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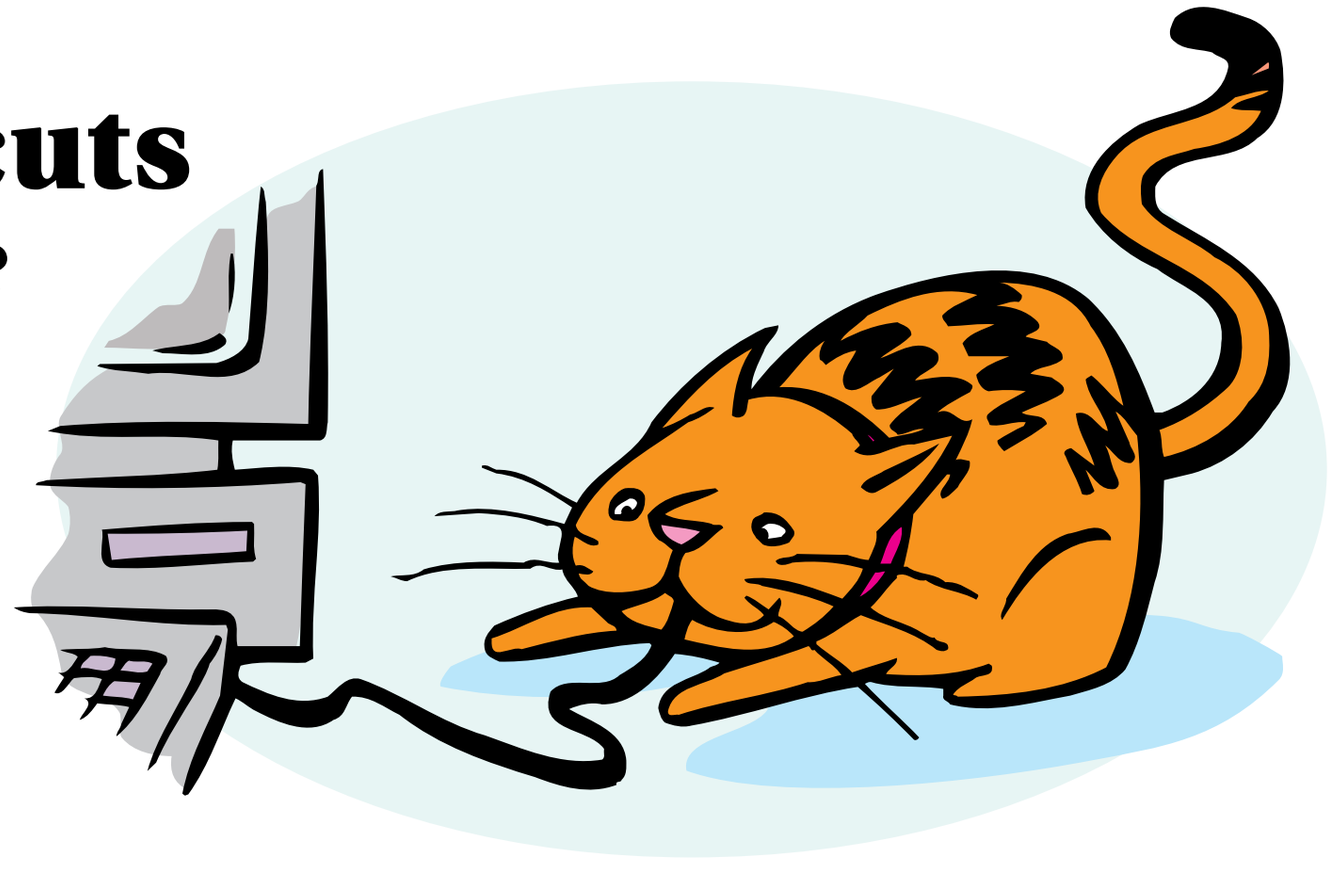
Keyboard Shortcuts or Mouse Clicks?



Read all about *Mouse Locator, LazyMouse, Shortcuts for Mac*, and Apple's Magic Trackpad.
Page 6.

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Contacting Washington Apple Pi

Washington Apple Pi, Ltd.
P.O. Box 6800
Silver Spring, MD 20916-6800
Business Office: 301/984-0300 [message]

Web address: http://www.wap.org

Email address: office@wap.org

Contents

President's Page

That Was Then, This Is Now

Jay Castillo

This year marks the 34th anniversary of the Washington Apple Pi. The first *Washington Apple Pi Journal*, Volume 1 Number 1, was published in February 1979. You can see both pages of it at this link: http://www.wap.org/journal/showcase.html. You can also view selected printed *WAP Journals* that have been posted by our intrepid webmaster, Lawrence Charters. We are attempting to obtain a full set of *Journals*, so if you can provide missing numbers, please help (Note that the copy must be broken for scanning). Looking at volumes contributed recently, I noted that the December 1988 issue, on the 10th anniversary of the Pi, consisted of 88 pages and had 35 contributing authors and 25 advertisers. I also noted that the Pi had 6000 members and had set a goal of attaining 7000!

We currently have around 600 members. The Pi membership continues slowly but steadily to decline. We thank the faithful members who remain with us, and we appreciate those of you who have been able personally to recruit new members. Are there any volunteers out there who would like to help with publicity and membership outreach and recruitment? Please let us know at: https://connect.wap.org//welcome/.

The Pi of the past was software and hardware intensive, and very much hands-on. Members tended to divide into Apple computer users and Macintosh computer users, and Pi activities reflected this divide. The Pi served as a resource for the members to obtain applications and other software for their machines. Selling disks to members was one of several sources of income for the Pi. Today, membership fees, generous member donations, and sound fiscal practices of the Pi management team provide adequate funds for our needs.

The Pi today reflects the many technological and cultural changes that have occurred in the last 30 years. The Internet, World Wide Web and pervasive social media have changed the way we interact with computers and each other. As more people use Apple computers and mobile devices, their sources for software, problem-solving information, or just interacting with other users are available with a few mouse clicks. Indeed, Pi members wherever they are can view the Pi monthly meeting through Ustream (http://www.ustream.tv/), and download our *Journal* from the Pi website : (https://connect.wap.org//welcome/).

As we look ahead, we are mindful of one of our operating principles: "We will ensure that WAP membership services keep pace with member interests and passions as well as with Apple products and services." We believe we are keeping pace with Apple as we feature mobile devices, the convergence of Mac OS X and the iOS operating systems, and Internet cloud services. We would greatly benefit from more feedback from our membership on your interests and passions.
We encourage you to provide it to us, so that we all can contribute to keeping the Pi useful, informative, and vibrant.

Editor's Column

Jay Castillo

Huffing and puffing, we have finished this latest edition of the Pi *Journal*. If you enjoy living on the edge, join us in our editorial activities. But seriously folks, we could always use more help in producing the *Journal*. So write something for us or become a volunteer editor; or better yet, become the *Journal's* Managing Editor. Applications accepted at **president@wap.org**.

In our cover story, Jay Castillo describes how he balanced the worlds of keyboard mavens verses mouse clickers as computer users. A great piece of hardware, the Apple Magic Trackpad, made the real difference. Applications such as *LazyMouse*, *Mouse Locator*, and *Shortcuts for MAC* complete the path to the middle way.

Lawrence Charters instructs us on the capabilities and advantages of *TechTool Pro 6*, which takes over where Apple *Disk Utility* leaves off. This version is compatible with Mac OS X 10.7 Lion. Lawrence concludes that it is "the most reliable, most comprehensive, and easiest to use diagnostic package available for Mac OS X. If you would like to go beyond *Disk Utility's* capabilities, *TechTool Pro* is an excellent investment."

For you web page builders and programmers, Sheri German provides a tutorial for HTML 5 forms and mobile computing. This is the second installment, following her article in the November/December 2011 edition of the *Journal*. Look and learn. Additonal learning to be had is found in Jed Sorokin-Altmann's article, "Podcasts and iTunes University." Jed shows us how to go beyond just downloading and playing music in *iTunes*.

Bob Jarecke's Tips & Tricks discusses *Trash* and email troubles, *Mail* threads, mobile *Safari* tabs, and much more. Take advantage of his hard-won expertise.
Our reprint for this issue is a warning and description of the original Flashback malware problem for Mac computers. Be aware that it has now evolved and has invaded substantial numbers of Macs, worldwide.

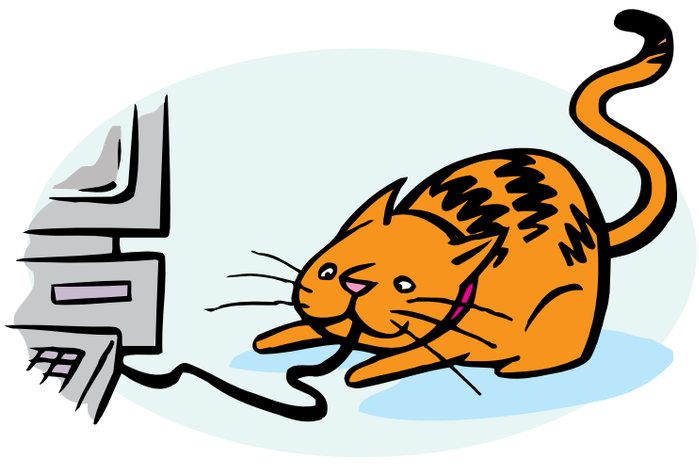
Be sure to click through the Hot Links page for informative and sometimes amusing links that I have selected. Be especially sure to click on the first link to learn about protecting yourself from the new version of the Flashback malware.

Keyboard Shortcuts or Mouse Clicks?

Jay Castillo

In the beginning was the command line computer user interface. Then came the graphical user interface and the mouse (Hurrah, Xerox PARC and Apple!). The computer user went from having to use the keyboard for all computer operations to being able to do essentially everything but text entry via the mouse. The keyboard remains an option, though; for just about every application, the pull-down menus on the menu bar display keyboard shortcuts for the functions on the menu.

The user community tends to one of two types: those who vow to keep their hands on the keyboard as much as possible, and those who, having logged in, use the keyboard as little as possible. The keyboarders see their approach as the most efficient way to do their work of text entry. They don't have to grope for the mouse while keeping their eyes on the screen — although they do have to memorize the keystrokes for the tasks they want to accomplish. The mouse aficionados just click merrily away and seem to accomplish their tasks just fine.



Finding the Middle Way

For many years I was a dedicated mouse clicker, probably because I am not a very good typist. But I learned a few useful keyboard shortcuts for frequently occurring tasks:

- Copy: Command-C
- Paste: Command-V
- Cut: Command-X
- Close Window: Command-W
- Quit Application: Command-Q

And really important:

- Undo: Command-Z

I also learned, of necessity, a few keyboard entries required at startup for solving operating system problems or installing the operating system (more about these later). Now, however, I am becoming a practitioner of the middle way, using the keyboard more and using my mouse more efficiently. This change is a result of my new computer hardware, and my discovery of some cool software.

Using the mouse more efficiently

I recently bought myself a 27-inch iMac. The display is beautiful—and enormous! It is so enormous that I had difficulty locating my mouse pointer. Also, all that screen real estate often required significant mouse scrolling to get the pointer

where I needed it. I enlarged the pointer, using the Cursor Size control of Universal Access in System Preferences. That helped some, but I couldn't make it too large, because it would obscure the screen details. I then discovered, at a Pi General Meeting presentation, two applications that helped with these problems: *Mouse Locator* and *LazyMouse*.

Mouse Locator

Mouse Locator is a free application from 2POINT5FISH.com, a small independent software vendor in the UK (http://www.2point5fish.com/index.html). When downloaded and installed, *Mouse Locator* is configured through System Preferences (see Figure 1). The application places green concentric circles around the mouse pointer (see Figure 2, upper right corner). I can set it to be always on or to be triggered by moving the pointer. I can select a hot key to instantly trigger *Mouse Locator*, so I can find the pointer on the desktop if it isn't visible. I can also adjust the interval between triggering and appearance, as well as the duration of the display. This application markedly improves my daily computer experience.

LazyMouse

LazyMouse is shareware from Old Jewel Software that snaps the mouse pointer to the default button whenever a dialog window opens on the screen (http://www.old-jewel.com/lazymouse/index.html). It also is configured through System Preferences (see Figure 3). The selected button is highlighted, so I just press Enter (keyboard!) to effect the event. I save a lot of mouse action, but I have to be alert that I really want to select the default button for the particular event. *LazyMouse* 2.1.9 is free for OS X 10.4 Tiger because later versions only work on OS X 10.5 or later. A free trial of version 2.5 is available, but you will be relentlessly reminded

Figure 1. *Mouse Locator* and *LazyMouse* preference panes are found in System Preferences when installed.

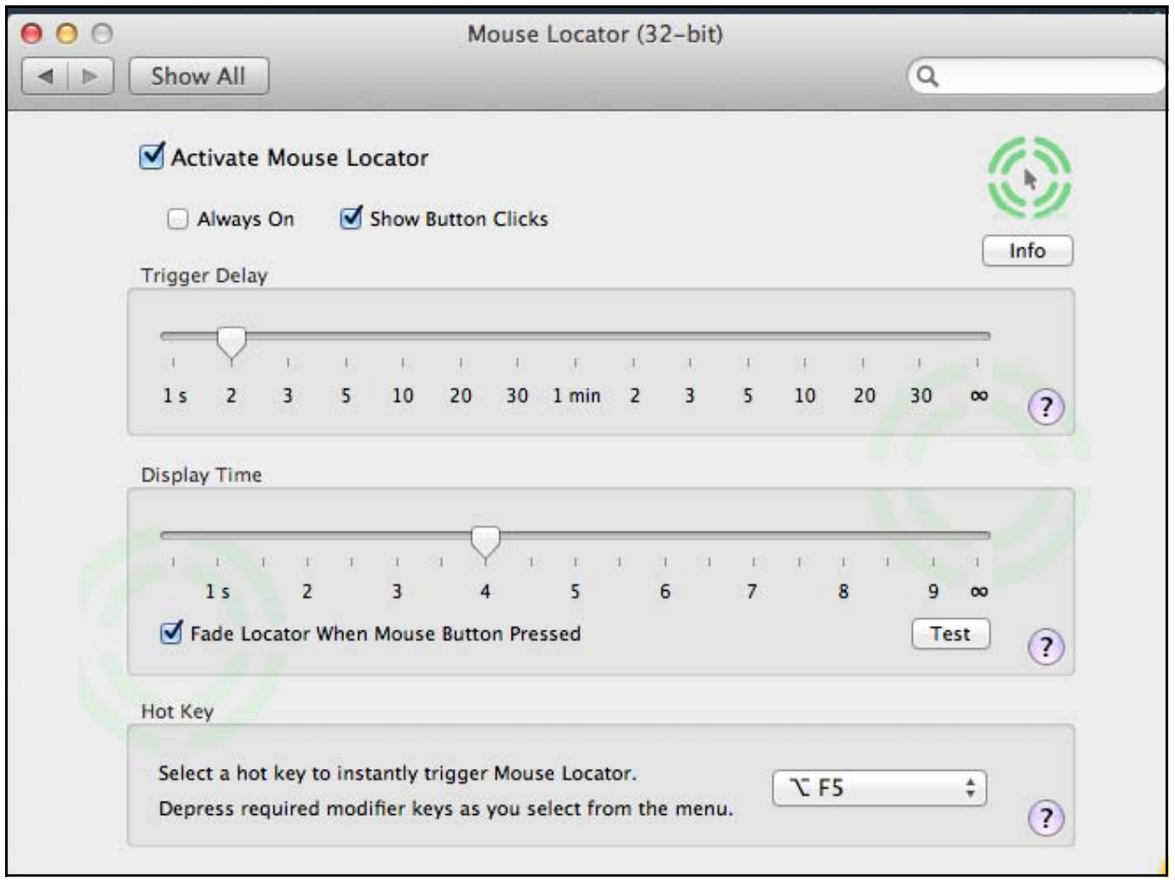


Figure 2. The controls for configuring *Mouse Locator*.

