



THINGS

EVERY iPhone & iPad USER

SHOULD KNOW



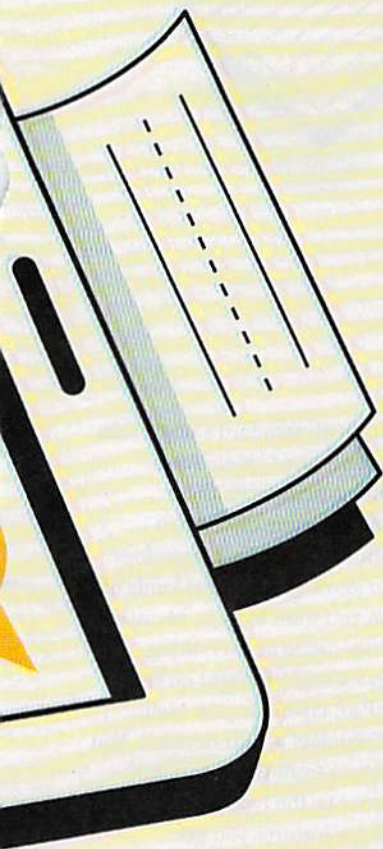
ESSENTIAL TRICKS & TECHNIQUES
FOR THE iPad AND iPhone

ILLUSTRATIONS BY HARRY CAMPBELL

Using an iPhone or iPad isn't hard. You probably didn't need a class, book, or on-screen tutorial to get started with yours. If you're like us, you just tapped here and there until the thing did what you wanted it to do.

That's why many of us have holes in our iPhone and iPad knowledge. You might know how to do the things you do all the time, but you're not so certain about the things you only do once in a while. Maybe you know all about working with text or taking photos, but you're a little hazier on Bluetooth devices and printing. We all have our gaps.

That's why we came up with a list of 12 things we think every reasonably savvy iOS user should know how to do. To paraphrase something we said this time last year ("100 Things Every Mac User Should Know," April 2011), you probably already know many of them. But we're also betting you don't know them all. Here's your chance to learn.



1

SYNC YOUR DATA

BY JOE KISSELL

Your iOS device can wirelessly sync personal data such as contacts, calendars, reminders, Safari bookmarks, and notes with your Mac as well as with Apple's iCloud, Microsoft Exchange, and Google. But how you set up those syncs can vary widely, depending on the kinds of mail and calendar accounts you have.

iCLOUD

The simplest syncing setup uses Apple's free iCloud service. It's also the most capable option, because it synchronizes the broadest range of data types (contacts, calendars, reminders, bookmarks, and notes). And because iCloud is thoroughly integrated with apps built into both iOS and Mac OS X, it's the most convenient. Setting it up couldn't be simpler: On a Mac, go to the iCloud preference pane, enter your credentials, and turn on the services you want to sync. Then, on an iOS device, go to Settings ► iCloud and do the same.

EXCHANGE

If you have an account on a Microsoft Exchange-compatible server, your iOS device can sync contacts, calendars, and reminders—but not notes or book-

marks—with it. To set up the account, tap Settings ► Mail, Contacts, Calendars ► Add Account ► Microsoft Exchange. Enter your credentials, tap Next, and follow the prompts.

GOOGLE

Your iOS device can sync contacts, calendars, and notes with Google's free services—Gmail Contacts, Google Calendar, and (for notes) Gmail—and it

can do so for both standard Google (aka Gmail) accounts and Google Apps accounts. But syncing with those services requires more effort than syncing with iCloud or Exchange does: You need to know exactly what kinds of information you want to sync, because no one service can sync everything.

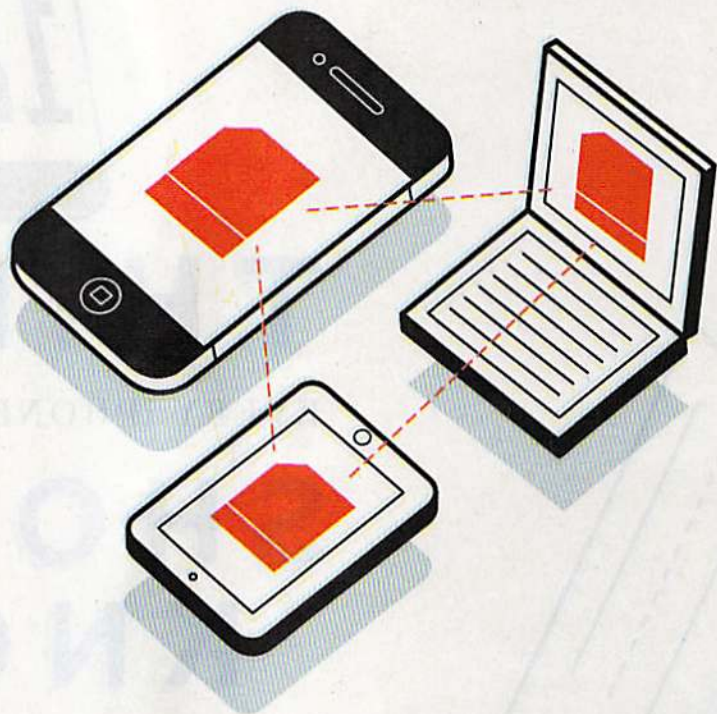
To set up a Google account on your iPhone or iPad, tap Settings ► Mail, Contacts, Calendars ► Add Account. You can now choose from three different types of accounts; the type you choose determines the features you get.

Gmail If you select Gmail, your iOS device uses IMAP to fetch notes (as well as email). It offers to sync calendars, but it won't sync your Gmail contacts. If you see a message asking you what you want to do with your local calendars, choose the safest option, Keep On My iPhone.

Microsoft Exchange With the Exchange option, your iOS device connects to your Google account using Google Sync (Google's implementation of Exchange). That provides push syncing of calendars and contacts (as well as mail), but not notes. If you choose to use Google Sync, read Google's



Google Exchange
Using Google's Exchange option lets you sync almost everything.



"Setting Up Google Sync with Your iOS Device" help document (macworld.com/7636) and the Known Issues tab (macworld.com/7637) before you proceed: This option has some specific limitations when it comes to accepting and declining events, recurring events, and syncing contacts.

Other By selecting Other, you can configure Gmail as a standard IMAP email account (with slightly different options than if you tap Gmail). With that account, you can sync notes, but not calendars or contacts.

