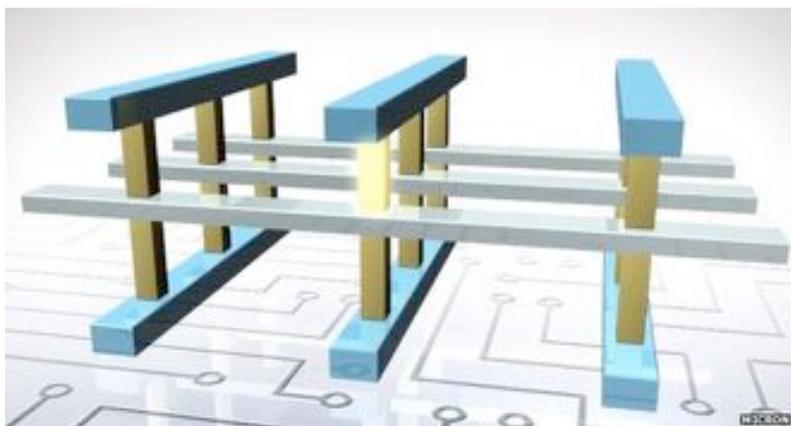


Magazine of the Canterbury Apple Users

# Applebyte



**August 2015**



**Convention Centre**

cnr Highsted & Sawyers Arm Roads

**August 26<sup>th</sup> 7:30 pm**

**APPLEBYTE** is the monthly magazine of:

Canterbury Apple User,  
a subgroup of Christchurch SeniorNet Mac Inc Society.

Submissions for publication are due by the 12th of the month of publication. Please submit all articles to:

**editor@appleusers.co.nz**

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# Meeting programme

Wednesday 26<sup>th</sup> August 2015

## 7:30 Monthly Meeting

- Welcome and News
- Topic: pleased check our website
- News update
- Information Exchange
- Supper

Come along and share your passion for Apple products. Learn about the latest technology, and enhance your skills. And meet with old and new friends over supper.

Visitors welcome.



# Passwords

Have you looked at your passwords lately? With the continuing reports of new sites being hacked and private information stolen, it is your responsibility to look after your own privacy. We all feel helpless when a site we use lets us down and doesn't properly protect the information that we entrust them with, but if that data leads to our information on other sites being compromised, then that is our fault ... do you have unique passwords for each site, or do you rely on one 'old trusty' password that you can easily remember? It really doesn't matter how secure a password is if it can be compromised at one site, and use it against you at another site.

Many sites have rules about how you must form your password, and they often present you with a red/green bar indicating how secure your choice is, but if you take one of the most commonly used passwords, 'password', give it a capital letter and add the a number and the shift of that number to get 'Password1!' you will probably get a "green" pass ... and that password is definitely not secure! An uncommon combination of 3 words, like 'Christmas penguin haircut' or leading/trailing letters from words of a sentence that you remember, are far more secure. But you still need unique passwords to ensure that one breach doesn't expose you everywhere; and something like 1Password, LastPass, or several other password-management apps to remember them all - and that will need a strongly secure password that you remember.

## Submitting your article

Electronic submissions are preferred (to save wear and tear on my fingers). Just choose whatever format suits and send it to:

**editor@appleusers.co.nz**

One page is roughly 450 words. Most articles are less than 4 pages, but longer articles may be accepted if of particular interest or relevance. Please ask in advance if you are planning a longer article.

Please write clearly; short sentences are recommended to help you do this. Use a spell-checker. If you are quoting some other article, please include an acknowledgment of your source.

Pictures can help explain your article, so by all means include one (or more) if appropriate. The format is not important - jpeg, tiff and gif are all fine, but try to provide a high quality image (300 dpi) if possible.

For screen shots, you can use the build-in Apple functions Apple-Shift-3 or Apple-Shift-4, or a utility such as Snapz Pro, available from:

**<http://www.macdownload.com>**.

## Next Deadline: 12 September 2015

## Unwanted Trackers

A hidden setting in Firefox lets you reduce tracking even further than Do Not Track...

You'd think checking a box labeled Do Not Track would indicate a strong preference for, you know: not being tracked. And yet that is not the case. Those who sell slots to advertisers or gather demographic and other personal data to associate with individuals and improve targeting have a desperate interest in following our every move online.

The more closely advertising is targeted to our needs, the more likely we are to not just to pay attention (worth a little), click (worth something), or follow through with buying or signing up (worth a lot). Those who sell advertising slots, and the advertisers who buy them, would prefer to have the best, unmediated access to you.

The Do Not Track preference was first envisioned in 2009 as a way for web users to state affirmatively that they didn't want to be tracked. The idea was that inserting a simple header—a bit of metadata sent from a browser to a server—would be a positive signal. The trick was convincing the browser makers and advertising industries to support it.

