mini'app'les
newsletter
the minnesota apple computer users' group, inc.

Website: http://www.miniapples.org	Forums: http://miniapples.7.forumer.com	Email: miniapples@mac.com

From the Editor:

The major announcement this month is the release of Mountain Lion, OS X 10.8. Looks like lots of new (and more iOS-like) features and a list of Mac computers that will not support Mountain Lion.

Tom Ostertag, Publications Director

Meeting Calendar

This information was compiled as this newsletter was being assembled and is subject to change. As always, confirm the Special Interest Group (SIG) date, time, and location with the SIG Leader or the mini'app'les website: www.miniapples.org.

Meeting Calendar – March 2012			
Thursday	March 1	7:00 pm	Mac Applications SIG
Tuesday	March 6	7:00 pm	Mac OS X SIG
Tuesday	March 13	7:00 pm	iOS SIG
Wednesday	March 14	7:00 pm	VectorWorks SIG*
Thursday	March 15	7:00 am	Mac Consultants SIG
Thursday	March 22	6:30 pm	FileMaker Pro SIG
Monday	April 2	6:30 pm	Mac Q&A SIG

Meeting Locations and Leaders		
Meeting	**Location**	**Leader**
Mac Applications SIG	Southdale Library, 7001 York Ave. S., Edina	Tim Drenk, 952-479-0891
Mac OS X SIG	Ridgedale Library, 12601 Ridgedale Drive, Minnetonka	Bob Demeules 763-559-1124
iOS SIG	Brookdale Library, 6125 Shingle Creek Parkway Brooklyn Center	Joel Gerdeen, 763-572-0148
VectorWorks SIG*	CJR Office, 4441 Claremore Dr., Edina	Charles Radloff, 952-941-1667
Mac Consultants SIG	Good Day Cafe, 5410 Wayzata Blvd., Golden Valley	Bob Demeules 763-559-1124
FileMaker Pro SIG	Erik's Bike Shop Corporate, 9201 Penn Ave S. #1, Bloomington	Steve Wilmes, 651-458-1513
Mac Q&A SIG	Merriam Park Library, 1831 Marshall Ave., St. Paul	Harry Lienke, qasig@miniapples.org
* This SIG is NOT sponsored by mini'app'les; the listing is provided as a service to members.		

TABLE OF CONTENTS

mini'app'les Annual Meeting
by Jeff Berg

The mini'app'les Annual Meeting was held at the Penn Lake Library in Bloomington on Saturday, February 18. The meeting began promptly at 1:05, kicked off with a welcome and a brief overview of the "state of the club" from President Tim Drenk and Vice President Jeff Berg. The emphasis for the coming year is going to be on improving club communications including an upcoming move to new mailing lists that you'll be hearing more about in coming months. We're also looking for ways to expand and grow, while continuing to serve the current membership. All members should take note that we're accepting feedback and ideas. If you can't attend a board meeting, please feel free to contact Tim or Jeff with your suggestions and comments.

David Dole, a long-time resident of Friendship Village, spoke briefly about the history of the Friendship Village PC Group and thanked mini'app'les for it's support in forming a Macintosh Group. We've gained ten new, active, members from Friendship Village since their Mac group got off the ground and we are looking forward to adding to that total in the coming months. Tim and Jeff both spoke of the positive experience they've had leading that group and encourage members who have something to share—like scrapbooking—to step forward.

Terra Knoble, a member of our club and the Resident Pixie for Splasm Software gave demos of two of their products. CheckBook Pro is a simple Quicken alternative for those who need a simple accounts register without the complication of online stock tracking. Audiobook Builder makes it fast and easy to convert audiobook CDs, or any audio files on your Mac into audiobook files for iTunes or your iPod.

Following Terra's demonstration we got down to business. The reading of the treasurers report was waived. There were no additional nominations for club officers from the floor and nominations were closed. The following is a list of nominees:

President	Tim Drenk
Vice President	Jeff Berg
Secretary	Joel Gerdeen
Treasurer	Bob Demeules
Membership Director	Mike Bertrand
Publications Director	Tom Ostertag
SIG Director	Kevin Strysik
Director at Large	Bruce Thompson

You'll be receiving instructions for the online election shortly.

The official business was concluded in record time, and we were able to spend the balance of the afternoon holding an open discussion about the

newly announced OS X 10.8 Mountain Lion and answering varied questions from the floor.

---

iOS SIG Meeting • 14 February 2012
by Joel Gerdeen

The monthly iOS SIG meeting was held at 7 pm on Tuesday, February 14 at the Brookdale Library. This SIG focuses on iOS devices such as iPhones, iPad and iPod Touches. We discussed some of our favorite apps that run on iOS. There was no formal Keynote presentation but just live demos.

Tim Tierney started the meeting with a demo of Evernote and its companion app, Skitch, both of which have iOS and OSX versions. Tim demonstrated both apps on his MacBook before showing the equivalent capabilities on his iPad with integration through the Evernote server. Evernote is a very capable application for managing notes, documents and multimedia. Skitch is a graphics program for simple diagrams and picture markup. The OSX versions are more mature and advanced than the iOS versions. Both apps are free on both iOS and OSX. Evernote Premium for $45 per year adds additional capabilities and storage.

Joel Gerdeen demonstrated a new Twitter app named TweetBot. While TweetBot has many capabilities, two unique features were demonstrated. The first is the display of thumbnails in the timeline listing of tweets. Rather than just seeing a cryptic link to a picture, a small thumbnail version is shown. Touch the thumbnail to see a larger version. The second unique feature is the inclusion of Readability for displaying the main text of a web page, similar to the Reader capability of Safari. If you touch a URL in a Tweet, the built-in web browser will display the main text of the page void of all the headers, extraneous graphics and ads. You can switch to display the full web page if you wish. There are also many other standard capabilities. While this app

costs $2.99, it is worth the cost in time savings if you use Twitter regularly.

The meeting continued with some discussion of the library wifi network and its configuration.

The next meeting is planned for Tuesday, March 13 at 7:00 PM at the Brookdale Library, Rooms A & B, 6125 Shingle Creek Parkway, Brooklyn Center, MN 55430. **Note that this meeting location is a change from previous meetings.** The meeting will continue discussion of favorite apps. For those interested, the meeting will continue afterwards at the nearby Denny's restaurant.

