

# printout

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

## KeyMac Auction

Keystone MacCentral is having its annual auction on Tuesday April 15. The auction is open to both members and non-members so bring a friend. Sign in before the auction begins.

Bids will be taken in minimum of \$1 increments only. Payment must be made in cash. Checks will be accepted from Keystone MacCentral members only.

Keystone MacCentral does not assume any liability for any product bought or sold. Disputes about purchased items will be resolved between the buyer and seller. We will provide contact information if requested.

This might be a good time to take a look at that hardware and/or software in your collection you might want to pass along — remember that “One man’s trash is another man’s treasure.” Bring your stuff with you to the auction, and convert your unused items to cash. Recent usable hardware and software both must work with OS 10.

An Auction Form must be filled out and attached to each separate item to be auctioned. Keep the description brief (there’s not much room) and readable, BUT include enough information to make your article attractive. Use the back of the form, if necessary. Copies of the form will be available at the auction.

On the Auction Form, the Seller # is your membership number. Non-members can obtain a Seller # during registration before the auction. If you have a minimum acceptable bid, include that amount in the Min Bid box.

Sellers will make 80% of the highest bid with the remaining 20% going to the club. 🗑

**Check our website for a list of items to be auctioned.**

***The election of board officers will be held during the May meeting. Current board members have agreed to run for another two year term. Members can nominate other interested members to run for any position before the election.***

Meet us at

### **Giant Food**

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

**Tuesday, April 15, 2014 6:30 p.m.**

**Attendance is free and open to all interested persons.**

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Keystone MacCentral is a not-for-profit group of Macintosh enthusiasts who generally meet the third Tuesday of every month to exchange information, participate in question-and-answer sessions, view product demonstrations, and obtain resource materials that will help them get the most out of their computer systems. Meetings are free and open to the public. The *Keystone MacCentral printout* is the official newsletter of Keystone MacCentral and an independent publication not affiliated or otherwise associated with or sponsored or sanctioned by any for-profit organization, including Apple Inc. Copyright © 2014, Keystone MacCentral, 310 Somerset Drive, Shiresmanstown, PA 17011.

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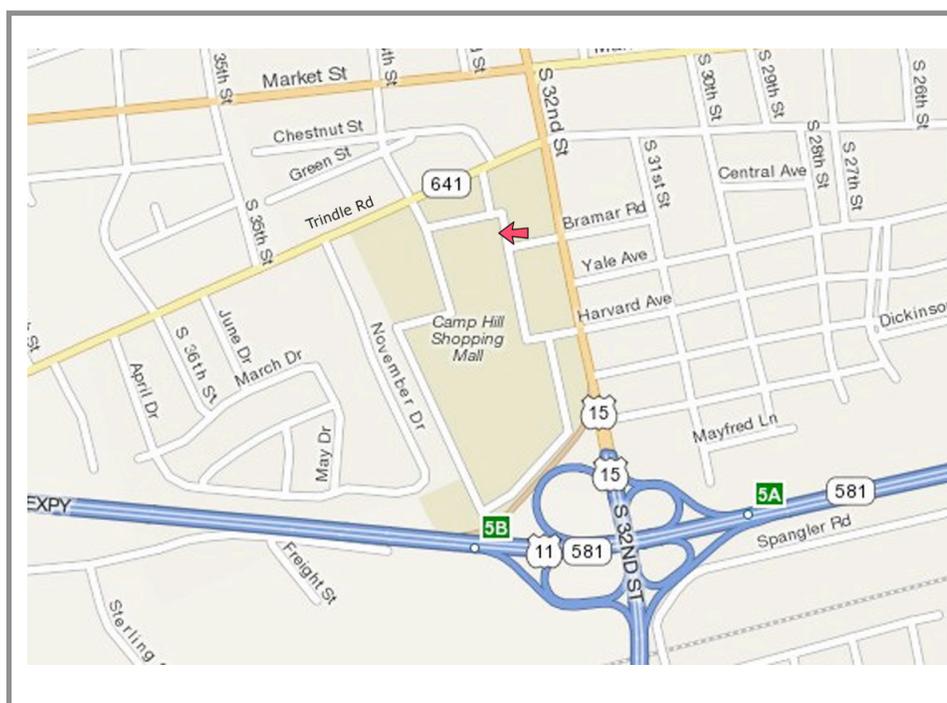
Tim Sullivan

### 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 still quite chilly outside, but there is hope that warmer spring temperatures will arrive fairly soon. After the “winter that would not quit,” some nice, warm weather would be indeed welcome! While I can long for but cannot predict when we will be enjoying balmy weather, there is another very welcome event that I cannot only promise will arrive on time but that I can highlight here: KeyMac’s ever-popular annual auction on April 15, 2014. Eric Adams, our industry liaison, has been hard at work contacting vendors for donations, and many vendors have responded affirmatively. If you want to check out many of the items that will be available, and, of course, you should so that you can be prepared to bid on your favorites, go to our website [www.keystonemac.com](http://www.keystonemac.com) and click on the vendor link. You will be able to see the list of donated items and then go to the vendor’s website to learn more about the product. I did that just this morning because [www.cooper-product.com](http://www.cooper-product.com) sent us a product called an iSlip Lite, and I wondered what it was for. Just looking at the brightly colored material in the packaging made me think of a bookmark or a band that could be used to wrap an iPod around a runner’s arm. Neither of those really seemed likely, so I went to the website and discovered a very clever way to clean the screen of an iPad or similar tablet. The band fits onto the iPad’s case and remains handy while serving as a colorful accent to the case itself. You really should check it out yourself and know which size would be appropriate for your iPad, iPad Mini or Kindle because the iSlips come in different sizes. I am fond of products to keep my screens clean, so I like the iSlip, and I am also very pleased that once again iKlear has donated

some of their excellent cleaning products. **In fact, in addition to the products that will be up for auction, iKlear also donated a nice bag of individual cleaning packets, and we will be giving one to each paid-up member at the auction as long as supplies last.** I will be bidding on both the iSlip and the iKlear products because the iKlear with its liquid cleaner coupled with a lint-free cloth does a great job of cleaning the screen, and the iSlip fits onto the device and is handy for smaller cleanups when traveling. Obviously, there are a lot of other great donations, including some beautiful, powered desktop speakers from [www.Audioengineusa.com](http://www.Audioengineusa.com) and a Garmin HUD display from Garmin in addition to many software applications and some useful Apple-centric books from O’Reilly publishers. Do yourself a favor and visit our website to check out the other items before the big night. The vendor links will stay up there until next year’s auction, so if you don’t win the items you want, remember to support the vendors who support us!

My “favorite meeting of the year” starts at 6:30, when you should visit the table to register and pick up your bidding card/number. The auction itself will begin about 7pm, depending on how long it takes for everyone to register. The usual auction rules apply, so please read them in this newsletter if you are new to the auction or just want to refresh your memory. KeyMac will be providing snacks and soft drinks, and you are always welcome to purchase a full dinner downstairs in Giant and bring it with you. Your taxes will be done, so come celebrate with your KeyMac friends at a great meeting?! See you there! ☺



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# Keystone MacCentral Minutes

## March 18, 2014

### Business Meeting

President Linda Cober brought the meeting to order and told us that Chuck Joiner might not be able to be the auctioneer in April. Eric Adams volunteered to replace him. Tim Sullivan reported some membership renewals received during the last month.

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. Nominations will be accepted from the floor during the May meeting.

### Q&A & Comments

Ernie Levasseur reported having problems loading photos from an SD card to his iPad. He gets a notice that he has to have more power. This could be a hardware problem or possibly a software bug, since he does not have the same problem with a Mac.

### Program Notes

Jim Carey found an alternative to Apple's My Photo Stream app, which requires you to have an iCloud account. It is called PhotoSync, costs \$2.99, and works over a WiFi network. The app for a Mac or Windows computer is free. Jim set up a WiFi network using KeyMac's old Airport Extreme base station, with no internet connection. He started the app on his iPhone to demonstrate how to transfer files to his iPad.

The process also works in the reverse direction. Dennis McMahon mentioned a similar app called Reflector which is used with an Apple TV.

Dennis began his portion of the March program with a history of optical storage. Early CD-ROMs had problems with the adhesives used between layers. Dennis explained that even now, cheaper media may not last as long as better media which are manufactured using better dyes. Dennis has embraced a new technology for data storage.

The M-Disc uses a burner with a higher powered laser to change the physical material of the M-Disc. Current disc storage size is the same as DVDs, about 4.7 GBs, with Blu-ray discs coming to market that will hold about 25 GBs. The M-Disc has been tested to withstand extreme heat and humidity, with no evidence of failures. Regular CDs and DVDs fail this type of testing.

Roxio Toast 11 or higher versions should be able to burn on Blu-ray compatible M-Discs, using burners that have the higher powered lasers. Apple SuperDrives will not work with Blu-ray discs, although there is Blu-ray playback software available for Macs using external Blu-ray drives. Dennis recommended TDK, Verbatim, and H-P discs for CD storage.