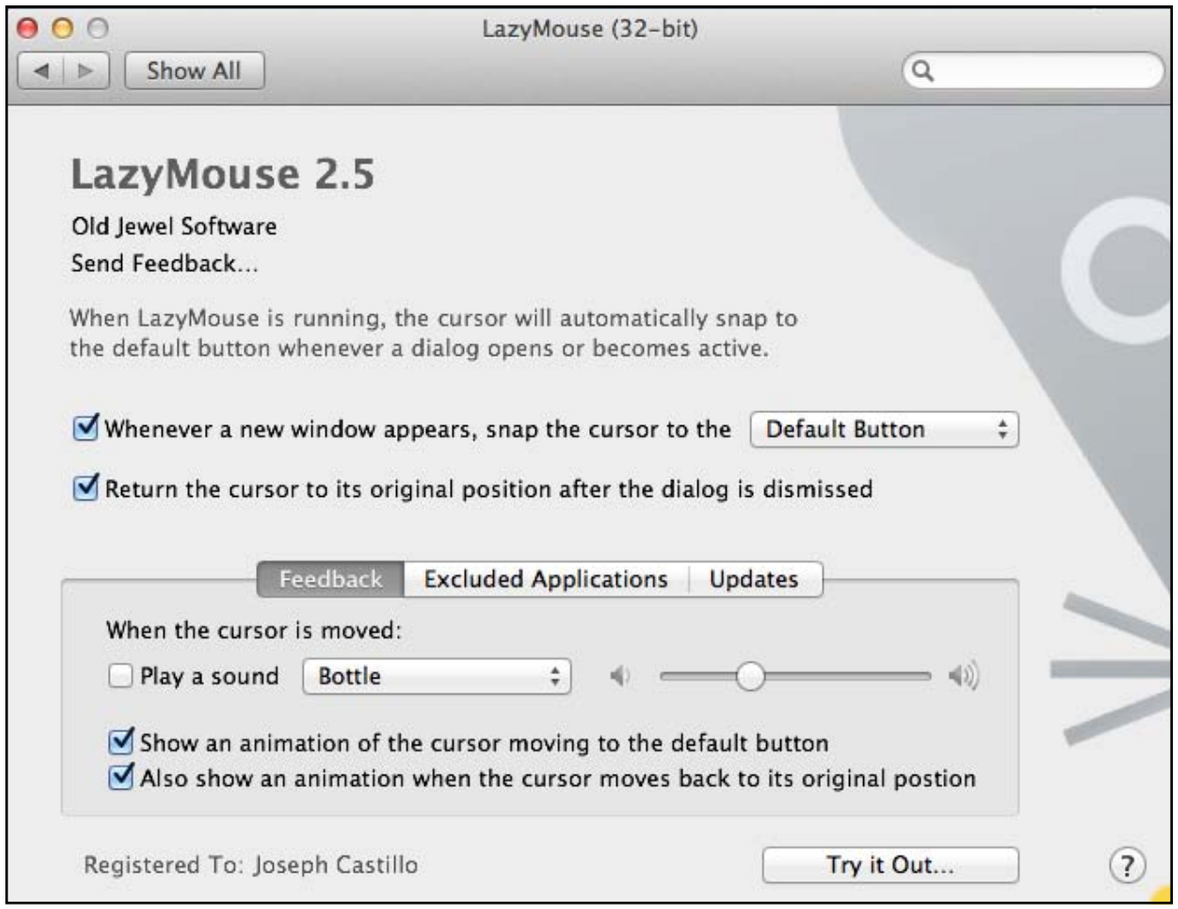


Figure 3. The controls for configuring *LazyMouse*.

Figure 4. The Apple wireless keybord and Magic Trackpad in tandem.

to buy the full version. I finally got tired of the reminders and spent the $9.95 for the full version.

Using the Keyboard More

What has really joined my mouse clicking and keyboard usage together was my purchase of an Apple Magic Trackpad. Apple's elegant design philosophy is manifest in the way that the Trackpad fits as an extension of the Apple wireless keyboard (see Figure 4). Now, my hands are naturally always together on the keyboard. I have only to make small movements of my right wrist to place my fingers in position to use the touch sensitive power of the Trackpad.

I became more motivated to use keyboard shortcuts, and I soon discovered a neat application called *Shortcuts for Mac*, which displays keyboard shortcuts for Mac OS X and applications in general. Developed by Gregor Czempiel, *Shortcuts for Mac* is available from the App Store (http://itunes.apple.com/us/app/shortcuts-for-mac/id412610974?mt=12) for $.99. That site says it's on sale for 24 hours only, but I have checked it for a few weeks and it's still at that price. The latest version, version 2, requires Mac OS X 10.6 or later.

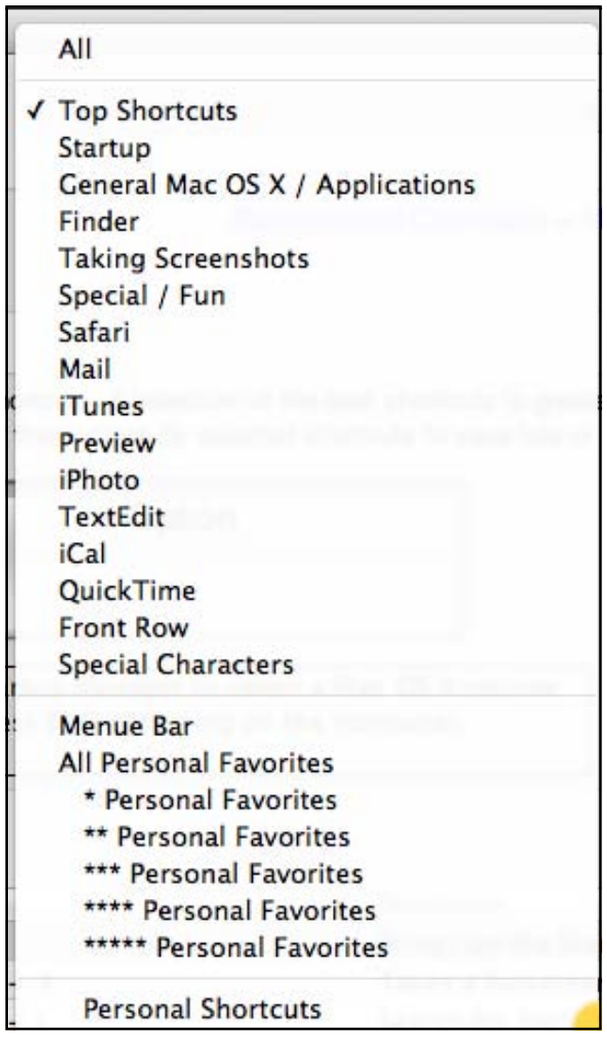
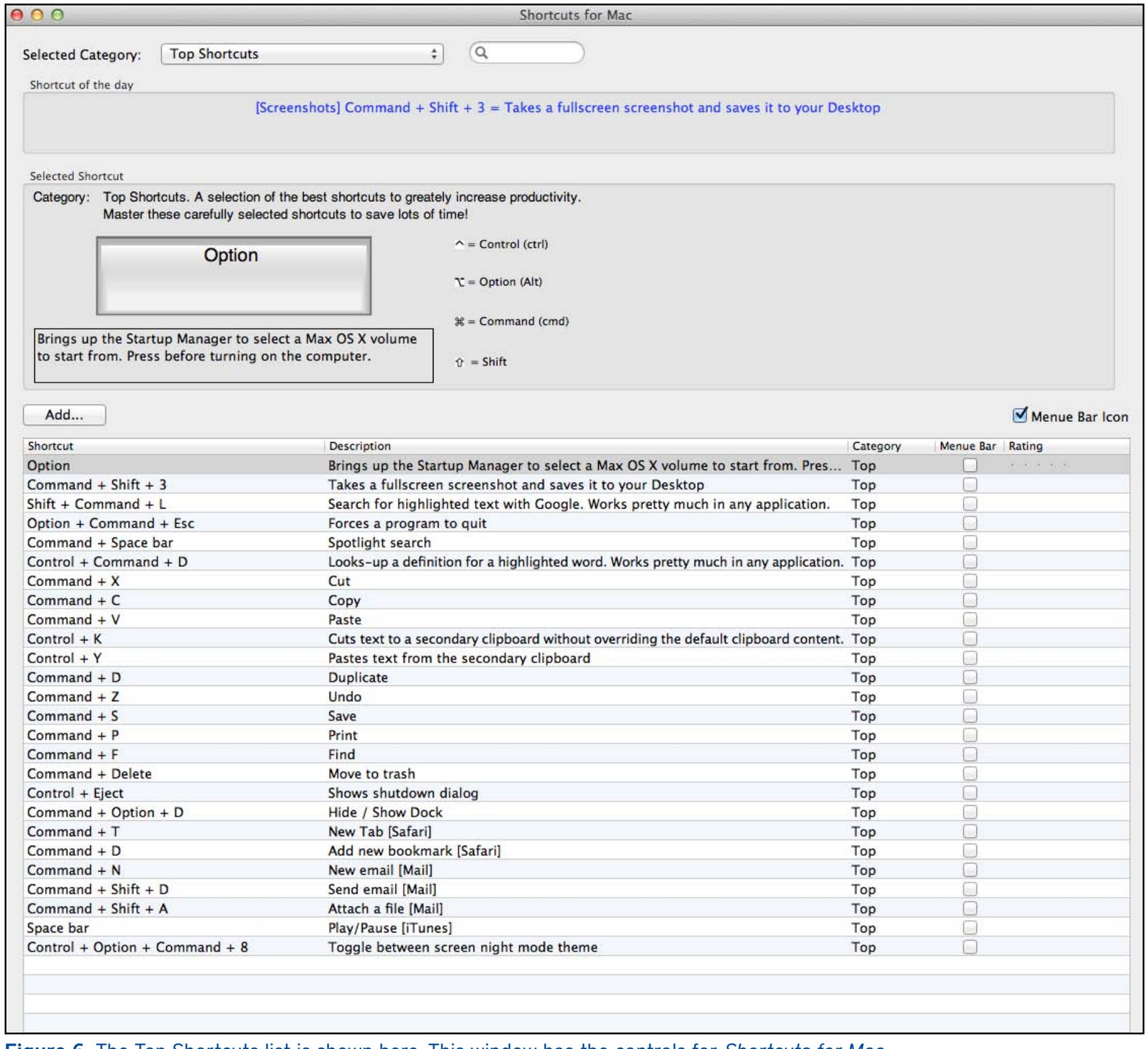


Figure 5. Dropdown menu for selecting lists in *Shortcuts for Mac*.

The application window (see Figure 5) has 16 shortcut categories from which I can choose. Here I have selected Top Shortcuts (see Figure 6). Below that selection is a space for the shortcut of the day. When I click on one of the shortcuts in the full list, it appears in the Selected Shortcut section, with its explanation.



Shortcut	Description	Category	Menue Bar	Rating
Option	Brings up the Startup Manager to select a Max OS X volume to start from. Pres...	Top	☐	
Command + Shift + 3	Takes a fullscreen screenshot and saves it to your Desktop	Top	☐	
Shift + Command + L	Search for highlighted text with Google. Works pretty much in any application.	Top	☐	
Option + Command + Esc	Forces a program to quit	Top	☐	
Command + Space bar	Spotlight search	Top	☐	
Control + Command + D	Looks-up a definition for a highlighted word. Works pretty much in any application.	Top	☐	
Command + X	Cut	Top	☐	
Command + C	Copy	Top	☐	
Command + V	Paste	Top	☐	
Control + K	Cuts text to a secondary clipboard without overriding the default clipboard content.	Top	☐	
Control + Y	Pastes text from the secondary clipboard	Top	☐	
Command + D	Duplicate	Top	☐	
Command + Z	Undo	Top	☐	
Command + S	Save	Top	☐	
Command + P	Print	Top	☐	
Command + F	Find	Top	☐	
Command + Delete	Move to trash	Top	☐	
Control + Eject	Shows shutdown dialog	Top	☐	
Command + Option + D	Hide / Show Dock	Top	☐	
Command + T	New Tab [Safari]	Top	☐	
Command + D	Add new bookmark [Safari]	Top	☐	
Command + N	New email [Mail]	Top	☐	
Command + Shift + D	Send email [Mail]	Top	☐	
Command + Shift + A	Attach a file [Mail]	Top	☐	
Space bar	Play/Pause [iTunes]	Top	☐	
Control + Option + Command + 8	Toggle between screen night mode theme	Top	☐	

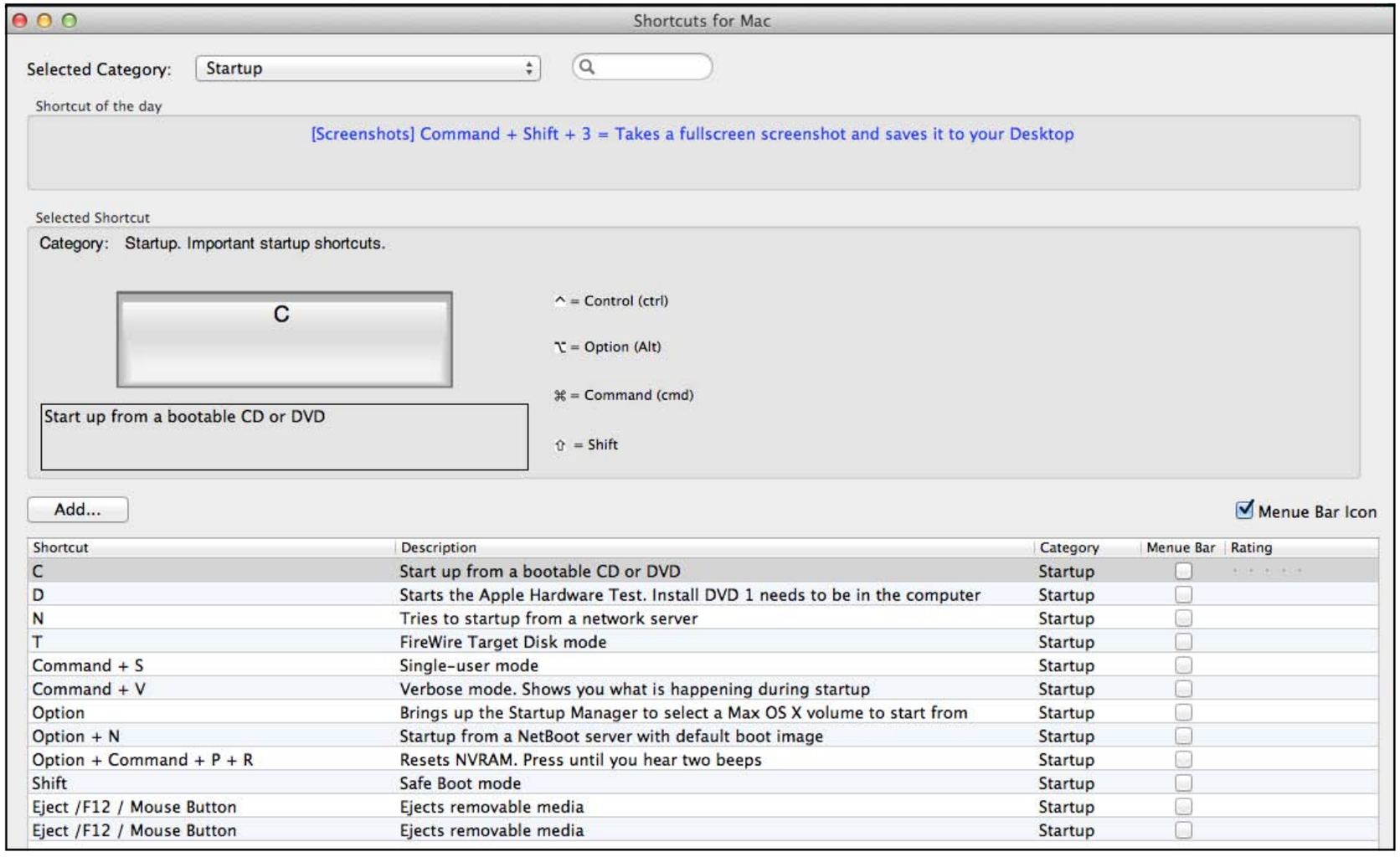
Figure 6. The Top Shortcuts list is shown here. This window has the controls for *Shortcuts for Mac*.