All the browser makers did, but the industry didn't. There were issues about whether the setting would be “no choice” along with yes and no, or default to either yes or no. As of now, there's essentially no mandate or requirement, whether among trade groups or governments, to honor the setting.

That's why Firefox's Tracking Protection caught my eye. A feature inserted into Firefox, it had the potential to offer a “Hey, Really, Do Not Track” option that would be largely effective. That fact that it's hidden seems to indicate that it's already controversial. No worries, though: even if it disappears or you don't use Firefox, you have alternatives via *Ghostery* ([www.ghostery.com](http://www.ghostery.com)) and other tools.

## How we're tracked

Advertising, analytics, social media, and other tracking networks use JavaScript, tiny images, and other embedded methods to install tracking IDs on your browser when you visit sites that incorporate their signals. This might be a site that uses Google Analytics, Doubleclick, GeoTrust, or dozens of others—or even dozens on one site.

Some networks go beyond using simple browser cookies, which are easy to block or delete, and employ “respawnable” “*evercookies*”. These components use various hidey-holes in offline storage and other features in HTML5, Flash, and other systems to cache an ID so that when a cookie is deleted, on the next visit to a site with the network's scripts in use, the browser cookie is re-created. A different category, “*supercookies*”, involve a user's ISP or cellular provider tagging their sessions uniquely.

Even in its best form, there was a dispute in the ad industry over whether Do Not Track meant, “Put a marker that someone shouldn't be tracked” or “you can track them but you can't make use of the data in targeting ads to them.” Evercookies and supercookies seem unethical, but may be perfectly legal. All legitimate networks offer some kind of opt-out method, but many work poorly, and you have to opt out often for every browser by network, and sometimes only for a limited period of time. And, as with the Do Not Track quibble, opting out of tracking can mean you're tracked with a promise to not use identifying information.

Because of all this, users have increasingly installed ad-blocking software, which throws the baby out with the filthy bathwater. Poor baby! The baby is the revenue from advertising that allows sites such as Macworld and hundreds of thousands—or maybe millions—of others to pay the bills that make publications go from a part-time self-employed blogging gig to a newsroom of hundreds of reporters. A recent report from the Reuters Institute for the Study of Journalism noted:

*In the UK, 39 percent have installed ad-blocking software on their PC, mobile, or tablet, whereas in the US this rises to 47 percent. The figures are even higher for 18–24s (56 and 55 percent respectively).*

I won't make a moral argument about the necessity of viewing ads when visiting a site that uses them for revenue. The business model of a site isn't the responsibility of its users, and the number of trackers that users shouldn't trust is so high that it's reasonable for people to install ad blockers as a way to get rid of good and bad alike.

It's absurd to say, "If you won't load [any or all] ads, you're stealing." It's an extreme position, especially when sites reference 10 or 20 or 30 tracking elements. The rise of ad blockers will hurt some sites and services, but also lead to development of other kinds of reader revenue, including more paywalls.

Some people simply don't want to see ads, and those who feel that way aren't valuable lost revenue, because they're not going to click on things or use calls to action, anyway. But I suspect that many people just don't want to be tracked all the time and have ads creepily targeted to them. For that group, blocking malicious sites and blocking bad actors—services that aren't engaged in ethical tracking—would likely be enough.

## Less tracking, more speed

Firefox's Tracking Protection earned some attention in May when two researchers—one then working at Firefox's maker, Mozilla—released a paper about the feature, which was

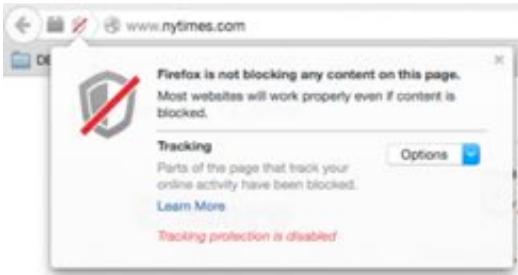


rolled into the browser, but not enabled nor presented as a choice in the main preferences interface. (To turn it on, type `about:config` in a Firefox location bar, and then search for `trackingprotection`. Double-click to set:

```
privacy.trackingprotection.enabled to true.)
```

Tracking Protection is not an ad blocker; it's not about whether a site is presenting commercial information to you at all. Rather, it's an unsafe-connection blocker. The developers used the software behind Google's Safe Browsing service, which manages a list of URLs to warn surfers about, and took about 1,500 domains from the Disconnect privacy-oriented service's list of bad players. The list is updated every 45 minutes. (Safe Browsing from Google is intended to avoid malware and phishing, while Disconnect focuses on insecure connections that carry private information and "malicious trackers, sources of malware, and identity theft.")

The paper showed not just the quantity of connections to services identified in this fashion, but also how much faster webpages load



*Tracking Protection can be disabled on a site-by-site basis.*

without pulling in seemingly unwanted or openly dangerous trackers. The speed is what attracted attention.