Jim Carey did not have the time to show us his video presentation on Adobe Lightroom, so he talked about the recent Nikon seminar he had attended. Jim said that Nikon owners might benefit from the first seminar for beginner and intermediate users. The class he was at recommended shooting in sRGB instead of RGB. Commercial printers might not be able to handle the RGB color space. Jim reminded us of the importance of calibrating our monitors before printing photos on our printers, for best results. 🗑️



# Apple Support for Snow Leopard Wanes

**When** is it time to make the jump to a new version of Mac OS X? You can upgrade any time, assuming your hardware and essential software are compatible. But what if you see no benefit in upgrading? How long can you wait?

Throughout Apple's entire history, the one activity that always forces an operating system upgrade is buying a new Mac. Macs have always come with the latest version of the operating system, and seldom has it been possible to downgrade in any real way. This is both sensible and intentional — Apple can better take advantage of new hardware capabilities if it doesn't also have to maintain backward compatibility, and just testing new software on old hardware has significant costs.

But no longer can you sit forever on a perfectly functional combination of a Mac and Mac OS X, at least not if you use the Internet. While it has created great good in our lives, connecting to the Internet also makes us vulnerable to digital exploitation, and the security fixes that Apple provides for Mac OS X and key apps like Safari and Mail are necessary for reducing that vulnerability. The longer you use an unpatched version of Mac OS X, the higher the risk that you could suffer data loss, financial attack, or even identity theft.

For many years, Apple maintained an “n-1” policy with regard to security fixes, updating the current version of Mac OS X and issuing a security update for the previous one. So, when Apple released Mac OS X 10.6.7 for Snow Leopard, the company also rolled out Security Update 2011-001 for 10.5 Leopard. Starting with 10.8 Mountain Lion, Apple extended that to “n-2” to protect both 10.7 Lion and 10.6 Snow Leopard, most recently releasing Security Update 2013-004 for both operating systems in September 2013.

Apple never explained the change, but it may have had to do with supporting older Intel-based Macs that customers held onto in order to run PowerPC-compatible apps via Rosetta. Rosetta went away with the release of Lion, forcing many customers to delay upgrades until new versions of key apps were released (see [“Preparing for Lion: Find Your PowerPC Applications,”](#) 6 May 2011).

We're now at 10.9 Mavericks, and while Apple has maintained the “n-2” policy surrounding security updates, that means support for 10.8 Mountain Lion and 10.7 Lion, with 10.6 Snow Leopard apparently pushed off the back of the truck. The recent [Security Update 2014-001](#) isn't available for Snow Leopard, and while Apple also released [Safari 6.1.2](#) for Mountain Lion and Lion, Snow Leopard can run only Safari 5. (Luckily, [Google Chrome](#) and [Firefox](#) both

remain compatible with Snow Leopard and continue to receive updates; both are safer choices for the Snow Leopard user.)

As always, Apple has said nothing official about Snow Leopard support; it's entirely possible that the company could release another security update for it if the vulnerability in question were sufficiently widespread and damaging.

So does all this mean you must upgrade from Snow Leopard immediately? Not necessarily. The security vulnerabilities fixed in Security Update 2014-001 may not even affect Snow Leopard. In a careful reading of the security update's release notes, none of the vulnerabilities struck me as particularly worrying for the Snow Leopard user. In particular, the major SSL/TLS vulnerability that affected Mavericks, iOS, and Apple TV doesn't appear to be a problem for Snow Leopard (see [“10.9.2 Fixes Critical SSL Security Bug, Adds FaceTime Audio,”](#) 25 February 2014). Realistically, if you don't run Apache or PHP under Snow Leopard, and you maintain safe browsing habits (stick to mainstream sites, don't download unknown content, and be generally cautious), I think the likelihood of trouble is low.

Part of the reason for that is that most Mac users are running Mavericks now, so those running older versions of Mac OS X aren't as compelling targets for online criminals. How many people are still running Snow Leopard? According to [NetApplications](#), it could be nearly 1 in 5 Mac users, although other stats, such as those [from The Omni Group](#), put it at more like 1 in 12. More broadly, even the NetApplications stats put Snow Leopard at only 1.4 percent of the overall Internet user base.

So, if you're still running Snow Leopard, what should you do? The first option is nothing. It's a risk, but probably not a huge one, and sometimes we choose convenience over safety — do you perform a basic safety check on your car before every trip? Didn't think so.

To reduce that risk, you can [upgrade to Mavericks for free](#) via the Mac App Store, assuming your hardware supports it. Here's a list of supported models; to find out what you have, choose About This Mac from the Apple menu, and then click the More Info button. For full instructions, read Joe Kissell's [“Take Control of Upgrading to Mavericks.”](#)

- iMac (Mid 2007 or newer); aka iMac7,1 or newer
- MacBook (13-inch Aluminum, Late 2008; or 13-inch Early 2009 or newer); aka MacBook5,1 or newer

- MacBook Air (Late 2008 or newer); aka MacBookAir2,1 or newer
- MacBook Pro (13-inch, Mid-2009 or newer; 15-inch, Mid/Late 2007 or newer; or 17-inch, Late 2007 or newer); aka MacBookPro3,1 or newer
- Mac mini (Early 2009 or newer); aka Macmini3,1 or newer
- Mac Pro (Early 2008 or newer); aka MacPro3,1 or newer
- Xserve (Early 2009); aka Xserve3,1 or newer

Given the fixes in 10.9.2, going all the way to Mavericks makes the most sense to me, but it's also possible to upgrade just to Mountain Lion if you have concerns about Mavericks. The two share the same hardware requirements, so if your Mac is on the list above, it can also run Mountain Lion. It [costs \\$19.99 from the Apple Store](#), and Apple will send you a Mac App Store redemption code via email. Again, check out ["Take Control of Upgrading to Mountain Lion"](#) for details.

Some older Macs can run Lion, but not Mountain Lion. In my opinion, hardware limitations are the only reason to run Lion; Mountain Lion and Mavericks are both better otherwise. Lion requires at least an Intel Core 2 Duo processor. Not sure what processor your Mac has? Choose About This Mac from the Apple menu and look at what the Processor line says. Look for Intel Core 2 Duo, Core i3, Core i5, Core i7, or Xeon. Anything else — specifically, "Core Duo" (without the 2) or "Core Solo" — and you won't be able to run even Lion. Should you be able to and wish to upgrade to Lion, though, you can [purchase a \\$19.99 redemption code](#) for the Mac App Store, and ["Take Control of Upgrading to Lion"](#) has instructions.

Finally, budget permitting, you can simply buy a new Mac, which will come with Mavericks pre-installed. And although I know you're pretty happy with your older Mac running Snow Leopard, I can guarantee that Macs have come a long way in the intervening 3–5 years, with notably improved performance, screens, and battery life. I've never felt that a new Mac was a step backwards from the one it replaced, and I doubt you will either. 🍷

by Joe Kissell

## FlippedBITS: Misconceptions about Changing Email Addresses

The first email message was sent in 1971. Over the more than four decades since, there has been plenty of time for the technology to evolve and for people to get used to it. Even so, on an almost daily basis I run into people who are doing it wrong, by which I mean making life unnecessarily difficult for themselves and inadvertently advertising facts that may be untrue or misleading.

In ["FlippedBITS: IMAP Misconceptions"](#) (11 April 2013), I talked about common misunderstandings about IMAP. Now I want to step back and look at email accounts and addresses more generally. The less-than-optimal approaches to email accounts I see so often are usually honest mistakes that result from not thinking through the way email works — and the way other people use email. Let me see if I can expose and clear up a few of these trouble spots.

**What's Your Email Address?** I'd like to start with the most fundamental fact about your email experience: your email address. The famous 19th-century French gastronome Jean Anthelme Brillat-Savarin said, "Tell me what you eat, and I will tell you who you are." Were he alive today, he might be able to make a similar judgment based on your email address. And whether you realize it or not, people do judge you by your address!

Now, I'm not merely saying that a Hotmail address is unfashionable. (It is unfashionable and always has been, but that's neither here nor there.) I'm saying that one can often make an educated guess about a person's technical ability, employment, and social savvy based on an email address — and those guesses (whether correct or not) may be unfavorable. For example, here are some stereotypes:

- At the very bottom of the email address hierarchy are addresses from an ISP — that is, addresses ending in @att.net, @comcast.net, @cox.net, @earthlink.net, @anything.rr.com, @verizon.net, and so on. These betray perhaps the worst misconception, which is that you must accept what your ISP offers or that there are no better alternatives (there are always better alternatives to an ISP's email). And they suggest that you're stuck with your provider, because switching ISPs would mean giving up that email address. Even if you've been blissfully content with your ISP for years, the possibility always exists that a better, less-expensive, or otherwise more attractive option could appear in the future — or that your ISP could go out of business.
- Addresses from Hotmail, Yahoo, Excite, Juno, and similar free email providers imply that you don't take email very seriously, and may suggest a holdover from student days. And it's distinctly worse if you have a

computer-suggested name like `jsmith487@hotmail.com` rather than, say, `johnsmith@hotmail.com` (which at least tells me you're an early adopter).

