

Magazine of the Canterbury Apple Users

# Applebyte



**May 2015**



**News Flash!** - *too fresh to get inside!*

Updated 15" Macbook Pro - New 27" Retina 5K iMac

**Convention Centre**

cnr Highsted & Sawyers Arm Roads

**May 27<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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## Contents

Meeting programme	3
Apps on Maps Links	3
Submitting your article	4
Take Control eBooks	4
Apple Watch	6
Google Searches	9
MacKeeper	11
FileMaker 14	11
Photos for OS X	12
Special offers	15
Share Your Mac's Screen	16
Solid State Disks	19
Around About	20
SeniorNet Mac	23
About the user group	24
Meeting Venue	24
Group contacts	24

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# Meeting programme

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

## 7:30 Monthly Meeting

- Welcome and News
- Jillian Wilson
- Streaming video web sites - free movies, etc.
- Information exchange
- Supper

Guest Speaker:

**Jillian Wilson**, *World Outdoor Adventurer*

### **Alaskan Arctic:**

An adventurer at heart, Jillian enjoys combining her love of the world's wild places with her passion for photography. Her images will include photographs of scenery of far northern Alaska, beyond the Brooks Range to Barter Island, the Aurora Borealis and polar bears.

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.



## Apps on Maps Links

*Chris*

At the April meeting a question was raised about links to sites presenting live/current information on maps. I have compiled a list from my database of url's.

Live map of thunder & lightning, by region:

<http://www.blitzortung.org/Webpages/index.php?lang=en>

<http://www.lightningmaps.org/realtime?lang=en>

Vessels at sea:

<http://www.marinetraffic.com/ais/home>

And Vessels in the air:

<http://www.flightradar24.com>

*Do you have a favorite to share?*

## 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](mailto: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 June 2015

## Take Control eBooks

*Adam & Tonya Engst*

### **Take Control of the Mac Command Line with Terminal, 2nd Edition**

It's easy to forget that OS X is based on Unix, but those in the know often drop to the Unix command line for tasks that are difficult or impossible to accomplish in the Mac's graphical interface. Six years ago, Joe Kissell penned "*Take Control of the Mac Command Line with Terminal*," a book designed to help readers become comfortable and capable on the command line. Today we're pleased to bring you the second edition of this essential reference. The book normally costs \$15, but the 30% MUG discount drops that to \$10.50. Learn more about the book at:

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

Written from a Mac user's point of view, the book starts with the command-line fundamentals, helps you set up an environment that will work for you, and walks you through more advanced topics as your knowledge increases. To help you put your new-found skills to use, you'll find 52 easy-to-follow, real-life "recipes" for simple tasks that are best done from the command line, as well as discussions of more complex tasks such as ssh-ing to a remote computer, transferring files via sftp and scp, handling permissions, logging in as root, installing Unix software, grappling with grep, and writing shell scripts that contain logic.

## Take Control of Security for Mac Users

No Mac is an island — our Macs are constantly connected to the outside world and store our most important data: financial records, email communications, personal photos, and goodness knows what else. Allowing an Internet hacker, malware app, or Wi-Fi sniffer to compromise the security of your Mac and its data could have far-reaching consequences in your real life. Happily, with some common sense and appropriate precautions, as outlined in Joe Kissell's latest book, "***Take Control of Security for Mac Users***," you can increase your security without undue inconvenience. The 159-page book is available by itself for \$10.50 after the 30% MUG discount, but read on, since we have other new books too!

Topics in "*Take Control of Security for Mac Users*" include:

- Determining your risk level (from 1-4)
- Implementing essential quick security fixes
- Controlling access to your Mac via a firewall
- Managing local access to your data with user accounts
- Sharing Mac resources like screens and files safely
- Securing your home network and working securely on someone else's network
- Protecting your Mac's data from snoops and thieves.
- Keeping your iCloud data (such as email and photos!) safe
- Deciding whether to use anti-malware software

Perhaps most important, you'll also find advice about what to do if something bad happens, with suggestions about how to recover from data loss, a malware or phishing attack, a network intrusion, or identity theft.

Because security and privacy often blur together, we've also just published the second edition of Joe's "***Take Control of Your Online Privacy***." Concern about privacy is a spectrum, and we all hit it in different places. But it's a fact that your online activities are being tracked and analyzed. Some of that is good — if you're going to see ads, you'd probably prefer they were for products that interest you, but that targeting could result in you being charged higher prices or reveal an embarrassing medical condition. That's just one example, but Joe has distilled all the questions we normal people have about privacy — and what you can do about them! — into this 135-page book. It's also \$10.50 after the MUG discount.

Finally, if you're interested in this topic, don't miss Joe's best-selling "***Take Control of Your Passwords***," which he also just updated to work in the latest details. It's only \$7 after the MUG discount.