---

mini'app'les at Friendship Village
By Tim Drenk

For the past 4 months, Jeff Berg and I have been teaching a Mac computer class at Friendship Village of Bloomington, (FVB) a senior retirement community. A PC computer class has been taught there for quite some time, but nothing specific for Macintosh users. David Dole, a 23 year resident at FVB, contacted me and asked if we would be interested in teaching FVB residents who own Macs how to use their computers. After a few meetings to work out the schedule and logistics, we had our first class in November.

Each class has been geared toward the interests of this community. We have covered some of the basic functions of Mac OS X Lion and looked back to older versions of Mac OS X as needed. We have walked through some of the functions of word processing and being sure important information is backed up. There is also definite interest in looking at what's new, so I demonstrated Siri on an iPhone 4S.

Last month, a StarTribune reporter was writing a story on seniors using technology. She was in contact with David Dole and he invited her to the Mac class at FVB. She interviewed those attending and wrote an article that appeared in the StarTribune on Feb 1. You can read it at

http://www.startribune.com/lifestyle/goodlife/138394464.html

This has been an enjoyable experience for Jeff and I as we have gotten to know those who attend the class. And the FVB residents have told us that they are enjoying learning new things about their Macs.

MacApps SIG Meeting Report – February 2, 2012

By Tim Drenk

We covered a number of Mail plug-ins this month. The purpose of a plug-in is to add or extend the function of the program with which it works. So the purpose of these Mail plug-ins to make using the built-in Mail app easier or more efficient. Here are a few of them:

MailRecent

(http://www.cs.unc.edu/~welch/MailRecent/) Free; 1.3.3 for 10.7, 1.2.4 for 10.6, 1.1 for 10.5, 1.0.4 for 10.4

MailRecent adds "Copy to Recent," "Move to Recent," and "Go to Recent" menu items to Mail's contextual menu. These menu items contain dynamically-updated lists of recently used mailboxes. The number of mailboxes kept in the list is determined by the "Number of Recent Items" setting for Documents in the Appearance panel of the OS X System Preferences.

As you drag or option-drag a message to a mailbox or use Mail's built-in "Move To" or "Copy To" menus to move a message to a mailbox, that mailbox should then appear under "Copy to Recent" and "Move to Recent" submenus under the "Messages" menu, and a "Go to Recent" submenu under the "Mailboxes" menu.

Mail Act-On 2.2.3

(http://www.indev.ca) $25 from Indev Software; PPC / Intel, Mac OS X 10.6 or later

Mail Act-On allows for more complex rules and rules or actions that can be trigger by keystrokes. A single keystroke will activate Mail Act-On's interface which gives the option to move emails to any folder available. Multiple messages can be acted upon at the same time. Depending on the settings of a particular rule, a single keystroke can send multiple messages to different locations based on the characteristics of each message.

The built-in rules are applied automatically or not at all. Using Mail Act-On, because actions can be started by a keystroke, rules can be applied after the email has been viewed. In addition, rules can be applied to messages in any folder, not just the Inbox, as with the built-in rules. There is even an undo if you need it.

TNEF's Enough 3.1

(http://www.joshjacob.com/mac-development/tnef.php) Free; Intel, Mac OS X 10.6 or later; 2.2 for 10.5-10.6, PPC/Intel; 2.0 for 10.4 and earlier, PPC

Occasionally, you might receive an email with a winmail.dat file instead of the attachments sent. That file is created by Microsoft Outlook or Microsoft Exchange Server and Mail is unable to decode it. That is where TNEF's Enough comes in (TNEF is the technical acronym for this type of file). TNEF's Enough extracts all the contents of the file so you can use the files that are being sent. You need to save the winmail.dat file and then open it with TNEF's Enough. A folder is created with whatever was sent. The downside to TNEF's Enough is that it is not a plug-in, but a standalone app and requires extra steps to use it.

Letter Opener 4.0.2

(http;//www.creativeinaustria.com) $30 from Creative In Austria; Intel, Mac OS X 10.5 or later

Letter Opener is Mail plug-in that performs the same function as TNEF's Enough. Letter Opener automatically decodes winmail.dat files so the attachments appear as they normally do directly in Mail. If you get a winmail.dat only on occasion, the extra steps needed to use the free TNEF's Enough

are not a big deal. If you get winmail.dat files regularly, Letter Opener's cost of $30 may well be worth it for Letter Opener to transparently handle them.

Creative in Austria does have a Lite version of Letter Opener for $6 in the MacApp store. It is a standalone app, however, and doesn't really offer any additional features over TNEF's Enough.

OS X 10.8 Mountain Lion Stalks iOS
by [Rich Mogull](#)

Starting 16 February 2012, Apple has made available a developer preview of [OS X 10.8 Mountain Lion](#), announcing plans to release the new operating system version this summer (or winter, for our friends in the Southern hemisphere), and dropping the word "Mac" from the name in the process.

This upgrade from 10.7 Lion to 10.8 Mountain Lion isn't meant to be a major overhaul like the one we saw moving from 10.6 Snow Leopard to 10.7 Lion. The core user experience remains largely the same, with a series of enhancements that build on the changes made in Lion. Since Mountain Lion is only in pre-release you shouldn't take this article as a review. Not all of the features were enabled on the demonstration system provided to me by Apple, and much is likely to change before it's released to the public.

Living in the iCloud -- Mountain Lion unifies the experience between iOS and the Mac while still maintaining those differences that are important to each platform. Notably, [iCloud](#) becomes the glue of the Apple ecosystem, playing a stronger role than we've seen before. For example, the first time you set up a user account, Mountain Lion prompts you for iCloud credentials and loads all your information and even Mac App Store purchases (unless you use a different Apple ID for iCloud and the Mac App Store). In a nice return to the days of MobileMe, you can even synchronize your Mail, Contacts, and

Calendar accounts if they have been configured on another Mountain Lion-using Mac connected to your iCloud account. (Oh, and iCal and Address Book have been renamed to match iOS, so they're now Calendars and Contacts.)

iCloud's Documents in the Cloud service gains several enhancements. For example, in a demo by Apple, I saw that as you edit a document on an iOS device, the updates are pushed immediately to a Mac version of the document even if it's open in the Mac application. And, Mountain Lion debuts a new Document Library where you can choose between iCloud documents and local files.