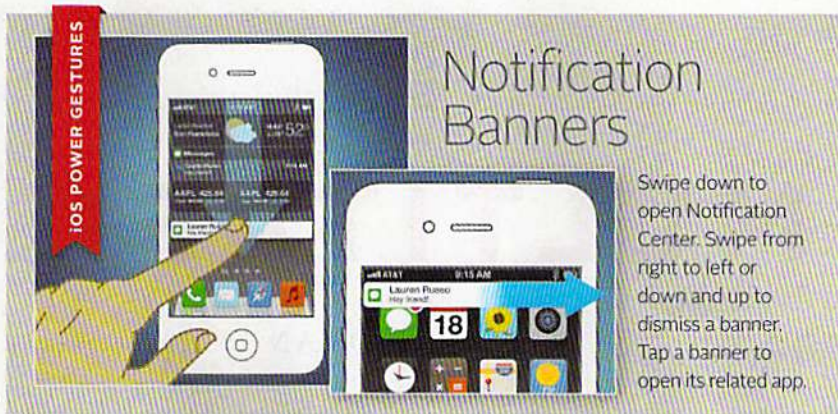
If one of these accounts doesn't have a feature you need, you can always set up more than one of them: For example, you can set up one Google account as Gmail and turn on Mail, Calendars, and Notes; then you can set up a second instance of that same account as Microsoft Exchange, and turn on only Contacts. Just make sure you don't set up two Google accounts to sync the same data; that could well lead to confusion.

You also need to be aware of how Google syncs specific kinds of data:

Contacts To sync contacts between Gmail and a Mac, open Address Book on the computer, choose Address Book ► Preferences, and click Accounts. Select On My Mac in the Accounts list, click Synchronize With Google, and follow the prompts. Google contacts sync only with Address Book's local (On My Mac) contacts; this option won't sync those stored in iCloud or on an Exchange server. (In fact, Apple warns against syncing Google contacts with Address Book on your Mac if you're also syncing contacts with iCloud.) If you want to merge local and server-based contacts, you can try Playa Apps' \$3 Contacts Sync for Google Gmail (macworld.com/7666).

Calendars You can also sync with Google Calendar from iOS using the CalDAV protocol. (For instructions, see Google's "CalDAV Calendar Sync" help page at macworld.com/7638; if you want to sync multiple calendars, see Apple's tech note at macworld.com/7639.)

However, there's no good reason to do so: Google Sync is easier to set up, has fewer restrictions, and provides push updates.



To configure iCal on your Mac to connect to Google Calendar, choose iCal ► Preferences, click Accounts, and then click the plus-sign button (+). Choose Google from the Account Type menu, enter your Google credentials, and click Create. You can sync an existing Google Calendar with iCal, but you can't sync an existing iCal calendar with Google Calendar.

Notes When you sync notes with a Google account, they appear in the Notes app on an iOS device, but they show up as email messages with the label Notes in Gmail, and they appear as messages in a Notes mailbox in your Gmail account in Mail on Mac OS X.

Tasks Gmail Tasks can't currently sync with the iOS Reminders app, even when you use Google Sync. But you can sync them with a third-party to-do app, such as Memengo's \$4 GeeTasks

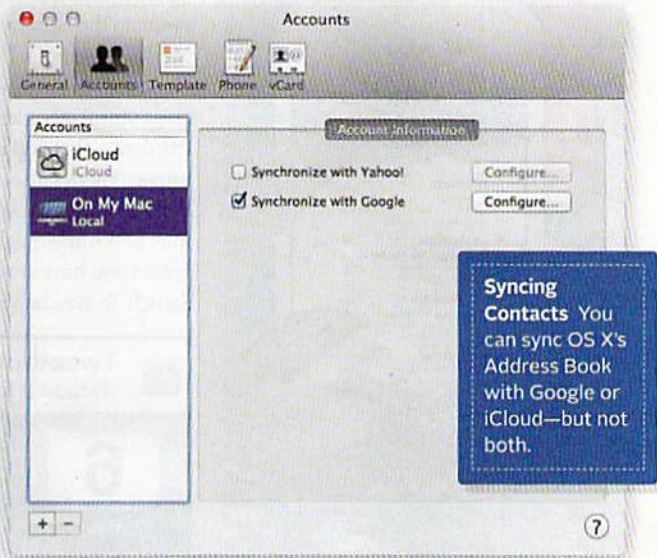
(macworld.com/7640), Yaniv Katan's free gTasks HD (macworld.com/7667), and Readdle's \$7 Calendars (★★★★; macworld.com/7642). You could search the App Store for other iOS to-do and reminder apps; many third-party options include both Mac and iOS components that sync

with each other and require neither an iCloud nor a Google account.

Bookmarks To sync your bookmarks between the Mac and iOS versions of Safari, iCloud is currently the only way: Apple doesn't give third-party software access to the Safari bookmarks on iOS devices, so no other service can sync them from your Mac to your iOS device.

You can, however, use the Xmarks Premium service from LastPass (\$12 per year; buy.xmarks.com), which also lets you sync your Safari, Firefox, and Chrome bookmarks among all your Macs and PCs. Several other alternative iOS browsers and bookmark apps also offer syncing with Safari on your Mac.

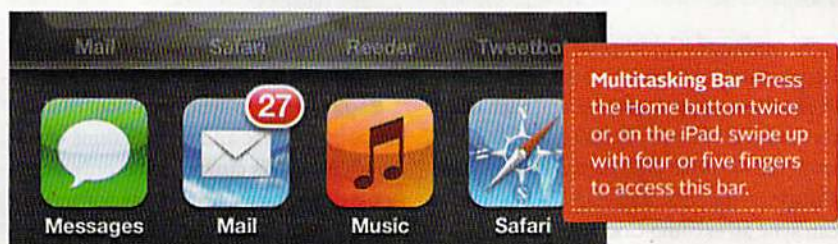
Senior Contributor **Joe Kissell** is the senior editor of TidBits and the author of *Take Control of iCloud* (TidBits Publishing, 2011).





MULTITASK

BY LEX FRIEDMAN



Multitasking arrived with iOS 4, making it a lot easier to get things done quickly on iPhones and iPads. iOS 5 brought multitasking gestures to the iPad-using masses, which helped make iOS even snappier. But those features really only help you use iOS faster once you've mastered them.

There are two main approaches to multitasking on an iOS device: using Home-button actions and performing gesture-based actions.

HOME BUTTON

Pressing the Home button twice quickly opens the multitasking bar. There you'll see your most recently run apps; they appear in the order in which you last used them (most recent to the left, less recent to the right; swipe left to see older ones). If you use a lot of apps and would rather not do all that swiping, it's probably faster to press the Home button once more, pause, and then press it again to summon Spotlight and search for the app by name.

If the multitasking bar is open and you swipe to the *right*, you expose a set of playback controls. Usually those controls work with the Music app, but they can also control other apps—such as Pandora—that you might be using to play music. There's also a button that turns on the orientation lock. (On the iPad, this may be a mute toggle, depending on the option you have set under the Use Side Switch To area in Settings ► General.)

On the iPad, this part of the multitasking bar also offers AirPlay control and brightness and volume sliders. On the iPhone, you have to swipe left to right once more to get AirPlay and volume; there's no brightness slider—a frustrating oversight.