Thank you for your support of the Take Control series!

cheers... -Adam & Tonya Engst, Take Control publishers

# Apple Watch

It has been released elsewhere in the world (Australia!) but not here yet, so when it eventually gets here it will be sooner before it is replaced by the next model ... so will it still be worth getting - I have no idea, so you will have to make up your own mind on that one. I must admit that it is tempting me though - all that money for a watch, and I would need an iPhone as well ... but it is tempting.

In the meantime, I guess all we can do is to keep up-to-date with what it can do, and what others find that they can do with it.

## Waterproof

Watchmakers don't like to say that something is waterproof - with enough pressure, (yes, scuba diving can produce significant pressure quite easily), pretty well anything can spring a leak ... so instead, we get a *water resistance rating*. Apple claims an IPX7 water-resistance rating for its device, which means it can withstand 1 metre of submersion for 30 minutes. (Companies are usually conservative with the limits of waterproofness for legal reasons.) Several brave enough have tested this, and have found no problems with leaks - so a bit of rain, or even wearing it in the shower, shouldn't present any problems.



## Your Watch is Personal

Your watch needs to communicate with an iPhone for the best results, but even more importantly, it needs to be touching your skin ... otherwise, it will need to be unlocked again every time that you want to use it ... rather less than convenient! This means that you will need to think about third-party accessories that you may want to use. Riding a bike, you don't want to mount your iPhone on the handlebars - it isn't waterproof. A bicycle mount that could theoretically allow your (waterproof) watch to be seen while riding isn't likely to work very well, - with the screen off and the watch perpetually falling back into locked mode ...

## Secret Socket

Yes, the current watches have a secret (diagnostic) socket hidden inside the slot used to fasten the watch strap. Some enterprising third-party developers are planning watch-straps with embedded batteries to give your watch an extra oompff - but the socket is undocumented and unsupported by Apple, so there could well be some legal issues arising.

In the meantime, Apple has announced an official program for third-party accessory developers to design and launch bands for the Apple Watch. This new program is called '*Made for Apple Watch*'. One of the device's marquee features is its ability to connect to different straps by way of a standard connector on either side of the Watch, and now accessory makers will be able to make good use of the product. The guidelines do not mention the hidden diagnostic port that some accessory makers hope to leverage, nor does it provide official specifications for developing charging accessories.

## **Healthcare**

Apple Watch is not so much an instrument for telling time as it is a personal interactive device that is attached to your body. One of the critical Apple Watch differentiators is its capacity to become the first commercial data-gathering and synthesis system for personal health metrics. By default, Apple Watch capabilities will automatically lead to healthcare monitoring modalities that, until now, have only been the stuff of science fiction.

Apple Watch could deliver event or monitor-driven, ultra-personalized medical data to you, your doctor, to another system that evaluates and adjusts treatment to meet changing circumstances, or to emergency contacts if you are incapacitated. The responsibility for reporting new or changed medical conditions will shift from the patient to an automatic reporting system, assuring more frequent and more accurate data. The result will be better, and less costly, healthcare.

Cost is a major factor in healthcare worldwide. The cost of healthcare in just the U.S. today is \$2.8 trillion a year and growing. Economic experts have predicted that unless healthcare costs can be brought under control, they will be unsustainable.

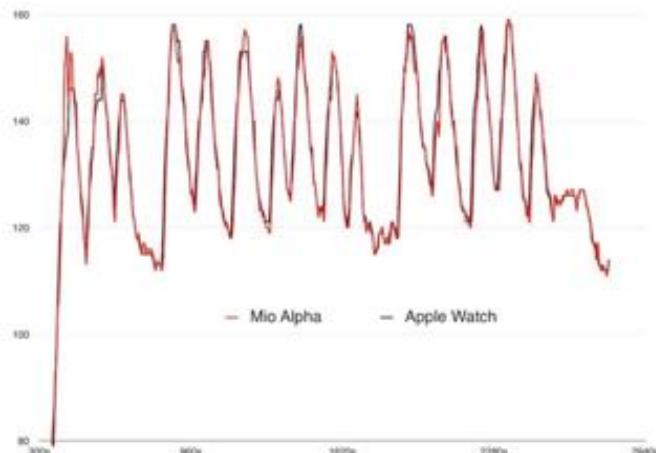
Maybe a free watch and iPhone for everyone will be cheap healthcare? Even just for me, as a trial ... I can dream, can't I?

## **Heart Attack?**

The Apple Watch heart rate monitor is far better than everyone thought, and that could theoretically lead to big medical breakthroughs — like the ability to predict heart attacks before they happen.

Developer Brad Larson dug into raw Apple Watch HealthKit heart rate data after a run and compared it to data from a heart rate monitor he had been wearing. The Apple Watch doesn't have Food and Drug Administration approval as a medical device, but Larson discovered the wearable is nearly as accurate as an electrocardiogram.

Larson compared Apple Watch to a Mio Alpha heart rate monitor, which is noteworthy for its tested EKG accuracy at performance speeds. The Mio Alpha takes samples every three seconds while Apple Watch grabs one every five, but the readings were nearly identical.