Mountain Lion also brings over more features from iOS, while tuning them to work better with a desktop operating system. While this includes some apps, the more-important changes are three new system-wide features: Notifications, Share Sheets, and Twitter.

Notification Center -- In the short time I've used Mountain Lion, I've found [Notification Center](#) to be highly useful, even if only a few applications support it. A notification is a brief message that appears onscreen, alerting you to something like a new incoming text message, a calendar event, or the next move in a multiplayer game. Fortunately, notifications are highly configurable, so you can control which aspects of your digital life become notifications. At the moment, Notification Center offers two types of notifications — banners that appear for a short time before disappearing, and alerts that stay until you click to close them or jump into the alerting application.

To see your notifications, you use a two-finger swipe from the edge of a trackpad or click the small notification icon located on the far right of the menu bar. Your Desktop slides a bit to the left to show a column of notifications in exactly the same style as the iOS Notification Center. It's an extremely intuitive action and nice for glancing at things like new email messages or calendar appointments.

Since Apple Mail is likely to be a heavy pusher of notifications, it gains a new Favorites mark so you can pick which contacts' messages trigger notifications. This is also used in Share Sheets, discussed below.

At first, I thought that bringing Notification Center to OS X would mean the end of the popular Growl notification tool, but the more I use Notification Center, the more I think that Growl retains an important role for those of us who need more flexibility in how notifications appear or advanced functions like sending notifications across computers.

As with most of the features I discuss in this article, Apple is supporting notifications with a new API for developers, so that developers can integrate notifications into their own programs.

Share Sheets -- Share Sheets adds a new button to supporting apps to "send" the current item to another application. This feature functions like the "Open In" feature in iOS, enabling you to share content directly between applications without cutting and pasting. (It's kind of a simplified Services menu item, and will hopefully see more use than Services.)

Share Sheets focuses on photos, videos, links, and documents, and it enables you to share to other applications and online services, and even send files directly to AirDrop. Share Sheets are context-aware, so if you are sharing a note, you can send it to Mail or Messages, but not to iPhoto. For files in the Finder, you can share directly from Quick Look windows. And if you are on a Web page you can, with a few clicks, share the full page in an email message, or as a link in Twitter.

Did I mention Twitter?

Twitter, Safari, and Web Sharing -- As with iOS, Twitter is integrated deeply into Mountain Lion. Once you add your Twitter account in the updated Mail, Contacts, and Calendars preference pane, you can send content right to Twitter using Share Sheets.

See a Web page you like? You no longer need to cut and paste into your favorite Twitter application, but can instead send it directly from Safari. There's also integration with your contacts (though I have yet to figure out how that works). When you create a new tweet, an input window pops up in whatever application you are in (instead of switching to a Twitter app), and you can choose to reveal your location down to the city level.

Apple also added support for Flickr and Vimeo accounts for photo and video sharing, along with support for some of the most popular Chinese photo and video sharing services as part of a series of system-wide enhancements for Chinese Mac users, showing how seriously Apple takes that market.

Safari steals a cue from Google Chrome and finally moves to a single address bar for search and Web addresses. Typing into the address bar will either take you to an address or run a search on the search engine of your choice. When I migrated my user account from my regular Mac, it retained Bing as my preferred engine.

Notes and Reminders -- Two iOS apps, Notes and Reminders, make their Mac debut. Notes replaces Stickies and is fully iCloud-compatible. Aside from keeping your notes in sync across different devices, Notes on the Mac supports more formatting, embedded images, and even file attachments. Since

Stickies is gone, you can now "pin" a note to the Desktop. And yes, you can choose any font you want.

Since Notes on iOS doesn't yet support this additional formatting, Apple "translates" the notes so they look appropriate on the smaller device. When I added an image, Notes didn't display it on my iPhone, but I did see an icon that indicated there was an attachment.

[Reminders](#) also comes to the Mac and maintains nearly the same features as on iOS, minus location-based reminders. Both Notes and Reminders can work with CalDAV to support services other than iCloud.

Unified Messaging -- Goodbye iChat, hello [Messages](#)! According to Apple, over 100 million Messages users have sent 26 billion messages using iMessage on iOS. Messages completely overhauls iChat and unifies it with the FaceTime video chat app and the Messages text messaging app on iOS. And [Messages is now available in beta](#) for Lion users.

Aside from the visual improvements, Messages now completely supports iMessage messages on the Mac.

This is unified with your other devices, so if someone sends a message to any of your iMessage email addresses, it will appear on all devices at once. Messages sent directly to your phone number, and not to an email address, appear only on your iPhone. You can send any attachment up to 100 MB, including video. All messages are encrypted from end-to-end.

Messages also supports group messaging, plus all the features of iChat. I was a bit worried that Screen Sharing would be gone (since that's the only way I can keep certain family members online), but fortunately it's still there.

Of all the changes, Messages hammered home to me the power of bouncing between devices without having to think about it. In one day, I tested it across my iPhone, iPad, and Mac, all without caring what was on or off, which app was open or closed. I merely moved from device to device while maintaining a continual conversation. It doesn't matter if someone is on an iPhone or a Mac — I can message them, FaceTime them, and exchange files. That's just a small example of the power of the cloud.

Gaming Gets a Power Up -- One of the most compelling demonstrations during Apple's briefing was watching a head-to-head real-time race in Real Racing 2, with one user on a Mac, the other on an iPad, and the Mac streaming to a high-definition television.

Mountain Lion brings the iOS Game Center to the Mac. Aside from its social features, like finding friends and leaderboards, [Game Center](#) adds voice chat, status synchronization, notifications, and cross-

platform multiplayer gaming. If your game supports it, you can hop off your iPhone and onto your Mac and pick up right where you left off.