MULTITASKING GESTURES

Because the iPhone's screen is so small, it does not support multitasking gestures. But the iPad does, and once you master them, you'll wonder how you ever managed without them. Unfortunately, the iPad's multitasking gestures aren't necessarily intuitive. But they're straightforward enough to memorize.

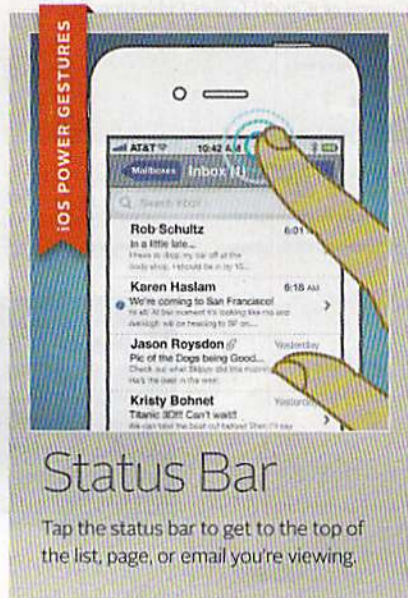
First, make sure the gestures are enabled: Go to Settings ► General and slide the Multitasking Gestures switch to On. You can now use three systemwide gestures from within any app:

- > Pinch closed with four or five fingers to get back to your home screen. Imagine you're squeezing the app closed by moving your fingers together. (For added amusement, perform the gesture slowly, and start expanding your hand again before you release, watching the app shrink and grow.)

- > Swipe straight up with four or five fingers to access the multitasking bar. You can swipe back down again to dismiss the multitasking bar, or just tap anywhere else on the screen. This works when you're on the home screen as well as from within apps.

- > Swipe left or right with four or five fingers to switch between apps. When you launch an app, visualize it as the left-most one; swipe from right to left to go to the last used app. Swipe the other way to go back.

Lex Friedman is a staff writer for Macworld.



Notifications With the multitasking bar open, notifications appear above it, not at the top of the screen.



MANAGE YOUR APPS

by SERENITY CALDWELL

Without apps, your iPhone, iPod, and iPad would be useless, so knowing how to find good apps and how to manage the ones you have is crucial.

FINDING

The App Store's Search feature is fine if you know the name of the app you want to buy. But there are other approaches you can take if you don't.

The handiest is to open the App Store's Categories tab. There, you can not only find the type of app you want—photo editing, say—but also see which ones are most popular with other App Store customers. If you've heard of a new one, you can sort by release date.

If you're looking for more of what you already have, turn on the Genius section of the App Store; it gives you recommendations for apps like those you've already downloaded. (This is particularly useful for games.) If you find an app that you know wouldn't suit your taste, swipe to delete it from your list; Genius will recalibrate its results.

ORGANIZING

Once you've amassed a lot of third-party apps, your home screens can get unwieldy. But the basics of app organization are easy: Tap and hold an app icon to enter edit mode (all the icons jiggle), drag apps around

the screen or from one screen to another, and when you're done press the Home button. But there's more to it than that.

Folders Have a lot of games? In edit mode, drag one game on top of another to create a Games folder. To add more games to the folder, just drag them onto it. You can add as many as 12 apps per folder on the iPhone, and 20 on the iPad. When you're done, open a folder by tapping it.

Use Your Mac If you need to straighten up several pages of apps, you're better off doing it on your Mac. Connect your device (via USB or Wi-Fi Sync) and open iTunes. Select your device in iTunes' Source list and click on the Apps tab; there, you can drag apps to rearrange them, or remove apps by unchecking them.

Search If you have so many apps that even your folders have become cluttered, you can search for them by title with Spotlight: Swipe to the right on your first home screen and start typing the name.

Updates When a numerical red badge pops up in the upper right corner of the App Store icon, some of your apps need updating. Because Apple approves new patches throughout the day, it's usually best to update your apps in the evening (you can do so by opening the App Store, tapping Updates, and then tapping Update All).



Undelete If you delete an app but want it back, you can redownload it for free. Open the App Store app. On an iPad, select the Purchased tab, then choose Not On This iPad, and then tap the download icon for the app. On an iPhone, select Updates and then Purchased, tap Not On This Phone, and then download the app.

USING

For the most part, iOS apps stick to themselves, within their own virtual sandboxes. But some apps can interact with others by sharing files.

Camera Roll and Dropbox Many apps can save images to, and open images from. Camera Roll: Just save app A's image and then use app B to open up that image from the Camera Roll. Documents are trickier. If app A is able to export to Dropbox, send the file there: You can then open Dropbox, load the file, and tap the Action button. You'll then be prompted to select an app from the Open In menu.



Other Apps The Open In command also appears in Safari, Mail, and third-party apps, allowing you to send external

files to various apps. So if, say, someone sends you an iBooks-compatible ePub or PDF by email, you can send it directly to iBooks to read it.

Fast App Switching In addition to opening recently used apps by double-pressing the Home button (see "Multi-task"), you can also quickly access apps that have recently issued notifications: Pull down Notification Center by swiping down from the top of your device's screen and tapping the app alert.

Quitting You can clear certain apps from the multi-tasking bar by entering edit mode and tapping the X in the upper left corner. You do not *need* to do this, however; your device automatically manages memory, and it quits any apps that might make it run sluggishly.

Serenity Caldwell is a staff editor for *Macworld*.



EDIT TEXT

BY DAN FRAKES

Whether you're writing an email or filling in a field in Safari, nearly every task you perform on your iPhone, iPad, and iPod touch involves working with text. And there are smart ways to do so.

BASICS

The first thing you need to know how to do is navigate and select text, and take advantage of iOS's built-in editing tools.

Scroll In almost any iOS editing field, you swipe your finger up or down to scroll through text. However, if you're working in a text field within a webpage, a single-finger swipe scrolls the webpage; swiping two fingers scrolls through the text field.

Position the Cursor Tap within a text field or document to place the cursor at that location and bring up iOS's on-screen keyboard. (If you have an external Bluetooth keyboard connected, the on-screen keyboard stays hidden.) Alternately, tap and hold anywhere on a word to see a loupe that shows a magnified view of the text beneath your fingertip. Drag your fingertip around in the text, and the loupe lets you position the cursor precisely.

Select Text In editable text, double-tap a word to select it; if text is not editable—for example, on a webpage—tap and hold anywhere on a word to select it. In either case, the selected word is highlighted and bracketed by a handle on each end; to expand the selection, drag either handle. To quickly select an entire

paragraph of text, tap once with *two* fingers. (This may not work in third-party apps that use the two-finger tap for something else.)