Having an EKG-accurate monitor strapped to wearers throughout the day could be hugely beneficial to the study of heart disease. Patients currently have to go a doctor's office or hospital to get an accurate EKG reading while running on a treadmill. Accurate EKG data generated throughout a normal day, combined with other metrics, could help researchers understand more about heart performance.

Apple would need to get FDA approval just to show EKG data or to give medical guidance, but medical tech expert Euan Thomson said that if Apple Watch gets the government's thumbs up to monitor your EKG, software could be used to warn users of a heart attack or stroke days in advance.

Getting that FDA approval would be the hardest part of the process, but Apple has already shown a dedication to making a true impact in medical research with HealthKit and ResearchKit. They secretly included a blood oxygen meter in the Apple Watch that hasn't been turned on yet, and they've hired a team of medical experts. It looks like something a lot more important than counting steps is on the way.

### **Driving**

Do you look at the time while driving? Well, in Australia, you a better take your old watch with you. Traffic Support Branch acting officer-in-charge Inspector Steve Kameniar said the Apple Watch was still considered a mobile phone under rule 300 of the Australian Road Rules. The rule states that a motorist can use a mobile phone while driving via Bluetooth, a headset or earphones without touching, holding or resting the phone on their body. It further states that it is an offence to create, send or look at a text, video message or email on a mobile phone. Insp Kameniar said the watch, therefore, should not be used in a vehicle that is moving or stationary. [Hmmm ... Ed]

# Google Searches

We all know that Google is a great place to search for just about anything ... well actually, anything at all - and people do!

What you may not know is that Google has an awful lot of disk drives, and so have enough space to remember anything that may be useful to know sometime in the future - such as what you were searching for.

If you had logged into Google to check your free email account, or perhaps Google+, or some web statistics that they provide for you, then Google also knows who it was that did those searches.

Perhaps you are starting to squirm about some things that you were searching for, last month, last year, or even 5 years ago? Well, the bad news is that all that information is remembered, and is still there - the good news is that you can see it, and even do something about it!

Take a deep breath, check that no-one else is watching, and head off to:

<https://history.google.com/history/>

After logging in, if necessary, you have your search history at your finger-tips. [If you know someone else's Google login, then ...!]



Browsing back through your previous searches - all indexed by date - is an interesting experience - the memories of what you were doing back then that cause you to follow that line of enquiry ... news stories, medical

conditions, old friends to find or stalk, on-line shopping, maybe a few more embarrassing sites. Google doesn't put many searches on a page, so you are probably going to go back through many many pages as you rediscover your past.

This is the URL you go to in order find out what's on someone's mind, what they're thinking about, what they're planning to do, and who they're planning to do it with. That's immensely valuable information, not just for advertisers (which is why Google wants to collect it), but also — potentially — for hackers and identity thieves.



The first thing you may wish to do is to download it — so you can have a permanent record of just how carefree you have been with your Googling, and perhaps as a basis for your memoirs. Google provides instructions on how to do this:

In the top right corner of the page, click the Options icon (a cog) and choose **Download**. A warning, at this point, to download the sensitive information on shared or public computers is displayed.

Read the warning - it contains information about how to get the downloaded information. You will eventually get an email with a link to actually download the information. Do I need to point out that it is easier for someone with access to your computer to read the file there than it is for them to hack into your Google account. If you are wanting privacy, you need to take the necessary steps to get and keep privacy!

**Note:** when viewing the Google searches, you see the search request, and a list of the web pages visited ... when you download the information, you just get the search requests. You may want to do it the hard way!

What you may very well do next is to delete some or all your search history, and possibly to prevent future searches from being saved (but, of course, you won't have a history file then!)

Google provides instructions on how to do that:

**<https://support.google.com/websearch/answer/465>**

While you are at it, consider disabling other data-slurping features of Google via your Account History page:

**<https://www.google.com/settings/accounthistory>**

if you aren't comfortable sharing your private data with them.



# MacKeeper

## MacKeeper

MacKeeper has been surrounded by controversy for years. Its previous owner, a Ukrainian-based company called ZeoBIT, was accused by Mac users of using aggressive advertising and scare tactics to push its product. The company is close to settling a class-action lawsuit in the U.S. that sought \$5 million in damages because MacKeeper warned users about fake security and performance problems to convince them to pay for the full version. If the settlement is reached, ZeoBIT will put \$2 million into a fund for refunds, but won't admit any fault.

Now a critical vulnerability in MacKeeper could let attackers execute malicious commands on Macs when their owners visit specially crafted Web pages. MacKeeper's developers acknowledged this recently discovered problem and have released a fix for it. But still, not a good look for a Security package!

If you do have a copy of MacKeeper installed, you may want to keep a note of: <http://www.macworld.com/article/2861435/how-to-uninstall-mackeeper-from-your-mac.html> in case you change your mind.

