, Minnesota.) I got the hang of it after a few minutes, and sort of enjoyed it. The experience even yielded a treasured photo, taken by someone else, of me with the MacBook held aloft in the middle of the throng.



Still, it wasn't an experience I'd care to repeat.

Fast-forward to last year, when I found myself in almost exactly the same predicament: my smartphone for blog-picture posting had failed, and I had to find a replacement camera quickly. I happened to have an iPad with me, and it did nicely. Yes, I looked and felt like a dork pointing such a big slab at my subjects to take pictures and shoot video, but it was a major step up from using a laptop with only an inner-lid camera. It was appropriate, too, since this also was an Apple-retail event – the debut of a relocated, larger Apple store in the Southdale Center mall in Edina, Minnesota.

The iPad Air isn't just for capturing images; it also does a decent job of editing them. Apple's iPad flavors of iPhoto and iMovie are pretty good, which makes an iPad a simple but capable mobile editing studio. A wide assortment of third-party apps augment my picture-editing capabilities (though certainly not to a Photoshop level). I have dabbled with dozens of the apps, and settled on a few gems.

For image editing, I have gravitated towards Photo Editor by Aviary, Autodesk's PixlrExpress+, Adobe's PS Express and Google's Snapseed – partly because all are nifty apps, and partly because Web-app versions of these exist via my preferred desktop browser, Google's Chrome, which creates consistency for me. Tap Tap Tap's **Camera**+ is also a part of my photo-editing kit in its iPad-native flavor, since I also use the iPhone variant.

I don't dabble as much with third-party iPad video-editing apps, but I regard Google's **YouTube Capture** as essential for light editing as well as uploading.

While such photography and videography work has taken up more of my reporting time, I remain primarily the writing kind of journalist and require hardware suited for that purpose. In this regard, the iPad Air has performed splendidly when outfitted with an add-on physical keyboard.

I've experimented with a wide array of keyboard covers and keyboard cases for the iPad Air. I settled on Logitech's \$149.99 FabricSkin Keyboard Folio, an accessory I was sure I'd hate (a "fabric-skin keyboard"? Really?) but have come to love.



The folio-style case includes an integrated mechanical keyboard with a membrane-style protective overlay, the reason I assumed I would detest it. It turns out the keyboard has a terrific feel for touch typing, even with the membrane, and I'm delighted with it. It's on the cramped side compared to traditional keyboards, as all iPad keyboard cases tend to be, but I've adapted. I like how the iPad hitches firmly to the case yet is straightforward to remove, and how the combo makes for a trim package with a pleasingly rubbery exterior when closed for transport.

Writing apps for the iPad are legion, too, and exist in a range of categories to satisfy any goal or taste. My favorites, which emphasize online publishing and collaboration, include Evernote, Google Drive and Blogsy. I have an entire chapter devoted to these and other apps in "The Mobile Writer," which expands on this article's thesis that the iPad is a more-than-adequate computer for a professional journalist or any other kind of writer.

Once fitted with the necessary add-on hardware and software, the iPad Air blended seamlessly into my reporting and writing routine. This includes typing and organizing interview notes via Evernote, and writing and filing stories via Google Drive. Since versions of these apps exist for virtually all other computing platforms, I often found myself bouncing from device to device — Chromebooks, Android tablets, Surface computers, Windows PCs, my beloved home iMac — without losing focus on research notes and articles in progress. The iPad Air is my preferred mobile device in this regard.

The iPad is a great device for other work tasks, including social media and online research, that I won't detail here. Suffice it to say the iPad stands up well to the MacBook Air in most respects — albeit with a very different user experience — and it rarely feels like a compromised device.

I found myself unexpectedly on deadline while driving one day, and rushed into a Caribou Coffee to work. I flipped open the iPad case, fired up Skype to do interviews via my Apple EarPods as I tapped out notes in Evernote (while appreciating how quiet the membrane-clad keyboard is). I then launched Google Drive to pound out my copy and clicked the Share button to invite my editor to join the editing session via his desktop PC at the office. It all felt perfectly natural.

On another occasion, I attended a pair of events over the course of an evening with the iPad Air at my side. First, I live-tweeted Ignite Minneapolis, an evening of five-minute-long speeches on a broad array of topics in a grand auditorium. On that night, I availed myself of a different, also-awesome keyboard case from Belkin, the Qode Ultimate Wireless Keyboard and Case (for the full TidBITS review, see "Belkin Ultimate Keyboard Case Makes iPad Air a Fair Travel Computer," 11 December 2013). Either the Logitech or the Belkin case works well on a lap.