Use the Editing Popover After placing the cursor or selecting a word, you see iOS's text-editing popover. The options available vary depending on the app and the context, but they usually include Select, Select All, and some combination of Cut, Copy, and Paste; you may also see Suggest and Define.

Some apps provide their own options, which are often found by tapping an arrow button in the popover. In Mail, for example, tapping the right arrow in the editing popover reveals options for formatting text and for increasing or decreasing the quote level. The app

applies the action you choose to the selected text (if you selected a block of text) or to the current line or paragraph (if you didn't).

Get a Definition When viewing uneditable text, double-tap a word to select it, and the editing popover that appears includes a Define option; tap Define to get a definition from iOS's built-in dictionary. When you're editing text, selecting a word presents the Suggest option; tap Suggest, and iOS presents you with similarly spelled words.

Check Spelling In almost any app, iOS automatically checks spelling as you type. If iOS doesn't correct a misspelled word on the fly, a dashed red underline appears beneath the word. Tap once anywhere on the word, and the resulting popover suggests replacements. Tap one to replace the misspelled word with it. (To disable the spelling checker, go to Settings ► General ► Keyboard.)

Undo iOS provides a couple of Undo tools: First, there's an Undo button on the iPad alternate keyboard (the one you see when you tap the 123 key). Second, if you shake an iOS device, a small dialog box slides onto the screen. Tap Undo Typing to undo the last change you made, or tap Cancel to leave your edits alone.

THE KEYBOARD

The size of the iOS keyboard depends on the device you're using (iPad, iPhone, or iPod touch) and whether that device is in landscape or portrait orientation. The keyboard's keys may also differ slightly depending on the app and context; for example, if you're entering a URL in Safari, you see a *.com* key and other options you'd commonly use to type URLs, instead of a spacebar.

People new to iOS often find it odd that it doesn't enter a typed character when you first touch the key; rather, it waits until you lift your finger off the key. This approach nips misspellings in the bud: If you realize you've pressed the wrong button, just slide your finger off the key before lifting your finger from the screen. The keyboard on the iPhone and iPod touch provides an



Highlighting In iOS, you can select a word by either double-tapping it or tapping and holding on it.



All iOS devices support external Bluetooth keyboards, and there are now dozens of keyboards on the market made specifically for use with the iPad (and, to a lesser extent, the iPhone and iPod touch). These portable keyboards include their own batteries and they usually have special iPad function keys for common iOS actions such as adjusting the volume and screen

brightness, controlling media playback, opening iOS's Spotlight search screen, going to the home screen, and more—some even offer dedicated buttons for cutting, copying, and pasting.

If you're a Mac keyboardist, you'll be happy to discover that iOS recognizes many of the Mac's common text-editing keyboard shortcuts, such as ⌘-C for copy, when you're using an external keyboard. In some apps—but not in Mail—you can even use formatting shortcuts, such as ⌘-B for bold and ⌘-I for italic.

KEYBOARD SHORTCUTS

The Settings > General > Keyboard screen offers several shortcuts to make entering text easier. It's obvious what Auto-Capitalization and Auto-Correction do. The Enable Caps Lock option lets you enable caps-lock mode by double-tapping the Shift key. The "." shortcut option, when enabled, automatically inserts a period and a trailing space whenever you quickly type two consecutive spaces.

In this same settings screen, you'll also find an often overlooked feature, Shortcuts. This feature—similar to, but

less capable than, SmileOnMyMac's excellent TextExpander app ($\$5$; macworld.com/7643)—makes it easier to type frequently used text snippets by associating them with shorter abbreviations. For example, tap Add New Shortcut, and then type *works for me* as the phrase and *wfm* as the shortcut. Now, whenever you type *wfm*, iOS immediately replaces it with *works for me*. Phrases are limited to a single line, so you can't use this feature for multiple-line email signatures or street addresses.

DICTIONATION

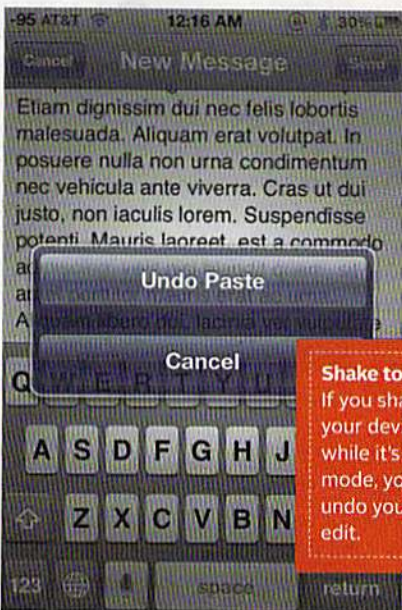
If you have an iPhone 4S, Siri—iOS's virtual assistant—can do some of your typing for you. When the iOS keyboard appears, tap the microphone icon to the left of the spacebar, and then start dictating. When you're done, tap the Done button and Siri enters its interpretation of what you said. Assuming that your iPhone has a decent Internet connection—Siri sends its data over the Net for analysis—this works surprisingly well, although you need to verbalize your punctuation and formatting as *comma*, *period*, *question mark*, *new paragraph*, and so on.

Dan Frakes is a senior editor for Macworld.

enlarged preview of a key's character. Again, if it's the wrong key, you can slide your finger to the intended key and then release.

This approach also has one other advantage: quick access to special characters. If you want to type a special version—or diacritic—of a character (for example, *ü*), tap and hold on the standard version of that character (in this case, *u*). You'll see a popover with various versions of the character (*üüüüüü*); choose one to insert it. This also works with some symbols, such as the dash (-) key—tapping and holding on it produces a standard dash, an end em dashes, and a bullet character.

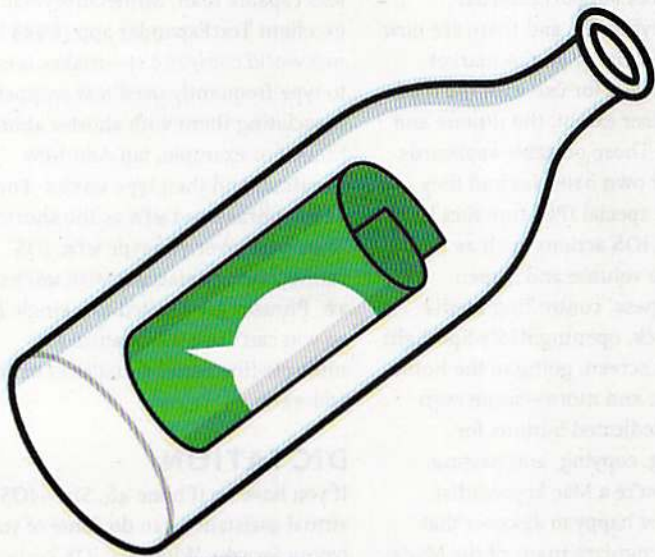
The virtual keyboard is good, but not everyone takes to it; for most people, it's not ideal for marathon typing sessions.