If you get pop-up ads about MacKeeper, you may want to check out: <http://www.macworld.com/article/2861868/how-to-remove-mackeeper-part-ii-the-pop-up-edition.html>

# FileMaker 14

## FileMaker 14

FileMaker today announced a new version of its development platform that speeds creation of custom solutions that run on iPad, iPhone, Windows, Mac and the web. FileMaker 14 brings point-and-click simplicity to automating business processes, delivering desktop-style application functionality to mobile web browsers and providing productive, engaging experiences on desktops, iOS devices and mobile web browsers.

The announcement coincides with the 30th anniversary of FileMaker software. FileMaker was the brainchild of a bootstrapped startup founded in Massachusetts by four entrepreneurs intent on creating easy-to-use database software. Today it is owned by Apple, but run as an independent company.

"Every society honors its live conformists and its dead troublemakers."

*Mignon McLaughlin*

*[Guess my target ... I'll be dead longer than I am alive! - Ed]*

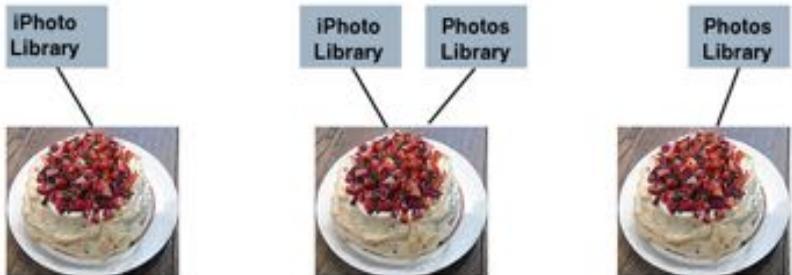
# Photos for OS X

A correction to last month's note has come to light. Please read on.

Apple was worried that people wouldn't upgrade to Photos if they had to essentially duplicate their iPhoto library while converting it to Photos. Do you have enough room on your hard drive to make a copy of your iPhoto library? Most people probably don't.

So instead, Apple uses a clever technique called "hard links" to make your new Photos library. Essentially, the photos in your iPhoto library and your Photos library are using the same space on your drive. They're kind of like Finder aliases, but... different.

It's all complicated Unix nerdy stuff, but the short version is that Apple can migrate your library from iPhoto to Photos without taking up much extra space on your hard drive. All the media files belong equally to *both* libraries. If you delete your iPhoto library, the photos don't go anywhere, because they're still part of the Photos library. It's a weird concept, but the most important thing to remember is that you can migrate a 50 GB iPhoto library to Photos without needing 50 GB of free space on your hard drive.



This clever trick is only used while migrating your iPhotos Library - once that is complete, when you add new photos to either your iPhoto library or the new Photos library, they will only be added to that particular library - they will not be visible in both libraries. You want to ensure that you only use your new Photos library, and I recommend backing up and removing your iPhotos library - to prevent accidents. Just as when you created the Photos library you didn't need much spare disk space, when you delete your old iPhotos Library, you won't suddenly get lots of available disk - it is still being used by the photos, now in the Photos library.

## Uploading Issues

If you've felt like your Internet connection has grown sluggish since you started using Photos, it may not be your service provider! The iCloud Photo Library can be quite a bandwidth hog. Even when Photos is not running, your Mac will continue to upload photos to iCloud. If you're

seeing Internet slowdowns, open Photos, open the Preferences window, click to the iCloud tab and click the *Pause For One Day* button.

If your Internet situation improves immediately, consider leaving your Mac on overnight and clicking the *Resume* button before you go to bed, letting Photos do its job overnight when nobody in your house is using the Internet.

## **Merging iPhoto Libraries**

There are a few options. If you're committed to using iCloud Photo Library, you can pour all your libraries into it one by one, and in the end you'll have one big library. (If you've got a large library like mine, prepare to pay Apple for the privilege—US\$10 per month for 500GB of storage, or US\$20 per month for 1TB.)

Photos will only sync one library, designated as the System Photo Library, with iCloud. So to sync multiple libraries together, you need to upload them in turn. Once your first library has uploaded to iCloud—you can check in the iCloud tab in Photos' Preferences window to see if it's done syncing—launch Photos with the Option key held down and you'll be able to open a different photo library. Once that library's open, open the Preferences window and in the General tab, click the *Use as System Photo Library* button. Then switch to the iCloud tab and be sure iCloud Photo Library is turned on. (To save time, set Photos to *Optimize Mac Storage*—that way it won't attempt to download all of the photos you just uploaded from the other library.)

Keep repeating this approach until all your libraries are in iCloud. Then if you want, you can choose the Download Originals to this Mac preference and create a single library on your hard drive that contains all the images from all your libraries. (Or you can keep the setting to Optimize Mac Storage and put your faith in iCloud.)