On the right-hand side of the main list area of the window, I can check the box to show a menu bar icon. The shortcut of the day appears, as well as those I select (up to 10 shortcuts) by clicking the menu bar box (see Figure 7). Earlier, I mentioned startup keyboard shortcuts: selecting Startup in the Selected Category provides these keyboard shortcuts, which are not to be found on any menu bar (see Figure 8). They must be pressed when the start button is pressed, or when you click Restart from the Apple menu. In total, I counted about 200 keyboard shortcuts listed in this application. If I want, I can also add my own personal shortcuts to the list, by selecting Personal Shortcuts from the Category list and clicking the Add button.

The combination of *Mouse Locator*, *LazyMouse*, and *Shortcuts for Mac* enables me to comfortably expand the power of my keyboard/trackpad tandem. I can call up *Shortcuts for Mac* when I need it, or keep its window open on my big screen while I work (or play), or take advantage of the menu bar icon. But I still don't type much better.

Figure 7. Clicking the icon, SC, displays selected shortcuts.

Figure 8. The list of startup keyboard shortcuts.



Editor's Note:

To obtain just a list of OS X keyboard shortcuts, check out the Apple website:

http://support.apple.com/kb/HT1343?viewlocale=en_US&locale=en_US.

***Also, for more on keyboard shortcuts see the November-December 2011 issue of the* Washington Apple Pi Journal.**

HTML5

Software Tutorial

HTML5 Forms and Mobile Computing

Sheri German

In the November-December 2011 Pi Journal, we looked at how the new HTML5 video element can improve the movie viewing experience of iPad and iPhone users. There is another area in which HTML5 provides benefit to iDevice users, and that is through new form elements and attributes. Even if you don't feel ready to buy into HTML5 in its entirety, you can still apply those HTML5 form features that work here and now on mobile devices.

With HTML5, forms have gone through their biggest overhaul in a long time. Development is still in flux, and browser support is variable. *Opera* currently has the most extensive support, and other browsers support many, though not necessarily the same, features. The good news is that for the most part, the new form controls and attributes degrade gracefully. And the even better news is that support on iOS devices is quite good.

In this tutorial, we're going to focus on form attributes; these will provide us with clear evidence of why parts of HTML5 are of benefit today. We'll look at how type attributes can enhance the experience of iPhone or iPad users. For example, if a type of tel is added to an input tag, when the user places her cursor in the phone field, the iPad/iPhone keyboard automatically displays with numbers (See Figure 1).

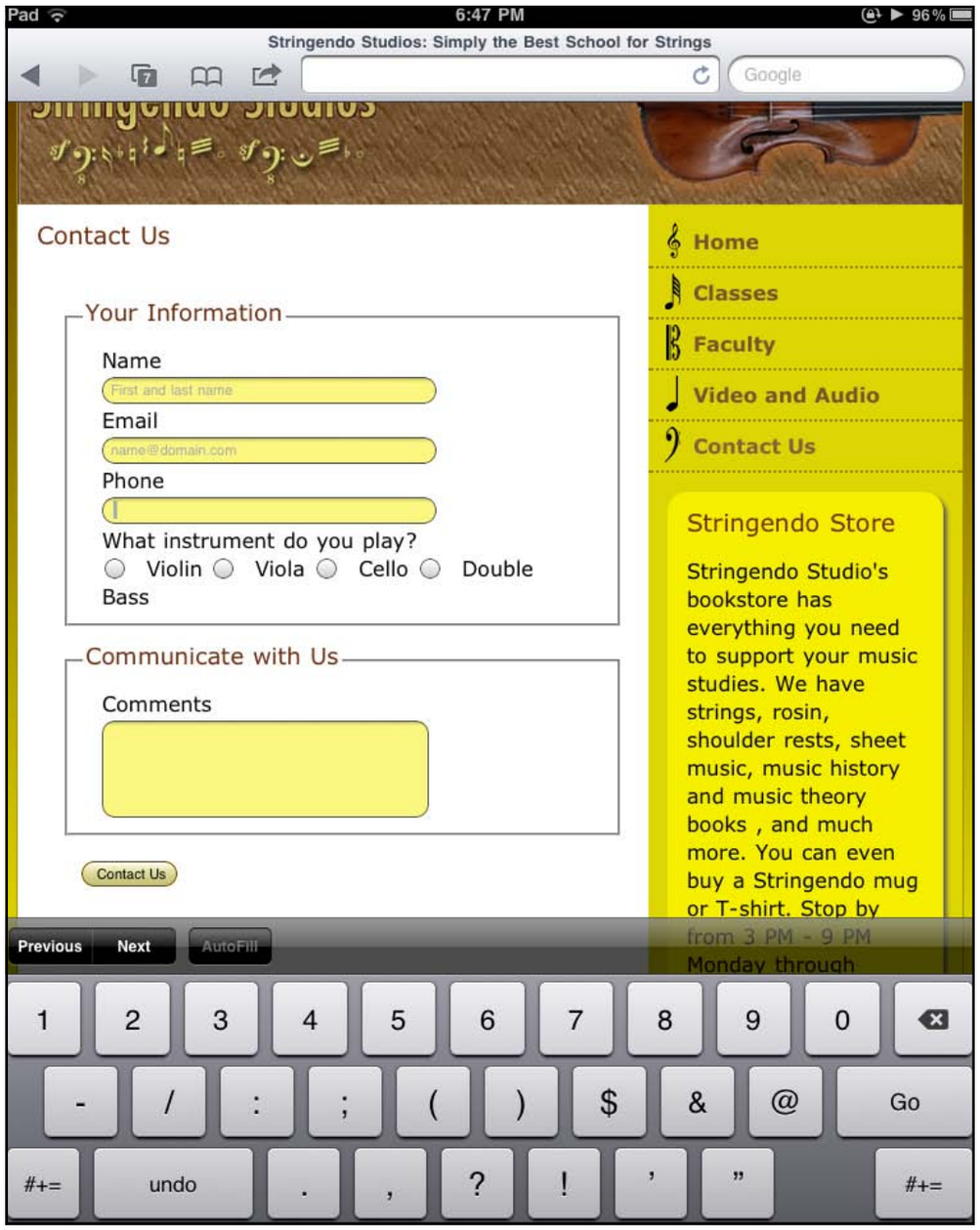


Figure 1: The new HTML5 tel attribute, when added to a form, will automatically prompt a mobile device to display a keyboard with numbers when the focus moves to the Phone field.

These are the HTML5 attributes we'll use in this tutorial:

- **email** to give a type of email to the textfield input element
- **tel** to give a type for phone numbers to the textfield input element
- **required** to ensure that the user fills in a particular textfield
- **placeholder** to provide hints about what to provide in a textfield
- **autofocus** to have the cursor automatically blink in a designated field

Note: The **autofocus** and **required** attributes provide us with an HTML5 means for accomplishing tasks that used to require the use of JavaScript.

The added bonus of using form attributes is that they can be used as attribute selectors in the style sheet to keep markup clean and uncluttered. Later in this tutorial we'll look at this technique.

Tip: There are many other form features that should, over time, gain more consistent support in browsers. Some of these are date pickers, range sliders, and number steppers. You can read about HTML5 forms at Dive into HTML5.
<http://diveintohtml5.info/forms.html>

Creating the Contact Form

Before we get to the fun stuff, we'll need a basic form. We'll use **fieldset** and **legend** and **label for** to provide better accessibility. Use your favorite web editor to paste this form code into an HTML page:

```
<h2>Audition Form</h2> <form name="contact" id="contact"
method="post" action=""> <fieldset> <legend>Your Information
</legend> <p><label for="name">Name</label> <input type="text"
name="name" id="name"></p>
  <p><label for="email">Email</label> <input type="email"
name="email" id="email"></p>   <p><label for="phone">Phone
</label>
  <input type="tel" name="phone" id="phone"></p>
<p>What instrument do you play?</p> <p><label>
<input type="radio" name="instruments" value="violin"
id="instruments _ 0">Violin</label>
  <label><input type="radio" name="instruments" value="viola"
  id="instruments _ 1">Viola</label> <label><input
type="radio" name="instruments" value="cello"
  id="instruments _ 2">Cello</label>
<label><input type="radio" name="instruments" value="bass"
id="instruments _ 3">Double Bass</label> </p>
</fieldset> <p><input type="submit" name="button" id="button"
value="Contact Us"></p> </form>
```

Now that we have the form's foundation, it's time to add usability enhancements, including functionality that would have required JavaScript in the past.

Go back into your web editor and locate the textfield that has an ID of **name**.

At the end, just before the closing bracket, type placeholder="First and Last Name". (Yes, you need the quotes.)

Add the autofocus attribute. The cursor will blink in this field as soon as the page loads.

Add the **required** attribute. If the user does not fill out the field, a warning message will pop up in some browsers, such as Firefox. Your code should resemble the code block below:

```
<input id=name name=name type=text placeholder="First and
last name" required autofocus>
```

Locate the textfield that has an ID of **email**.

Within the tag, just before the closing bracket, type **placeholder="name@domain.com" required**

Change the type to email: **type=email**. Again, this will benefit users of iPads and iPhones on which the iOS will present different keyboards depending on the input type. Your code should resemble the code block below:

```
<input type="email" name="email" id="email"
placeholder="name@domain.com" required>
```

Locate the textfield that has an ID of **phone**.

Within the tag, just before the closing bracket, type **placeholder="example 800-555-5555" required**

Change the type to tel: **type="tel"**. The iOS will present a number keyboard. Your code should resemble the code block below:

```
<input type="tel" name="phone" id="phone"
placeholder="example 800-555-5555" required>
```
(See Figure 2).

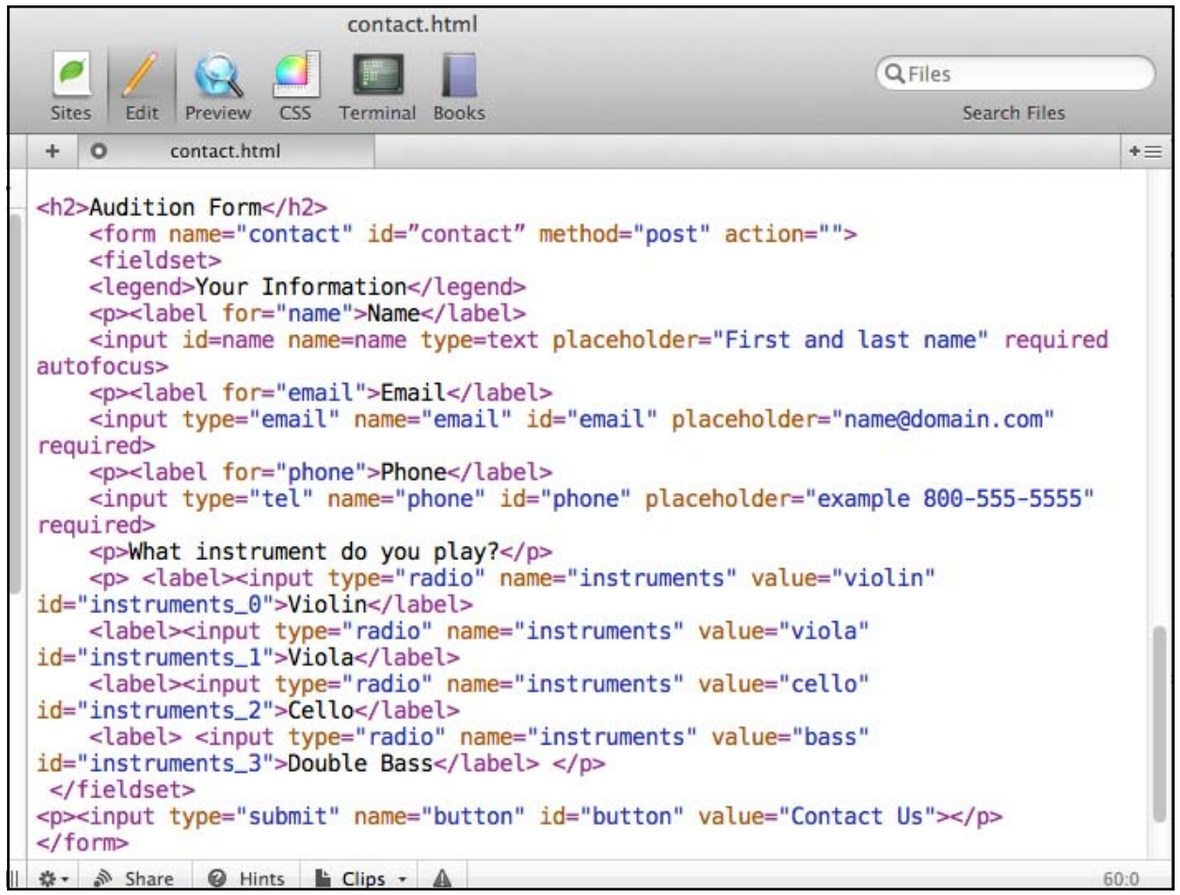


Figure 2: The coding for the Contact Form, nice and neatly formatted.

Styling the Form

Now that the basic form is complete, it's time to make it look spiffy. Before we get to the new and exciting form attributes though, let's set up a few basic rules.

Create a CSS document and paste these rules into it. Link the CSS document to the form page and you'll be good to go.

```
form {font-family: Arial, sans-serif;
padding: 20px;
margin-top: 0;
```

```
margin-left: 15px;}

fieldset {margin-bottom: 10px;}

legend {font-family: sans-serif, "Lucida Grande",
Verdana, Arial;
     color: #990033;
     font-size: 120%;
     padding-bottom: 10px;}

#contact p {margin-bottom: 0;}

h2 {font-family: Georgia, "Times New Roman",
Times, serif;
     color: #505050;}
```

Adding Type Attribute Selectors

Now here is where it starts to get interesting. As mentioned in the last section of this article, styling forms has posed a challenge because of the fact that the input element includes just about every form object: textfields, submit buttons, radio buttons, etc. So if, for example, you wanted to add a width of 250 to the name, email, and phone textfields, you would also see the width of the radio and submit buttons increase to that size. To avoid the problem, you would have to start adding classes to the various input elements. This would add extra markup to the page, and increase the amount of maintenance.

This is where **type attributes** come to the rescue. You will remember that you added different types to the various input elements. We'll use these types within brackets [ ] to create attribute selectors. Then our styles will target specific input elements rather than all input elements.

First we'll set the width of the name, email, and phone to 250. We'll even add in some CSS3 rounded corners. Finally we'll use a CSS3 color format RGBA to add varying amounts of opacity to the background color of our color scheme.