- An AOL address tells me you were probably an AOL user back in the days of floppy disks and dial-up modems, and you kept the address just because it was too much bother to change it — or because you weren't aware there were any alternatives. (More on changing addresses in a bit.) And by the way, if you're still paying for AOL even though you don't use them for dial-up access anymore, you're wasting your money. Did you know you can keep using your AOL address for free?

- Addresses tied to Apple's services — those ending in `@icloud.com`, `@me.com`, and `@mac.com` — tell me you're an Apple fan (which may be a positive or negative judgment, depending on who's making it). But if that's your primary or only address, it also suggests excessive dependence on Apple and a willingness to live with significant limitations when it comes to email.

- A Gmail address suggests you're a bit more sophisticated than the average email user, but not sophisticated enough to set up Gmail with your own domain name (or perhaps too poor — custom domain names used to be free but now require a paid Google Apps subscription, at \$50 per user per year). In particular, when I get business email from someone using a `gmail.com` address, I have to wonder what kind of employer can't spring for a professional-looking domain name or why the sender is choosing to send from a personal address instead of a work address.

- Addresses in a `.edu` domain are fine for students and teachers, but when someone continues using such an address years after graduating, I wonder if it's due to unemployment. Of course, you may just be proud of your alma mater, but using such an address for non-school correspondence years later is a bit like continuing to wear a class ring in your 40s. It makes people wonder why you haven't moved on.

- If your address belongs to a business's domain (`@macworld.com`, `@apple.com`, `@wellsfargo.com`, etc.), that tells me you're employed, and it tells me something about your employer if not about your specific profession. That's all fine, but if I receive personal email from an unambiguously business address, I wonder what's going on. Perhaps the person does not have the sense to keep personal and business email separate, or is too lazy to get a personal account somewhere.

Of course, if you own your own business, that's another story altogether, because there's often no need to separate personal and business correspondence. You might get email from Adam's `ace@tidbits.com` address that has nothing to do with TidBITS. That's his domain, and he can do whatever he likes with it. So it's a business domain that also functions as a personal domain, which brings us to the next category.

- Email addresses in a personal domain — that is, one you own yourself, whether or not it involves your name — tell me that you're a highly clueful person, with at least modest technical sophistication and a better-than-average awareness of How Things Work. I also know that you could switch email providers if you ever found that to be necessary. The nature of your personal domain might also tell me something. I chose the domain `alt.cc` — which I use for both personal and business correspondence — largely for its compactness (I once co-owned the domain name `computergeeks.com`, which was far too unwieldy), and I also own the domain `joekissell.com` (for obvious reasons). But if someone sends me email from an address ending in `@misogynist.com`, you know I'm going to raise an eyebrow as I reach for the Delete key.

Of course, you may have more than one address, and you may carefully choose which one you use based on the situation. I certainly do. I have every single type of address listed above (except `.edu`), but I use them selectively and with attention to the recipient, the occasion, and what impression I'm trying to convey.

If you regularly use one of the less-desirable email addresses, don't worry, you're not stuck with it forever! I'll make some suggestions in a moment, but first I want to mention another problematic email practice.

**A Couple's Address? Really?** Every so often I get an email from a couple who share a single email address. And while that's adorable on some level, it's also infuriating. `JohnAndNancy@ThePetersonFamily.com` sends me a message and it's signed "John." Later, I want to tell John something so I send a message to that address, but Nancy replies. I never know who's going to be on the other end of the conversation.

Look, couples. I'm sure you're the two closest people ever, that you share a brain, and that you have no secrets from each other. Good for you. But as surely as you each need your own driver's license and passport, you need to have your own email addresses too. John and I might want to discuss a surprise party for Nancy, and Nancy might want to buy John a gift online without worrying that he'll see the receipt. There are a thousand other reasons why it's worthwhile for even the most committed and trusting couple to have separate addresses. If you want to have a family address especially for email both people need to see (such as bills), that's fair enough, but please do your correspondents a favor and let them know your personal address too. (You do know email accounts are available for free, right?)

**Accounts, Domains, and Providers** — Why do so many people use less-than-ideal email addresses? One reason is a misconception that an email account must be tied to a domain name, a provider, or both. But that isn't so. Sure, you can get an email address from your ISP that, in turn, is tied to that ISP's domain name, but in fact the elements of email account, domain name, and provider can (and generally should) be entirely distinct.

Let's start with your ISP — the cable, DSL, satellite, dial-up, or cellular provider you use to access the Internet. Virtually every ISP also offers email accounts, and in some cases they're set up for you automatically whether you want them or not. But no one is required to use these accounts! If it exists, you can simply ignore it. Go ahead and use Gmail, iCloud, or your favorite IMAP provider for email. The fact that Comcast provides your broadband connection doesn't obligate you to use Comcast as an email provider. (You may want to at least set up your Comcast address to forward email to your regular address, just in case Comcast uses it to send you support messages or account notifications.)

The same goes for Web hosts. Maybe you have a hosting package with a company like [IandI](#) or [DreamHost](#). These and countless other similar services usually include email hosting as part of the package, and there's nothing wrong with using that if you like. But you're not required to, and it's often possible to get better and more reliable service from providers that specialize in email. Even if you do go with a Web hosting service, you can and should use a custom domain — not a domain belonging to the hosting provider.

But what about other email providers? If you use another service to host your email, isn't your address tied to that service? Well, yes and no.

It's true that if you have an aol.com address, only AOL can host it, and if you have a gmail.com address, only Google can host that. The same goes for all the providers — including iCloud, Yahoo, and Microsoft (outlook.com, live.com, and hotmail.com).

But you don't have to live with an address in a generic domain. You can have a domain of your very own and then direct that email to your preferred email provider. Even better, you have the flexibility to change email providers if the need should arise. And in many cases, you can still keep your old address as an alternative if you're concerned that changing it would be infeasible.

**Ditch a Locked-In Provider** — If you want the control, flexibility, and favorable impressions that come from having your own domain name, you can make it happen. The exact steps depend on the choices you make, but I'll outline the process here.

1. First, pick a domain registrar, find a domain name you like, and register it. I've had good results with [easyDNS](#) and [Directnic](#), but there are zillions of other registrars, too. These days, the going rate for domain names is about \$15 per year — more if you want an unusual top-level domain, less on some bargain sites or if you're transferring a domain from another registrar. The hardest part of registering a domain is finding a name that hasn't been taken, but once you've done that, the rest of the process should take just minutes.

2. Next, pick an email provider. If you're happy with your existing provider (whether iCloud, Gmail, or whatever)

except for the fact that you don't have your own domain name, the simplest approach is to log in to your account at your registrar's Web site and configure it to forward all email for your domain to your existing address. That way you don't have to change anything on the receiving side, although you may prefer to change the From address in your email client to reflect your new domain when you send outgoing mail. (This is often easier said than done, but I go into more detail about it, especially for Gmail, in "[Take Control of Apple Mail](#).")

If you aren't happy with your current provider, now's the time to choose a new one. You'll most likely pay for the service, and although prices vary widely, there are many options under \$50 per year. I use the easyMail service from easyDNS, but lots of people swear by [FastMail](#), Google Apps, and other providers. If you choose a new email provider, you'll have to specify which address(es) you want mailboxes for in your new domain. You'll also have to follow the provider's instructions for setting up MX (mail exchange) records with your domain registrar, so incoming email is directed to the right server. That sounds complicated but it's just a matter of filling in a few blanks on a form, and most email providers and registrars provide clear, simple instructions for doing so, [like these from easyMail](#).

2. Now, if you've changed email providers, configure your email client (such as Apple Mail) on each device you use to log in to your new account with the username and password you chose.

3. Finally — assuming, again, that you've changed providers — forward mail from your old address to your new one. Most email providers and ISPs have a screen somewhere in the account settings area of their Web sites where you can type a forwarding address. By doing this, you ensure that mail sent to your old address will still reach you, even if your correspondents don't update their address books. (It's still a good idea to send out change-of-address notices and change important subscriptions and accounts, but forwarding email removes one of the barriers to switching providers.)

Although each provider is different, I'll explain how this is done with iCloud and Gmail. To forward email from iCloud, log in to your account at [www.icloud.com/mail](http://www.icloud.com/mail). Click the gear icon in the lower-right corner and choose Preferences from the pop-up menu. On the General pane, select Forward My Email To, enter an address, and click Done. To forward email from Gmail, log in to your account at [mail.google.com](http://mail.google.com), click the gear icon in the upper-right corner and choose Settings from the pop-up menu. Click Forwarding and POP/IMAP. Click Add a Forwarding Address and follow the prompts to set it up. Then select Forward a Copy of Incoming Mail To and choose that address from the pop-up menu. From the second pop-up menu, choose what you want Gmail to do with the original message after forwarding it (my choice would be Delete Gmail's Copy). Then click Save Changes.