If you're trying to merge libraries on different Macs, this is even easier—log all the Macs in to the same iCloud account and have them all sync their libraries. The end result will be a single, merged library.

If you're not riding the iCloud train, then you'll need some help. Fat Cat Software makes a helpful \$30 utility called iPhoto Library Manager (<http://www.fatcatsoftware.com/iplm/>) that lets you merge iPhoto libraries in advance of importing them into Photos.

If you've got a copy of Aperture, which supports importing of iPhoto libraries, you can use that to build a master library. In Aperture 3.3 or later, choose Switch to Library: Other/New, pick an iPhoto library, then choose File: Import: Library and keep importing new libraries until you're happy. Then you can import your newly created Aperture library directly into Photos.

## Automating Photos

Photos does have some basic scripting support, but it doesn't come with any Automator actions. Automator can be an extremely useful utility for Mac users who want to automate tasks. Apple provides Automator actions for iPhoto and Aperture, but sadly not Photos!

Fortunately, the good people at Mac OS X Automation have come through with a package of Photos-related Automator actions:

**<https://photosautomation.com>**.

Their Automator action collection adds support for:

- Getting the current selection
- Picking an image
- Getting the contents of an album
- Adding content to an album
- Importing items
- Importing items from a tethered camera
- Exporting items to disk
- Exporting items to Keynote
- Displaying an image's location in Maps
- Playing slideshows

Unfortunately, Photos doesn't support editing images in an external editor yet, but using Automator you could simplify the exporting of an image, modifying it outside of Photos, and importing that edited version as a new media item inside Photos. That's not quite the same as editing an image in place, but it's better than nothing.

## Geotagging photos

If you use a camera that doesn't have GPS capabilities, you may have used iPhoto to add map data to the images you took. Unfortunately, while Photos will display location data, it doesn't allow you to edit it.

If you want to add location data to all of your nonGPS photos, you'll need to import the images directly onto your Mac. I recommend Image Capture, a utility that's made by Apple and appears on every Mac. Import all your photos to a folder, and then use a geotagging utility to add map data.

There are a bunch of different geotagging apps out there. *Photo GeoTag* (App Store), *Geotag Photos* (<http://www.geotagphotos.net/>), and *HoudahGeo* (<http://www.houdah.com/houdahGeo/>) will do the job. Most of these utilities let you use an app on your iPhone (or a dedicated GPS tracker) to record your location while you're shooting, and then transfer that location to your pictures by syncing up the tracking information with the time stamp on your image files. It's pretty clever.

Once you've added map data to your photos, you can just import those files directly into Photos, and the app will understand and display their proper geotag information.

# Special offers

*Peter Fitchett*

**Note: These specials are available to all user group members. Contact Peter (web@appleusers.co.nz) for access or coupon codes.**

## **Micromat - makers of TechTools Pro**

Micromat, leaders in diagnostic maintenance and repair for Mac, is offering a 20% discount to all Apple user group members.

This offer is ongoing.

## **Plum Amazing**

Plum Amazing, LLC is a U.S.-based (but international) company specializing in iPhone, mobile, Mac, and other software applications. Prices for Plum Amazing software range from \$7-\$30 (US). A coupon code gives Apple user group members 30% off all of these products.

This offer is valid through **December 31, 2015**.

## **Prosoft Engineering**

Prosoft is the award-winning leader for data loss prevention and recovery. As long-time user group supporters, they value the feedback and support that they have received from the Apple User Group members worldwide. They are offering a 25% off list price to user group members.

This offer is ongoing while supplies last.

## **O'Reilly**

Get 40% off books from O'Reilly, Microsoft Press, No Starch, Paraglyph, PC Publishing, Pragmatic Bookshelf, Rocky Nook, SitePoint, or YoungJin books and 50% off ebooks you purchase directly from O'Reilly.

This offer is ongoing.

## **EverWeb by RAGE**

EverWeb is an easy to use drag-and-drop website builder. No coding, and no web building experience is required to get your beautiful website up and running. If you have ever used Apple's now discontinued iWeb, your transition to EverWeb will be a breeze. EverWeb's user interface, and most of its functionality, is very similar to iWeb. Build a website either from scratch using a blank canvas, or modify one of the many professionally designed built-in templates.

Apple user group members can purchase this at 50% off.

This offer is valid through **December 31, 2015**.

**Note: These specials are available to all user group members. Contact Peter (web@appleusers.co.nz) for access or coupon codes.**

# Share Your Mac's Screen

Part of the beauty of buying a Mac is that it will mostly live up to Apple's classic mantra: "It just works." (At least when compared to systems running Windows, that is. Or when you're trying to set up the new MacBook.) But what happens when it no longer does?

That's generally when the tech support emails or phone calls from family and friends begin pouring in. After all, as loyal Apple users, we practically insist our loved ones also buy Macs, effectively turning us into unpaid Geniuses at the first sign of trouble.