- Create a selector named **input[type="text"], input[type="email"],** input[type="tel"] (Notice the use of square brackets for attribute selectors.)
- Add a **width** of **250px**.
- Set the **Display** to **Block**. (This will put the fields themselves on different lines than their labels and give us a neater appearance.)
- Add **border-radius** in its three formats. (While *Safari* 5 now uses border-radius rather than needing the webkit extension, there are still users with older versions of *Safari*.)
- border-radius: 10px; /* standard CSS3 */ -moz-border-radius: 10px; /* For *Firefox* */ -webkit-border-radius: 10px; / For *Chrome* and older versions of *Safari* */

- Add rgb color in a light gray color:

  `background-color: (rgb 238, 238, 238);`

  This rule is for earlier versions of Internet Explorer that do not understand the alpha channel in rgba color.
- Add rgba color for modern browsers:

  `background-color: rgba (238, 238, 238, 0.5)`

  The last value sets the opacity to 50%.
- ***Tip:*** Here is a handy hex to rgb or rgba converter: http://hex2rgba.devoth.com/

(See Figure 3).

Here is the entire rule:

```
input[type="text"], input[type="email"],
input[type="tel"]{background-color:
rgb(238, 238, 238);
background-color: rgba(238, 238, 238, 0.5);
width: 250px; display:block; border-ra-
dius: 10px;
-webkit-border-radius: 10px; -moz-bor-
der-radius: 10px;}
```

Now that we have a rule for the texfield inputs, it's time to create a unique rule for the submit input type.

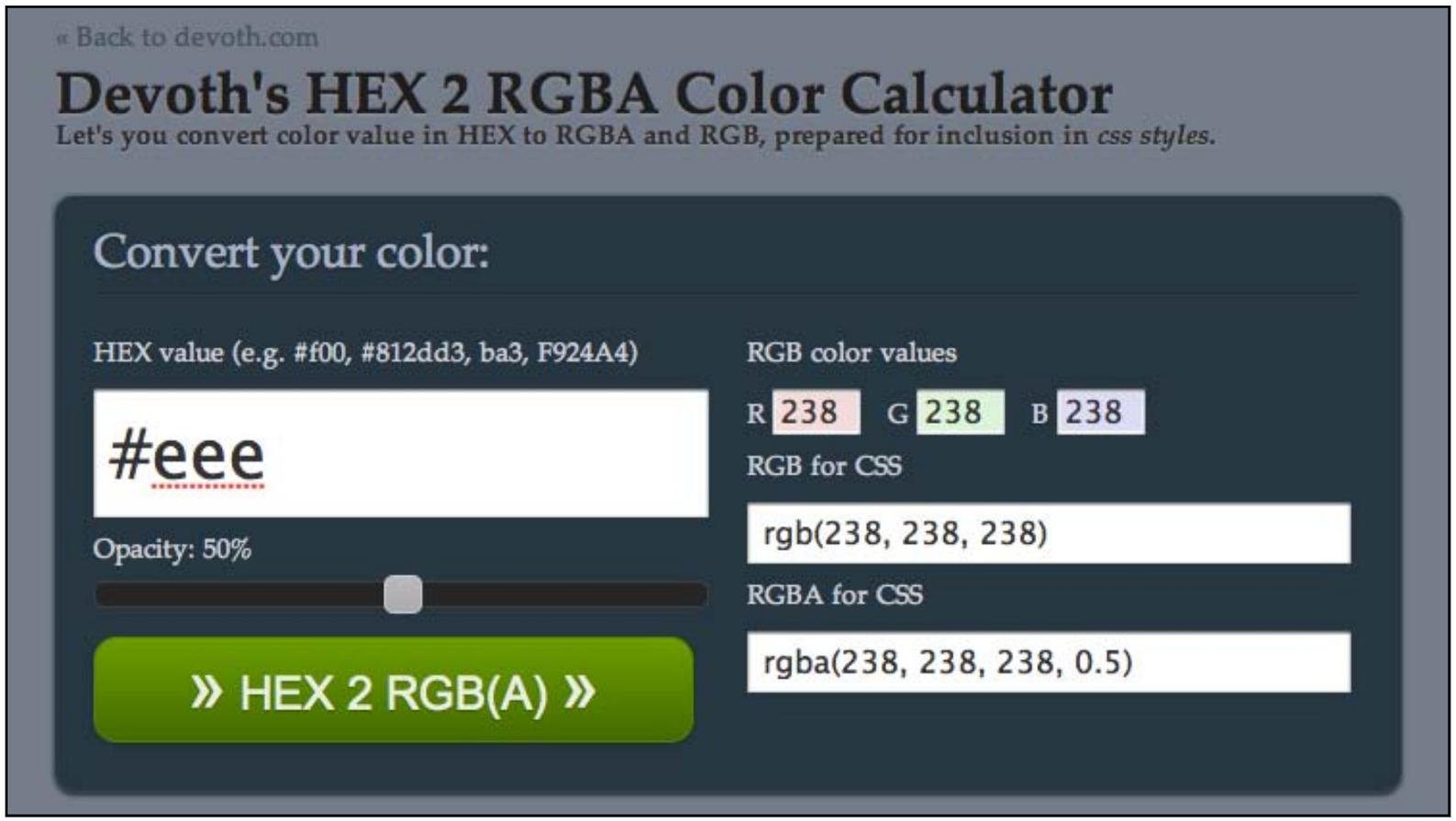


Figure 3: Devoth's hexadecimal to red-green-blue-alpha color calculator (http://hex2rgba.devoth.com/) allows you to experiment with color combinations and opacity.

Figure 4: Complete coding for our CSS3 styles to make the form nice and pretty.

contact.html

Sites | Edit | Preview | CSS | Terminal | Books

contact.html

```
form {
    font-family: Arial, sans-serif;
    padding: 20px;
    margin-top: 0;
    margin-left: 15px;
}
fieldset {
        margin-bottom: 10px;
}
legend {
    font-family: sans-serif, "Lucida Grande", Verdana, Arial;
    color: #990033;
    font-size: 120%;
    padding-bottom: 10px;
}
#contact p {
        margin-bottom: 0;}
h2 {
    font-family: Georgia, "Times New Roman", Times, serif;
    color: #505050;}

input[type="text"], input[type="email"], input[type="tel"]{
    background-color: rgb(238, 238, 238);
    background-color: rgba(238, 238, 238, 0.5);
    width: 250px;
    display:block;
    border-radius: 10px;
    -webkit-border-radius: 10px;
    -moz-border-radius: 10px;
}
input[type="submit"]
{
    background-color:
    border: solid 1px #000;
    width: 75px;
    padding: 4px;
    margin-top: 10px;
    margin-bottom: 10px;
    background-color: #ddd;
    border: 1px solid #666;
}
```

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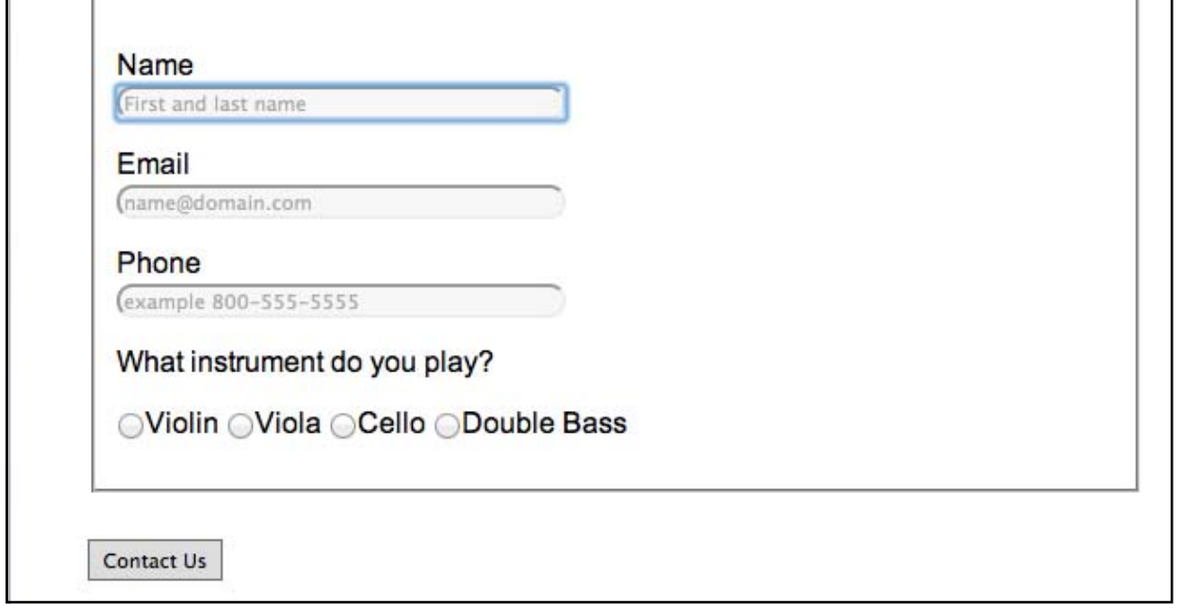


Figure 5: The completed iPhone-friendly form. Notice the round field boxes and how the focus is in the first field, highlighted with a soft, blue glow.

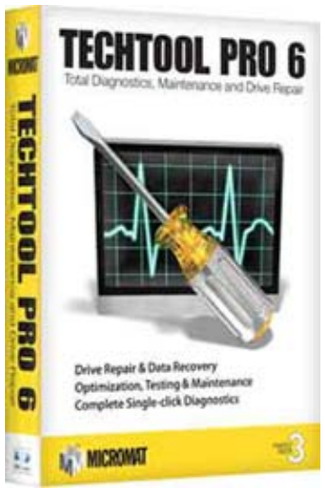
`input[type=”submit”]{background-color: #DED604; border: solid 1px #000; width: 75px; padding: 4px; margin-top: 10px; margin-bottom: 10px;  border: 1px solid #654421;}` (See Figure 4).

Tip: Even the standards compliant browsers have varying support for the different form features. You can bookmark Estelle Weyl's chart HTML5 Web Forms & Browser Support. <http://www.standardista.com/html5/html5-web-forms/> (See Figure 5).

That's it! By using attributes in the HTML document and attribute selectors in the CSS document, you're leveraging the power of HTML5 and CSS3 to optimize the use of forms in iOS. There is even more you can do to increase usability in mobile computing. In the next article in this series, we'll take a look at CSS3 media queries and how they can be used to create one site for multiple screen sizes.

Software Review

TechTool Pro 6: Beyond *Disk Utility*



Very few Mac users have ever come to fully appreciate the wonders of *Disk Utility*. Created by Apple and tucked away in the Utilities directory, *Disk Utility* can correct errors with your drive's permissions, repair file directory damage, erase a drive, or partition a drive. If that isn't enough, it can also build a RAID from two or more drives, create a CD-ROM or DVD, create a disk image, or even clone the contents of one drive to another. The *Journal* had an article on the subject back in 2009, with the understated title of "*Disk Utility*: Superhero, Savior, Prophet." http://www.wap.org/journal/diskutility/

Micromat, a Macintosh software company that has been around forever (or since 1989, which is close enough), has for quite some time been competing against the free *Disk Utility* with their own product, *TechTool Pro*. A "lite" version of *TechTool* was so well regarded at Apple that, for most of a decade, a copy of *TechTool Lite* was included with every purchase of AppleCare. Whenever a user called with an AppleCare question, the technician would invariably ask, "Have you run *TechTool*?"

Figure 1. This opening screen is also a diagnostic screen. It indicates that *TechTool Pro* is running on a Mac Pro with four drives, that the USB ports are running at 480 megabits per second, the CPU has a 12 megabyte cache, the processor is running at 2.8 GHz, the network is operating at gigabit speed, the FireWire port is operating at 800 megabits per second. Along the bottom margin, it indicates that the computer has eight processor cores, only one of which is particularly busy.

Apple has stopped including *TechTool Lite* with AppleCare, but the upscale commercial sibling, *TechTool Pro,* has continued to evolve and take advantage of new operating systems, and has ventured into areas where *Disk Utility* wouldn't dream of going. The current version, *TechTool Pro 6*, is compatible with Mac OS X 10.7 Lion and, wrapped in an approachable, easy to understand interface (see Figure 1), can do all of the following:

Figure 2. *TechTool Pro*'s Volume Cloning and Image Cloning options allow you to duplicate a drive, sync files between volumes, or create a disk image with a number of options. Most of these functions can be done with *Disk Utility*, but the *TechTool Pro* interface is far easier to understand.

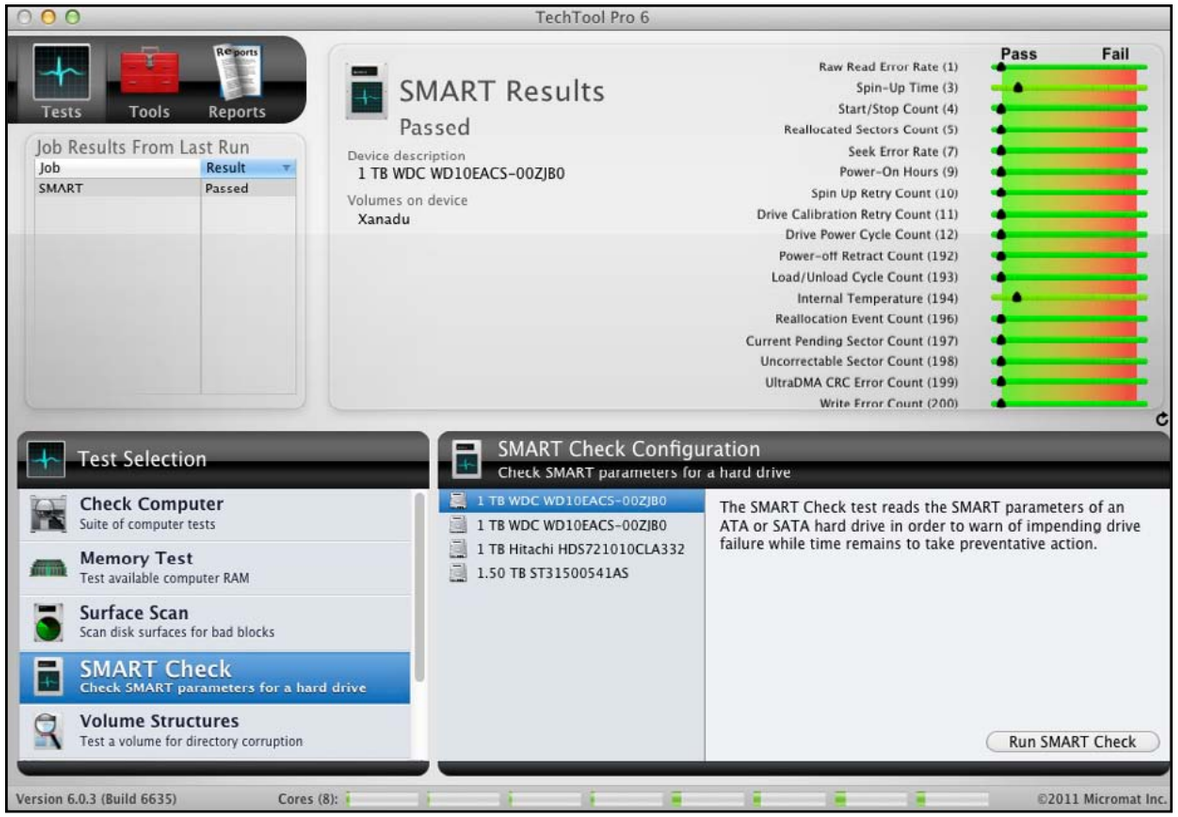


Figure 3. *Disk Utility* performs a Self-Monitoring, Analysis and Reporting Technology ("SMART") check every time it launches, but the reporting is minimal. *TechTool Pro* gives a detailed, colorful report on the SMART results for each volume.