Of course, if you were using an ISP's email account and you change ISPs, your old account, including that forwarding setting, will disappear when you discontinue service. (Worse, someone else might get that username and start receiving your mail, which can be awkward.) So if you're thinking of switching ISPs, try to wait a few months after you set up your new email address, and tell every single person who sends email to your old address that you're using a new one, effective immediately. (And, be sure to send that message from your new account, so replies don't go to your old one!)

Later on, if your email provider goes out of business, encounters security problems, raises prices, or does anything else objectionable — or if you simply find one you like better — you can set up an account with a new provider

and change your MX records again (as in Step 2), change your client settings (as in Step 3), and transfer your saved email to the new provider. Your correspondents will never know the difference.

**Further Advice** — Having an email address in a domain you control and hosting your email at a provider you like can solve numerous problems and perhaps even improve your image. But that's just the tip of the iceberg. In my new book "[Take Control of Apple Mail](#)," I discuss many other ways to become a better correspondent, manage your Inbox, and make email a pleasure rather than a hassle. The book covers email etiquette, dealing with incoming and outgoing attachments, using signatures, providing the proper context in replies, judiciously using Cc and Bcc fields, and many other email tasks. I hope you find it helpful. 📧

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by Josh Centers

## Why I Was Banned from WATCH ABC and Hulu

**Back** when ABC arrived on the Apple TV (see "[Apple TV Gains ABC, Bloomberg, Crackle, KORTV](#)," 11 December 2013), I noted that I couldn't access it, because the app said I was in an "unsupported geo region." I didn't think too much about it at the time, figuring it was some kind of launch bug, and besides, there's nothing I care to watch on ABC.



But months later, I still didn't have access. That bothered the part of me that hates tech mysteries, but with a baby, a book to finish, and HBO's "True Detective," I had more pressing concerns. Then the problem began to spread.

One day my wife asked why Hulu Plus on the Apple TV said we were behind an anonymous proxy. We were not. I tried playing something on Hulu's Web site and received the same error message, claiming that my Comcast-provided IP address was behind an anonymous proxy. Strange.

At this point, I was completely baffled. Who do you contact when something like this happens? Hulu? ABC? Your ISP? I decided to start with Hulu, since I pay for the service, and Comcast is a nightmare to work with. Hulu makes you jump through hoops to contact support — scroll down to the bottom of the Web site, click Help, click Contact Us below all the support articles, and then click [Contact Support](#). ABC makes it even less obvious, but it turns out that the

company's feedback form [doubles as a support request form](#).

Upon contacting Hulu, I immediately received an automated message back:

*Thanks for contacting us. Based on the IP address you were using when you submitted this message, our system determined that your computer was accessing our site using a proxy server. Once you disable it, you should be able to watch videos on Hulu again.*

I replied to the automated message, explaining that my IP was assigned by Comcast. Meanwhile, I received a similar message from ABC:

*We detected that your internet network's IP address is using an anonymous proxy service. Our player requires that IP settings are not anonymous or routed to known anonymous proxy services. Please follow the steps below to update your proxy settings:*

I replied again, explaining, as I did with Hulu, that my Comcast-supplied IP address isn't an anonymous proxy. I got this reply:

*Thank you very much for your response. However, when we verified your IP address XXX.XXX.XXX.XXX, the proxy setting is still set to "anonymous," please contact Comcast Xfinity to get more assistance on how to turn the proxy setting off on your router.*

Argh! This was becoming Kafkaesque. I decided to take matters into my own hands. I tried resetting my AirPort

Express to factory defaults, just in case I had enabled something screwy. No dice.

Comcast assigns dynamic IP addresses to the devices on its network, which means that they don't stay the same forever. However, an IP address tends to stick to a MAC address (the unique identifier for every network interface) for quite some time. In the past, I've been able to work around IP bans by manually changing, or "cloning," the MAC address for my router, which makes an ISP think that it's a different device, needing a new IP number. Unfortunately, Apple's AirPort base stations don't offer that feature.

Fortunately, I found a guide explaining [how to change your Comcast IP address](#) without changing the MAC address. That technique worked, but I still couldn't access Hulu or ABC. It appears that an entire IP range was banned.

I still hadn't heard from a human at Hulu, but I decided to give ABC another shot. I sent a screenshot from AirPort Utility with my automatically assigned IP address, explaining that I had reset my router and that I wasn't using any sort of proxy.

The good news is that this story has a happy ending. Within a few days, support reps at both Hulu and ABC acknowledged that my IP address was not an anonymous proxy and restored service. Thanks to Ben at ABC and Lauren M. at Hulu for getting this fixed.

**A Taste of the Future?** – While I'm glad to have these problems fixed, they serve as sobering reminders that these streaming services can ban you at any time, for any reason. As we shift from traditional TV to online video, will such problems become more commonplace?

I'm still not sure how this happened, though I have a couple of theories. In December 2013, I was putting the finishing

touches on "[Take Control of Apple TV](#)," and, as part of my research, was experimenting with various proxies at the request of our early access readers. I was also experimenting with the [Tor anonymization network](#) on my MacBook, due to NSA-induced paranoia.

I can understand blocking Tor or blocking these proxies, but was my IP banned simply for having tried these services briefly? If so, that's disturbing. What about people who use such services to protect their privacy and exercise their freedom of speech? Will we have to choose between watching commercial TV and defending our rights? Could governments encourage such blocking to discourage widespread adoption of anonymization technologies? Closer to the here and now, what if a friend visits your house and uses one of these services on your network? Will that get you blacklisted?

But maybe I'm just being paranoid. After all, traditional media companies offer services like Hulu, WATCH ABC, and HBO GO only reluctantly, to combat piracy, but these companies would prefer that you watch the old-fashioned way, over a coaxial cable, and their digital services often seem half-hearted. Case in point: when it released the season finale of the excellent "True Detective." Even at the best of times, HBO GO has numerous network glitches and mediocre picture quality.

Meanwhile, Netflix held up like a champ when it debuted season 2 of the also-excellent "House of Cards," it doesn't ban users indiscriminately, and it's much more forgiving when its subscribers use proxies to access foreign content. The difference, of course, is that other than licensing deals, Netflix is independent of the old guard. Netflix doesn't exist out of reluctance, and it shows. If we want a bright future for Internet-based TV, we need more independent content creators and distributors like Netflix. 🍻

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by Joe Kissell

## Mail Improvements in OS X 10.9.2

It seems to happen like clockwork: I release a book about some Apple product or service, and within a week, Apple updates its offerings in such a way as to invalidate what I wrote. But this time I had a tiny bit of luck: Apple's 10.9.2 update (see "[10.9.2 Fixes Critical SSL Security Bug, Adds FaceTime Audio](#)," 25 February 2014) was released hours before we planned to publish my new book, "[Take Control of Apple Mail](#)," and that gave me just enough time to revisit problems in previous versions of Mail and edit the manuscript to reflect the changes.

I'm pleased to report that the new version of Mail in 10.9.2 (version 7.2, build 1874) is far better than its predecessors, about which I complained mightily in "[Mail in Mavericks Changes the Gmail Equation](#)" (22 October 2013) and (to a

slightly lesser extent) "[Mail in Mavericks: Is It Safe Yet?](#)" (11 November 2013). That meant I was able to delete quite a few paragraphs from my book detailing bugs and other infelicitous changes. But, to keep this in perspective: Mail is now at the point where it should have been when Mavericks was released.

Since those paragraphs will no longer be in the book, I wanted to report what I've found. I'll begin with the usual disclaimers: not every problem has disappeared, and what works for one person doesn't necessarily work for everyone. As evidenced by the long list of comments on this article, plenty of people are still experiencing significant problems. Even so, this is the first version of Mail in Mavericks that feels reasonably reliable, and it's about time!

As always, Apple's own claims about what has changed are vague and incomplete. The relevant lines from the [release notes](#) are as follows:

- Includes general improvements to the stability and compatibility of Mail
- Improves the accuracy of unread counts in Mail
- Resolves an issue that prevented Mail from receiving new messages from certain providers
- Improves VoiceOver navigation in Mail and Finder
- Improves compatibility with Gmail Archive mailboxes
- Includes improvements to Gmail labels

That all sounds encouraging, if not terribly clear. So, take Apple's list with a grain of salt. Here's what my tests have shown:

- Unified mailbox behavior: In 10.8 Mountain Lion and before, you could drag a message from any mailbox to the unified Inbox icon (which contains the Inboxes for all your accounts), and Mail would move it to the Inbox of the account where the message was stored — unless it was stored locally and thus not in any account, in which case it would be moved to the account shown first under the unified mailbox. The same went for other unified mailboxes — Drafts, Sent, Junk, Trash, and Archive. However, in 10.9.0 and 10.9.1, this convenience feature was gone; when dragging a message to any unified mailbox, you had to expand it and select a specific account underneath. Now, in 10.9.2, we're back to the more convenient Mountain Lion behavior.