This may not be a problem if the afflicted Mac was in the next room, down the street, or even across town, but what happens when it's located too far away to drive over and offer assistance in person? That's where screen sharing comes to the rescue, offering a remote helping hand from hundreds or even thousands of miles away.

## Screens

*Screens* is a virtual network computing (VNC) solution available for OS X and iOS. With support for clipboards, multiple displays, and a customizable toolbar, *Screens* is the next best thing to actually sitting in front of a distant computer.



Best of all, developer Edovia offers a free *Screens Express* utility designed to allow temporary access to any Mac running OS X 10.8 Mountain Lion or later through a shareable link, making it perfect for impromptu tech support calls from loved ones.

*Screens 3* is the closest thing you can get to sitting in front of a remote Mac, but you'll pay for the privilege.

To get started, point the owner of the ailing Mac to the Edovia website (<http://edovia.com/screens/>) and have them download the latest version. Once installed, *Screens Express* will verify that the router is set up properly, and if not, it will go through the process of opening a public port capable of serving up the necessary incoming remote connection.

The remote user will need their administrator username and password to allow such configuration to take place, so be prepared for at least one phone call prior to being able to log in. (Edovia also has an extensive Troubleshooting section on its website for tough cases where UPnP or NAT port mapping is disabled or unavailable, including a Google search form tuned to specific router brands and models.)

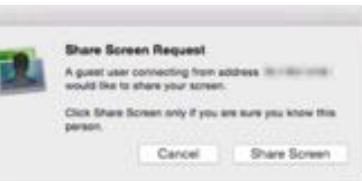
## Making the connection

Once *Screens Express* is actually running, the remote user will see a green dot and the words “Configuration successful,” along with a button to share a link to the Mac in question. Clicking this button opens the built-in Share options, which include Mail, Messages, Twitter, Facebook, and any other services configured on that system.



Email and text messages are the most direct of the available options, so have the remote user send one to you, and then click or tap that link to open *Screens* at your end and initiate the connection.

The remote user will need to authenticate the connection by clicking the Share Screen button that pops up, and within a moment, their screen should appear on your Mac or iOS device.



The beauty of *Screens Express* is that the remote user remains in full control of the experience: They can close the connection at their end, or choose to create a new link whenever the utility is launched for extra security.

Although *Screens* is one of the fastest and easiest ways to get connected, there are a couple of potential downsides. For one, the Mac and iOS apps are not cheap (US\$30 and \$20, respectively). Also, the remote Mac will need to be of fairly recent vintage—this tip won’t do much good for anyone still rocking an older Mac running OS X 10.7 Lion or earlier.

## The free option

If you can get by with a less elegant (and therefore less expensive) screen sharing option, there’s another tool for the job and it won’t cost a dime—at least for noncommercial use, which is you.

*TeamViewer* is actually equivalent to a Swiss Army knife for remote support, offering screen sharing as well



as the ability to video chat, share presentations, and transfer files between systems. Best of all, the software requires no login—*TeamViewer* connects using nothing more than a nine-digit ID code and randomly generated password.

To begin, download and install the full version of *TeamViewer* on your own Mac first (<https://www.teamviewer.com/en/index.aspx>), then



instruct your family member to do the same for the *TeamViewer QuickSupport* version, a stripped-down edition optimized for instant support and minimum fuss. Have them make note of the unique ID and password, then you enter those credentials under the “Control Remote Computer” section of your own installation, making sure the Remote Control option is selected.

*TeamViewer* may not be a glamorous option, but it definitely gets the job done in a pinch, and works great with older Macs. The company even maintains download links for previous versions,

which allowed us to connect to an early 2005 Power Mac G5 stuck on Mac OS X Leopard 10.5.8—just the kind of trustworthy relic a longtime Mac user might pass down to a family member.

### When all else fails

As great as *Screens* or *TeamViewer* may be, software-based options won’t do a thing to help in cases where the Mac in question refuses to start or is having other hardware-related issues.

If your distant relative has the same good taste in Apple products you do, chances are they have also have an iPhone, iPad, or even iPod touch lying around—and if they do, **FaceTime** makes a pretty great down-and-dirty tech support system, using iPhone, iPad, iPod touch or an old Macbook with camera. (Skype, etc. with video chat will also work.)

Make a *FaceTime* connection the usual way, have your family member point the camera in the general direction of the troubled Mac. Hopefully they can hold the device steady and close enough to make the screen readable at your end.

### Other

Of course, these are not the only solutions; *iChat/Messages* on pre-Yosemite systems has screen sharing using a third-party server such as AIM, Jabber, or Google accounts. (If both computers are using Yosemite, you don’t need the third-party account.) Alternatively, you can use **Back to my Mac** with a shared iCloud account. VNC is already built into MacOS X, see **Screen Sharing** in the Sharing panel of *System Preferences*. Add to that the free **ScreenSharingMenulet** and go to it.