Later that night, I arrived at Microsoft's only retail store in Minnesota, at the vast Mall of America in Bloomington, to see gaming fanatics get their hands on the new Xbox One console for the first time. This session was more about shooting photos than writing, with the iPad as my primary picture-taking and image-editing device, and the means for uploading my pictures via Google's **Google**+ app. Shoot, edit, upload – I repeated the sequence again and again as I wandered around the packed store.



In the pre-iPad days, an Apple laptop would have been my device of choice for all of these mobile reporting scenarios, but I'd never pick a MacBook Air over the iPad Air today.

The iPad Air is smaller and lighter than the MacBook Air, even when inside the Logitech keyboard case, and it is less expensive, too – though perhaps not by much in certain scenarios. Between needing one of the cellular-capable models for filing stories while out and about, and wanting enough storage for video, I could be looking at \$829 for the 64 GB iPad Air plus \$150 for the Logitech FabricSkin Keyboard Folio, bringing the total cost to \$979 – just under the \$999 price of the 11-inch MacBook Air.

That's why I'll stick with the loaner iPad from work for now (while I have it) rather than invest in one of my own. But fellow writers with bucks to spare should shake off the preconception that a laptop is the only way to go for on-the-go journalism, and give the iPad Air serious consideration. It is the do-it-all mobile-reporting computer.

### by Alicia Katz Pollock

## How to Solve Wi-Fi Connectivity Problems

**One** of the benefits of Apple products is that the company has gone to great lengths to make the underlying technology invisible, to the extent possible. Think about Internet connectivity. Remember the lengthy screech and squeal of a modem handshaking with your ISP? Today, thanks to wireless networking (and broadband Internet connections), you can open your MacBook Air and be browsing the Web within moments.

At least, you can when Wi-Fi is working properly. As a consultant, I occasionally come across a Mac that insists that you choose the Wi-Fi network from the menu bar icon every time. Or perhaps the Mac drops the Wi-Fi connection, or won't connect at all. Here are a few troubleshooting steps that should fix it. (Note that I'm talking just about the wireless network connection here, not Internet connectivity, since that's another whole ball of wax.)

**Restart the Mac** – Just do it, and if you're helping someone else, make sure he or she does it. You may think that restarting is obvious, but several times my clients have told me they restarted, and, after two hours of troubleshooting, admitted they hadn't actually done so, because they thought it would take too long. A restart fixes many ills, including recalcitrant Wi-Fi, so it's always worth a try. If that doesn't work...

**Restart the Wireless Router** – The next step is to reboot the wireless router, often an AirPort base station. Just as many issues are solved by restarting the Mac, the same goes for Wi-Fi hardware. That hardware may come in the form of a single device from the Internet service

provider, a cable/DSL modem with Wi-Fi built in. Or, you may have a standalone cable/DSL modem connected to an AirPort base station, Time Capsule, or third-party wireless router.

These devices often lack reset or power switches, so the easiest way to restart them is to pull the power. (You can also restart an AirPort base station using AirPort Utility in either Mac OS X or iOS, assuming, of course, that you can connect to it at all.) Unplug the device (either end; it's generally safest to unplug the cable that goes into the device rather than risk pulling the wrong cord from the wall) and wait a few seconds to be certain any internal capacitors have discharged.

If you're dealing with a separate cable/DSL modem and wireless router, restarting the modem won't generally affect Wi-Fi. But if you do unplug the modem as well, make sure to plug it in first, wait a minute or so for its lights to indicate that it's back online, and then plug the wireless router back in.

Once the wireless router is back up (this can take another minute or two), see if the Mac can connect to the Wi-Fi network. If not, restart the Mac to encourage it to reconnect, and if even that doesn't work, read on.

**Recreate Your Preferred Network** – It's possible that the Mac's wireless connection settings have become corrupted. To fix this, delete the connection and recreate it. Follow these steps:

1. Open the Network pane of System Preferences.

2. Select the Wi-Fi connection in the list of network services on the left.

3. Click the Advanced button at the bottom right of the window. In the Wi-Fi view's Preferred Networks list, you'll see every wireless network you've ever used. This is where your Mac remembers Wi-Fi details that enable it to connect automatically the next time that network is available.

4. Find the desired wireless network name in the list and select it.



5. Click the – button below the list to delete that network.

6. Click the + button, and in the dialog that appears, click the Choose a Network button.

7. Wait for the right wireless network to appear. Select it and click the OK button, entering the network password if prompted.