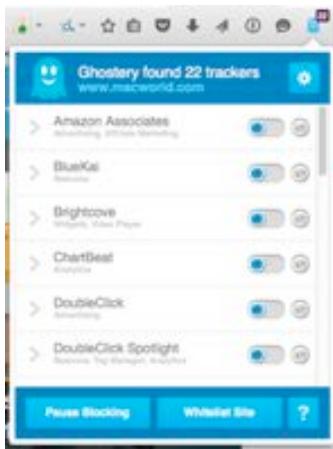
In my testing over the last few weeks, Firefox in OS X is definitely zippier, but I've also had to disable Tracking Protection for specific sites, especially for use

with Facebook logins from other sites. You can use a pop-down menu in the toolbar to disable protection on individual sites. For the most part, most sites work just fine.

However, this feature is not officially documented, and its future is uncertain. (Microsoft has had such a tracking blocklist in Internet Explorer since 2011, which is sadly not of use for us on iOS or in OS X. Maybe Microsoft should restart IE for Mac?)

## Alternatives to Tracking Protection

I like Tracking Protection because of its integration and seemingly light hand in what it does. But Disconnect (which helped provided the blocklist for the feature), *Ghostery*, and others offer similar or better features. *Ghostery*, for instance, shows you a count of how many tracking elements on a site when the page loads, and lets you block whichever you like. *Ghostery* is focused on privacy, not malice. Disconnect has its feet on both pedestals.



*Ghostery reveals the number of different tracking elements on a webpage, and lets you block them.*

iOS 9 will also support “content-block extensions” for Safari, already available in its OS X incarnation, which can be used for ad blocking. One can imagine Disconnect and others offering these extensions.

No matter your feelings about ads, it's reasonable to be worried about and want to block sites that have no business—literally, it's *none* of their business—tracking you, and to be angry at those feeding us malicious software and trying to coax our secrets from us. Some balance would be nice. Without it, readers will continue to take matters in their own hands.

# Take Control ebooks

## ***Take Control of iTunes 12: The FAQ*** **- answers your Apple Music questions**

iTunes — can't live with it, can't without it. That has become all the more true with the free 3-month trial of Apple's new Apple Music streaming service, since the way it's integrated into iTunes 12.2 has caused untold consternation.

Luckily, you have an expert friend — Kirk McElhearn may know more about iTunes than anyone outside Apple, with posts on his Kirkville blog and his iTunes Guy articles for Macworld helping hundreds of thousands of people each month. Now he has distilled his knowledge into *Take Control of iTunes 12: The FAQ*, a 251-page book perfectly timed to answer your questions about the intertwined options in Apple Music, the iCloud Music Library feature, and iTunes Match. The book normally costs \$15, but the 30% MUG discount drops that to \$10.50. (Contact Peter ([web@appleusers.co.nz](mailto:web@appleusers.co.nz)) for coupon code.)

*(After you follow the link, click the green Buy button to add the title to your cart in the redesigned Take Control site — you'll see the discount before you finish checking out.)*

True to its FAQ title, and befitting the many questions people have about iTunes, the book answers about 150 frequently asked questions about all aspects of the app. Chapters such as Play, Rip, Buy, Tag, View, Organize, Search, Sync, Cloud, and Share cover the basics and beyond. Read more about each of these chapters on our Web site, under More Info, and click the Free Sample post-it on the book cover to check out a PDF sample of the first few pages of each chapter.

## ***Take Control of Keynote***

Little is more stressful than giving a major presentation, whether it's for a hiring committee, the city council, or your local MUG. Proper preparation is essential, which is why Joe Kissell's new book, *Take Control of Keynote*, walks you through every step of the process: planning what you want to say, creating attractive slides that support your points, and delivering a successful talk. The 168-page book is ideal for beginners, but it also has plenty of tips and documentation of subtle features for long-time Keynote users. The book normally costs \$15, but the 30% MUG discount drops that to \$10.50. (Contact Peter ([web@appleusers.co.nz](mailto:web@appleusers.co.nz)) for coupon code.)

Building on his years of public speaking at Macworld Expo, Mac Mania cruises, and innumerable Mac user groups, Joe starts by explaining how to PLAN your presentation even before you launch Keynote. He then helps you choose the right theme in Keynote, and explains how to

CREATE slides by filling in placeholders, adding objects (images, movies, sounds, tables, and charts), and inserting and styling text. You'll also learn how to add build effects to slides and transitions between slides to disclose information progressively, highlight particular objects or text as you speak, and call attention to topic changes. Lastly, Joe offers real-world advice about how to DELIVER a successful talk, including tips on making presenter notes and customizing your presenter display, rehearsing, setting up your display, and controlling your presentation.

Not all presentations are meant to be given in person, and Joe also explains how to deliver remote presentations over the Internet, make self-playing presentations for kiosks, and create presentations with recorded narration. The book covers Keynote for the Mac, but includes an appendix that discusses what's similar and different in Keynote for iOS and Keynote for iCloud.