Non-Apple alternate solutions are also available using **Skype**, **Join.Me** (from LogMeIn), and Google’s **Chrome Remote Desktop** ... among others.

**One last word of advice:** If you’re helping a loved one purchase and set up a new computer, install the necessary client software for remote access at the same time! You’ll thank yourself when the inevitable first late-night support call comes through.

# Solid State Disks



It is solid, but it doesn't look like a disk; and you will find it everywhere from the high-performance replacement of the mechanical computer hard disk, to the storage in your iPhone, iPad and iPod.

If you have one of these, and you don't use it for a while, you may be advised to back it up ... to a mechanical hard disk!

New research shows that solid state drives can lose data over time if they aren't powered on, especially in warmer environments. A powered-off SSD in 104°F may start seeing data loss after a couple of weeks.

A presentation from Seagate's Alvin Cox shows basic performance requirements for both consumer and enterprise SSDs. It notes that consumer SSDs, when powered-off in 86°F (30°C), should retain data for about a year. Bumping up the temperature by 9°F (5°C) reduces the time of data retention by half. Store your SSD in 131°F degree heat (in the sun in your car?), and it might start losing data after a couple of days.

In reality, there's probably not much risk to your primary computer unless you leave it in excessively high heat while you take an extended holiday, in which case you may have other problems to address. But as more devices come with solid state storage as the standard, you may end

up with some less-used devices whose data will deteriorate after a couple years' neglect. Consider this your routine

Power Off Temperature	55	1	1	2	2	3	5
	50	2	2	3	4	6	9
	45	4	4	5	7	10	17
	40	7	8	10	14	20	31
	35	14	16	20	26	38	61
	30	28	32	39	52	76	120
	25	58	65	79	105	155	244
25	30	35	40	45	50		
Active temp							

reminder to back things up—preferably to a mechanical hard drive!

# Around, About

*Peter Fitchett*

## **LinX Computational Imaging**

Apple recently acquired this Israeli company for US\$20 million. The LinX camera system is capturing images from more than one angle (effectively using multiple cameras), and also mapping the distance of every object and surface in the shot, it can do amazing things far beyond simply taking great photos. The LinX depth map can speed up and improve the quality of auto-focus. And if you don't like the image captured with auto-focus, you can refocus the image after it's been taken! You could replace or remove the background of not only a photo, but also a live video — in real time. It would work like a green screen, but no green screen would be required. Any background could be replaced... And we could be using it in the next iPhone - or Apple may have some other plans.

## **Heart Rate and Apple Watch**

Apple has posted the following information to explain how the heart rate is measured in the Apple Watch:

The average heart rate is 72 beats per minute (bpm). As you exercise, your muscles need more oxygen, and your heart beats faster to deliver it. During workouts, the heart rate sensor in Apple Watch measures your heart rate and displays it right on your wrist. You can also check your heart rate at any time using the Heart Rate Glance. And throughout the day, Apple Watch measures your heart rate every 10 minutes and stores it in the Health app. All this information, as well as other data it collects, helps Apple Watch estimate how many calories you've burned. And by checking your heart rate during workouts, you can see how both your intensity level and your heart rate change over time.

The heart rate sensor in Apple Watch uses what is known as photoplethysmography. This technology, while difficult to pronounce or spell, is based on a very simple fact: Blood is red because it reflects red light and absorbs green light. Apple Watch uses green LED lights paired with light-sensitive photodiodes to detect the amount of blood flowing through your wrist at any given moment. When your heart beats, the blood flow in your wrist — and the green light absorption — is greater. Between beats, it's less. By flashing its LED lights hundreds of times per second, Apple Watch can calculate the number of times the heart beats each minute — your heart rate.

The heart rate sensor can also use infrared light. This mode is what Apple Watch uses when it measures your heart rate every 10 minutes. However, if the infrared system isn't providing an adequate reading, Apple Watch switches to the green LEDs. In addition, the heart rate sensor is designed to compensate for low signal levels by increasing both LED brightness and sampling rate.

## Watson

Since blowing away the competition on television's Jeopardy! quiz show in 2011, IBM's Watson cognitive computing platform has been studying medicine at the IBM R&D center in Haifa. 'Watson went to medical school, and now it's set to graduate,' said Dr Aya Soffer, director of big data and cognitive analytics at the Israel facility. 'We've had it study the medical literature, and now it's ready to apply its natural language processing skills to real-life applications.'

Just in time, too. Last week, IBM announced the launch of Watson Health Cloud to 'provide a secure and open platform for physicians, researchers, insurers, and companies focused on health and wellness solutions'. The platform will be used by health companies Johnson and Johnson and Medtronic, as well as by Apple. The Mac maker has its own platform and hopes to become a top health company itself. It has established a new business unit, called Watson Health Cloud, to administer the big data apps that will use Watson's intelligent analysis and understanding of medical data.