- Gmail special mailboxes: In the first two releases of Mavericks, although you could uncheck the Store Draft Messages on the Server, Store Sent Messages on the Server, Store Junk Messages on the Server, or Move Deleted Messages to the Trash Mailbox checkboxes on the Mailbox Behaviors view of your Gmail account preferences, as soon as you reopened the Preferences window, you'd see that they were checked again. In other words, you were obligated to store Gmail drafts, sent, junk, and trash email on the server whether you wanted to or not. Furthermore, Mail forced you to use the default locations for Gmail's Drafts, Sent, Junk, and Trash mailboxes. (That is, if you selected another mailbox and chose Mailbox > Use This Mailbox For, the submenu was dimmed.) Both of those annoyances are now gone; you can store special Gmail mailboxes on the server or not, and if you do, you can choose nonstandard mailboxes if you prefer.

- Gmail mailbox order: Previously, you could not rearrange Gmail mailboxes in Mail's sidebar; those at the top level of your Gmail account were always in alphabetical order (although, strangely, mailboxes nested within another mailbox could still be reordered). Now you can reorder Gmail mailboxes, but not the special-purpose mailboxes Gmail creates automatically, such as Important and Chats.

- Gmail AppleScript problems: If you had an AppleScript that targeted a Gmail mailbox other than Inbox or Archive/All Mail, it would fail, because AppleScript saw all the other Gmail mailboxes as being empty. Now AppleScripts can again see into Gmail mailboxes properly.

- Exchange reliability: Users with Exchange accounts had found that Mail checked for new messages on launch, but not afterwards; you had to either quit and reopen Mail or take your accounts offline and then check for new messages manually (as described in [this Apple support article](#)). That has now been fixed, at least for most users.

- Addressing to Smart Groups: The Contacts app lets you create groups of addresses — for example, a Family group that contains the contact records of your family members. You can type a portion of a group's name and Mail auto-completes it just as it would for an individual name. Auto-complete does not work for Smart Groups (so, that much hasn't changed since 10.9.1), but now, if you type the entire, exact name of the Smart Group and type a comma or press Tab or Return, Mail at least displays the group name in a nice blue bubble, and the Smart Group does in fact work — Mail sends the message to the correct addresses.

That's as much as my testing has revealed so far. I wouldn't be surprised to find more improvements (or new bugs, for that matter). I can't yet say whether other issues with Gmail or Exchange have been dealt with. And although Apple may have improved the accuracy of unread counts (perhaps for Smart Mailbox badges), I've read multiple reports that the badge on Mail's Dock icon still isn't accurate. Numerous other issues remain, as well, but on the whole the bugs seem to be fewer and less severe than before.

If you've noticed additional improvements, things that are still broken, or new bugs, please share them with us in the comments. And if you ever feel as though your email is out of control, my brand new 175-page book "[Take Control of Apple Mail](#)" will help you become more productive with Apple Mail in 10.9 Mavericks and iOS 7, providing essential advice for Gmail, iCloud, IMAP, and Exchange accounts. It reveals hidden interface elements, shows how to customize Mail, explains my strategy for avoiding email overload, demystifies encrypted email, and provides solutions to common problems, among many other things. 📖



# The Lazy Man's New Camera: the Fujifilm X-E2

I enjoy work — I can watch people work for hours — but I am lazy myself, especially when it comes to cameras. I rarely want to carry a camera while traveling and when I do, I want something lightweight.

On the other hand, I cannot see the point of taking photographs if I cannot hang them on the wall. I want to make poster-sized prints. If I am going to the bother of using a camera, I want top quality.

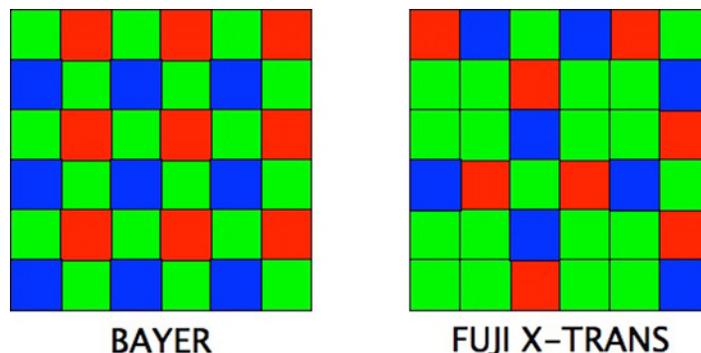
For nine years I used Sigma cameras because I found nothing that could beat their Foveon image sensor for general-purpose photography — it is the sharpest sensor ever developed — and the closest equivalents were bigger, heavier, and costlier (see “[Sense & Sensors in Digital Photography](#),” 18 October 2004, “[Horsepower & Image Sensors](#),” 15 December 2007, and “[How Not to Buy a Digital Camera](#),” 17 June 2010). However, times have changed. On my last holiday I was able to shed 13 pounds (6 kg) of kit — for the first time ever I did not carry a tripod — yet I got even better pictures than before.

For an example of what this gear can do, take a look at this larger-than-life link of an anchor chain. I am in Antarctic waters, standing on the deck of a three-masted schooner, the Oosterschelde. We are rolling gently. I am taking the picture with a very long telephoto lens, a lens equivalent to 300mm on a 35mm camera. I am as close to the chain as the lens will focus, which maximizes the effect of a shaking camera, and I am holding the camera in my hands. I cannot keep the image in the viewfinder still. To prevent blur with a film camera I would need to use a shutter speed of 1/500 second or faster. Using a digital with an ordinary anti-shake lens, 1/125 second would be possible, or maybe 1/60 second, but my camera is set to 1/15 second.



In short, you are looking at a picture that ought to be impossible to take.

The lens is by Fujifilm, a 55-200mm zoom, and the camera is as remarkable as the lens: the [Fujifilm X-E2](#) (about \$900). This camera uses the third generation of Fuji's proprietary X-Trans sensor in an [APS size](#). This sensor uses a different pattern of coloured cells than the Bayer sensor used in most cameras:



When exposed to fine lines, the tiny repeating patterns in a Bayer sensor tend to create moiré interference patterns. Preventing this requires blurring the image with a diffuser. The larger patterns on the X-Trans sensor generate fewer and weaker moiré patterns, so a diffuser is not required. I found its images to be almost as sharp as those from the latest Foveon sensor, but compared to the Foveon, the X-Trans can capture a broader range of tones from black to white — it has a greater dynamic range — and it is much cleaner at sensitivities greater than ISO 400. (To boost the sensitivity of an image sensor for use in low light, the camera amplifies its voltages. Setting the ISO speed sets the amplifier's gain. Doubling the speed doubles the sensor's sensitivity and increases its background noise.)

I find it difficult to believe how clean and detailed the XE-2's images can be at high ISO speeds. I shot this moulting penguin chick at ISO 1600. If your monitor is 100 dpi and you display this at 100 percent size, the complete image (inset) would be 4 feet wide (1.2 m). I did nothing to this picture save convert it from the raw file.



To create a JPEG image, the Fujifilm X-E2 modifies the tones in this raw image to make them more natural, throwing away lots of information along the way. Below is the best JPEG that the camera could create. I know it is the best one because the X-E2 lets you process raw files post hoc and try different settings.

Unusually low noise enables the X-Trans sensor to capture tones that are unusually dark. Indeed, I have rarely seen pictures that capture a range of brightness, such a disparity of highlight and shadow. For example, here in the ship's lounge at midnight the skylights illuminate nothing, the ceiling, walls, and floor reflect nothing, and the few lightbulbs are dim, yet ISO 6400 still captures almost the full range of tones in the scene, from bright pictures to black clothing in shadow.



The JPEG above looks more normal, but dark clothes everywhere disappear into blackness. Also, its perspective is strange. The young woman's head is too small and her legs are too long. This is from the optical stretching of a wide-angle lens. To make the good image above, not only did I need to use the full dynamic range of the X-Trans sensor, I also needed to normalize the perspective and trim the edges. To convert the raw image I used the raw converter [Photo Ninja](#) (\$129), then I corrected the perspective and trimmed the image in Photoshop.



The scene above looks so natural that you must look at the original image to see how spotty and contrasty the lighting was. The picture below contains all of the information in the original file without any attempt to modify the range of tones to make the scene look natural. (It is a linear conversion by [dcraw](#).) This gives an idea of how little light reached the lower levels of the scene. (The exposure was 1/15 second at f/3.2.)

**The Software** – Converting raw image files to viewable pictures requires a raw converter. The X-E2 comes with one, a free version of [Silkypix](#). It does an excellent job converting raw files, and it automatically applies image-correction data supplied in the files by Fuji's lenses, but it is slow and has an unintuitive interface that is remarkably awkward to use. For example, here is a screen print from its file browser of a thumbnail image and its label. I can find no way to enlarge the label to make it more readable.



I have also tried two other raw converters that apply Fuji's image-correction data: Adobe Camera Raw and [Iridient Developer](#) (\$75). Adobe's raw converter cannot extract either the image sensor's full dynamic range or its sharpness. Iridient Developer creates sharp images and captures the full dynamic range but leaves more noise than I like.

Instead of these applications, I have found myself using Photo Ninja. Photo Ninja does not apply Fuji's image-correction data but has easy workarounds. It functions as a standalone application and/or as a Photoshop plug-in, and it incorporates Noise Ninja, which is the best noise remover I know of.