*Take Control of Keynote* rounds out our trilogy of books about Apple's iWork suite, joining Michael E. Cohen's *Take Control of Pages* and Sharon Zardetto's *Take Control of Numbers*. All three rank among our most comprehensive titles, so if you've replaced Microsoft Office with iWork, we now have complete documentation for you. All three books are available separately, but if you want the full 750-page collection, you can also save 30%, dropping the \$55 cover price to \$38.50.

### ***Take Control of Audio Hijack***

Recording audio from a Mac app is conceptually simple, but without the right tools and know-how, it can be tremendously frustrating. We've long relied on Rogue Amoeba's Audio Hijack for all recording tasks, and today we're pleased to bring you Kirk McElhearn's new *Take Control of Audio Hijack* to explain both the basics and the subtleties of Audio Hijack 3's flowchart-like interface. The book normally costs \$10, but the 30% MUG discount drops that to \$7. (Contact Peter ([web@appleusers.co.nz](mailto:web@appleusers.co.nz)) for coupon code.)

You'll learn how to capture and enhance any audio playing on a Mac, with step-by-step instructions for common scenarios — including recording audio playing in Safari, capturing Skype and FaceTime calls, digitizing your old LPs, extracting audio from concert DVDs, and working with mics and mixers, among much else. Kirk also covers the basics of editing recordings in Rogue Amoeba's Fission audio editor.

We could go on for a while about all the good stuff that Kirk distilled into the 119-page book, but if you've read this far and want more detail, click the link above to read the book's full description on our redesigned Web site.

Thank you for your support of the Take Control series!

*Adam & Tonya Engst*, Take Control publishers.

# Review: TVPilot

*Frank Petrie*

I used to say that ‘if I’m not creating, I’m not breathing.’ Over the years, however, my time spent **creating** content has shifted to time **consuming** content. Between cable, streaming and the odd BluRay or DVD disc, it sometimes becomes hard to keep track of which of my favorite program’s episodes I have or haven’t watched and from which season. Plus there are so many new programs being introduced constantly, it’s extremely time consuming to keep up with what’s out there.

Now, let’s all say it together - “There’s an app for that.” It’s called TV Pilot (<http://www.llsoft.ca/products/tvpilot.html>).

TV Pilot serves several purposes. At it’s base level, TV Pilot catalogues your TV viewing, It allows you to keep track of what you have watched and what you would like to watch. It’ll even recommend similar programming.

You can “Discover” new series, create a list of your “Favorites” or perform searches via series titles or actors. Read a summary of a series and each of its episodes, by season number and episode number.

You can set your layout in either grid or list mode. Across of the top of the pane is your toolbar: Discover, Favorites, Summary, Actors, Episodes and Seasons.

I found my experience with this app to be mixed. I was quite happy to find that I could look up both American and British TV series. And it is interesting some of the series that you’ll find using the Discover button.

The Summary I found to be the most useful button. It will tell you what the series plot line is and be given information on runtime, network, genre and such.

I found it amusing that I was able to look up TV series that ran in the 1950’s!

But there are cons. There were TV series that ran for nearly a decade or longer that don’t appear at all when typed in the search field (i.e., Law & Order: SVU). Also, when I brought up Law & Order: Criminal Intent, it didn’t list Vincent D’Onofrio as one of its cast. Odd, as he was the lead for about 85% of the series run and was included in the series banner.

I also found support minimal at best but this app has barely a learning curve. You can be up and running within several minutes following the button explanations on their site.

All in all, even with some cons and occasional flaky behavior (the list in the sidebar would randomly repeat series listings a multitude of times), if you can locate the series that you’re interested in, this app could serve you well. Free trial available, or buy (us\$4.00) (@ App Store, or site).

# Reorganise Your Apps

**Warning:** don't move any applications out of the Applications folder. Don't do it. There will be no immediate fire and brimstone raining down on you, but it will cause problems down the line if you do.

But what you can do is to mess around *within* your Applications folder.

The first question is probably "why should I do this at all?" You certainly don't have to, and if you are not sure, then don't bother, but if you want to more easily access your applications there are a couple of things you can try.

The simplest change is to simply drag your entire Applications folder onto the Dock - you need to drag it to the right-hand end of the dock, near the downloads folder and trashcan. This will allow a single click to give you access to every single app you own. Having done that, you may be able to remove some of the less-used apps that you already have in your dock, making it a bit less crowded.

For many, that will be sufficient, and we still think it's a great idea. So why do anything different? Well, mostly to refine the idea, to address a serious and growing problem (at least for some of us): app collecting.

Too many apps, too many choices!