Weather Widget



Pull down on the current day in the Weather app to get an hourly view. Swipe left or right on the widget in Notification Center to get a weekly view.



5

SEND A MESSAGE

BY LEX FRIEDMAN

Broadly speaking, iOS offers three ways to message people (not including email): iMessage, traditional SMS and MMS texting, and instant messaging (IM). iMessage requires Apple's stock Messages app. You can text using Messages or a third-party app. IM requires a third-party app; which one you choose depends on the hardware and apps your recipients use.

iMESSAGE

On the iPhone, iPad, and iPod touch, you can use Apple's Messages app to send iMessages, which can convey text, photos, and videos between iOS devices.

Messages automatically defaults to sending an iMessage when it detects that the recipient is also using an iMessage-capable device—namely, an iOS device running iOS 5 or later. iMessages don't count against your carrier's text-messaging limits for your plan, and they have added niceties: They can sync between iOS devices, and you get an indication when your message has been successfully delivered. You can go a step further by turning on Send Read Receipts (in Settings ► Messages), which indicates to your friends who use iMessage when you've actually read their messages.

Tip: If you set your iMessage Caller ID address to your email address in the

Settings app, your messages will always stay in sync between your iOS devices.

SMS AND MMS

On the iPhone, the Messages app also works for sending traditional SMS and MMS messages. As you compose new messages in the app, they appear in blue if you and your recipient are both using iMessage; they turn green when you're messaging folks on other platforms.

In the Settings app, you can tweak a few elements of Messages' behavior when sending such messages. There's a toggle to disable MMS, in case your plan doesn't support those messages and you don't want to send any pictures or videos accidentally at an added cost. You can also disable Group Messaging, which allows you to text multiple people at once. The other two settings are Show Subject Field (a texting feature that almost no one uses, so it may be wiser to leave it turned off) and Character Count, which provides a countdown as you type to ensure that your text message isn't too long.

If you want to send text, picture, and video messages to someone who doesn't have an iOS device, third-party apps make that possible. Many do so by determining the email address equivalent of your friends' phone numbers, a process that generally requires that you know which wireless carrier they use. Other apps send text messages through their own systems, meaning that all they need is your contacts' phone numbers.

Many of the apps that can let you send text messages can also help you save on your messaging plan: If you use a third-party app that sends text messages over the Internet instead of via your cellular provider, you can probably downsize your messaging option—or eliminate it outright.

Search the App Store for SMS and you'll find oodles of options for such apps; they include Enflck's TextNow (📱📱; free; macworld.com/7644) and Gogii's textPlus (📱📱📱; free; macworld.com/7645). If you're on an iPhone, you can use any of these third-party apps in tandem with Messages. With any



third-party messaging app, however, your device must be online to send messages via the app.

My favorite third-party app for messaging is Google Voice (free; macworld.com/7646): It's ad-free and requires only your contacts' phone numbers to work. Google Voice just sends text messages, not photo or video ones. It does require that you have a free Google Voice account, which you must create on your Mac; you can use your existing Google account to do so. Once that's set up, you get push alerts when messages arrive—a must for any app you'd consider using for texts.

The biggest downside to the otherwise satisfactory Google Voice option is that the app doesn't support sending pictures. Numerous other apps you can find in the App Store support photo sharing—in their own way. When you use these third-party apps to send a photo, the recipient actually receives a

link to the image, which has been uploaded to a Web service somewhere. It's a fine way to send photos, provided the recipient has Internet access on his or her smartphone.

INSTANT MESSAGING

One other option is to go the instant messaging route. All of the major IM networks—AIM, MSN, Google, Yahoo, and Facebook—have apps of their own; numerous other apps, including BeejiveIM (★★★★; \$10; macworld.com/7606) and Verbs IM (★★★★; \$1; macworld.com/7647), offer combined access to multiple IM networks. With such apps, you can send messages to friends who are logged in to those services on their computers or smartphones.

As with the other apps mentioned, IM services don't count against your cellular plan's messaging quota, though they will add to your use of data.

6

SHOOT PHOTOS AND VIDEO

BY ALEXANDRA CHANG

The iPhone and iPad make for surprisingly robust cameras, thanks in large part to the built-in apps that let you shoot, manage, and sync your images.

THE BASICS

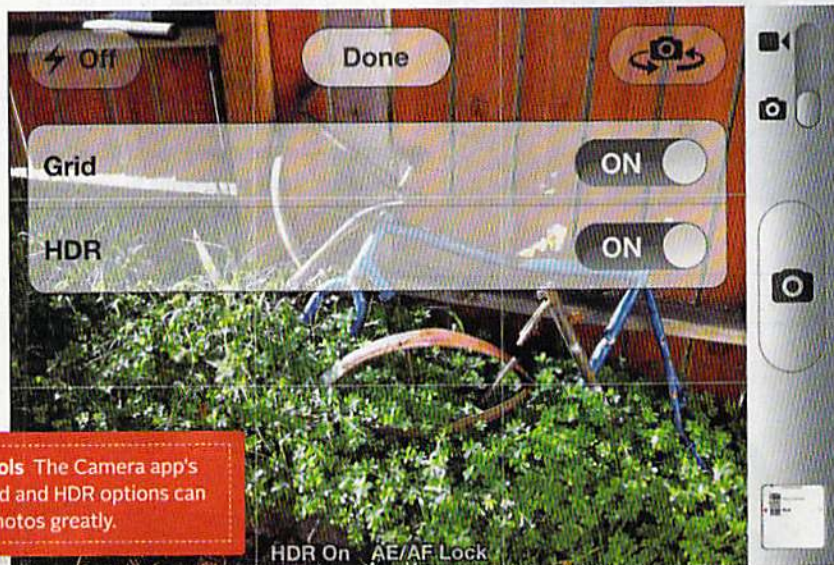
Apple's built-in Camera app is the easiest way to shoot photos and video on an iOS device. You can launch it by tapping on the app's icon or, if you're in a hurry, by pressing the Home button twice from the lock screen and then tapping on the camera icon.

Once the app launches, you take still shots by tapping the camera button at the bottom center of the screen. You can switch between the front

and back cameras by tapping the camera icon with the arrows, in the top right corner. For a low-light setting, turn the flash to On or Auto; turn it to Off if you don't want any flash in your shot.

To shoot video, tap the Photo/Video toggle in the bottom right corner. A round red light replaces the camera button. Tap this button to start recording (you'll see a time code in the upper right corner of the app's screen); tap again to stop.

For help in composing your shots, tap the Options button at the top of the app's screen and turn on Grid; this overlays a three-by-three grid on the screen, so you can follow the rule of thirds. That's also where you can turn on the camera's high dynamic range (HDR) feature, which



Built-in Tools The Camera app's built-in Grid and HDR options can improve photos greatly.

combines three separate exposures to create a single image with optimal lighting. HDR is best for landscape and outdoor portrait shots; don't use it for action photos.