Photo Ninja also features a number of tools for editing photographs, but it is not a complete photo editor. I still need to use Photoshop, and I routinely rely on two Photoshop plug-ins by Topaz Labs, Adjust and Detail (see "[Digital Ain't Film: Modern Photo Editing](#)," 29 April 2010).

- **Topaz Adjust** (~\$50) rearranges contrast across the picture as a whole. Used judiciously, Adjust adds unobtrusive modelling so that images show greater depth. With one slider you define up to 50 regions across the photograph. With another slider you set Adjust to equalize the picture's contrast so that each region has a similar range of tones from black to white. Fully equalized contrast looks bizarre, but the slider lets you equalize the contrast partially. The glacier photo below shows the original photo on the left and the effect of Topaz Adjust in the middle.
- **Topaz Detail** (~\$40) makes pictures clearer by boosting the contrast of details. It has separate sliders for fine, medium, and coarse detail, and it does not create artifacts. The image of the glacier on the right shows its effect when applied to the picture in the middle.



Both Topaz products have a lot of other sliders and buttons, but none that I find useful. I think that some of the controls are gimmicks, and all the others have equivalents in Photoshop, where they work more quickly and are easier to use.

**Camera Controls** — As I mentioned, I am lazy. I don't mind editing photos on my computer in the comfort of my home, but I want to make life easy for myself while taking pictures. This is one reason I avoid JPEGs in favour of raw files. Avoiding JPEGs lets me ignore most of a camera's settings, because most of the settings are for converting

raw images into JPEG format and have nothing to do with taking pictures. Once I set the image-quality menu to "raw", using the camera requires less thought.

Once I do this, the X-E2 saves only raw files and, in theory, its controls for processing JPEGs have no effect. Yet in practice, as with most cameras, they do have an effect: they get in the way. For example, a button labelled Q (for "Quick") brings up a menu to access 16 functions quickly. Of these, 14 are for processing JPEGs and so are useless to me. The 15th function is important: selecting ISO speed. However, it is so important that I configured a button near the shutter to access ISO speed directly. The only remaining function is also important — it brings up a menu for adjusting the brightness of the viewfinder and the display on the back — but it cannot be attached to any other button. To access this one function, I need to navigate past all the other choices in the menu. A sensible control structure for raw-image users would hide every function that applies only to shooting JPEGs.

A sensible control structure would also let the user disable buttons. Some buttons are awkwardly placed such that they can be pressed accidentally while shooting, and I would rather such buttons do nothing instead of bringing up a distracting and unnecessary menu.

Finally — this is a minor peeve but a pet one — sensible controls would permit selecting ISO speeds only in whole steps: 200, 400, 800, etc. The intermediate values are a relic of film, when each emulsion had a specific sensitivity that the exposure meter needed to match. In a digital camera, all this control does is adjust the gain on an amplifier, and the intermediate steps in gain are too fine to matter. I should not need to click through 18 menu items when only 7 are useful. For feature-counting reviewers who miss this unnecessary precision, the camera could offer the option in a settings menu.

In general, the camera's controls are not up to its optical engineering. Indeed, the controls appear to have been designed by the same committee that invented the camel while trying to redesign the horse. And as we'll see, this committee had its hands in other parts of the X-E2 as well.

**Viewfinder and Focussing** — The X-E2 can compete with the finest DSLRs on the market, yet it is not a DSLR. Its viewfinder is a screen, a high-resolution OLED display. It is large enough to see, yet not so large that the edges disappear when wearing eyeglasses. It refreshes fast enough to follow action and can be turned up bright enough to use comfortably in normal sunshine, although when I found myself surrounded by brilliant sun reflecting off the sea and ice, I did need to remove my sunglasses or shield the viewfinder with my left hand. It can also be set to display a useful set of information. All in all I find the OLED to be as functional as the optical viewfinder of my old APS-sized SLRs, and the lack of a mirror box makes the camera smaller and lighter. Its lenses are smaller and lighter too, because the rear element can be closer to the sensor.

For focussing, a DSLR uses sensors in its viewfinder, where they must be positioned perfectly or, as commonly happens, they focus inaccurately. Instead, the X-E2 has them on the image sensor itself, where they can never be out of adjustment. Whenever the subject has some modest amount of contrast, the focussing system works speedily and well.

Unfortunately, Fuji's camel committee failed to design a system that can focus on a common subject that moves quickly: a bird. The continuous auto-focus is too slow and the manual focus cannot be used for the purpose because the focussing ring needs to be turned through awkwardly long arcs. Moreover — the kicker — turning the focussing ring automatically magnifies the image in the viewfinder so that whenever the bird is not dead centre, it disappears.

The camel committee also hampered focussing in another way. I find that the surest way to focus the X-E2 is to leave it on manual focus, point a wee square in the viewfinder at what I want to focus on, and then push a button labelled AF-L. This focusses the camera quickly and certainly. Once the camera is focussed, it stays focussed however I frame the image, and the shutter responds with no delay. This design is excellent. However, near the useful AF-L button is another button that's rarely needed. It brings up a menu to change the automatic focusing range from normal to close-up (which is erroneously labeled Macro). It's all but impossible to avoid pressing the Macro button accidentally, which stops picture-taking dead. Fuji heard so many complaints about this on the preceding model that the company modified the firmware to permit disabling this button if you are not doing close-up work — and then they added a hump. If you disable the annoying Macro button, you disable the important AF-L focussing button as well.

It seems apparent, by the way, that the members of the committee who redesigned this horse were too polite. If one of your pictures is slightly fuzzy, the camera avoids giving offence by refusing to show you this. In display mode it will not magnify images sufficiently to tell.

**Exposure** — The X-E2's automatic exposure works well enough for snapshots, but for careful work I find automatic exposure to be a nuisance, because I must continually review the exposure histogram and adjust the exposure-compensation dial. The X-E2's manual exposure mode is simpler, because the viewfinder can be configured to show the exposure histogram in real time. All I need do is look at the histogram and set an aperture, shutter speed, and ISO sensitivity that has the histogram looking right. This I can do without removing the camera from my eye, because all of the information I need can be displayed in the viewfinder and the controls can be accessed by touch. However, the camel committee threw in yet another hump. For manual mode they created a "feature" that automatically adjusts whatever shutter speed I select by plus or minus one-third of a stop.

I have no idea why they did this, but I find it amusing as well as annoying, because with this camera's sensor, correcting exposure by one-third of an f-stop is no more

meaningful than adjusting the length of a hem by one-third of an inch (8 mm). The most precise way to set the exposure is to have the histogram show that the brightest objects in the scene are not quite clipping (except for the sun and lightbulbs, and their specular reflections). Nothing else is so precise yet this still allows most of an f-stop's slop in the highlights, and the sensor's enormous dynamic range makes underexposure by one-third of a stop undetectable.

**Sensor Size** — Many photographers dream of a camera with an image sensor the size of a 35mm frame, but I think the next size smaller is more sensible, the APS size used in the X-E2. APS-sized sensors allow bodies and lenses to be smaller and lighter in weight, they create smaller files, and — most important — they generate greater depth of field, which tends to make images look sharper overall.

Although a larger format makes it easier to blur a background, doing this with the camera is a hold-over from film. Digital editing offers far more control. For example, imagine this snowy sheathbill flies into your Antarctic studio for a portrait. Like all vain birds, he wants the portrait to show off his face, not the back of his head or the feathers of the day. To this end you want to keep his face sharp but soften everything else. You want to soften most of his feathers gently and homogeneously, so that all of them still look like feathers but they don't call attention to themselves. Selective focus is too coarse a tool to achieve this but the blurring tool in Photoshop makes it easy.



**Lenses** — I have purchased four lenses for the X-E2: Fujinon 18-55mm (~\$700) and 55-200mm (~\$500) zooms, a Fujinon 14mm (~\$700), and a cheap, third-party, full-frame fish-eye (~\$325) sold under the Rokinon and Samyang brand names, and probably others. The two zooms have image stabilization that works a treat. The other two lenses lack image stabilization but cover angles so wide that camera shake is not much of a problem. The 14mm Fujinon offers both automatic and manual focus but Fuji's camel committee decided that it should not support the useful focussing button. The Rokinon fish-eye is completely manual and cheap. Optically, the three Fujinon lenses are excellent — and to my surprise, so is the Rokinon. I much prefer it to any of the Sigma fish-eyes I have owned.

For some reason that I do not understand, the X-E2 is supposed to have an old-fashioned appearance. To my eye it does not look remotely like any film camera I have ever seen, yet for some reason its supposed “retro” appearance is attracting customers. To further this perception, most of Fuji’s lenses for the X-E2 are not modern zooms, they have fixed focal lengths. Even more old-fashioned, none of them has image stabilization. Moreover, assuming the other lenses work like my 14mm Fujinon, they defeat the useful focussing button as well. They might measure a little better optically on a test bench, but image stabilization matters incomparably more for sharp pictures than subtle differences in optics, and a slightly wider aperture offers no significant advantage in a camera with an electronic viewfinder and usable ISO speeds up to 6400. The only fixed focal-length lenses I would consider for the X-E2 are extreme wide-angles. Fuji’s 60mm macro lens might also be useful for macro work on a tripod but for the field I think it more practical to screw a two-element +3 lens onto an image-stabilized 55-200mm zoom. I have found a [Marumi DHG Achromat Macro 330](#) (~\$85) to work nicely.