We have apps we use, or used to use more than we do now. In some cases, the need for them went away (such as an MySpace photo-gallery grabber), or the program was discontinued but still works fine (word processor Bean, for example), or you finished that game but want to keep it around in case you want to play it again someday, or you found a better app for the purpose. More often these days, however, some of us find that there is simply more than one great app for the job, depending on exactly what sort of task it is, and you use them as you need.

As your applications folder gets larger, it may be useful to group similar apps into folders. By and large, you can do this of course, just as you can with any other folder. There do seem to be a couple of apps out there that are, for whatever reason, adamant that they can't be moved from the main Applications directory into a subfolder, but this isn't the case for nearly all other apps, so there is no reason not to do exactly that, provided the sub-folders stay located within the Applications folder.

An obvious candidate is a Games folder, but also consider a Video Apps folder, an Audio Apps folder, a "Internet" folder (and a supplementary "Internet Utilities" folder), a Graphics Apps folder, and a (third party) Utilities folder. When trying to move programs into these folders, they will often require your admin password to authorize it, because the system needs to know where you're moving this to. It's a bit tedious to do that each time, but it only needs to be done once.

While doing this, you might also decide to do some program "spring cleaning". If you do, you may consider getting one more program to help: an app-removal app that puts the unwanted app in the trash but also includes the preference file and any other little bits located elsewhere. This isn't strictly necessary for most apps, but it makes things even tidier, and there are at least three good choices: App Trap (free), App Cleaner (free), and AppDelete (us\$8). App Trap is a favourite because it automatically monitors the trash, and when you put an application in the trash it just goes and gets the other cruft associated with that app, and trashes that too. (Do not mistake these apps for the "clean your Mac" type stuff; those are unneeded and often cause problems, so avoid them.)

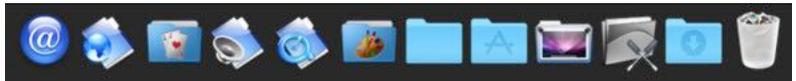
As a rule of thumb, incidentally, pro-level apps and system-utility type apps can't be uninstalled as easily as just dragging them to the trash; for those, you need to follow the developer's un-install instructions.

### Sub-folders

So create the custom sub-folders wanted first, then start grouping apps together. Microsoft used to do this for their Office apps, but they don't in the latest incarnation, so an Office 2016 folder seems like a good idea. Because Adobe is picky about where their apps are, you need to leave their apps ungrouped, but you can make aliases of them to put in a Graphics Apps folder, along with other graphic apps.

Games can be thrown into one folder, and few apps related to your work into another. Video apps and Audio apps may each get their own folders, and your web browsers (if you use more than one) into a "Internet" folder, along with any FTP program and (an alias of) Mail and Safari (they don't like to be moved), ... and so on.

The problem with making sub-folders is that they are just plain blue folders, like all other folders (except certain special ones, like Applications), and so it is not obvious what's inside them. You can solve this problem by using a program called Folders Factory, which allows you to change the color of the folder as well as add a custom image or even an "embossing" effect.



*My dock with custom application-group folders*

Now we had easily-spottable custom folders that told us even without reading the label what kind of apps were inside them. You can even have sub-folders in the sub-folder (such as different types of games within the Games folder).

The last step is dragging the most important of these custom app folders into the Dock for quick access. Yes, you may already have the Application folder (in its entirety) there, and these subfolders are reachable within the long listing when you click on the Applications folder in the Dock, but this is even faster.

Once you have added the folders to the dock, you can click on each, and select 'Options' and then either *Stack* or *Folder* to control how you want the folder contents to be displayed.

### **What about the Desktop?**

For those that absolutely feel like they want these folders on their desktop rather than in their Dock, make an alias of the folder in the Applications folder, and drag that onto your desktop. It will behave exactly as if you had dragged the real folder out there, but it won't slow down Finder responsiveness, you won't run into problems with apps not updating correctly or not working because they are not in the Applications folder where they belong, and best of all should you accidentally trash the alias, no harm has been done.

## **RAID Backup System**

We usually store our photos, documents, and more on a single hard disk but there's always the nagging worry that the disk will fail, taking all your work and memories with it. Backing up using Time Machine, Super Duper!, or CrashPlan, say, is a good way of reducing this risk, but there is another: RAID.

RAID sounds complicated, but it's extremely worthwhile--one of the things it can do is to mirror the contents of one disk completely to another, all the time and automatically. While cloning your hard disk using Super Duper!, for example, is something that might happen once a day, or week, or just sometime, with a RAID system, every time something is written to one disk, it is simultaneously written to the second,- so that if one drive fails, you have a perfect copy of everything it contained on the second.

The especially good news is that a mirrored RAID setup like this, once it's configured, appears to you and to your computer as a single disk, so it's as easy to use as a single disk - defining it as a backup target, say, or simply dropping files onto it like with any other disk--but just safer.