And while it isn't limited to gaming, the new [AirPlay Mirroring](#) in Mountain Lion means you can blast your achievements onto the big screen in 720p high definition. When sending to an Apple TV, AirPlay Mirroring will match your Mac's display resolution, or you can set your Mac's resolution to match the TV. (I was unable to test this, as AirPlay Mirroring informed me that my Apple TV wasn't running the right software version.)

As a professional speaker, I find AirPlay Mirroring from a Mac to a TV interesting, but I would rather send from my iOS device to my Mac, which I would then connect to a conference projector. Then I could wander the stage while writing notes and drawing diagrams from the iPad onto the big screen.

Gatekeeper -- Gatekeeper is a significant advance in the history of Mac security. Admittedly, I'm somewhat biased since security is my day job.

Nothing can prevent malware from being written, but Gatekeeper should ensure that we never see a

Mac malware epidemic. It limits the kind of *downloaded* applications that will run on your Mac. It's an extension of the File Quarantine feature first introduced in 10.5 Leopard, and it enables you to limit applications to those that come from the Mac App Store, or a combination of the Mac App Store and identified developers who sign their applications with a digital certificate issued by Apple. For Mac users who want to avoid Trojan horses and other malicious downloads, Gatekeeper is a compelling security option. I've written a detailed description of Gatekeeper in "[Gatekeeper Slams the Door on Mac Malware Epidemics](#)" (16 February 2012).

The Future is the (i)Cloud -- Although a lot of the early coverage of Mountain Lion will focus on the influence of iOS on OS X, the real story is the growing role of iCloud. iCloud is the glue holding the Apple ecosystem together. Increasingly, Mac users' settings, data, and communications are stored and managed in iCloud. In "[The Future Is Disposable](#)" (24 June 2011), I wrote:

> Many vendors offer tools to host files and backups in the cloud, but Apple is taking iCloud in a totally different direction. Within Apple's ecosystem the cloud becomes the center of everything — your apps, your data, and your settings. It won't be done by file synchronization that extends our current model of computing, but by baking the concept of cloud access into everything we do at a fundamental level. Our devices finally become tools, not roach motels where the bits check in, but never check out.

> If Apple pulls this off it will be one of the most ambitious leaps in the history of consumer technology. Just as the Mac changed desktop computing, the iPod changed the way we listen to music, and the iPhone transformed the mobile phone into something from science fiction, the overlap of iCloud, Lion, and iOS could change everything we know about personal computing.

Mountain Lion is the clearest indication yet that Apple shares this vision. If they succeed, how we use our computers, tablets, phones, and perhaps even televisions will never be the same.

Gatekeeper Slams the Door on Mac Malware Epidemics

by Rich Mogull

There are three ways to attack a computer — gain physical access, hit it over the network, or trick the user into running something they shouldn't. Macs are reasonably well protected against two of the three.

If you use a strong password and encrypt your hard disk using FileVault, only a sophisticated attacker can get in. Up-to-date Macs are reasonably secure against direct network attacks, and when vulnerabilities do crop up, a combination of anti-exploitation features makes it a lot harder for the bad guys (at least on Mac OS X 10.7 Lion). So for physical and network attacks, we Mac users are in pretty good shape.

But the third kind of attack? Well that's a bit of a problem, since we humans, even the most paranoid of us, can fall prey to trickery. It's a problem we haven't had very good solutions for... until now.

OS X 10.8 Mountain Lion includes a transformative security technology called Gatekeeper. It's a major new advance in operating system security designed to reduce dramatically the ability of an attacker to trick users into installing malicious software. It could be the key to preventing a future malware epidemic.

We Are the Weakest Link -- I used to tell people they were safe as long as they stayed out of the shadowy neighborhoods of the Internet, but danger is everywhere these days. Attackers know that even the most paranoid of us can't identify every possible threat, and they use sophisticated techniques to trick us into running malicious software on our computers.

We haven't had a lot of good ways to protect ourselves from nasty downloads. Both Mac OS X and Windows maintain blacklists of known malware and throw up warnings in our browsers in an attempt to prevent us from downloading dangerous things, or at least to alert us when we do. Third-party antivirus tools extend the blacklist approach as far as is reasonable, with vast libraries of bad things to block, but that race is one that the good guys can never win, given that there are now tens of thousands (really!) of new malicious software variants appearing every day.

In fact, there are so many new bad pieces of software appearing daily that most enterprise-level antivirus vendors are taking the opposite approach and offering whitelist tools that allow *only* approved software to run, thus locking down desktops tighter than a supermax prison. That can work in a business environment, but it's totally unrealistic for home users.

After all, the rest of us install software all the time, from all sorts of places. We download it from trusted sources like the Mac App Store and our favorite vendors, but many of us still sometimes grab tools from unfamiliar locations. Even when we try to download only from trusted locations, the bad guys have become masterful at deceiving us into running software that we sometimes don't even know is a program.

This is why iOS has so many fewer security problems than Android or any general-purpose operating system. Users can download apps *only* from the App Store (without jailbreaking, of course, which itself requires exploitation of security vulnerabilities). Those apps are locked into their own private sandboxes and given at least a cursory review by Apple. The system isn't perfect (notably due to the impact the approval process has on the overwhelming majority of developers who are legitimate), but has so far prevented any widespread malicious software. Thanks to its more-open model, Android suffers far more security attacks (researchers recently discovered an Android-based botnet comprising more than 100,000 devices). Some Android and Symbian users now install antivirus software on their phones.

The Mac App Store provides an iOS-like experience for Mac users in terms of safety, albeit with fewer application restrictions. Software is reviewed and is easy to revoke should something slip through. Starting 1 March 2012, all new apps must be sandboxed to reduce the damage they can do to your

Mac if they are malicious or introduce a new security vulnerability. But while the Mac App Store is far safer source than the big bad Internet, there's nothing to stop us from installing software from other locations, as there is on iOS. And considering all the Mac App Store restrictions, we'll likely never see a day where we want Apple as the final arbiter for *all* software we run on our Macs.

That's where Gatekeeper comes in.

Gatekeeper Changes the Game -- [Gatekeeper](#) is a new feature of OS X 10.8 Mountain Lion that is designed to provide Macs with the security of iOS, while still accounting for the different ways we use Macs. Gatekeeper wraps together a string of technologies Apple began introducing over the past few versions of Mac OS X, the Mac App Store, and a new credential Apple will provide developers (for free).