Because it's your most frequently used network, your home or office wireless network should appear at the top of the Preferred Networks list. If it's farther down, drag it to the top to make sure it's used preferentially.

While you're there, take a moment to peruse the list. Every wireless network you've ever joined is listed. A few may be from places you'll never visit again. There's no harm in having a long list, but if you took a trip to Hawaii, you probably won't need your hotel's wireless network again, so you can remove it.

Restart your Mac to see if your it joins the network automatically. Are you on, and does it stay on? If yes, congratulations! If not... onward and upward.

**Create a New Location** – A little-known feature of the Network preference pane is the capability to create multiple "locations." This feature enables you to maintain

separate sets of networking preferences for different places. For example, you could create a "Mobile" location that removes all network services except Wi-Fi and Bluetooth, or a "Work" location that includes only Ethernet.

Creating a new location gives you a clean slate of wireless network settings and may clear up any remaining glitches. Follow these steps:

1. In the Network pane of System Preferences, choose Edit Locations from the Locations pop-up menu at the top.

| L                           | c Locations                     | 0   |
|-----------------------------|---------------------------------|---|
| MI-11                       | Home                            |   |
| Convected                   |                                 | Turn Wi-Fi Off                                  |
| Built-in Ethernet           |                                 | wstar and has the IP                            |
| Not Connected               | + - 01                          |   |
| Built-in FireWire           | Done                            | networks<br>be joined automatically.            |
| iPhone US8<br>Not Connected | mave to manual                  | s are available, you will<br>present a network. |
| Not Connected               |                                 |   |
| VPN (PPTP)<br>Not Connected |                                 |   |
|                             | ✓ Show Wi-Fi status in menu bar | Advanced  |

2. Click the + at the bottom and type a new Location name, like Home or Work. Click Done.

You'll notice that your list of network services will clean itself up.

3. Using the buttons at the bottom, you can add or remove any network services that you never use, and set the order by choosing Set Service Order from the pop-up gear menu. Once everything is adjusted (probably with Wi-Fi at the top), click the Apply button.

It's a good idea to restart your Mac to make sure everything is refreshed; you may be asked for your Wi-Fi password again. Does your Wi-Fi stay connected? It should! This solution hasn't failed me yet.

**Last Ditch Efforts** — Of course, there are a number of other reasons why Wi-Fi connections can be problematic, and some of them can be difficult to fix. For instance:

• It's conceivable that your wireless router's settings have become scrambled to the point where restarting it isn't sufficient. To resolve this, reset it to factory defaults (consult the manual) and reconfigure it from scratch. It's best to write down all the settings before you nuke its little brain.

• Worse yet, wireless routers do die, despite their lack of moving parts. If no computer can pick up the wireless

network, and a factory reset doesn't help, it's possible that a new AirPort base station is in your future. Luckily, you usually get new Wi-Fi flavors when you upgrade. If you have a combined modem/wireless router, you may have to call your ISP for a replacement.

• If your Mac can't see any other wireless network at all, it's possible that its AirPort card has failed. That might be reason to visit the Apple Store, but if you're feeling ambitious, iFixit has free repair guides for nearly everything you might want to replace, along with tools and replacement parts for sale.

• Finally, and most frustratingly, Mac OS X upgrades are often accompanied by numerous complaints on the Apple

Support Communities forums about Wi-Fi dropouts. The suggestions above will often resolve these problems, but sometimes the solutions are specific to Wi-Fi settings (like switching to a particular channel instead of letting it be chosen automatically) or to corruption in areas outside of what would you'd normally think. If all else fails, calling Apple is your best bet.

**Conclusion** — There's little more frustrating than being forced to connect manually to your favorite wireless network repeatedly, or not being able to connect at all, so I hope this advice will help you avoid that inconvenience.

### **February Software Review**

### iTunes 11.1.5

### Feb 26, 2014 - 232.7 MB

System Requirements

- OS X version 10.6.8 or later

This update fixes a problem that may cause iTunes to quit unexpectedly when a device is connected and improves compatibility with iBooks for Mac on OS X Mavericks.