The Camera app automatically sets exposure and focus points, but it doesn't always do so correctly. To focus and set the exposure level on a specific part of an image, tap that area on the screen. To prevent the Camera app from picking new exposure and focus points, tap and hold on the part of your image where you want to set the exposure and focus; doing this activates the auto-exposure/auto-focus lock.

While the built-in Camera app is fine for most users, more-serious photogra-

phers will want a third-party app. Tap tap tap's Camera+ (\$); macworld.com/7576) and Jens Daemgen's ProCamera (👍👍👍; \$); macworld.com/7648) are excellent choices. Both let you lock the exposure on one part of an image and focus on another—something Apple's Camera app can't do. They also provide more advanced features, including stabilizing modes, self-timers, and burst modes for taking quick successive photos.

MANAGING AND SYNCING

Once you've shot a photo or video, it's automatically saved to your device's Camera Roll, which you access by either tapping the Photos app icon, by tapping

the small photo icon in the lower corner of the Camera app, or by swiping to the right in the Camera app.

You can organize your Camera Roll into different albums by tapping the Edit button in the Photo app's album viewing mode. Tap Add, create a title for your album, and then select the photos you want to add to that album. This duplicates the photos, so you'll have one copy in Camera Roll and another in the album.

You can delete a photo by tapping it in the Camera Roll and then tapping the trash-can icon in the lower right corner. If you want to delete multiple photos at once, go to the Camera Roll and tap the Action button in the top right corner; select the photos you want to get rid of and tap the red Delete button in the bottom right corner.

To sync your photos and videos across multiple iOS devices and your Mac, you have a few options. You can tether your iOS device to your Mac (via USB cord or Wi-Fi) and then select the Photos or Videos tab in iTunes, check the Sync box, and then choose Apply. Your photos sync with either iPhoto or Aperture for photos, and with iTunes for videos. You can then choose to sync those photos from the app to other iOS devices by tethering them to your Mac.

For more seamless syncing, use Apple's iCloud Photo Stream service. (Photo Stream syncs only photos, not videos.) Go to Settings ► iCloud and turn on Photo Stream. That done, every time you snap a photo on your iOS device, it syncs to other devices that also have Photo Stream turned on and are tied to your Apple ID. The photos display in a Photo Stream album in the Photos app on your iOS devices. On your Mac, Photo Stream imports images to either Aperture or iPhoto.

You can do everything with Photo Stream that you can do with Camera Roll except delete individual images. You can delete the entirety of your Photo Stream on the iCloud website. On your Mac, sign in to the site and then click your name in the top right corner. Click the Advanced button and then click Reset Photo Stream. The photo will be deleted on your iOS devices, but not from your Mac.

Photo Stream starts deleting photos on your iOS device first when you have more than 1000; the oldest go first.

There are a couple of ways to assert control over Photo Stream. You can turn Photo Stream off while you're shooting, delete the images you don't like from your Camera Roll, and then turn Photo Stream back on; Photo Stream syncs only new Camera Roll images. Another option is to turn your phone to Airplane Mode while you're shooting and follow the same steps.

EDITING

Apple's Photos app provides basic photo-editing tools for your still images, including rotate, enhance, red-eye removal, and crop. To enter the Photo app's editing mode, tap an image in your



Edit Photos
You can perform basic editing functions in the iOS Photos app itself.



Video Mode In video mode, the camera button turns into a red dot, and a time code appears at the upper right.

Camera Roll and then tap the Edit button in the top right corner. For advanced editing, you need to purchase third-party apps. Nik Software's \$5 Snapseed (macworld.com/7578) is an excellent all-in-one photo editor that runs on both iPhones and iPads. With it, you can use Multi-Touch gestures to tune and adjust images, add filters and frames, and make selective edits.

To edit videos on your iOS devices, use the basic Trim tool in the Camera Roll; you can edit the start- and endpoints of a video by tapping and holding the end you want to trim in the video preview at the top of the screen. If you want to do more than that, you must download Apple's \$5 iMovie app (macworld.com/7649). With it, you can do almost as much on your iPad as you can on your desktop Mac. Tap a clip, and bright yellow selection handles appear; you can then drag the clip to the Viewer area. Add titles by double-tapping a clip and choosing a title style from the pop-up menu that appears.

Pinch outward vertically to access the Precision Editor for more-specific edits. You can also edit audio for multiple tracks. The iMovie version for the iPhone and iPod touch offers similar features, but it doesn't include the Precision Editor or the ability to see audio waveforms.

Alexandra Chang is a staff editor for *Macworld*.

7

PRINT

BY DAN MOREN

With iOS 4.2, Apple introduced AirPrint, which put printing capabilities directly into the mobile operating system. Unfortunately, AirPrint works only with certain printers. If you have an AirPrint-capable printer, printing from an iPhone or an iPad—or, more specifically, from an iOS app that supports printing—is simple. (Those apps include such staples as Safari and Mail.) But even if you don't have an AirPrint printer, there are still ways to print from an iPad or iPhone, as long as you have the right helper apps.

PRINT CENTER

The Print command is often hidden under the Action button, alongside things like Send To Email or Send To Twitter, in apps that support printing. Once you find and tap Print, you're asked to select a printer and specify the number of copies (up to 99); depending on the printer you're using, there may be other options as well. Once you've made your selections, tap Print again.

To check the status of a current print job, you use Print Center, an app that appears only while printing is active; you reveal it by double-clicking the Home button to open the multitasking bar. There, Print Center is the first app in the bar; the badge on its icon reflects the number of print jobs that are currently in the queue.

If you have multiple jobs printing at the same time, you can look at their



details by tapping on any of them. (If Print Center is displaying information about a job, tap the Print Order button in the top left of the popover.) For each job, Print Center tells you what's printing, which printer it was sent to, the number of copies being printed, the time the job was sent, and the current status.

You can cancel a job by tapping the Cancel Printing button or, from the Print Order screen, by swiping across a job and tapping Delete. Unlike other apps, Print Center disappears from the multitasking bar when it has no jobs left.

THIRD-PARTY APPS

While the printing basics are built into iOS, there are third-party apps that do more. The best is Ecamm Network's \$20 Printopia (📱📱📱📱; macworld.com/a/

155941), which is actually a preference pane you install on your Mac.

With Printopia installed, you can send print jobs from any iOS device not only to any printer shared by your Mac, but also to a number of virtual printers. For example, you can "print" a photo and have it open in Preview on your Mac. Or you can turn a printable item into a file that gets saved to your Dropbox. You can even create workflows with the app that will turn printed documents into PDF mail attachments.