You interact with Gatekeeper via a new setting in the Security pane of System Preferences that enables you to restrict what applications you allow to run, based on where you downloaded them from:

- **Mac App Store:** These applications are reviewed by Apple, use sandboxing (or will, by the time Mountain Lion is released), and the code is digitally signed so OS X can detect if it has been modified by malware.

- **Mac App Store and identified developers:** Beginning immediately, Apple will start issuing digital certificates to developers registered in the Apple Developer Program. Developers can use these certificates to sign

applications they distribute themselves. These applications aren't reviewed by Apple, but if malicious activity is detected Apple can revoke a certificate and block future installations from that developer.

- **Anywhere:** Full freedom to run whatever code you want.

No matter which of the three options you pick, you can manually allow any application to run. Apple has provided a well-designed user interface to prevent mistakes and mindless click-throughs, so it will probably be best to stick with the second option (Mac App Store and identified developers), and allow other applications to run only if you're absolutely certain they're safe.

For the first time, we have a tool built into OS X to protect us — at least those of us who want or need it — from ourselves. Gatekeeper dramatically reduces the likelihood of Mac users, particularly those who don't have the sophistication or knowledge necessary to make informed decisions, installing malicious applications.

To provide complete coverage, Gatekeeper combines lightweight whitelisting, a smidgen of anti-malware blacklisting, and two options for how software can be trusted. Let's look at each of these in turn.

How Gatekeeper Works -- Building on the File Quarantine feature first added in 10.5 Leopard, Gatekeeper checks every downloaded application before it runs for the first time. It allows applications to run only if they match your settings, haven't been tampered with (assuming they've been digitally signed), and are free of known malware on Apple's list.

This last bit is the smidgen of anti-malware blacklisting I mentioned; not much has changed here, but it makes sense for Apple to be able to identify the most prevalent and troublesome pieces of malware automatically.

Gatekeeper's whitelisting is the polar opposite of how most consumer-level antivirus tools work. Instead of trying to prevent problems using a blacklist of known bad things, whitelisting allows only those things that we have a reasonable assurance are good. In other words, Gatekeeper is a step in the direction of the draconian whitelisting

approach used by enterprise-level antivirus companies, but one that maintains the usability required by home users who shouldn't be restricted to a short list of accepted software.

And the key to whitelisting, which Apple can get away with more than any other operating system vendor, thanks to its tight controls on development, are the combination of a trusted software repository in the Mac App Store and identification of trusted developers via digital signatures.

At Gatekeeper's strictest setting, you can install downloaded applications only from the Mac App Store. These are the most trusted applications since they have been manually reviewed by Apple, implement sandboxing, and use code signing. That doesn't mean something bad can't slip through the cracks, but if it does, the odds are high it will be detected, reported to Apple, and pulled from the Mac App Store. The app will still be on your system, although Apple could potentially clean it out with a security update as they did for MacDefender last year (see "Security Update 2011-003 Addresses MacDefender Malware," 31 May 2011).

In the middle setting, you can also install applications from identified developers. This code isn't reviewed or sandboxed, but it *is* code-signed to eliminate the possibility of tampering after the fact. Since Apple Developer IDs tie back to a registered member of the Apple Developer Program, there is also some attribution if a malicious application is issued, and, once it has been discovered, Apple can immediately blacklist that digital certificate to protect the rest of the user population. Again, I'm sure we will see someone game the system and issue malicious applications, but the chances of this happening *at scale* are much lower than before. (Your local certificate blacklist is updated once a day.)

Finally, there's still a manual process to install whatever you want, whenever you want, no matter what you have set. These applications still undergo the malware blacklist check to help catch the most common bad stuff.

One of the most important aspects of Gatekeeper is its user interface. Once you pick a setting, you won't be plagued with alerts unless you try to install something that violates your settings. If you do try to install software from an untrusted source, the alert doesn't give you the option to click through and install it anyway. Clicking without reading (or understanding an alert) is a serious security design flaw, so eliminating that option dramatically increases Gatekeeper's efficacy and value.

If you still want to install an application, you must Control-click it and manually enable it from a contextual menu. (Apple warned me that my test system uses a different workflow than the official preview release so I can't show you the exact process.)

Many of us assumed that Apple would some day offer an option to allow installation of only Mac App Store applications to improve the security of average users. When I talked with other press and security experts, I even said I was looking forward to the feature, especially for friends and family who rarely run complex software. However, such a requirement would hurt developers whose software simply can't meet Mac App Store sandboxing requirements, or who don't want to sell through the Mac App Store. The addition of the Developer ID option directly addresses that concern and provides a nice balance of flexibility and control.

There are still some areas where Gatekeeper doesn't help. It doesn't check applications on CDs or DVDs, USB drives, or other physical media attached to the Mac. It evaluates only *downloaded* applications. Also, Gatekeeper checks only complete executable applications, so it won't protect you from a malicious Flash game or Java applet that runs in your Web browser (although Macs ship with both disabled by default).

Why Gatekeeper Matters -- Right now the single biggest source of malicious software on Macs is Trojan horse programs. Even on current versions of Windows (Windows Vista and Windows 7), we see far fewer self-replicating viruses. Thanks to the anti-exploitation features we first saw in Windows and that have now become standard in Mac OS X, modern operating systems are far harder to exploit than even a few years ago. It happens, but it takes a lot more skill, and it's far easier to trick unsuspecting users instead.

As I wrote a year ago in "Apple's Security Past Defines Its Future" (27 January 2011), our biggest

security risk as consumers is the increasing sophistication of the techniques attackers use to trick us into hurting ourselves. While our operating system vendors can't do much to prevent us from emailing our financial data directly to the bad guys, or handing over our usernames and passwords to convincing fake Web sites, they can make it a lot harder for attackers to take over our computers.

That's where Gatekeeper comes in. While I'm sure attackers will figure out ways around it, or new ways to trick us into installing evil software, Gatekeeper makes it a heck of a lot harder for them to do anything widespread. Gatekeeper reduces attackers' ability to automate, increases the cost of attacks, and thus reduces their economic advantages (and believe me, the main reason malware still exists is because of the money that can be stolen or earned). We will still see malware, but Gatekeeper, in conjunction with the rest of OS X's security features, dramatically reduces the likelihood that we will see malware that affects more than a small number of users.