You can buy external RAID hard disks that have two or more hard disks inside a single box, but you can also easily make your own using the built-in tools in OS X. Standalone RAID systems tend to perform slightly better, but for home or small office use the difference is negligible. Here, we're going to show you how you can repurpose a couple of old hard disks you might have lying about (or picked up cheap on TradeMe) to create a mirrored RAID system. Even if you're not sure about how reliable your old hard drives are, with this easy, free method, you can use them with a bit more confidence.

### **Gather your drives**

For this technique, you'll need two spare drives--usually external, but you can also use internal drives, like if you have an old Mac Pro or G5. It

doesn't matter for the process of creating a mirrored RAID how the drives connect, what size or capacity they are, or what kind of drives they are. It doesn't even matter what format or partition map they are, as they'll be wiped anyway--just ensure there's no data on them you want to keep. Note that the size of your mirrored RAID will only be as big as your *smallest* drive - the extra space on a bigger disk will be wasted.

### **Start building your RAID**

Connect your drives then launch Disk Utility (/Applications/Utilities) and click on either of the two disks you want to build into a RAID. Click the *RAID* tab at the top of the right-hand pane, and name the single drive you'll create in the RAID Set Name field. Ensure the RAID Type dropdown is set to *Mirrored RAID Set*.

### **Add drives and set options**

Drag the drives you want to use for your RAID setup from the list on the left into the space on the right. Click *Options* below this space and check the option to have the RAID set automatically rebuilt.

### **Create the RAID**

Click the *Create* button at the bottom right, double check you have the correct drives specified, then hit the *Create* button in the confirmation.

### **Use your new RAID drive for backup**

Depending on your system, as soon as the RAID set has finished being built, you might get a prompt to use it as a *Time Machine backup*; if this is what you want to do, click *Use as Backup Disk*, but otherwise click one of the other options. For example, you might wish to use a different backup system, such as Super Duper! or Carbon Copy Cloner, or use the RAID disk set for every-day file use.

No disk or backup system is guaranteed - all you're doing is mitigating risk with each additional layer of protection you add - but 2 copies of your data are better than 1, and so this is a good step in making catastrophic data loss less likely.

### **Inspect your setup**

Before you started this process, you would have had two external drives mounted on your Mac. Now, it looks like you only have one, but that's because the system is treating those two drives as a single disk. Disk Utility will still show both disks, as well as the combined RAID set.

### **Break up the RAID set**

If you want to redeploy your RAID drives elsewhere in the future, you can easily break apart the RAID system. Select the set in Disk Utility then click Delete. After confirmation, the mirroring will stop, and you are free to use the 2 disks independently again.

### **Commercial RAID Systems**

Commercial RAID systems were mentioned earlier. They do have a few advantages over the 'do-it-yourself' product, such as a single connection

to your computer, and off-loading the additional disk writing. They also have a weakness - a failure may not be in the disk drive, but in the RAID cabinet itself - a single point of failure making your storage inaccessible!

*Whatever you decide to use, consider each part , and decide what you need to do to recover if that part should fail - and how long it may take.*

## New “Wi-Fi”?

Whether you’re tracking your steps, monitoring your health or sending photos, you want the battery life of your Apple Watch to last as long as possible. If the power necessary to transmit and receive information from your Apple Watch to a computer, cellular or Wi-Fi network were reduced, you could get a lot more mileage out of the technology you’re wearing before having to recharge it.

Adrian Tang of NASA’s Jet Propulsion Laboratory and M.C. Frank Chang at the University of California, Los Angeles, have been working on microchips for wearable devices that reflect wireless signals instead of using regular transmitters and receivers. Their solution transmits information up to three times faster than regular Wi-Fi.

“The idea is if the wearable device only needs to reflect the Wi-Fi signal from a router or cell tower, instead of generate it, the power consumption can go way down (and the battery life can go way up),” Tang said in a statement.

Information transmitted to and from a wearable device is encoded as 1s and 0s, just like data on a computer. When incoming energy is absorbed by the circuit, that’s a “0,” and if the chip reflects that energy, that’s a “1.” This simple switch mechanism uses very little power and allows for the fast transfer of information between a wearable device and the Wi-Fi server.

The challenge for Tang and his colleagues is that the wearable device isn’t the only object in a room that reflects signals – so do all the other things around. The chip in the wearable device needs to differentiate between the real Wi-Fi signal and the reflection from the background.

The technologists have tested the system at distances of up to 20 feet (6 meters). At about 8 feet (2.5 meters), they achieved a data transfer rate of 330 megabits per second, which is **about three times the current Wi-Fi rate, using about a thousand times less power than a regular Wi-Fi link.**

A base station and Wi-Fi service are still required for the system to work. To compensate for the low power drain on the wearable device, the computer or other technology it’s communicating with must have a long battery life or else be plugged in. The router will experience more power usage, too. The next challenge for the engineers will be to examine this.