If you're looking to extend your printing options on the iOS device itself, turn to a program like EuroSmartz's \$20 PrintBureau, which comes in three versions: One that works on both the iPhone and the iPad (📱📱📱📱; macworld.com/7651), and then separate editions that work on the iPhone and the iPad, respectively. This program lets you open and print documents from the Web, your email, your contacts and calendars, and even other apps on your device. In addition to supporting AirPrint, PrintBureau also supports printing directly to other Wi-Fi-enabled printers.

Between the built-in Print Center app and third-party utilities such as Printopia and PrintBureau, you can print almost anything from your iPhone or iPad.

Dan Moren is a senior associate editor for *Macworld*.



Printing in Safari The Web browser is just one of the iOS apps with built-in printing capabilities.

WORK WITH PDFS

DAN MOREN

Working with PDFs is almost as easy in iOS as it is on the Mac.

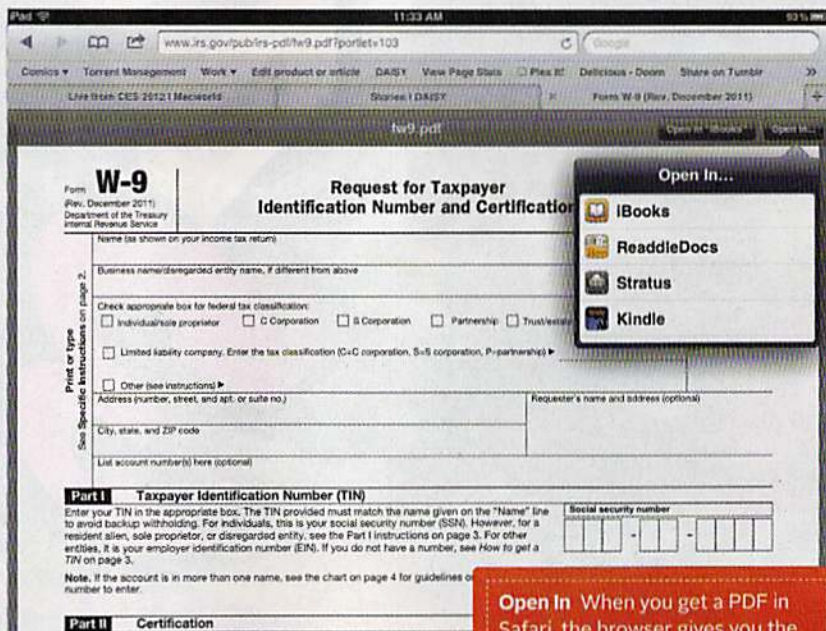
READING

The two places where you'll encounter PDFs most frequently are on the Web and in email.

In the first case, mobile Safari seamlessly loads the PDF, which you can then scroll, pan, and zoom by using standard iOS gestures. You can search the document by typing a term in Safari's search bar, scrolling down to the In This Document section, and tapping your search term. This highlights the term throughout the document, just as if you were searching a webpage on your Mac; you can cycle through the results by tapping the arrow keys on the bottom toolbar.

Working with PDFs in email is equally as simple: In a message, just tap the document to open it. Note that if the PDF is large, you may first need to download it; a dotted-line border around the PDF icon in an email denotes an undownloaded attachment. Once you've opened it, you can treat it more or less as you would a PDF you view on a website.

By default, all iOS lets you do is *view* PDFs. To do more, you'll need a third-party app. Fortunately, iOS makes it easy to open your document in another application, thanks to the Open In button. Tap it and the system shows you a list of every installed app that can open the PDF document in question. Tap any option, and iOS automatically launches the program, imports the document, and opens it for you. Added bonus: Because



iOS makes a copy of the PDF and stores it in the app opening it, PDFs that you open in third-party apps are available even when you're offline.

What you can do then depends on the app you're using. Both Apple's free iBooks and Amazon's free Kindle app let you search and bookmark pages. Good.iWare's GoodReader for iPad (★★★★½; \$5; macworld.com/7611) or iPhone (★★★★½; \$5; macworld.com/7652) and Readdle's ReaddleDocs for iPad (★★★★½; \$5; macworld.com/7653) or iPhone (\$5; macworld.com/7654) not only let you organize PDFs into folders, but they also provide annotation tools that enable you to write and draw on PDFs, highlight text, and make notes. In addition, they can hook into online services like iCloud, Dropbox,

and Google Docs, so you can ensure that your documents are shared with your other devices; they also let you easily print and email PDFs.

CREATING

Although Mac users have long been able to easily create PDFs from pretty much any document, that capability is, sadly, not built into iOS. For those of you who need to create a PDF while you're on the go, you'll need to download an app such as Adobe's CreatePDF (\$10; macworld.com/7655) or EuroSmartz's Save2PDF for iPad (★★★★; \$6; macworld.com/7656) or iPhone (★★★★; \$5; macworld.com/7657), which can create PDFs from text, RTF, and Microsoft Office documents, and more.



USE BLUETOOTH

DAN FRAKES



Although you can connect accessories to your iOS device using the 30-pin dock-connector port on the bottom, or the headphone jack on top, many add-ons—including wireless headphones and speakers, phone headsets, and external keyboards—connect wirelessly using Bluetooth technology. You need to know how to set up those connections.

CONNECTING

Pairing associates a Bluetooth accessory with an iOS device. To do so, go to Settings ► General ► Bluetooth and make sure Bluetooth is set to On. With that done, your iOS device is *discoverable*—meaning that it's available for pairing.

Next, put the accessory in pairing mode. For most Bluetooth devices, this is as simple as pressing a dedicated connect button; in others, you hold down the power button. However it's done, pairing mode is usually indicated by a flashing or alternating-color light.

A few seconds after your accessory enters pairing mode, it should appear in the list of Bluetooth devices in iOS, with the words *not connected* to the right. Tap the accessory to connect to it. You may be prompted to enter a passcode: For audio accessories and phone headsets, you generally just type **0000** on your iOS device's keyboard; for Bluetooth keyboards, an on-screen message asks you to type a four-digit code on the

external keyboard. The accessory's status changes to *connected* and you can then use it.

USING

Once you pair a Bluetooth device with your iOS device, it should be *connected*—in other words, available for use—whenever it's on and within range (usually around 30 feet). When you turn on a paired Bluetooth device such as a keyboard, a headset, or headphones within range of your iOS device, the Bluetooth icon should appear in the iOS device's status bar, indicating that a device is connected.

When you see that icon, the accessory should be usable without further fuss. Bluetooth audio devices can be the exceptions: When you're using a Bluetooth headset, tapping the Source button while on a call lets you switch between using the iPhone's earpiece and microphone, the iPhone's speaker and microphone, or the headset. When you're using Bluetooth speakers or headphones, tapping the AirPlay button in an app provides the option of sending the sound to your Bluetooth audio device: Tap the button and then choose the headphones or speakers from the menu.