At some point, maybe even someday soon, someone will upload a malicious app to the Mac App Store or slip some nefarious app signed with a Developer ID onto the Internet and the media will froth and proclaim the end of innocence.

But it won't matter. Because every attack that ends up in the headlines is an attack thwarted. And behind the media furor we'll see a string of one-off stories, but no epidemic.

I've written up some more technical details on Gatekeeper at Securosis.com.

FileMaker Go Brings FileMaker Databases to iOS
by Steve McCabe

It's easy to forget that FileMaker, Inc., is a wholly owned subsidiary of Apple. The direct successor to Claris, FileMaker has, to a degree that saddens its main product's many dedicated users, become something of a red-headed stepchild within the Apple universe. In many ways, FileMaker (the database program) is an anomaly in that universe, a throwback to the days when Apple's software bore the Claris label.

Since 1998, Claris has been FileMaker, Inc., a company so utterly separate from its sole owner that one could easily be forgiven for imagining that the two companies have no connection at all. While you can find reference to FileMaker, Inc., at the Apple Web site if you search for it, it's not easy to find. In fact, only Bento, Filemaker's personal database, is available on the Mac App Store while its grown-up stablemates are not. And nowhere has the distance between the two corporations been more clear than on the iPhone.

When Apple unveiled the iOS App Store in 2008, FileMaker devotees were sure that Apple's very own purveyor of fine database software would be among the first to place products in the App Store. FileMaker, after all, wasn't a total stranger to the mobile market: FileMaker Mobile provided a solution to Palm and Pocket PC users as early as 2006. But it took the company two years after the opening of the App Store to release FileMaker Go in July 2010. I've been using it for some time, and wanted to share my impressions.

FileMaker Go for the iPhone is not an impulse purchase. At $19.99, it's not the cheapest app in the App Store, and it's not even the cheapest FileMaker client — FMTouch costs half that amount. And $19.99 gets you only the iPhone version — FileMaker Go for the iPad costs $39.99. (Note: This article focuses on the iPhone app, but the conceptual issues, if fewer of the screen size concerns, are the same.)

FileMaker Go is essentially a FileMaker thin client — data within FileMaker databases can be manipulated quite easily on the iPhone using the onscreen keyboard. You enter fields by tapping them; absent a Tab key, you move between fields by tapping the Next button. Buttons trigger scripts as they do on a desktop machine. Calculations, well, calculate. Overall, the software's functionality, once a database is open, is quite acceptable.

Where a FileMaker developer will find new challenges is in configuring a database for an iOS

device, and, in particular, an iPhone. While a desktop-based FileMaker solution can take advantage of relatively large expanses of screen, an iPhone held in portrait view has a limited available display area. FileMaker's design guidelines recommend limiting layouts to 312 pixels in width to avoid forcing users to zoom out in order to view an entire layout.

The small iPhone screen means less data is visible, and scrolling lists of related data presented in a portal can be viewed only with difficulty — the scrolling navigation cues that are comfortable on a desktop or laptop computer's screen don't scale well to the iPhone's screen. Therefore, layouts have to be designed carefully, and cunningly scripted sequences of forms become the most practical way of manipulating data. To help with that, FileMaker's Get(SystemPlatform) and Get(ApplicationVersion) script functions can be called to identify an instance of the database running on FileMaker Go, and the database can then be scripted to switch to a mobile-friendly layout. Compare the top (desktop FileMaker Pro) and bottom (FileMaker Go on the iPhone) screenshots below.
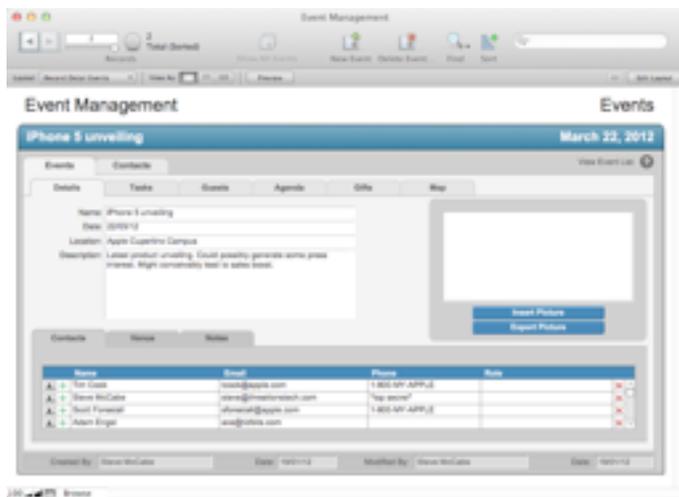
Data structures also need to be prepared quite thoroughly, because once a database has been loaded onto an iPhone, its database schema can't be changed there. Although records in any FileMaker table can be modified (if the user has the right access privileges), that is the extent to which FileMaker Go can interact with the data. Tables can't be added or deleted, nor can fields, and relationships between tables cannot be modified. Scripts can be run, but cannot be written or edited. Similarly, any layout can

be made accessible to the iPhone (although not all layouts will be suitable), but they cannot be modified on the iPhone.
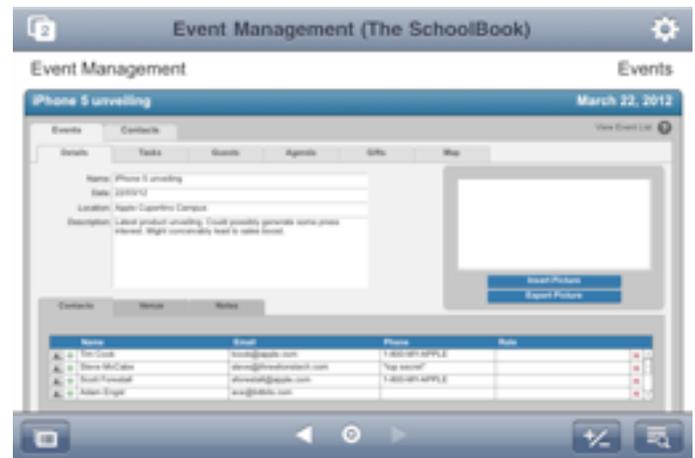
Databases, therefore, need to be prepared in FileMaker Pro on a desktop computer and then transferred to the iPhone via one of two methods. If a database is shared, either using FileMaker sharing under FileMaker Pro or via FileMaker Server, then FileMaker Go can access it in much the same way that a desktop version of FileMaker Pro would; that is, by using a file-browser interface on the iPhone that offers a list of all available files on a selected server. The major advantage of this method is instant updating — since FileMaker Go is interacting directly with the database on the server, updates made to the data with the iPhone app are automatically updated live on the server, and those updates are then reflected on any other clients that happen to have the database open.