- Clone a volume (see Figure 2) (*Disk Utility* can do this too, but with fewer options);
- Perform a surface scan of a hard drive, checking every byte for bad blocks;
- Perform a SMART check of a hard drive, confirming that the on-board electronics are working and properly reporting drive health (see Figure 3) (*Disk Utility* can do this too, but with less detailed results);
- Perform a check of volume directory corruption (again, *Disk Utility* can do this, but with less detailed results);
- Perform a check of file integrity;
- Perform a memory test of RAM (see Figure 4);
- Perform a check of video memory;
- Rebuild and repair a volume directory;
- Defragment a drive (Mac OS X does this automatically, but not with the same manic sense of completeness);
- Optimize a volume to consolidate free space;
- Recover files from a damaged volume or, in certain cases, from the trash;
- Securely erase data (*Disk Utility* can do this too, but with fewer options);
- Enable or disable file system journaling (*Disk Utility* can do this as well);
- Verify and repair disk permissions (*Disk Utility* does this too, but with less detailed results)

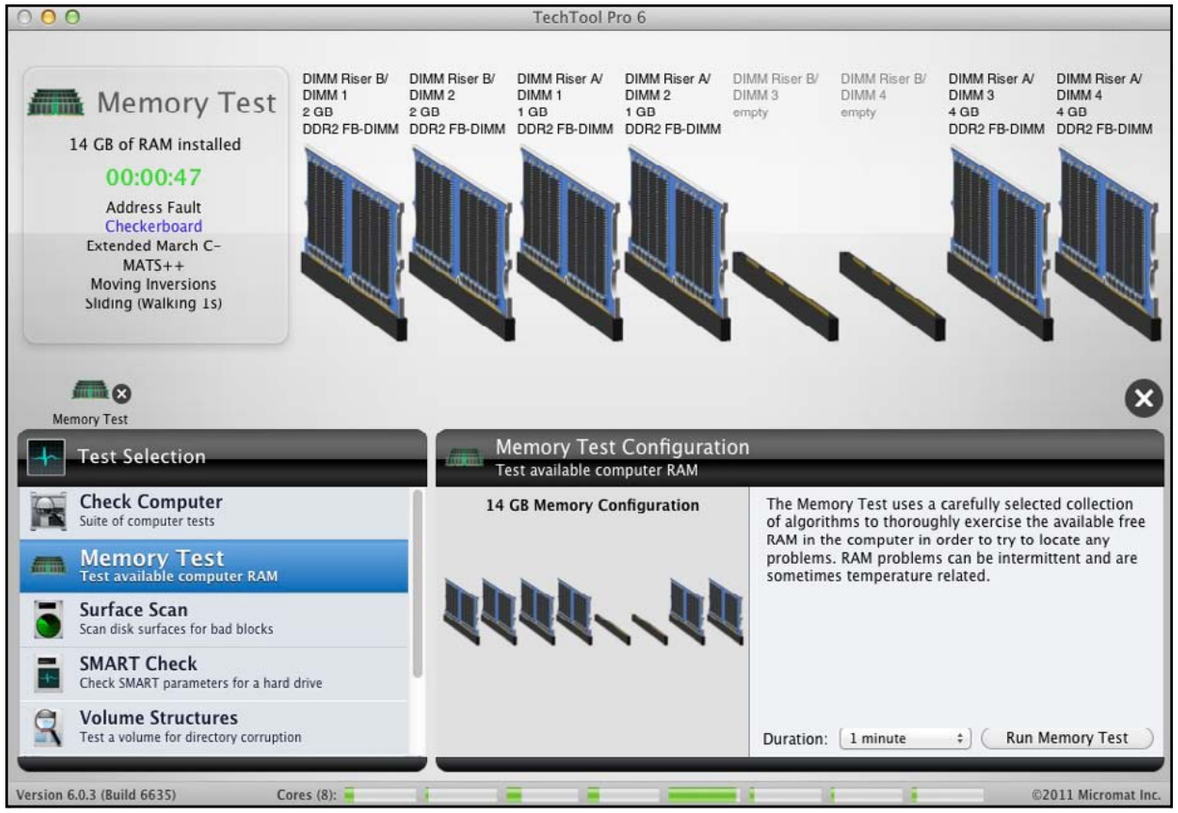


Figure 4. *TechTool Pro* has an outstanding memory check function. You have a choice of checks, from a quick, one-minute check to a comprehensive 90-minute check. The check also gives you a nice graphic showing all installed memory cards and the size and specification of each.

Figure 5. *TechTool Pro's* Local Network check scans the local network and reports all devices found, their IP address, and the services found on those devices. In this case, the check found four devices. The highlighted top item is reported as an AirPort Base Station with an Apple File Sharing service and a Samba (Windows file sharing) service. The fourth device claims, curiously, to be a robotic vacuum cleaner.

- Scan your local networks, and report on all devices found, their IP address, and what services and ports are active (see Figure 5);
- Perform a check of your monitor and verification of iSight functions;
- Perform a check of your sound system and speech synthesis functions;
- Create an eDrive (an electronic drive partition that can be used as an emergency startup partition) (Lion automatically creates an emergency startup partition);
- Offer detailed, exportable reports on all test functions.

This is a long list of functions for one utility package. All the functions work, so rather than explain them in detail, we'll look at those functions that are exceptional.

Winners

One of the most valuable functions offered by *TechTool Pro* is its comprehensive system test. From the opening screen, click on Check Computer, type in an administrator name and password, and then go do something else for an hour or two. *TechTool Pro* will check the health of the your computer's memory, video memory, and hard drive SMART status, and perform a file structure check of all attached volumes, a volume structure check of all attached volumes, and a disk surface scan of all attached volumes. Depending on the size of any attached hard drives, this can take a long time, but a Mac that passes all these tests is probably a very healthy Mac.

TechTool Pro's memory check is also outstanding. It is very common today for Mac users (especially those who belong to user groups) to install more RAM in their Macs. While this is a thrifty option, it comes with a sense of anxiety: Did I properly seat the memory card? Is the memory the right type? Is it good memory? *TechTool Pro's* memory check does a terrific job of testing memory and does it with an easy-to-understand set of controls.

Corrupted files are a problem for most users, chiefly because most users have no idea how to find them or associate the problems they may be having with file corruption. *TechTool Pro's* File Structures test will check each and every file on a drive and provide a comprehensive report of those files that are corrupted or improperly classified. This check, which can take hours on a large volume, is a real gem.

For the past decade, another commercial utility, *Disk Warrior*, has developed an almost cult following because it does one trick and does it well: It can rebuild a damaged volume directory. *TechTool Pro* also has a Volume Rebuild tool and, while I have not compared the two side by side, *TechTool Pro* has been fully successful every time I've tried it.

Losers

TechTool Pro has no functions that can be classified as losers. The audio signal check is not particularly useful, but it does work. The eDrive partition tool isn't needed with Mac OS X 10.7 Lion, which automatically creates a recovery drive as part of the installation process. It is useful though with Mac OS X 10.6—but only if you take the time to run the tool and create a partition.

Many other functions, as noted, are also available in *Disk Utility* without spending a dime. But the *Disk Utility* interface is looking increasingly dated; few Mac users today even know it exists, and those that do rarely use it for more than a few simple things, such as erasing disks or checking file permissions. Most of the other functions are not nearly as obvious as in *TechTool Pro*, and for almost every function, *TechTool Pro* provides far more complete, and colorful, reporting tools.

Conclusion

TechTool Pro is the most reliable, most comprehensive, and easiest to use diagnostic package available for Mac OS X. If you would like to go beyond *Disk Utility's* capabilities, *TechTool Pro* is an excellent investment.

Tech Tool Pro 6 is a product of Micromat, Inc., 5329 Skylane Blvd, Santa Rosa, CA 95403. It is available via download from the Micromat web site, www.micromat.com, for $99.99.

Software Tutorial

Podcasts and *iTunes* University

Jed Sorokin-Altmann

iTunes provides the user much more than the ability to buy, download, and listen to music. Podcasts can provide entertainment or instruction. *iTunes* University ("*iTunes* U") courses allow the user to participate in academically structured learning environments. Podcasts and *iTunes* U content are both found by browsing in the designated sections of the *iTunes* Store (see Figure 1) or by entering a topic in the "Search Store" section in the standard Spotlight Search location in the *iTunes* window.

Podcasts can be either audio or video formats, and depending on the podcast, present the choice of an audio or video stream (see Figure 2). For example, several nightly news shows offer podcasts of the prior night's program, and have two podcasts, one video and one of just the audio. Podcasts are downloadable as a subscription or on an individual basis. Podcast subscriptions are the audio/visual equivalent of RSS feeds. *iTunes* will periodically check with the server to see if there are new podcast episodes, and if there are, it will download the newest episode. (Note: If a podcast posts multiple new episodes at once, *iTunes* will

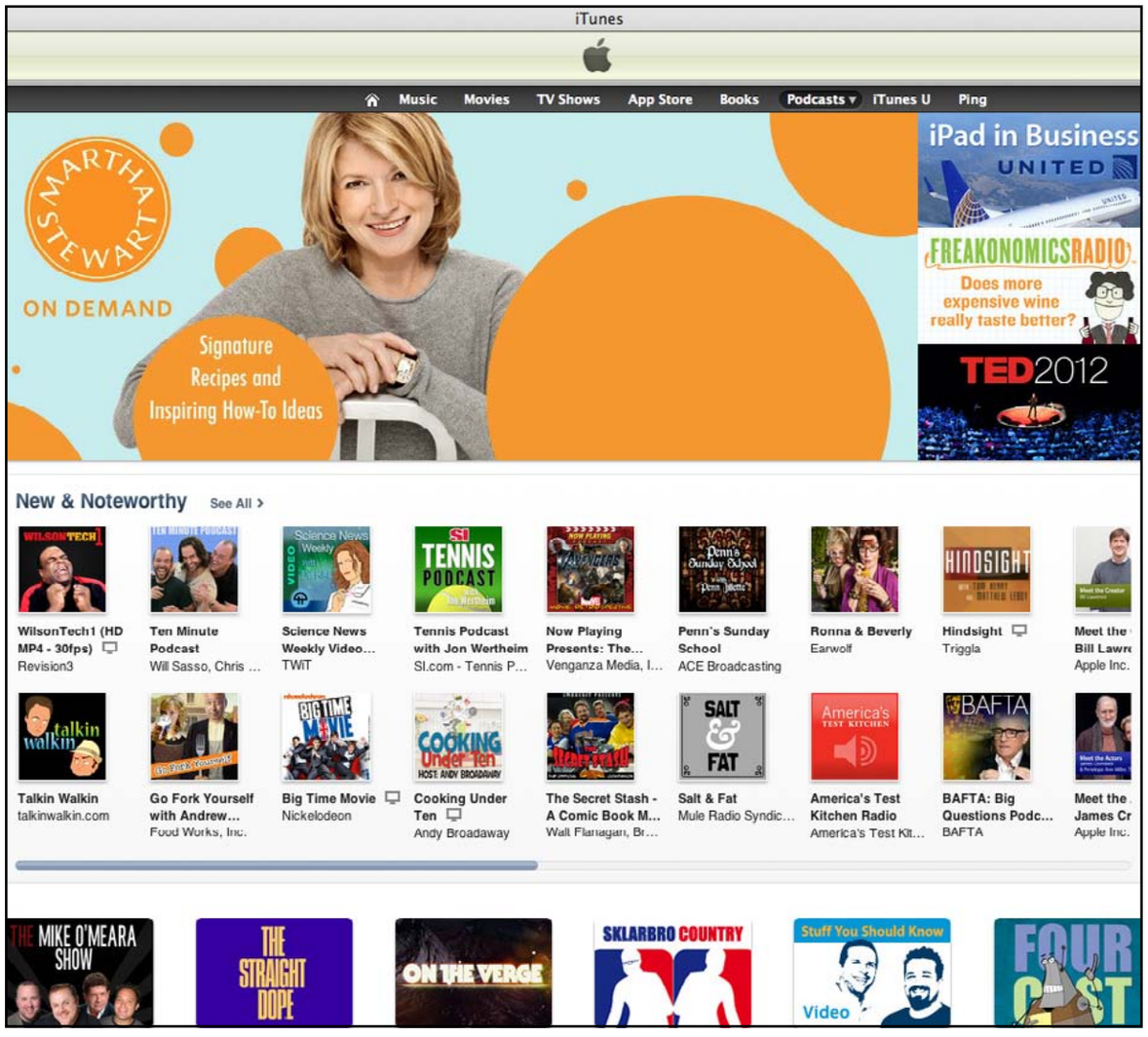


Figure 2. When you click on Podcasts, you see this introductory screen.

Figure 1. In the *iTunes* Store window, click to browse for Podcasts or *iTunes* U content.

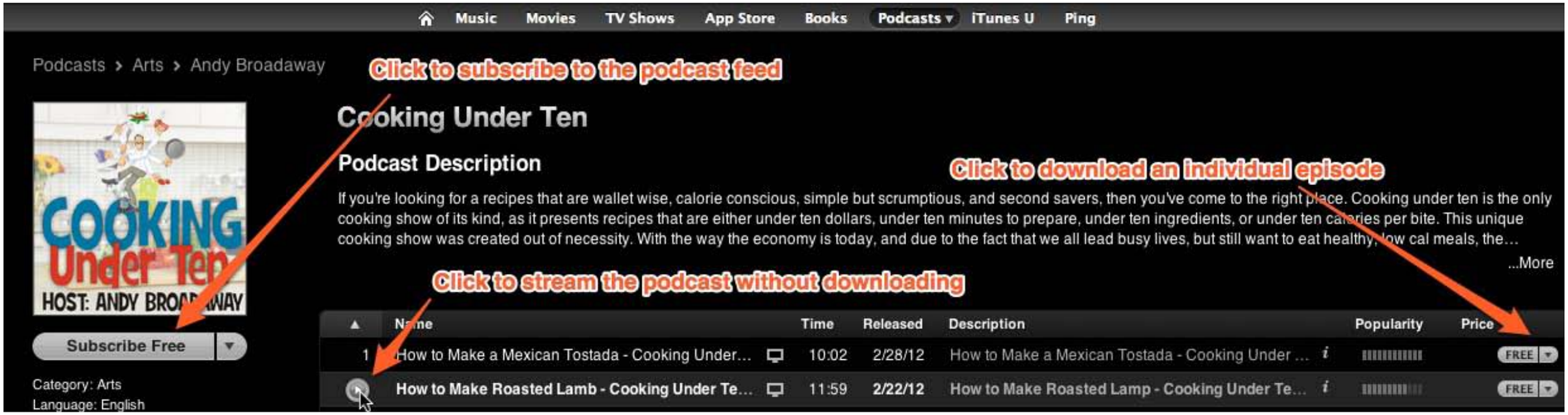


Figure 3. Once you select a podcast, you can subscribe, download individual podcasts, or stream them.

automatically download only the newest. You will have to click to download the rest!) Alternatively, you can click to download a particular episode or episodes of a podcast (see Figure 3).

iTunes U courses are essentially a type of podcast. Like other podcasts, they can be either audio or video. The difference from other podcasts is primarily that *iTunes* U content comes from approved educational institutions and organizations (see Figure 4). An important functional difference for users is that they will appear in different sections in the *iTunes* store and in *iTunes*.