# El Capitan Mail

Mail is one of those apps most of us take for granted. It's one of the first apps we configure when setting up a Mac. In El Capitan, that foundational app experience is the same - what's more, Apple has introduced big improvements to Mail 9 that make it easier to work on and do more with your messages.

Much more robust full-screen support and swipe gestures are two of Mail 9's most noticeable visual changes. That's not all: Improved data detectors make it easier to add events to your calendar and contacts to your contact database. There are other under the hood improvements to make it easier to find what you need and act on it.

## **Full-screen support and gestures**

Full-screen support in Mail 9 makes it easier to juggle multiple email messages. Let's say you're composing an email and you want to check another message or copy something from it. The email message you're composing now moves to the bottom of the screen, so you can access your email inbox, copy text or attachments from other messages, etc.

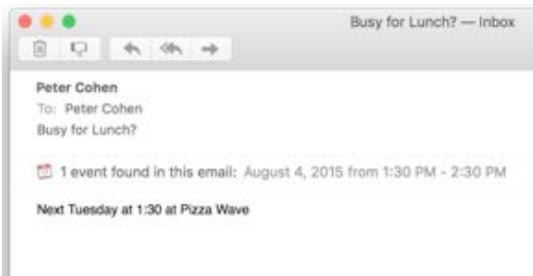
It's also easier to manage more than one email conversation at the same time. You can switch between active email threads using tabs, just like in Safari. And those tabs slide to the bottom of the full-screen Mail window, just like a single message.

Mail 9's improved gesture support will be comfortable to anyone who also uses an iPhone, iPad, or iPod touch. On a Mac equipped with a Magic Mouse or a trackpad (either a built-in one on a Mac laptop or a Magic Trackpad), you can use the same gestures you're accustomed to on iOS: Swipe left to delete a message, swipe right to mark it as read.

You're probably already familiar with data detectors: if you move your mouse over a date and time, for example, you may see a popup appear to add that as a calendar item. You can add contacts the same way. Data detectors get a little more front and center with Mail 9: Mail adds banners in between the address field and the body of the message with data it's detected and possible actions to take.

For example, if Mail 9 recognizes that someone's asking to get together, it'll list the event as an option you can add to your calendar. And if the message is from someone who's not already in your address book, you can easily add them to your contacts database the same way.

Mail 9 helps to provide more actionable intelligence even faster. It doesn't take long for muscle memory to kick in: Before you know it, you'll automatically check that spot in the message for action items. Grouping calendar and contact actions together gives you a bullseye to see where you need to be, at what time, and with whom.



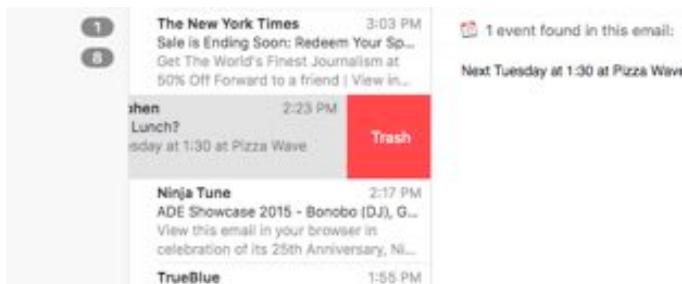
*Mail detects what's going on and offers to make a calendar event quickly and easily.*

## Other changes

Apple emphasizes natural language search in El Capitan beginning with Spotlight, OS X's system-wide search function. You look for a file the same way you would if you were using Siri, in your own words. Natural language search isn't limited only to Spotlight. It's come to Mail's too.

Expect to spend less time fighting with Mail search function to get the results you want. Just write, "Show me emails with 'El Capitan' in the subject line" and expect to get what you asked for.

Internet Message Access Protocol (IMAP) is one of the most popular ways to access email. It's how iCloud and many other popular email services work. Apple has shored up the IMAP support in Mail with a new engine that it says is up to twice as fast on setup.



*Swipe left using your trackpad, Magic Trackpad or Magic Mouse to delete messages in a jiffy.*

What's more, Mail 9 better prioritizes message downloads that you're currently viewing. You spend less time waiting for Mail to synchronize your messages before you can read them. This is particularly helpful if you're stuck with a slower Internet connection that can get Mail 8 (Yosemite) spinning as it tries to synchronize your inbox.

Mail 9 exemplifies a design philosophy often reiterated in Apple's products: A conscious effort on Apple's part to get the interface out of your way. With improved data detectors, more effortless full-screen support, improved IMAP performance and the addition of iOS-like gestures, Apple's making it that much easier for you to do things with email, instead of just reading it.

## Inside iOS 9

A major focus for Apple in building iOS 9 is making it even easier to access the information you need, in part by predicting what you want before you unlock your phone. One way the upcoming operating system update will do that is by knowing when you get into your car, and predicting where you're probably planning to drive.

iOS already offers estimated travel times in the Notification Center's Today view. But starting with the release of iOS 9 this spring, travel directions will become even more convenient, with popular destinations automatically showing up on the iPhone's lock screen.