FileMaker Go can access shared databases over a Wi-Fi or a cellular data connection. This means that a salesman on a sales call, for example, can check inventory or the status of an order from his iPhone — provided that he has a decent Internet connection and his company's database is shared over the Internet, of course.

Databases can also be synced to an iPhone via the Apps tab in iTunes. Databases installed this way reside entirely on the device, not on a server, and so changes made locally stay local until the file is copied back to the computer to which the device syncs.

Layout compromises aside, FileMaker Go does offer a couple of new opportunities for capturing data.

Container fields in FileMaker Go databases can contain the same variety of data as their desktop counterparts, but data entry becomes a little more interesting.

Tap a container in Browse mode and, in addition to the obvious Choose From Library option, two new data sources are available. Take Photo enables the user to take a photo — but not a video — with the iPhone's built-in camera (front or back, if it's an iPhone 4 or 4S), with a button offering a choice of full, large, medium or small file sizes and resolutions. A third choice, Get Signature, offers a plain white screen with a horizontal (in landscape mode) line labeled "Sign Here." Sign with your fingertip (or a stylus), and then tap either Clear to try again — it's not easy to sign legibly with your finger — or Accept to place your signature in the container field. Once a container field is filled, a tap on its contents reveals two additional options, Email and Open.

The ability to use fully scriptable databases on an iPhone offers interesting possibilities beyond simple database manipulation. There is a small degree to which FileMaker Go could be considered a development platform for iOS, offering developers, as it does, the capability to build rich and complex solutions that can then be ported to the iPhone simply by syncing, rather than having to develop from scratch using Objective-C.

Database-like applications have been available on the desktop for some time now, with FileMaker Pro Advanced, née Developer, having the capability to generate stand-alone applications encapsulating the functionality of a database. The significant difference with iOS devices is the fact that stand-alone solutions are not possible — you must be running FileMaker Go on your iPhone or iPad in order to access the database, but that's not a massive price to pay in order to develop, quickly and quite easily, a custom iOS "app." FileMaker claims they're apps; they're not, of course — they're documents. They're rich and complex documents, granted, but they're still documents.

Unlike Bento, the iOS versions of which are limited to sharing data only with Bento on the Mac, FileMaker Go is a solution many FileMaker users have been waiting for since the day Steve Jobs announced third-party apps on the iPhone. (For more about Bento, see the various articles TidBITS has published about the software.) Despite the inevitable layout and design compromises that the small size of the iPhone imposes on the FileMaker developer, FileMaker Go for the iPhone is a solid piece of software that integrates well with the existing FileMaker universe. Why Apple keeps it at arm's length remains a mystery.

[Steve McCabe is a Mac consultant, tech writer, and physics teacher in New Zealand. He writes about his adventures in New Zealand, he blogs about technology, and he has just finished rebuilding his personal Web site.]

Hot Links:

Compiled by *Tom Ostertag*

Apple, Inc.

There's a New Cat in Town | *World of Apple*

Mountain Lion surprise attack | *Infinite Loop*

Apple Settles Class Action Lawsuit Over iPhone 4 'Antennagate' | *Cult of Mac*

Tim Cook admits Apple may further converge iOS & OS X, Macs could run on ARM CPUs | *AppleInsider*

Apple sold more iOS devices in 2011 than total Macs in 28 years | *AppleInsider*

Mac Software

Mountain Lion may be able to scan a barcode, install an app | *TUAW*

Mac OS X 10.7.3 Fixes Bugs, Improves Lion Server | *TidBITS*

AirPort Utility 6.0 Screencast Walkthrough | *TidBITS*

Microsoft Office for iPad pictured, will soon be submitted to Apple's App Store | *AppleInsider*

Mountain Lion: What you need to know | *Macworld*

OS X Mountain Lion Limits Apps to Mac App Store, Signed Apps by Default | *MacRumors*

10.7 : Enable Recovery HD after restore from Time Capsule/File Vault 2. | *MacOSX Hints*

Mountain Lion: Developers React to OS X Mountain Lion | *The Mac Observer*

Apple bringing AirPlay Mirroring, Messages to OS X | *iLounge*

Growl developers respond to Mountain Lion's Notification Center | *Infinite Loop*

Hiss: Get Your Growl Alerts in Mountain Lion's Notification Center [Os X Mountain Lion] | *Gizmodo*

Apple unveils Mac OS X 10.8 Mountain Lion coming this summer with 100+ new features | *AppleInsider*

First Look: Messages for Mac | *AppleInsider*

Mountain Lion brings new iOS-like file handling, iCloud App Library features | *AppleInsider*

Mac Hardware

Older Macs Voted Off The Mountain Lion Island | *Infinite Loop*

iPad/iPod/iPhone/iTunes/iCloud

Solving iCloud-Related Slowdowns in Lion | *TidBITS*

Developers say Apple needs to overhaul iOS user information security | *Infinite Loop*

Apple Announces iPhone 4S, iOS 5, and iCloud | *Apple Hot News*

iTunes Store And App Store Are Finally Getting A Much Needed Makeover [Rumor] | *Cult of Mac*

Miscellaneous

One fix for non-functioning SuperDrive | *MacOSX Hints*

Show More Than 7 Days In A Week In iCal [OS X Tips] | *Cult of Mac*

Members Helping Members

Need Help? Have a question the manual doesn't answer? Members Helping Members is a group of volunteers who have generously agreed to help. They are just a phone call or an email away. Please call only during the appropriate times, and **only if you are a current mini'app'les member** and own the software in question.