### OS X Mavericks 10.9.2 Update

### Feb 25, 2014 - 859.7 MB

System Requirements

- OS X Mavericks 10.9.1

This update:

• Adds the ability to make and receive FaceTime audio calls

• Adds call waiting support for FaceTime audio and video calls

• Adds the ability to block incoming iMessages from individual senders

- Improves the accuracy of unread counts in Mail
- Resolves an issue that prevented Mail from receiving new messages from certain providers
- Improves AutoFill compatibility in Safari
- Fixes an issue that may cause audio distortion on certain Macs
- Improves reliability when connecting to a file server using SMB2

• Fixes an issue that may cause VPN connections to disconnect

- Improves VoiceOver navigation in Mail and Finder
- Provides a fix for SSL connection verification

### Security Update 2014-001 (Lion)

### Feb 25, 2014 - 123.4 MB

System Requirements

– OS X Lion 10.7.5

Security Update 2014-001 is recommended for all users and improves the security of OS X.

### OS X Mavericks 10.9.2 Update (Combo)

#### Feb 25, 2014 - 859.7 MB

System Requirements

– OS X Mavericks 10.9

This update:

- Adds the ability to make and receive FaceTime audio calls
- Adds call waiting support for FaceTime audio and video calls
- Adds the ability to block incoming iMessages from individual senders
- Improves the accuracy of unread counts in Mail
- Resolves an issue that prevented Mail from receiving new messages from certain providers
- Improves AutoFill compatibility in Safari
- Fixes an issue that may cause audio distortion on certain Macs
- Improves reliability when connecting to a file server using SMB2
- Fixes an issue that may cause VPN connections to disconnect
- Improves VoiceOver navigation in Mail and Finder
- Provides a fix for SSL connection verification

### Security Update 2014-001 (Mountain Lion)

### Feb 25, 2014 - 115.8 MB

System Requirements

- OS X 10.8.5

Security Update 2014-001 is recommended for all users and improves the security of OS  $\rm X$ 

### Boot Camp Support Software 5.1.5621

#### Feb 11, 2014 - 924.9 MB

System Requirements for 5.1.5621 (non LynxPoint):

- MacBook Air (11-inch & 13-inch, Mid 2011)
- MacBook Air (11-inch & 13-inch, Mid 2012)
- MacBook Pro (15-inch & 17-inch, Mid 2010)
- MacBook Pro (13-inch, & 15-inch, Early 2011)
- MacBook Pro (17-inch, Early 2011)
- MacBook Pro (13-inch,15-inch & 17-inch Late 2011)
- MacBook Pro (13-inch & 15-inch, Mid 2012)
- MacBook Pro (Retina, Mid 2012)
- MacBook Pro (Retina, 13-inch, Late 2012)
- MacBook Pro (Retina, Early 2013)
- MacBook Pro (Retina, 13-inch, Early 2013)
- Mac Pro (Early 2009)
- Mac Pro (Mid 2010)
- Mac Pro (Mid 2012)
- Mac Pro (Late 2013)
- Mac mini (Mid 2011)
- Mac mini (Late 2012)
- iMac (27-inch, Quad Core, Late 2009)

- iMac (21.5-inch & 27-inch, Mid 2010)
- iMac (21.5-inch & 27-inch, Mid 2011)
- iMac (21.5-inch, Late 2011)
- iMac (21.5-inch & 27-inch, Late 2012)

This download contains the Windows Support Software (Windows Drivers) you need to support 64 bit versions of Windows 7, Windows 8, and Windows 8.1 on your Mac.

Note: If you are using one of the Macs listed below, you should download Boot Camp Support Software 5.1.5640 instead.

- MacBook Air (11-inch, Mid 2013)
- MacBook Air (13-inch, Mid 2013)
- MacBook Pro (Retina, 13-inch, Late 2013)
- MacBook Pro (Retina, 15-inch, Late 2013)
- iMac (21.5-inch, Late 2013)
- iMac (27-inch, Late 2013)
- iMac (21.5-inch, Late 2013) 🖸



### Share Keystone MacCentral with other MACaholics

| Name                                 |   |
|--------------------------------------|---|
| Address                              |   |
| City                                 | State Zip                               |
| Home Phone                           | Day Phone                               |
| E-mail Address                       |   |
| Date                                 | Is this O Renewal or O New?             |
| How did you hear about us?           |   |
| Dues for one person are $O$ \$20/yr. | Family or Corporate dues are O \$30/yr. |

To join Keystone MacCentral, mail this form with your membership dues (payable to Keystone MacCentral) to:

#### Keystone MacCentral Membership Chair 310 Somerset Drive Shiresmanstown, PA 17011

Keystone MacCentral meetings are **usually** held at 6:30 p.m. on the 3rd Tuesday of the month at Giant Foods, Trindle & 32nd, Camp Hill