Watson has a collection of APIs and SDKs that can be popped into apps, running on IBM's Bluemix platform as a service. The APIs will query the servers for the relevant data, and the Watson technology will put it into context, providing responses with insight and intelligent analysis. Given IBM's new partnership with Apple, some of those APIs are likely to end up integrated into apps that will be used with devices like the Apple Watch, to enable apps to put into context the data it collects.

## Apple Watch's S1 Chip

The S1 microprocessor inside the Apple Watch was roughly equivalent to the A5 chip inside the iPhone 4s, iPad mini, and iPad 2. But if you wanted even more detail on what makes the Apple Watch's chip tick, the silicon experts at Chipworks have posted an X-Ray look inside the S1 processor.

Taking an X-Ray to the Apple Watch, Chipworks identified some components - which we can ignore. What all of these technical details are will have to be worked out over time. What doesn't need to be worked out, though, is just how cool the Apple Watch looks under an X-Ray.



## Microsoft

Microsoft announced during its Build conference that it will release a tool for developers to port their iOS apps directly to Windows 10 as “universal apps” that run on both phones and desktop computers. Developers will be able to feed their existing Objective-C code into a new software package and have it converted to work on the upcoming PC operating system.

At least, that’s how Microsoft is pitching it, though the whole process is a bit more complex. Essentially Windows 10 will ship with APIs that mirror the expected behavior of many iOS APIs, and this new conversion tool will help developers swap out iOS code for matching Windows code.

Also relating to Microsoft, developer evangelist Jerry Nixon, *Windows 10* will be “**the last version of Windows**” as the company will be shifting away from big releases and focusing on continuous improvements to the venerable platform. Well, at least until *Windows 11*.

## YouTube Support

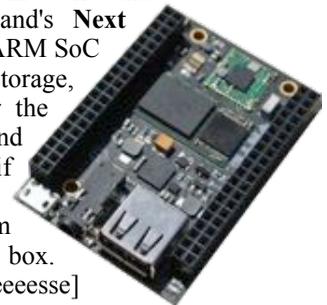
Did you buy a smart TV or set-top box or tablet any time before January 2013? Do you watch YouTube on it, perhaps through an app? Bad news: Google has shut down the feed that pushed content into the app. This includes iPad 2010 and many Sony, Samsung and Panasonic ‘smart’ TVs - sold as “the future”.

Google explains that this disconnect is because the API – the software interface – for remote access to YouTube has been updated from version 2 to version 3 (v1 was buried back in 2009). V3, launched in December 2012, offers more capability – though nothing that really matters to someone watching on an iPad or smart TV.

There’s now a new dimension to obsolescence. We usually fret about the hardware in our ‘smart’ devices becoming superannuated as the ever-increasing demands of the web, or whatever the internet throws up next, will leave our processor power wheezing. Now we have to worry also about software spigots being turned off.

## Not Apple

There's a new computer development board in town—and it's under US\$10! *C.H.I.P.*, from Oakland's **Next Thing Co.**, features a 1Ghz Allwinner R8 ARM SoC with 512MB of RAM, 4GB of eMMC storage, and built-in WiFi and Bluetooth; all for the amazing price of \$9. Of course, you'll spend an additional \$10 (VGA) or \$15 (HDMI) if you want high-resolution video, but as-is, it's an amazing price for a complete system capable of running Linux out of the box. [Apple, can we get a Mac for this price? Pleeessse]



## Coming, Ready or Not

Recently, Apple released results for fiscal Q2, and had an earnings call. There was a lot for the Apple investor to like in both the announcement and the call (they made lots of money, again!), but there was one small thing said that should have been a wake up call to investors, but was generally overlooked in the recent discussions.

Apple management does not say anything in an earnings call that it does not mean, and Cook is always meticulous about his wording.

So, the following two points are evident:

- Apple clearly has more products coming
- Apple strongly believes the stock will appreciate significantly over the next few years, and thus buying back shares at current prices will be a bargain for shareholders.

## Apple& IBM

With tablet sales declining, Apple and IBM are hoping to give iPad sales a boost by targeting senior citizens. Apple, IBM and Japan Post Group announced an initiative aimed at improving the quality of life for millions of Japanese senior citizens. The initiative will deliver iPads with IBM-developed apps and analytics to connect millions of seniors with services, health care, community and their families.

### And finally, nothing to do with computers:

"I knew a guy who was so lazy that he married a pregnant woman."

*anon*

"Look for the opportunities in the difficulties,  
not the difficulties in the opportunities."

*Victor Fiorelli*

"If you want to know your past - look into your present conditions.  
If you want to know your future - look into your present actions."

*Chinese Proverb*

## 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.

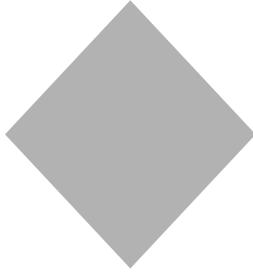
**Newsletter:** Supplied every two months.

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