Apple II / IIGS Software & Hardware	NV
AppleWorks / ClarisWorks	3, 4
Classic Macs	NV
Cross-Platform File Transfer	2, 3
FileMaker Pro	NV
iMacs	NV
Intel-Based Macs	NV
iPhoto	3
iMovie	6
iWork	4
Mac OS Classic	3
Mac OS X	NV
Microsoft Excel	2, 5
Microsoft Word	2, 5
Networks	NV
New Users	1
PhotoShop	NV
QuarkXPress	5
Quicken	NV
QuickBooks and QuickBooks Pro	NV
VectorWorks	NV

1.	Les Anderson	651-735-3953	anderslc@usfamily.net	DEW
2.	Tom Ostertag	651-488-9979	tostertag@q.com	DEW
3.	Bruce Thompson	763-546-1088	bthompson@macconnect.com	EW
4.	Pam Lienke	651-457-6026	plienke@aol.com	DEW
5.	Ron Heck	651-774-9151	ronheck@comcast.net	DEW

D = Days, generally 9 a.m. to 5 p.m.
E = Evenings, generally 5 p.m. to 9 p.m.
W= Weekends, generally 1 p.m. to 9 p.m.
NV = No Volunteer

Please call at reasonable hours and ask if it is a convenient time for helping you. By the way, many of these volunteers can also be contacted on our forums. We appreciate your cooperation.

Mini'app'les needs more volunteers for Members Helping Members — If you are willing to be a Members Helping Members volunteer, please send an email message to Membership Director Les Anderson or contact him on our forums with your name, telephone number, contact hours, and the software and hardware areas you are willing to support.

Mini'app'les Membership Application and Renewal Form

Membership cost is $15.00 for one year. To pay electronically using PayPal, visit the mini'app'les website.
If you prefer to pay by check, use the form below. Please make your check payable to "mini'app'les".

Name: _____

Company (if mailed to): _____

Address: _____

City, State, Zip: _____

Phone # (home): _____

Phone # (work): _____

Phone # (cell): _____

Membership ID # (if renewal): _____

Email: _____

Your email address will NOT be sold, shared, or distributed. It will be used only for official mini'app'les business such as distribution of the newsletter and membership renewal reminders.

_____Check if this is a change of address notice

_____Check if you want to volunteer

_____Check if you want to be added to "Members Helping Members"

_____Check if you were referred by a club member (if so, please give member's name)

Please mail this application and your payment to:
    mini'app'les
    P.O. Box 796
    Hopkins, MN 55343-0796

Thank you for your support!

Benefits of mini'app'les Membership

• Access to the mini'app'les online forums. Post questions and/or answers about issues, trouble shooting, products, buying and selling, special events, discounts, and news about Apple and the mini'app'les club.

• Access to our Members Helping Members network of professional and advanced users of Apple technologies. These members volunteer their time to help other members with software, hardware, and other Apple related issues.

• A variety of Mac Special Interest Groups (SIGs) that meet each month.

• Multi-SIG meetings and workshops to help members with computer problems. You can bring your equipment to these events and receive support from knowledgeable Mac users to help diagnose your problem(s).

• Participation in drawings for computer hardware, software, and other computer related materials.

• Discounts from vendors and manufacturers. Refer to the on-line forums for current offers.

mini'app'les

the minnesota apple computer users' group, inc.

Introduction — This is the newsletter of mini'app'les, the Minnesota Apple Computer Users' Group, Inc., a Minnesota non-profit club. The whole newsletter is copyrighted © by mini'app'les. Articles may be reproduced in other non-profit User Groups' publications except where specifically copyrighted by the author (permission to reproduce these articles must be given by the author). Please include the source when reprinting.

The mini'app'les Newsletter is an independent publication not affiliated, sponsored, or sanctioned by Apple, Inc. or any other computer manufacturer. The opinions, statements, positions, and views are those of the author(s) or newsletter staff and are not intended to represent the opinions, statements, positions, or views of Apple, Inc., or any other computer manufacturer. Instead of placing a trademark symbol at every occurrence of a trade-marked name, we state we are using the names only in an editorial manner, to the benefit of the trademark owner, with no intention of infringement of the trademark.

Questions — Members with technical questions should refer to the Members Helping Members section or bring their questions to an appropriate SIG meeting. Please direct other questions to an appropriate board member.

Dealers — Mini'app'les does not endorse specific dealers. The club promotes distribution of information that may help members identify best buys and service. The club itself does not participate in bulk purchases of media, software, hardware, and publications. Members may organize such activities on behalf of other members.

Submissions — We welcome contributions from our members. Perhaps you're using new software that you just can't live without. Maybe you have a new piece of hardware that you find extremely useful and of high quality. On the other hand, you might be struggling with problematic software or hardware. Why not share your experience with other members by writing a product review? Doing so may steer others towards quality products or help them avoid the problems you may be having.

Submissions must be received by the 15th day of each month to be included in the next month's newsletter. Please send contributions directly to our post office box (mini'app'les, PO Box 796, Hopkins MN 55343), or email them to miniapples@mac.com.

The deadline for material for the next newsletter is the fifteenth of the month. An article will be printed when space permits and, if in the opinion of the Newsletter Editor or Publications Director, it constitutes material suitable for publication.

This newsletter was produced using Apple's Pages word processor.

Board of Directors

President	Tim Drenk
	952-479-0891
	timdrenk@miniapples.org
Vice President	Jeff Berg
	781-350-0598
	jeff@purpleshark.com
Secretary	Joel Gerdeen
	763-607-0906
	jgerdeen@mac.com
Treasurer	Bob Demeules
	763-559-1124
	osx.sig@mac.com
Membership Director	Les Anderson
	651-735-3953
	anderslc@usfamily.net
Publications Director	Tom Ostertag
	651-488-9979
	tostertag@q.com
SIG Director	Kevin Strysik
	65l-489-4691
	strysik@mac.com
Director at Large	Bruce Thompson
	763-546-1088
	bthompson@macconnect.com
Membership Coordinator	Sandy Foderick
	sfoderick@mac.com