Currently Fuji’s longest lens is 200mm. At first I lusted for a longer one for wildlife (one is promised for the end of the year), but I am no longer sure it would be worth the money and weight. A longer lens for wildlife would require at least the same shutter speed to stop an animal’s movement and a smaller aperture to maintain the same depth of field — two stops smaller when doubling the length of the lens from 200mm to 400mm. That would require two stops’ greater ISO speed: 3200 or 6400 instead of 800 or 1600. ISO 3200 and 6400 are noticeably noisier than ISO 800 and 1600. A cropped image at ISO 1600 might not be worse than a full-frame image at ISO 6400. I made a quick and dirty comparison of this with focal lengths of 100mm and 200mm, and saw no difference likely to be obvious below a print size of 16-by-24 inches (40-by-60 cm).

**Final Thoughts** — I have not been able to make exhaustive comparisons, but it does appear to me that in general, the X-E2 sets a new standard of quality for general-purpose photography. Other cameras may be a little better in one way or another and preferable in particular circumstances, but overall — considering dynamic range and noise at all ISO speeds plus sensor sharpness, depth of field, and optical stabilization — I have never seen such good imaging come from any camera, let alone such a small and light one. It falls down only in its controls. (But alas, problematic as they are, the standard of the industry is so poor that I find them actually to be better than many others. One might even deem the Fuji’s controls to be a selling feature: sleeping on stones instead of spikes.)

The camera and lenses are reasonably comfortable to use, and are a delight to carry, but the small body is a bit awkward to hold, even with a grip. For use rather than carrying, a larger body would feel more comfortable. It would also be useful to have a brighter or larger viewfinder for use in brilliant sun.

Fuji recently announced such a product, the X-T1 (~\$1,300). It is weather-resistant as well, and the company plans to sell some weather-resistant lenses to complement it. I have no need for any of these but the system’s overall image quality is so high that if the new camera’s controls are more sensible, I just may be tempted despite the cost and extra weight.

And water resistant. Maybe if I sail on the Oosterschelde again...

[If you found the information in this article valuable, Charles asks that you pay a little for it by making a donation to the aid organization [Doctors Without Borders](#).] 

by **Tim Sullivan**

## Rumors and Reality

### • Around Apple

– It’s time to start thinking about the iPhone 6 and iOS 8. (Maybe in September?)

Apple is exploring the idea of flexible screens — the new iPhone could unfold like those trifold advertising folders. Also graphene technology could yield very thin batteries that recharge very quickly and last as much as 10 times longer than current batteries.

Apple will probably jump into mobile healthcare and fitness when they introduce the expected sensor-laden iWatch. Apple plans for iOS 8 to probably include an application codenamed “Healthbook.” The software will be capable of monitoring and storing fitness statistics such as steps taken, calories burned, and miles walked. Furthermore, the app will have the ability to manage and track

weight loss. The software will be pre-installed. Sensors will be able to track a person’s blood pressure, hydration levels, heart rate, and potentially several other blood-related data points, such as glucose levels. Tim Cook expects that “the whole sensor field is going to explode.”

In iOS 8 look for

– Much faster than iOS 7

– Messages app may be changed to auto-delete conversations after a certain amount of inactivity, such as a month or a year

– Apple may also simplify the Notification Center in iOS 8 by removing the “Missed” section of the feature and only retaining the sections titled “Today” and “Notifications.”

- The Game Center app may go away
- Versions of its Preview and Text Edit applications could be added.

**Charging tiny little IO devices** is a bit of a pain and challenge. My wife lives and dies by her FitBit. If the little thing dies before the end of the day, she gets really upset. The iWatch could have the same issue. It will be interesting to see how Apple handles charging the iWatch. They are investigating wireless, solar and motion charging methods.

**Worried that those rascally hackers** are gonna getcha?

The following programs were able to detect over 95 percent of tested threats:

- [avast! Free Antivirus 8.0](#)
- [F-Secure Anti-virus for Mac](#)
- [VirusBarrier 10.7.8](#)
- [Avira Mac Security 2.0.1.105](#)
- [ESET Cybersecurity 5.0.115.0](#)
- [Sophos Anti-Virus for Mac 9.0.6](#)
- [Kaspersky Security 14.0.1.46](#)
- [Dr. Web Light 6.0.6](#)

**iWork vs Microsoft's Office for iPad suite:** the iWork suite got a major overhaul recently to make the OS and iOS versions more compatible. The word on the street is that the programs were dumbed-down for OS. Upgrades to Pages 5.1 or Numbers 3.1 re-installed some missing features. BUT, both programs are trying to access your iTunes and iPhoto libraries constantly, even when not called upon. The process `com.apple.MediaLibraryService` appears in Activity Monitor showing CPU usage of over 100% in some instances — a process that can pretty much clog up your computer.

About 24 hours after debuting on the iOS App Store, Microsoft's Office for iPad productivity suite has taken over the first three Top Free Apps seats. It appears pent-up demand for an iPad version of Microsoft's productivity suite has propelled all three Office for iPad apps — Microsoft Word for iPad, Microsoft Excel for iPad and Microsoft PowerPoint for iPad — to the top of Apple's iOS App Store for iPad.

Microsoft's new iPad apps are of the so-called "freemium" variety, meaning they require in-app purchases to unlock certain features. In the case of Office for iPad, free features include document viewing, but users need to have an Office 365 subscription to make edits. Existing subscription holders can sign in immediately, though Microsoft also built in a subscription purchasing mechanism in each Office app.

As with any other software distributed through the iOS App Store, Microsoft Office is subject to Apple's usual 30 percent cut of any new in-app purchases, in this case subscriptions. Current Office 365 pricing stands at \$99 per year or \$9.99 per month.

**You really, really should upgrade to iOS 7.0.6** if you have not already done so. It fixed a bug in which "an attacker with a privileged network position may capture or modify data in sessions protected by SSL/TLS."

SSL stands for Secure Sockets Layer, and it's what helps ensure that communication between your browser and your favorite websites' servers remains private and secure. TLS, or Transport Layer Security, is a more recent protocol that does essentially the same. In brief, SSL/TLS is a cryptographic key that lets a browser and a server know they are who they say they are, a secret digital handshake that keeps your financial information safe when you make an Amazon payment or log into wells Fargo.com.

This all happens in the background; your only direct interaction with SSL/TLS is when you notice the lock icon in your search bar has clamped shut. That means you've got a direct, private, secure line.

Before the new improved version, SSL was susceptible to Man in the Middle Attacks, where a hacker intercepts all communications between you and whatever site you are communicating with.

Since the same bug exists in Safari at this time, it is recommended to not use Safari. Your best option in the meantime is to use Chrome or Firefox.

**Emojis** came from Japan. It was bound to happen soon or later: Someone (insert your comments about fussy people here) emailed Tim Cook wanting to know "why are the Emojis mostly white (people)"?



Katie Cotton – Apple's Vice President of Worldwide Corporate Communications — fielded the email and answered it:

*"Tim forwarded your email to me. We agree with you. Our emoji characters are based on the Unicode standard, which is necessary for them to be displayed properly across many platforms. There needs to be more diversity in the emoji character set, and we have been working closely with the Unicode Consortium in an effort to update the standard."*

Emoji or Apple Color Emoji are best accessed from Apple's Keyboard & Character Viewer. Go to System Preferences > Language & Text > Input Sources. Check "Keyboard & Character Viewer" to place the Viewer on the menu bar. Click on it, select Emoji, go crazy.

To actually use one, drag it to your text or email insertion point. 📧

# March Software Review

## Recur iPhone App Helps You Manage Repetitive Tasks

by Adam C. Engst

Most to-do apps suffer from the same problem, which is that there are far more things you could — and would like to — do than there are hours in a day. For me, that means that the vast majority of items on my to-do list merely slouch around at the bottom, mocking me forever with their un-doneness. But juggling my task list in my head doesn't mean I'm ineffective — TidBITS comes out each week, Take Control books get published, the business keeps running — and while I'm not always as timely as I'd like, I don't believe I'm disappointing people through utter inaction.

That said, I've run across a particular iPhone to-do app — the \$1.99 [Recur](#) from Grailr — that turns the concept of a to-do list on its head in surprising and compelling way, so much so that Recur has earned one of the coveted spots on the home screen of my iPhone. (Although Recur works on the iPad, it's truly an iPhone app, and merely scales itself up for the iPad screen. Before you ask, no, there's no syncing of data between copies of the app.)