Once you find a podcast or *iTunes* U course of interest, there are three ways to access it. One option is to click the Subscribe Free

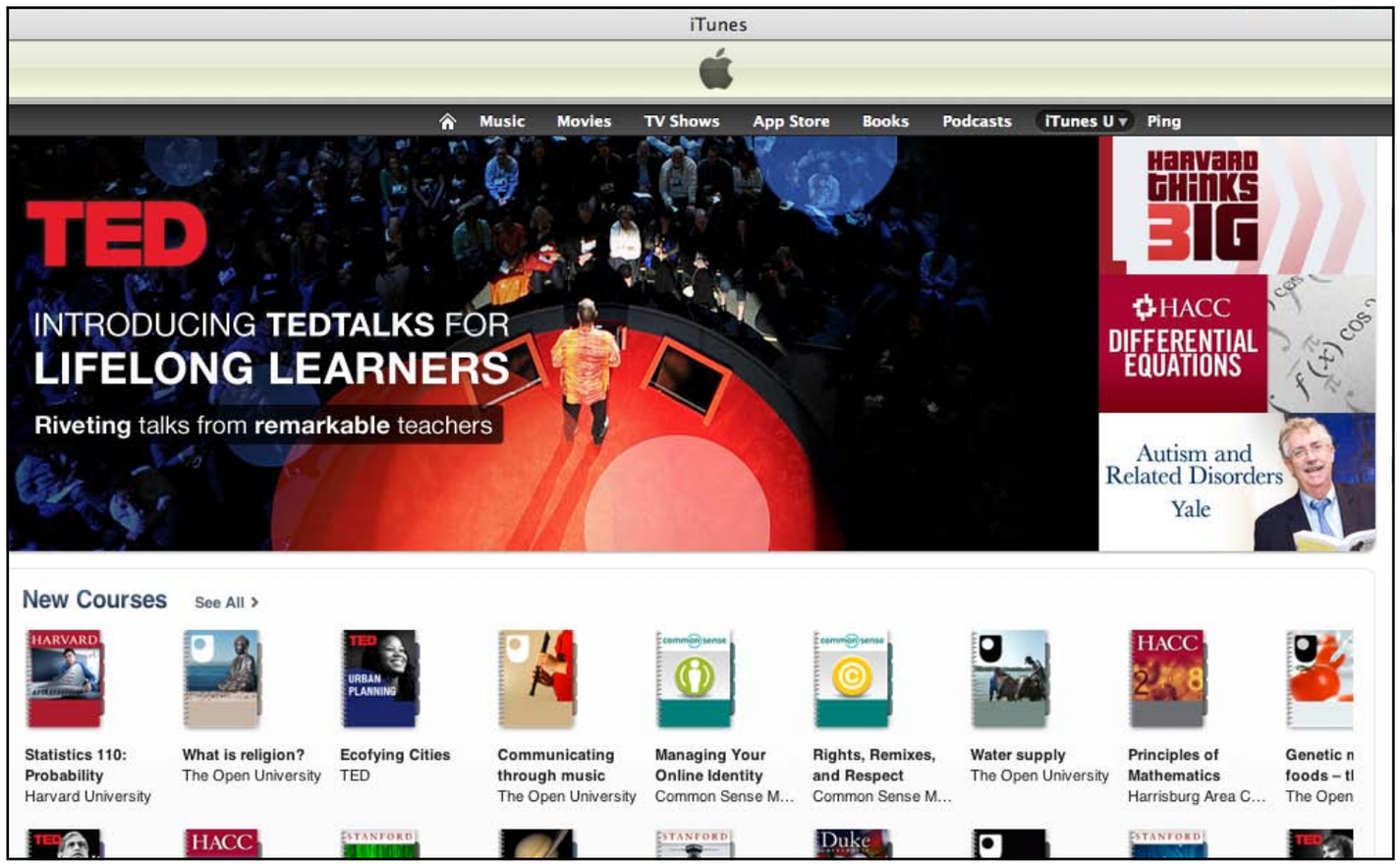


Figure 4. Here is the *iTunes* U introductory window.

Figure 5. Access your podcasts or *iTunes* U courses on the left side of the *iTunes* window.

button to subscribe to the feed and get the latest episode whenever it comes out. Another option is to click the Free button next to an individual episode to download just that episode. The third option is to put the cursor over the individual episode and click the play triangle (where the number was) to stream the episode without downloading it. One warning! If you download an episode, whether with or without a subscription, start playing it, stop, and then come back to resume play, the episode will resume playing from where you left off. If, however, you are streaming and stop streaming, when you come back to the episode, it will start at the beginning.

Figure 6. You probably want to move your discarded episodes to the trash.

Once an episode is downloaded, you'll find it in the Podcasts or *iTunes* U section of the *iTunes* sidebar on the left side of the window. If you have unplayed podcasts, there will be a number next to the section (see Figure 5).

If you decide to delete a podcast, you'll see a dialog window asking if you want to move the podcast to the Trash or keep it in the *iTunes* media folder (see Figure 6). You almost certainly want to move it to the Trash. Otherwise, it will still be on your drive taking up space, but you won't see it in *iTunes*.

Beware the Morphing Flashback Malware

Adam C. Engst

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The permanent URL for this article is: http://tidbits.com/article/12818

As TidBITS Security Editor Rich Mogull wrote in "*Gatekeeper Slams the Door on Mac Malware Epidemics* [1]" (16 February 2012), the most significant security hole on the Mac stems from users being tricked into installing something malicious, and once OS X 10.8 Mountain Lion sees widespread adoption later this year, Mac users will have additional protection from at least malicious downloaded applications.

But even Gatekeeper won't protect from malware that worms its way into Macs in other ways, such as Flashback, malware that may have started out life masquerading as a Flash Player installer but can now infect Macs through sneakier means. (Thanks to TidBITS sponsor Intego for many of the details in this article, which Intego was the first to publish in its *Mac Security Blog* [2].)

Infection Vectors — In Flashback's original approach (variants Flashback.A, Flashback.B, and Flashback.C), a malicious or hacked Web site would display what looks like a Flash error, and if you were to click it, an installer package pretending to be Flash Player would be downloaded. If "Open 'safe' files after downloading" is selected in Safari's General preferences, the bogus installer would be launched automatically, and your Mac would be infected.
(Tip #1: Disable that option in Safari!)
(See Figure 1 [3])

Figure 1.

The new Flashback.G instead employs a two-pronged approach that's completely different from the fake Flash Player installer, though the malicious code that's installed is essentially the same (hence the continued use of the Flashback name). First, it attempts to install code on your Mac silently through one of two known Java vulnerabilities. (Luckily, Macs running 10.7 Lion don't have Java installed by default, and those who have installed all available Java updates in either Lion or 10.6 Snow Leopard are immune from such attacks.) Failing that, Flashback next attempts to download and run a Java applet that displays a self-signed certificate purporting to be from Apple Inc.; if you were to click the Continue button, you'd

Figure 2.

be giving the applet permission to run and your Mac would be infected. (See Figure 2 [4])

It's clear that Flashback is in active development, not just from the arrival of this new attack vector, but because it intentionally tries to avoid detection. Some variants check to see if the user is running Mac OS X in VMware Fusion and won't execute if so. They do this because many security researchers test malware in virtual machines, rather than risk infection of full installations of Mac OS X, since it's easier to delete a virtual machine and start over with a clean copy. The most recent Flashback.G variant won't even attempt to install if Intego's VirusBarrier X6 or certain other security programs are present, presumably since there's no point in bothering with Macs that are already protected.

Infection Effects — Flashback's goal is to capture user names and passwords, which it accomplishes by inserting its code into Web browsers like Safari and Firefox and other network applications like Skype. It monitors network traffic and looks for connections to a number of domains — sites such as Google, Yahoo, CNN, PayPal, numerous banks, and many others. Presumably, the bad guys behind Flashback are looking for user names and passwords that they can exploit immediately — such as for a bank Web site — and those that may be reused across different sites. (Tip #2: Don't use the same password for all Web sites!)

Because Flashback's code can interfere with its host programs, it tends to cause crashes. If a network-related program starts crashing regularly, that may be a clue that your Mac has been infected.

Flashback needs both a way to transmit these stolen login credentials back to the mothership and a method of updating its code. It does this via a set of command and control servers that were initially inoperable when Intego discovered Flashback in late September 2011. They were brought online at some point in October 2011 and have been sending updates to infected Macs since. In theory, Flashback can also download additional software, although Intego hasn't yet seen such activity.

Exactly what code Flashback installs on infected Macs has changed over time. At first, it installed a dynamic loader library and auto-launch code into a file at ~/Library/Preferences/Preferences.dylib. That backdoor code communicated with remote servers using RC4 encryption and sent information such as the infected Mac's unique hardware ID, version of Mac OS X, hardware architecture, and more.

Subsequent variants of Flashback moved away from the easy-to-delete Preferences.dylib file and instead install the backdoor code inside the application package for Safari and Firefox, modifying the app's Info.plist file with the location of the backdoor and storing the actual code at /Applications/Safari.app/Contents/Resources/UnHackMeBuild. (For Firefox, replace "Safari.app" with "Firefox.app" in all the commands and paths below.)

Just removing that file from within the app isn't sufficient to eliminate the infection; it's also necessary to delete the following lines from the Info.plist, and to do that, you must either open it in BBEdit, or first convert the file to XML with this Terminal command:

plutil -convert xml1 /Applications/Safari.app/Contents/Info.plist

Once that's done, look for and delete these lines.

<key>LSEnvironment</key>
<dict>
<key>DYLD_INSERT_LIBRARIES</key>
<string>/Applications/Safari.app/Contents/Resources/UnHackMeBuild</string>
</dict>

But Flashback didn't stop there. According to Intego, a later variant installs an executable file in the /tmp directory, applies executable permissions, and then launches the executable. The Flashback backdoor thus becomes active with no indication that anything untoward has happened.

Intego has determined that the most recent Flashback.G variant changes approaches yet again, installing itself into an invisible file in the **/Users/Shared** directory. This file can bear many names, but all the ones seen so far have a .so extension. Unfortunately, it seems likely that Flashback will continue to rotate the names and locations of where it stores its backdoor code, making it difficult to provide reliable removal instructions.

This latest variant also creates a file at **/Users/Shared/.svcdmp** and a plist file, used to patch applications, at **~/.MACOSX/environment.plist**, along with a log stored at **~/Library/Logs/vmLog**.

Some of Flashback's early variants (but not Flashback.G) go beyond just patching network-aware applications, and intentionally damage system files. In particular, these early variants of Flashback disable Mac OS X's built-in XProtect malware detection system by deleting some key files:

/System/Library/LaunchDaemons/com.apple.xprotectupdater.plist
/usr/libexec/XProtectUpdater

This intentional file deletion is particularly concerning not just because it prevents XProtect from working (Apple has updated XProtect to detect the earlier variants of Flashback), but also because it means that antivirus software cannot repair the damage; doing so would entail installing entirely new copies of the affected files, rather than just restoring them to their pre-infection state.

It is possible to repair the damage manually, by restoring files from Time Machine or another backup program, but it's essential to do so from within the backup program to get the original permissions, which likely wouldn't happen with a simple Finder copy.

Our Advice — Intego tells me that the rate of infection by Flashback has increased significantly since it started using the combination of the Java vulnerabilities and the fake self-signed certificate. What I don't yet have a sense of is how easy it is to run across a Web site that hosts Flashback, but there are both ways that users can be fooled into visiting such sites and ways legitimate sites can unwittingly end up hosting such malware.

Regardless, it is certainly possible to avoid infection by Flashback. Apple's own XProtect has been updated to detect and protect against Flashback's early variants, so as long as that's active, you're probably safe from any of those that may still exist. Nonetheless, to guard against the later variants, you must make sure you have either not installed Java in Lion, or kept your Java installation in Lion or Snow Leopard up to date. And barring that, if you get a prompt to approve a self-signed certificate from Apple, you must deny it.

Similarly, it's possible to remove Flashback infections manually, if you have a fairly high level of technical sophistication (the information above should give you what you need to know, though I'd also recommend searching the Web for updated information about future Flashback changes).

But I must admit, just as with the MacDefender situation, I'm driven to say that anyone who doesn't feel they have the technical awareness to detect Flashback's infection attempts or to repair an infected Mac manually should be running up-to-date security software like Intego's *VirusBarrier X6* [5].

(There are of course other antivirus tools available for the Mac, some of which are free, like *ClamXav* [6] and *Sophos Anti-Virus for Mac Home Edition* [7], but VirusBarrier provides additional security-related capabilities, such as a configurable port-based firewall, the capability to detect spyware activity and prevent software from "phoning home," network traffic monitoring tools, network attack detection, anti-phishing protection, cookie filtering, and more.)

Much as I would like to say that users should just be careful out there, it's simply too easy for someone who doesn't know what a self-signed certificate looks like to click through such a prompt, and even allowing a fake Flash Player installer to run is the sort of thing that many less-experienced users wouldn't think twice about doing.

[1]: http://tidbits.com/article/12795

[2]: http://blog.intego.com/

[3]: http://tidbits.com/resources/2012-02/Flashback-installer.jpeg

[4]: http://tidbits.com/resources/2012-02/Flashback-certificate-prompt.png

[5]: http://www.intego.com/virusbarrier/

[6]: http://www.clamxav.com/

[7]: http://www.sophos.com/en-us/products/free-tools/sophos-antivirus-for-mac-home-edition.aspx

Trash and Email Troubles, *Mail* Threads, Mobile *Safari* Tabs, and Much, Much More

Bob Jarecke

The Tips & Tricks series marches on. Hopefully the tidbits below will be of some benefit to you. With the recent introduction of new operating systems for the Mac (Mac OS X Lion) and Apple mobile devices (iOS 5), there should be lots of new hints for all to employ. Do you have some favorites? If you do, pass them along via the feedback email link here: feedback@wap.org.

1. Troublesome *Trash*

Have you ever tried to empty *Trash*, and it balked? Instead of the sound of the trash being emptied, you are confronted with an error message informing you that the operation cannot be completed because a particular file is in use (see Figure 1.) So what do you do now to clean out the computer's dustbin?

If the file is recognizable and associated with a certain application, make sure that application is not operating. If it is open, close it and empty *Trash* again.

Figure 1. This nuisance message indicates your effort to empty the *Trash* didn't happen. Read the associated message carefully to better understand what is causing the hang-up.

If this doesn't fix the condition, proceed to *Finder*. Select *Finder*, and from the dropdown menu, click on Secure Empty Trash. This works in most cases, but if not, open the *Activity Monitor* utility, and locate the Locum process. Select it and use the Force Quit option in the top toolbar. You will be asked for your admin password during this step. When this is done, go back to *Finder* and use the Empty *Trash* option.

2. Troublesome Email

Very recently on the Pi's TCS Forum, a member reported that he was having problems trashing emails in the Apple *Mail* application. No matter what he did, any attempts to delete emails in the On My Mac section of mailboxes resulted in an error message indicating that the message could not be moved to the mail-box "Trash – On My Mac."

The member tried restarting his Mac and emptying *Trash*—steps that were external to the Mail program—but this still did not make any difference. A friendly pointer on the TCS to a lesser-known option within the *Mail* application did, however.

When experiencing email problems using Apple *Mail*, proceed to the Mailbox menu item, click on it, and at the bottom of the dropdown menu, select Rebuild. This will do as the title suggests, rebuild *Mail*'s mailbox database. Hopefully, this action will put all things in order and you will once again enjoy error-free electronic mail (see Figure 2.)