While beta testing iOS 9, users have noticed that after getting into their car after work, directions home appeared on their iPhone's lock screen. Other users also commented that the functionality works on their Apple Watch as well. (With iOS 9, the iPhone knows when a user gets in their car because of a connection to the vehicle's infotainment system.)

While developing this capability, Apple has placed an emphasis on protecting personal data, with most analysis occurring within the iOS device, and when external assistance is required, by anonymizing any information that might be sent through the Internet, so it is not identifiable to you or your device.

## Around, About

*Peter Fitchett*

**Apple Web Site:** A redesign of Apple.com has appeared, removing the standalone 'Store' tab, and the 'store.apple.com' domain entirely. This is an enormous change for one of the biggest online retail stores in the world. The buying experience is now woven into the site as a whole, with purchasing buttons and options for products available on every product page. Instead of browsing for information about a product and then having to make the 'jump' over to the store side, customers will now take care of both actions at once.

**Safari:** Some battery experts ran Chrome, Safari, and Firefox through a series of tests to determine which browser was most battery-efficient: Averaging data from all websites tested, Safari won first place with 6hrs 21min of total usage, Firefox second with 5hrs 29min of usage, and Chrome last with 5hrs 8min of usage. Basically, if you simply switch to using Safari instead of Chrome, on average you could get an extra hour of usage from your battery life.

**Microsoft's Gift to Apple Watch:** Quick and easy translation is right at your fingertips - or, more accurately, on your wrist - with the new Microsoft Translator for Apple Watch. All you have to do is speak into

your watch and you'll have access to translations in 50 different languages. The translator can speak any translated phrases for you that you can't figure out how to pronounce. The app also can save your most commonly used translations and recent phrases for even quicker access.

**Only in Texas?** After falling 9,300 feet from a Beechcraft Bonanza airplane, a lost iPhone not only reported its location but laid out a map where owner, Ben Wilson, could find it. It was in one piece, scratched a bit on the corners but it still worked. The owner reported "It's just fine. The only missing part is the battery." [I'm not sure how it reported its position without an *internal!!* battery? - Ed]

Staying with new technology, a new name to remember is "**3D Xpoint**" **memory**. Developed by Intel and Micron, this new memory should start production next year - and it is up to 1000 times faster than NAND flash ... the memory that is in thumb drives, camera cards and SSD "disk" storage in our computers, iPads and smart phones. An added benefit is that it should last hundreds of times longer than NAND before becoming unreliable. No price available yet.

In the meantime, SSD is still available, and Samsung has just released a **16TB 2.5 disk SSD disk**, (PM1633a). By comparison, the largest conventional hard drives made by Seagate and Western Digital currently max out at 8 or 10TB. Samsung showed off a server with 48 of these new SSDs, with a total storage capacity of 768 terabytes and performance rated at 2,000,000 IOPS (input/output operations per second). By comparison, the consumer-grade SSD that you have in your PC is probably capable of around 10,000-90,000 IOPS, depending on the workload.

Finally, **a thought for the month** - For iOS 9, Apple introduced new technologies giving developers the ability to write extensions, including content blocking extension for Safari. Ads on websites is a \$20 billion industry. If this is cut by say 50% within a year or so, what will the Internet, and Google, look like?

## SeniorNet Mac

**Computer Training Lessons:** Two-hour sessions, once a week for four weeks. Course notes are provided. Classes are small with a maximum of six students and two tutors per lesson.

**Social Events:** Held on the fourth Tuesday of the month.

**Newsletter:** Supplied every two months.

We are now located at: 190 Worcester Str, Christchurch.

Contact: If you would like to join SeniorNet Mac and are in the 55-plus age group, please contact Allan Rutherford at (03) 352-4950, or email:

[ajmr@xtra.co.nz](mailto:ajmr@xtra.co.nz),

# About the user group



## Aims

*Canterbury Apple Users is a non-profit subsection of SeniorNet Mac (Christchurch) that exists for the purpose of exchanging ideas and expertise about the use of Apple computers, the Macintosh operating systems, and related hardware and software.*

## Meeting venue

Meetings are held on the last Wednesday of each month (except December) beginning at 7:30pm, at the Convention Centre, corner Highsted and Sawyers Arms Roads.

Drinks, and maybe a snack, are available while we all calm down after the excitement of the meeting.

If you find it difficult to get to meetings, please contact an organizer to see how we can help.



## Group contacts

Website

<http://www.appleusers.co.nz>

Mailing Lists

**Peter Fitchett**  
[listadmin@appleusers.co.nz](mailto:listadmin@appleusers.co.nz)

(3) 960 8189

The HELP email list is open to all Mac users who wish to give or receive assistance. See our website for instruction on how to subscribe/unsubscribe.



Apple User Group