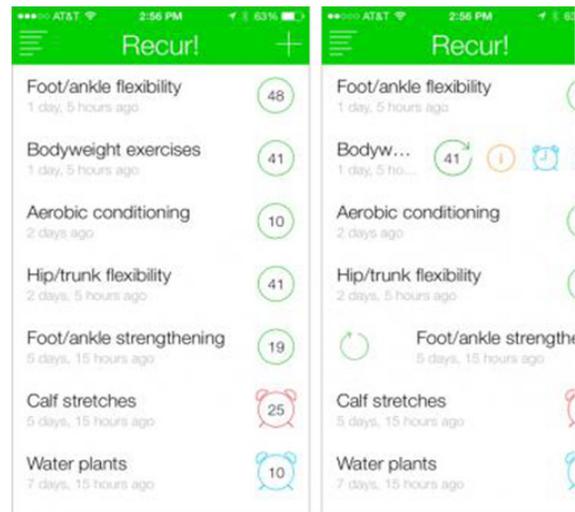
Standard to-do lists are aspirational — they hold things you must do, should do, or would like to do, along with those jobs you don't want to do at all, but feel you shouldn't forget. Grailr ignored such fanciful flights of future possibility, and instead designed Recur to support those repetitive tasks and activities that underpin our lives. (To be fair, the company has another app, the \$1.99 [CARROT To-Do](#), that's more of a traditional to-do app, albeit one with a sadistic personality that rewards you for completing tasks and gets upset with you for slacking off.)

More specifically, Recur helps you focus on those things that you may not think to do on your own or that aren't better handled by a calendar app. You probably don't need to be reminded to make dinner or brush your teeth, since hunger pangs make it hard to forget eating, and something like brushing your teeth is easy to turn into a nightly habit. And while date-related tasks like taking out the recycling every other Wednesday night need tracking, they're what apps like Calendar and BusyCal are designed to handle.

But what about watering houseplants, which should be done every week, doing some physical therapy for an injury every day or two, or just working out a few times per week? All of these need to happen regularly, so putting them on a traditional to-do list would likely involve a lot of interaction and clutter, and since they don't need to be

completed on a highly specific schedule, a calendar program would just be annoying. And yet, you want to know which of these activities you should do at any given point, it's useful to have a small amount of nagging, and it's nice to get a sense of completion in the short term and accomplishment in the long term.

Here's my situation. I've been recovering from a bad case of plantar fasciitis since October 2012. I've finally hit the point where I can run several days per week again, but for the last 8 months, I've been working daily on strength and flexibility, both to aid recovery and to reduce the likelihood of injury once I'm running seriously again. I've built up a variety of routines, none of which needs to be done every day, but which I should rotate through. Look at the screenshots below, and I'll explain what's so cool about Recur.

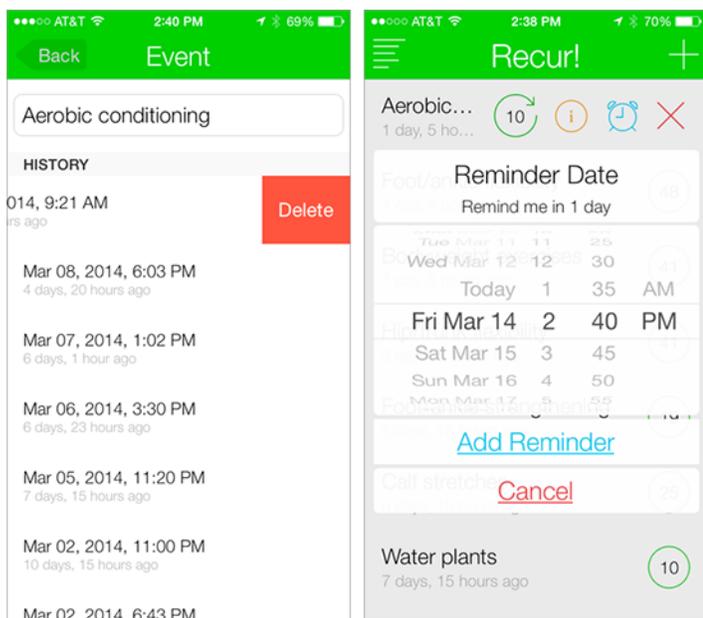


Recur has one main screen, which shows your tasks. You add a new one by tapping the + button or pulling the list down; a new task needs only a name. Once an item is created, you mark it as done by swiping to the right on its name; in the right-hand screenshot, I'm noting that I did my foot/ankle strengthening exercises. That increments the number inside the green circle so you can see how many times you've accomplished the task, updates the last-done date, and moves the item to the top of the list.

Tapping an item's name reveals four buttons, as you can see in the Bodyweight Exercises line above. Here's what they do:

- The green refresh button works like swiping to the right, except you can choose the date on which the action happened, which is handy when you forget to record something on the spot.
- The orange information button shows the task's history, which is useful for seeing how regular you've been. You

can also swipe to the left on any history item to delete it, if you added it accidentally. You cannot edit the dates and times of history entries, which would be nice; the workaround is to remove and recreate them manually.



- The blue alarm clock button lets you set a reminder, which can either occur once or repeat daily, weekly, monthly, or yearly. (Other options, such as every other day, would be welcome but would increase the app's complexity.) When an item has a reminder, the blue alarm clock icon replaces the green circle around the number of times you've accomplished the task. The alarm clock turns red after you've dismissed the notification and stays that way until you mark the task as done — clearly I need to do my calf stretches, and I should water the plants this weekend.
- The red X button does double duty, letting you either delete a task entirely, or decrement its number by one, deleting the most recent history entry and returning the task to its previous position in the list. It's easy to swipe the wrong task accidentally, so I use the decrement feature fairly often.

What I appreciate about Recur is that I can glance at the app in the morning and see which of my exercises are settling toward the bottom of the list and should thus receive some attention. And if I talk to a coach or therapist about what I've been doing, I don't have to guess at how often I've done the exercises I was assigned.

I've tried a variety of ways of logging such information, ranging from paper to a Google Docs spreadsheet, and no

system has ever stuck, thanks to being too much work, too messy, or just plain unsatisfying. I won't pretend that using Recur is a major reward, but I do get a tiny thrill of accomplishment when recording a task as done and seeing it leap to the top of the list. And when it comes to those chores you know you should do but have trouble mustering the enthusiasm for, any little boost helps.

## Apple Updates

### Digital Camera RAW Compatibility Update 5.04

**Mar 20, 2014 – 7.25 MB**

System Requirements

- OS X Mountain Lion 10.8.5 w/ iPhoto 9.4.3 or Aperture 3.4.5

This update adds RAW image compatibility for the following cameras to Aperture 3 and iPhoto '11:

- Fujifilm X-E2
- Fujifilm X-T1
- Nikon D3300
- Nikon 1 AW1
- Panasonic LUMIX DMC-GM1
- Pentax K-3

### Xerox Printer Drivers 3.0 for OS X

**Mar 13, 2014 – 66 MB**

System Requirements

- OS X Mavericks 10.9 and later
- OS X Mountain Lion 10.8 and later
- OS X Lion 10.7 and later

This download includes the latest Xerox printing and scanning software for OS X Mavericks, OS X Mountain Lion, and OS X Lion.

### Epson Printer Drivers 2.17 for OS X

**Mar 13, 2014 – 1.19 GB**

System Requirements

- OS X Mavericks 10.9 and later
- OS X Mountain Lion 10.8 and later
- OS X Lion 10.7 and later
- Mac OS X 10.6

This update installs the latest software for your EPSON printer or scanner for OS X Mavericks, OS X Mountain Lion, OS X Lion and Mac OS X 10.6 Snow Leopard. 🗑️



by Tom Bank

# Carbon Copy Cloner One of the Good Guys

I needed to upgrade Carbon Copy Cloner, but I found it's no longer free. Now the price for the commercial product is \$39.95. I checked around and found this in an Apple Support Group:

The following is from: [Carbon Copy Cloner's Transition to a Commercial Product](#)

*#If I donated for CCC in the past, will I have to purchase the new version?*

*No. To express our appreciation to all of the people who have sent a verifiable donation to Bombich Software prior to July 24, 2012, we will grant a registration code for CCC 3.5. If you are a previous donor and see a message about a 30-day trial, you can retrieve your registration code here*

I was going to write to them to see if I could get part of my \$15 donation from years ago applied to my purchase of CCC. Went to their web site by clicking the retrieve button above; it took me to <https://mew.bombich.com/licenses/retrieveLicense.php>, which asked for my email address. I

entered it and clicked the Retrieve License button there. I got an email in response, with:



Clicked on automatically apply. It opened CCC, told me there was a new version. I said to download it. The new version told me the license was out of date. I clicked on the automatically apply button in the email again. It did it and I now have a free licensed copy of CCC installed.

All I can say is, **WOW!** Talk about customer appreciation! If I get charged for another upgrade, I won't complain. 🗑️

## Share Keystone MacCentral with other MACaholics

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E-mail Address \_\_\_\_\_

Date \_\_\_\_\_ Is this  Renewal or  New?

How did you hear about us? \_\_\_\_\_

Dues for one person are  \$20/yr. Family or Corporate dues are  \$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