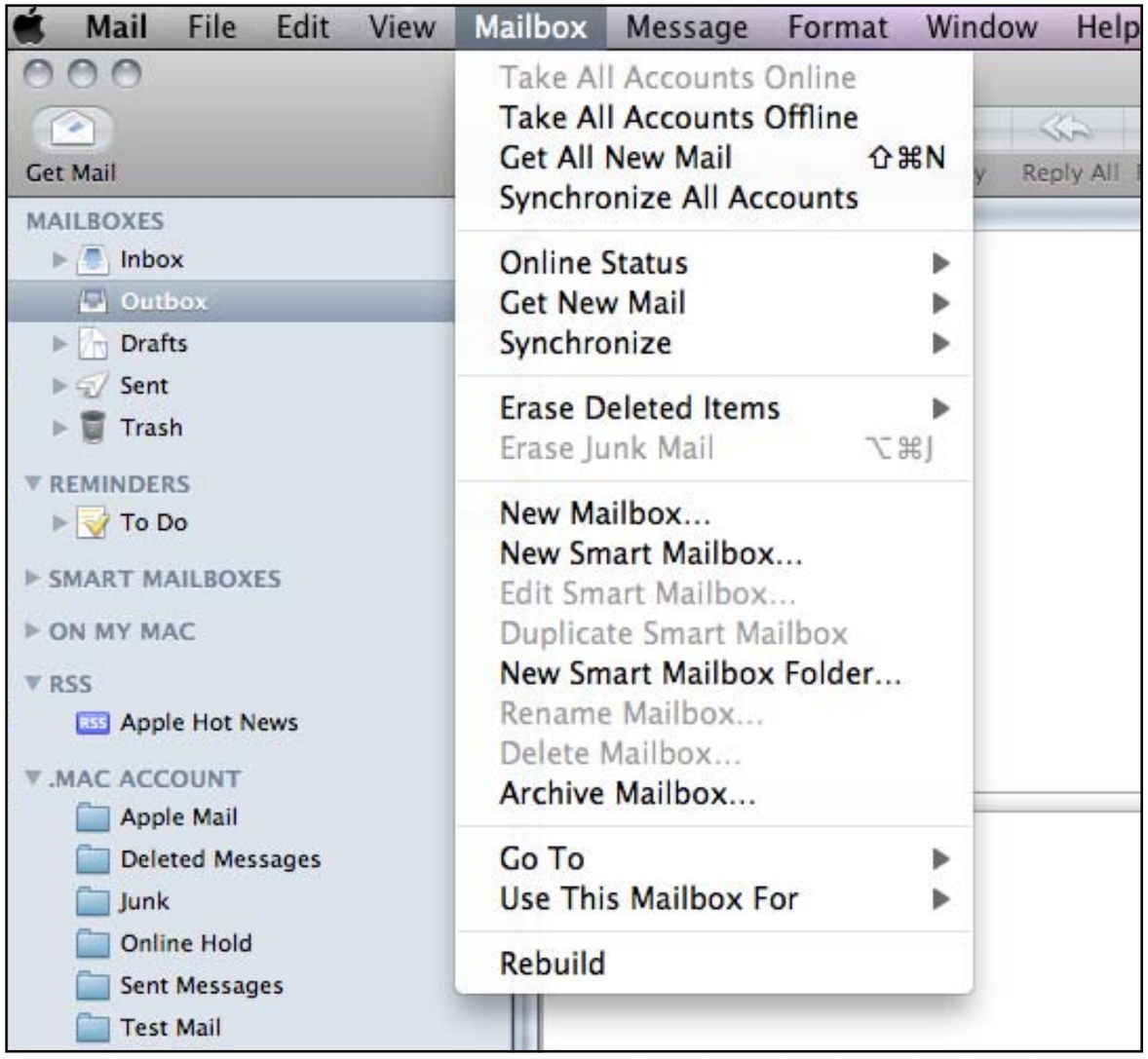


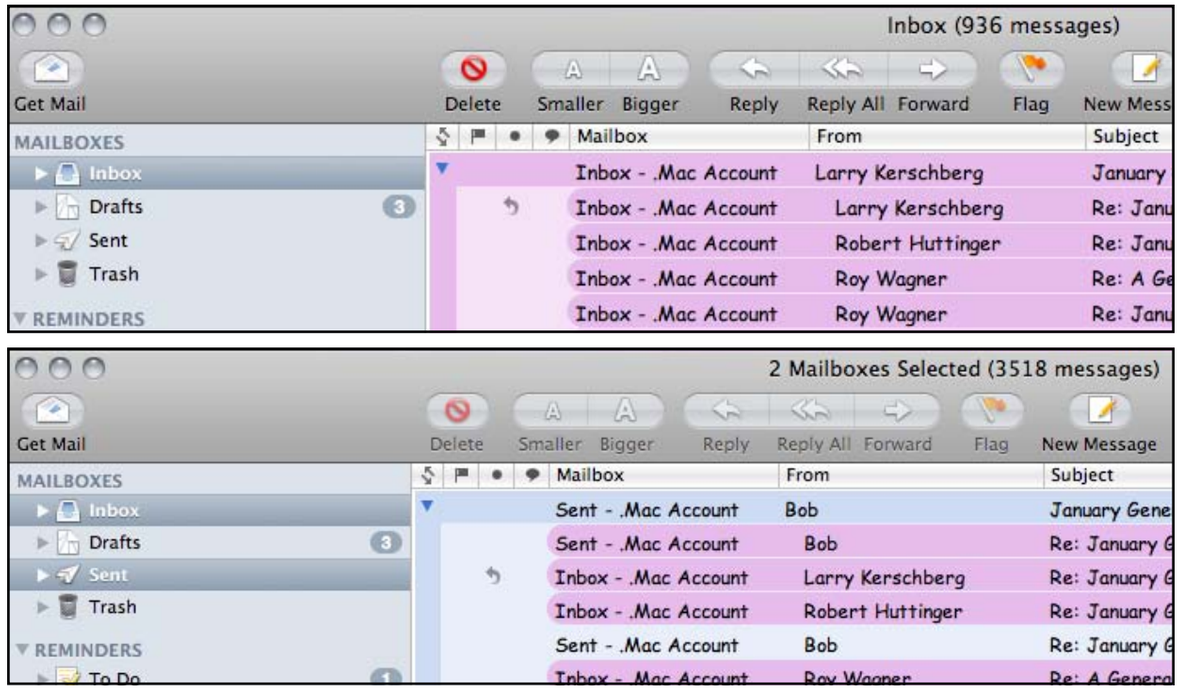
Figure 2. In Apple *Mail,* the Mailbox menu has a Rebuild option. Selecting Rebuild could clear up some problematic email issues.

3. Using Thread Viewing in *Mail*

Apple *Mail* has a great email viewing feature called thread viewing that allows you to group related messages so that you see a better picture of the whole discussion. When you turn on this feature (Mail menu >> View >> Organize by Thread), all emails relating to the subject of an originating email are displayed together. Nice.

In the graphics below, I first show the full thread of messages in my InBox mailbox regarding the subject of "January General Meeting." While the thread captures all the responses to the first message, it doesn't directly capture my replies because they reside in *Mail's* Sent mailbox. How can I include them for a fuller picture?

To view the email from more than one mailbox, just hold the Command (Apple) key and click on the mailboxes you want to include. The second screenshot graphic illustrates how all related emails are viewable in a single thread. Note: When you make the mailbox selection, the list of messages may jump in list viewing pane, so make a mental note of the date of the original message and scroll back to that area of the list. The full thread of the message should then be visible. (See Figures 3 and 4.)



Figures 3 and 4. The first screen shot illustrates a message thread associated with only one mailbox, the Inbox. The second screen shot is the same thread showing the complete message thread because both the Inbox and Sent mailboxes are selected.

4. iOS 5: Using Tabs in Mobile *Safari*

Here is a tip about how to reopen recently closed tabs quickly in mobile *Safari* on an iPad. Press and hold on the add tab [+] symbol. What results is a list of tabs that have been recently closed. Touching any one of the listed pages will reopen it in a new tab.

There are reports of list inconsistencies, but generally this feature works. To clear the list, close *Safari* with no open tabs or quit the mobile *Safari* app in the multi-tasking bar by clicking on the 'X' in the jiggling app mode. (See Figure 5.)

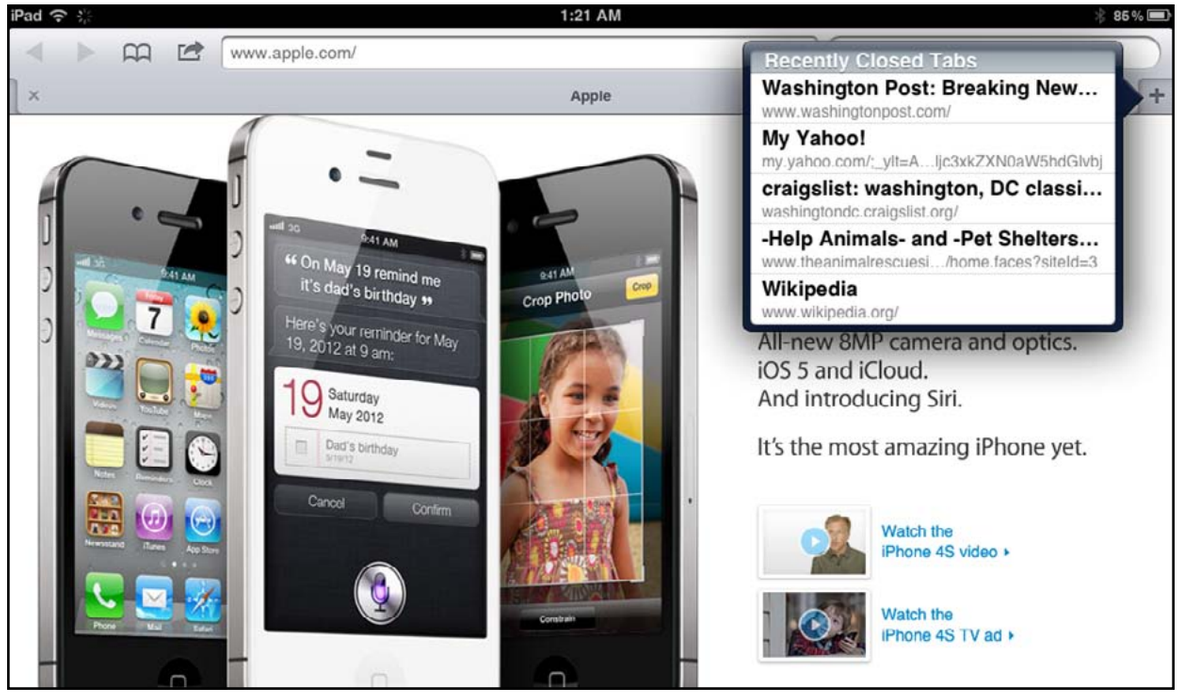


Figure 5. You can reveal recently closed tabs in mobile *Safari* by touching the new tab symbol [+] and holding.

5. Checking an iOS Device Battery Level when Charging

When your Apple iOS mobile device is connected to the AC charger, can you check the battery charge percentage without disconnecting it?

Yes. Clicking the home button reveals a battery image with a green graduated charge level, but it doesn't give the precise degree of charge. To get a more accurate level of charge, make sure the Battery Percentage function is on in the Settings app. Here is the pathway: Settings > General > Usage > Battery Percentage - On. Now—even if you are employing the screen lock feature—the percentage level of charge will be available in the top menu bar at the far right. (See Figure 6.)

6. Clearing Growl Notifications

If you are using the Growl notification system within Mac OS X, you could end up with a whole host of these translucent notices on your computer screen. Stepping away from your Mac for even a short period of time can result in a serious cleanup task.

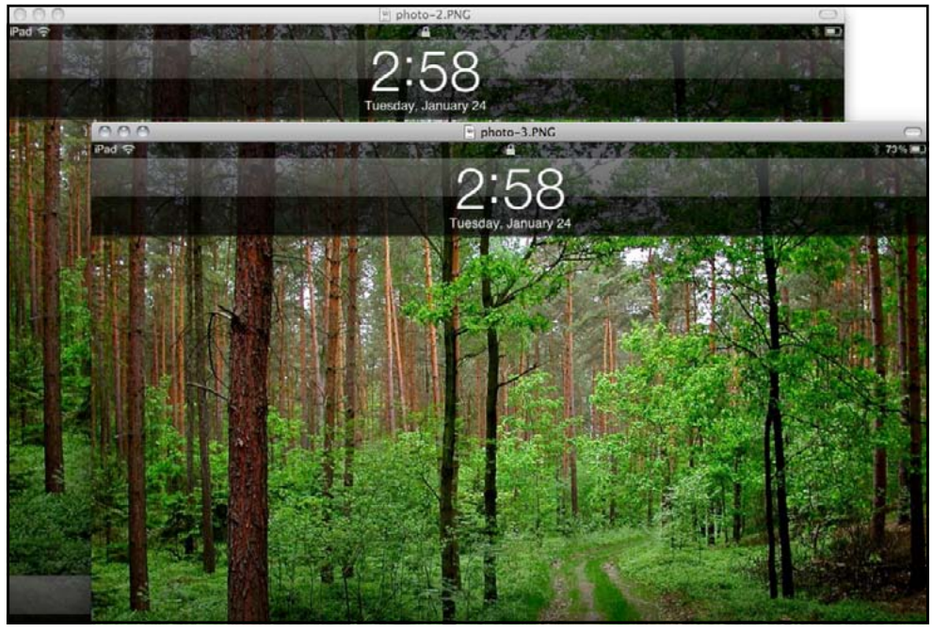


Figure 6. Note the battery indicator in the aft screen shot; you can only estimate the battery life remaining for this iPad. The screen shot in front shows a more precise battery level because the iPad's battery percentage feature is turned on.

To recap, Growl is a global notification system for computer operating systems that allows various applications to display small notification messages about events as defined by the computer user. The application is managed via a System Preferences pane. This pane allows the user to enable and disable Growl's notifications for certain applications entirely or to select specific notifications for each application. As for the screen full of Growl notifications, just hold the Option key and close any one of the notifications. All gone! (See Figure 7.)

7. Quick Switch to Parent Folder in *Finder*

Sometimes when navigating in *Finder* using Column View, your parent folder ends up under the left sidebar and out of view. If you need to quickly view the parent folder without scrolling left or using the left arrow key, just click in the white space at the bottom of the destination column, and *Finder* immediately reveals the parent folder. Note: This tip only works in *Finder* if you are using Column View. (See Figure 8.)

Do you have some tricks of your own? Let us know so we can share them with the other readers; just use the Contact Us button at the bottom of the page.

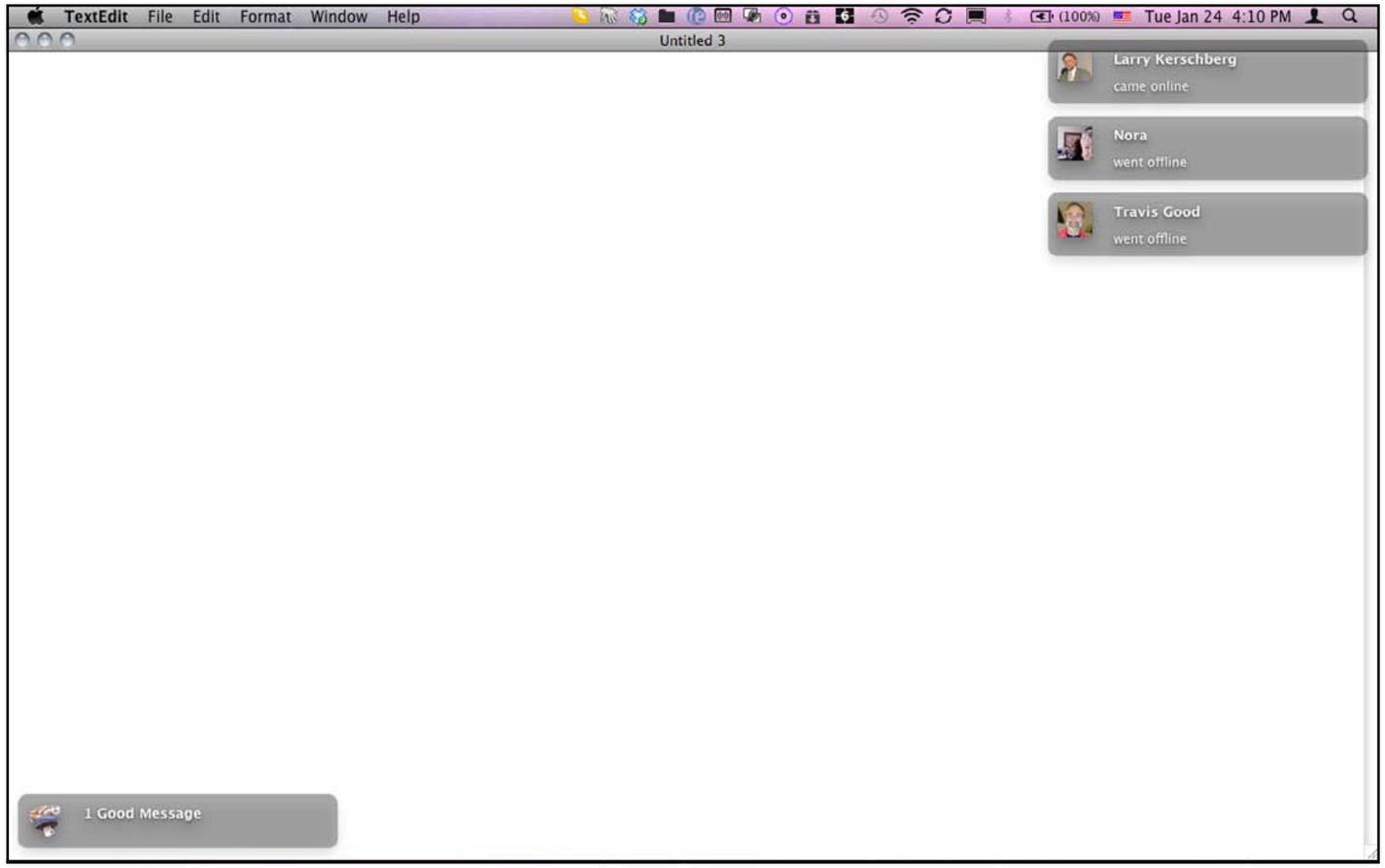


Figure 7 (top). This screen shot shows a number of Growl notifications that have accumulated. You can clear them all at once by holding the Option key when you delete any one of them.

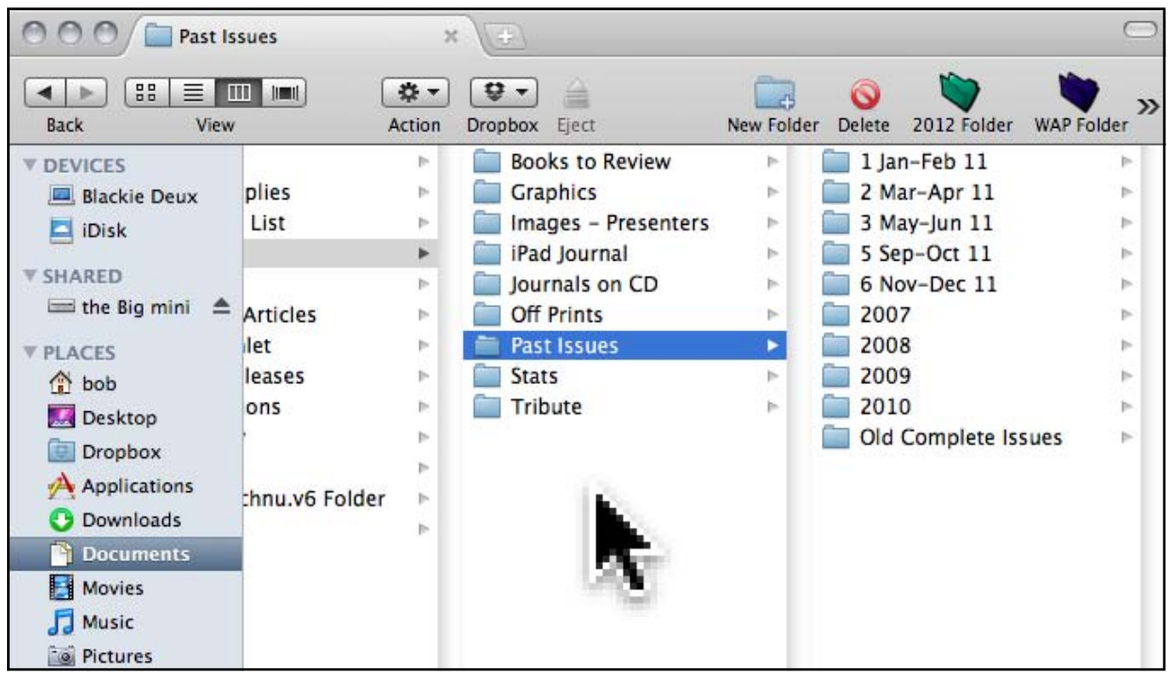


Figure 8 (left). In Finder's Column View, if you lose sight of the parent folder of the file or folder you have selected, just click in the open space below the items in the column. The column to the left will jump back into view, revealing the parent folder.

HOT LINKS

- Danger! Danger! The Flashback malware has evolved into a new version that takes advantage of a vulnerability in the Java application if it is installed on your Mac. Go here to learn about how it works, how you can protect yourself.
  http://www.macworld.com/article/1166254/what_you_need_to_know_about_the_flashback_trojan.html - lsrc.nl_mwweek_h_cbstories

- You just bought a New iPad, and want to clean out your old one so you can move it to its next life. Be careful, Grasshopper.
  http://www.zdnet.com/blog/hardware/how-do-i-securely-wipe-my-ipad-for-resale/18893?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+ZDNetBlogs+%28ZDNet+All+Blogs%29

- But you can go home again. How useful is the Home button on your iPad? Do you know its awesome power? Here is your opportunity to be informed and empowered:
  http://52tiger.net/the-ipad-home-button/

- Quick! Download the Quicken update for Lion! If you have not upgraded to Lion because of its incompatibility with Quicken Mac 2007, you can do it now.
  http://tidbits.com/article/12852

- Burn before reading…When I was a spook, we used yellow legal pads. How times have changed:
  http://www.cultofmac.com/149159/president-obama-in-the-oval-office-getting-briefed-on-an-ipad-2-image/

- Yeah, but is it REALLY secure? Researchers have recently discovered flaws in the cryptologic algorithms that are used to secure web transactions. If you are a prime number aficionado, here is an explanation of the problem and why it may or may not matter to you.
  http://boingboing.net/2012/02/16/prime-suspect-or-random-acts.html

- Did you know that your address book on your mobile device is fair game? A number of iOS applications send back your address book data. Sometimes you may want this to happen, and sometimes you may not. Check it out:
  http://boingboing.net/2012/02/16/prime-suspect-or-random-acts.html

- Fun with your iPad! Amaze your friends and neighbors! Watch this jolly German demonstrate his iPad to mall visitors:
  http://www.youtube.com/watch?v=32bUla--6GM

- Here is more fun. This brief clip shows (almost) every Apple product. How many can you name?
  http://www.ritholtz.com/blog/2012/02/every-apple-design-everish-in-30-seconds/

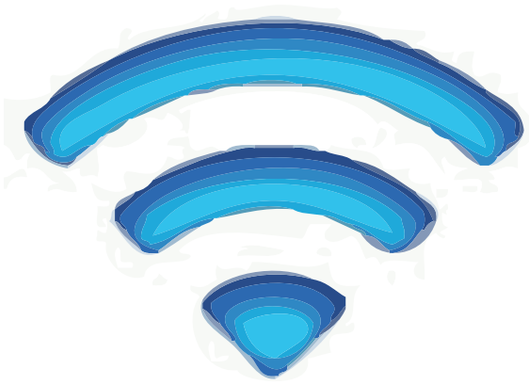
Upcoming Washington Apple Pi Meeting

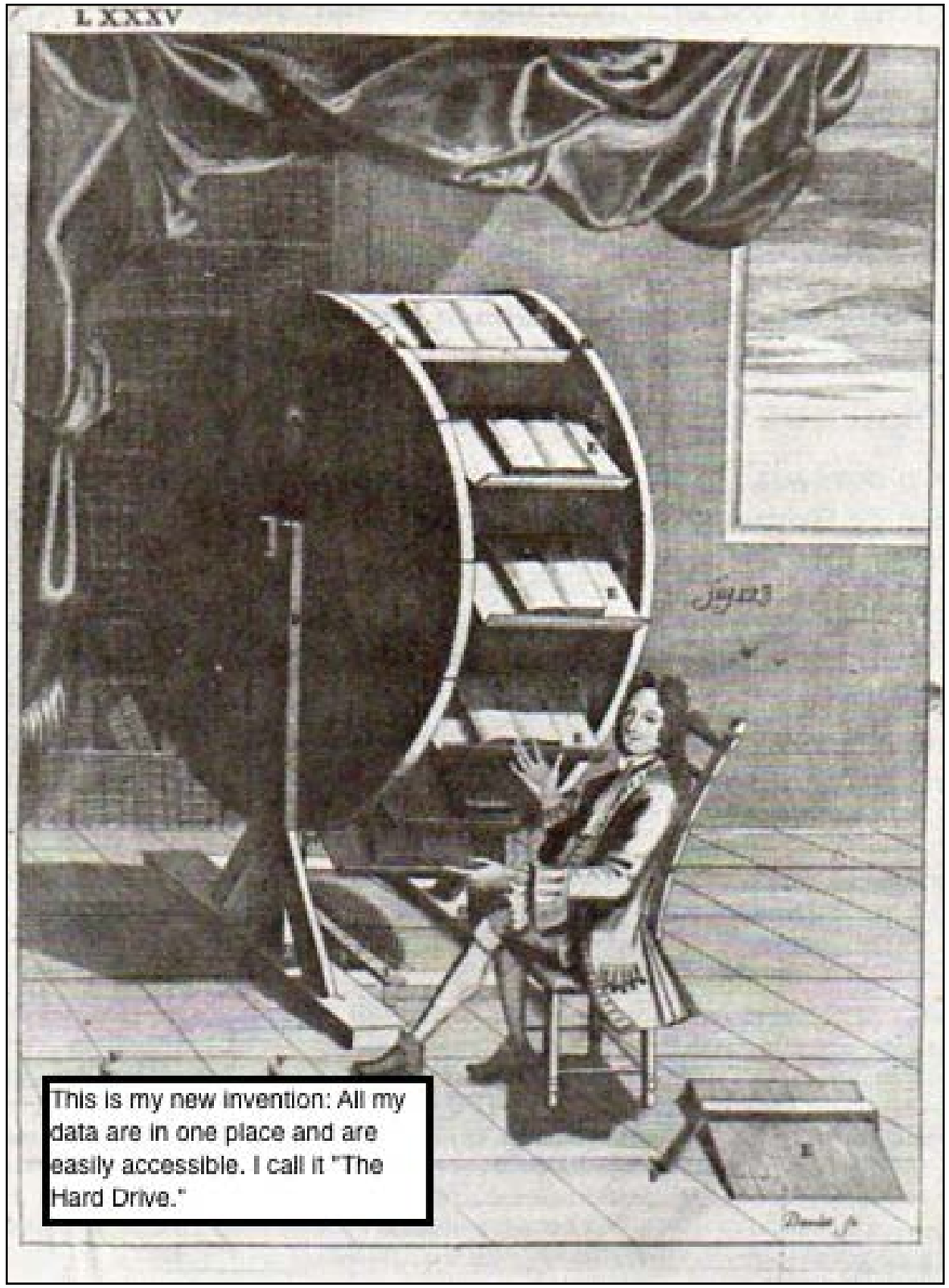
April 28th 2012: Setting Up Your Own VPN

Are you taking risks with unprotected Wi-Fi? Our April general meeting presentation will show you how to set up and use your own personal Virtual Private Network (VPN).

The meetings will be held at our usual location, the Enterprise building, Room 178 on the George Mason University campus in Fairfax VA. The Pi web site has the full agenda and a map showing how to get there. Check back closer to the meeting date for any updates or changes:

http://www.wap.org/events/april2012/





Volunteer Opportunities

Members Helping Members

Dedicated volunteers are the lifeblood of the Pi. Whether it is installing a hard drive at a Clubhouse Saturday event, answering questions at a General Meeting, or placing advice on the TCS Forums, there are many ways to pitch in and help, depending on a member's interests and talents. Please consider making a commitment to ensure that the Pi remains a strong and energetic club dedicated to helping its members. All volunteer efforts are appreciated. Check out these areas where assistance is needed.

Featured Position – General Meeting Webcast Director

The Pi currently captures its General Meetings on videotape for future viewing by members who cannot attend the meetings. Using the same camera, we are able to concurrently produce live webcasts so members can view the meeting in real time via the Internet. We need a dedicated volunteer to oversee the technical and production aspects of this webcast.

There are various technical components to putting up the video on the Pi's Ustream web page. The Webcast Director needs to that ensure that the equipment is properly set up and functioning, and needs to monitor the audio and video streaming production from start to finish (or designate someone to do this) to ensure satisfactory audio and video quality. The Webcast Director will not be responsible for any other part of the General Meeting program, but will focus exclusively on the webcast production.

Any previous experience in TV or video production would be advantageous, but is not required. A basic understanding of video and audio equipment and how to connect them would be helpful, but the contracted cameraman has primary responsibility for equipment hookup. The Webcast Director needs to make sure that the meeting presenters do not stray from their predetermined stage positions, so they remain adequately illuminated for the entire presentation. Also, this person should be available in case of a technical or other problem that would require the speaker to temporarily suspend their presentation. Case in point: the Webcast Director will stop the action when the cameraman indicates that a new tape needs to be swapped out in the video camera.

If you are interested in helping out with an eye on taking over this important position, contact Bob Jarecke at **robert.jarecke@wap.org.**

Journal Managing Editor

The *Journal* is an established, time-honored publication of the Washington Apple Pi and it is in need of someone to take over as Managing Editor, leading a team of dedicated and highly skilled volunteers. The *Journal* is published on a bi-monthly basis so most of the activity occurs in the three weeks leading up to the publication date. In addition, this person will be a member of the Pi's Publications Committee, which has oversight of all printed material published by the Pi. The job is challenging, but very rewarding.

If you enjoy writing and want to help the Pi progress, this is the job for you. If you enjoy working with enthusiastic colleagues on meaningful projects, apply today.

Contact the interim *Journal* editor, Jay Castillo, at: **editor@wap.org** with any questions or to express your interest.

General Meeting Manager

Our General Meeting programs need someone dedicated to the planning and managing of these important club events. The job includes coordinating meeting activities, making any necessary arrangements, and managing the behind-the-scenes tasks. While it sounds like a job for Superman, that really is not the case. If you have juggled household duties or been an office administrator, you have the skills. While another Pi manager emcees the meeting, you will be making him or her look good!

Because this activity needs to be approved by the Pi's Management Committee, the volunteer will serve as an adjunct member of that committee. This volunteer opportunity is guaranteed to keep you busy, and when the meeting is over and everything is packed up, lunch is on the Pi.

Send your inquires to **robert.jarecke@wap.org.**

Contact **office@wap.org** to express interest and we'll go from there.

iChat Help Volunteer

Apple's *iChat* application offers a way for Pi members to help other members from the comfort of their own home. Interested? Read on.

iChat is an ideal means for direct communication using text, voice, video, or, in the last two versions of Mac OS X, screen sharing. With the Pi having commercial grade servers and server software, we now have the means to host our own *iChat* network. We are currently testing the capability of this interactive networking software, and the first results are positive.

So what will Pi *iChat* Help volunteers do? Basically, the volunteer helps members who have questions or a problem, but instead of meeting face-to-face, you handle the matter using *iChat*. What's that? You don't use *iChat* or haven't even launched it yet? No problem, we will train you. We will also be providing guidance on how to deal with common issues, and on problem-solving techniques, and will supply a list of associate helpers who can help with particular issues. All you need to bring to the equation is your people skills and a genuine desire to help.

If you have even the slightest interest or any questions, contact the Management Committee Chair, Bob Jarecke, at **robert.jarecke@wap.org.**

Washington Apple Pi

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Members helping Members