MANAGING

Every Bluetooth accessory you've paired with your iOS device is listed in the

Bluetooth screen of the Settings app; each connected accessory displays the word *connected* next to it. If a device is paired and turned on, but it doesn't show up as connected, tapping its name in the list often leads to a successful connection; otherwise, you may need to turn the accessory off and then back on again.

If you want to delete a pairing so that you can use a particular Bluetooth accessory with a different device, just tap the blue arrow next to the accessory's name in the list, and then tap Forget This Device.



Now Discoverable

Paired but Not Connected
After you've paired a device, it needs to be on and in range to connect.

10

COMMUNICATE SAFELY

BY GLENN FLEISHMAN

When you take your iOS device out into the world, strangers can indeed intercept your wireless connections. But a few simple steps can keep your communications safe.

SECURE EMAIL

By default, when setting up your email accounts, iOS configures them with the best available security; all of the prefab accounts, like Gmail, Yahoo, and AOL, default to secure connections. But if you're setting up an email account manually, you need to configure that protection yourself.

Go to Settings ► Mail, Contacts, Calendars, select Add Account ► Other, and then tap Add Mail Account. Enter the necessary information (name, email

address, and so on), and then tap Next. iOS tries to pull settings details from the mail host. If it can't, you must supply details about the incoming and outgoing mail servers. Fill in the values (you can get them from your ISP), and then tap Next.

If you enter this information correctly, iOS tries to set up secure incoming and outgoing connections. If it fails, it asks whether you want to proceed. Click Yes.

Still in Settings ► Mail, Contacts, Calendars, select the email account. Swipe down to the Outgoing Mail Server area and tap the mail server name. Tap the name under Primary Server and flip Use SSL to On. Next, enter a new port number in Server Port (often 587 for outgoing mail, but double-check with your ISP). Tap Done and then tap Account at the top. Now select Advanced at the bottom of the mail setup sheet. In Incoming Settings,

flip Use SSL to On. Set Server Port to the provided value (often 993 for IMAP and 995 for POP), and then tap Done.

VPNS

To set up a VPN connection, go to Settings ► General ► Network ► VPN. Tap Add VPN Configuration, and then choose the type of VPN: L2TP, PPTP, or IPSec. (Your system admin or VPN provider should provide this and other details.) You can choose to enter a password, in which case iOS automatically enters it whenever you initiate a VPN connection; if you don't, you must enter the password each time you connect. When you're done, tap Save.

The VPN item now appears in the main level of Settings. To turn on a VPN link, tap VPN in the Settings app. Select the VPN connection you want to use; a checkmark appears next to the selected setup. Flip the VPN switch to On.

Note that you have to turn on the VPN each time you want to connect securely; iOS won't do it automatically.

Senior Contributor **Glenn Fleishman** is the author of *Take Control of Screen Sharing in Lion* (Take Control Books, 2012).



Choose a VPN If you set up more than one VPN connection, you can choose the one you want to use.

KEEP IT SAFE

BY SERENITY CALDWELL

With all the personal information you keep on your iOS device—passwords, contacts, phone numbers, and documents—you need to make sure it's secure from prying eyes and backed up in case you lose it.

PASSCODES

You can set one of two kinds of passcodes: numeric or alphanumeric. The first is a four-digit number code; the second can contain any number of letters, numbers, and symbols. The latter is obviously more secure, but it's also

harder to type in. The passcode will be required when anyone tries to activate your device. If the correct passcode isn't supplied after ten tries, iOS blocks access to your apps and data.

To set either kind of passcode, go to Settings ► Passcode Lock. If it isn't already on, and you want to use the four-digit number code, just tap Turn Passcode On; if you want to use a longer alphanumeric code, turn Simple Passcode to Off and then tap Turn Passcode On. In either case, iOS prompts you to enter your passcode twice. Assuming those two entries match, your device is now protected.

Once you've set a passcode, you can specify when you want to require it (tap Require Passcode and then select a time). You can also opt to have the data on your device erased if someone enters an incorrect passcode more than ten times. If you have an iPhone 4S, you can choose whether you'd like to enable Siri from the lock screen. When enabled, Siri can perform basic functions (sending text messages and emails, tracking contacts with Find My Friends, and more). If you try to do more, Siri prompts you to first unlock your phone.

Some apps (such as Dropbox) may require passcodes of their own when you launch them, to protect the specific data in those apps.



Items in Lists

In Mail, swiping sideways causes the Delete button to appear; tap it to delete a message. This action works similarly in other apps.

FIND A DEVICE

If your device gets stolen or misplaced, you can track it using Find My iPhone. Apple's free service allows you to locate a device, send a message or alert to it, and even lock and remotely wipe it. To use this service, however, you first need to enable it on your device. You can do so by going to Settings ► iCloud and turning on Find My iPhone. If you don't have an iCloud account, you'll need to create one first.

If your device *does* go missing, you can track it using the Find My iPhone app or via iCloud.com.

BACK UP

You can choose whether to back up your device's data to your computer or to iCloud. An iCloud backup is more current; with iTunes, your backups are only as recent as the last time you connected your device to your computer. To initiate an iCloud backup, head to Settings ► iCloud ► Storage & Backup, and turn the iCloud Backup toggle on.

You can make doubly sure that your data is safe by backing up your device to both iCloud and iTunes: When you connect to iTunes, change your Backup preferences under the Summary screen to Back Up To This Computer and click Sync; when the backup has finished, return the setting to Back Up To iCloud.



12

TROUBLESHOOT

BY TED LANDAU

Compared to fixing a Mac's problems, troubleshooting iOS devices is easy. Fewer things (or at least fewer serious things) can go wrong. But if something does go amiss, there are also fewer things you can do to fix it. This keeps iOS troubleshooting simple, but it also means that if your small bag of tricks doesn't do the job, there may be no way to fix your device without Apple's help.

PROBLEMS WITH A SINGLE APP

The most common iOS problems are specific to an individual app. These can range from one feature failing to work (you tap a button but nothing happens) to the entire app freezing. In the worst case, the app may crash, dumping you back on the home screen. Here are five potential remedies:

Force-Quit the App Assuming that the problem app did not crash, press the Home button to return to the home screen. From there, double-press the Home button to bring up the multitasking bar. Locate the icon for the app (most likely the first icon). Tap and hold on the icon until you enter edit mode, then tap the badge for the problem app. The icon should vanish from the multitasking bar. This is a force-quit, and it clears any trace of the app in active memory. Double-press the Home button to hide the multitasking bar. Launch the app again. With luck, the problem will be gone.

Check the App's Settings Launch the Settings app. Scroll down to see if the problem app is listed. If so, tap its name and check for settings that might resolve

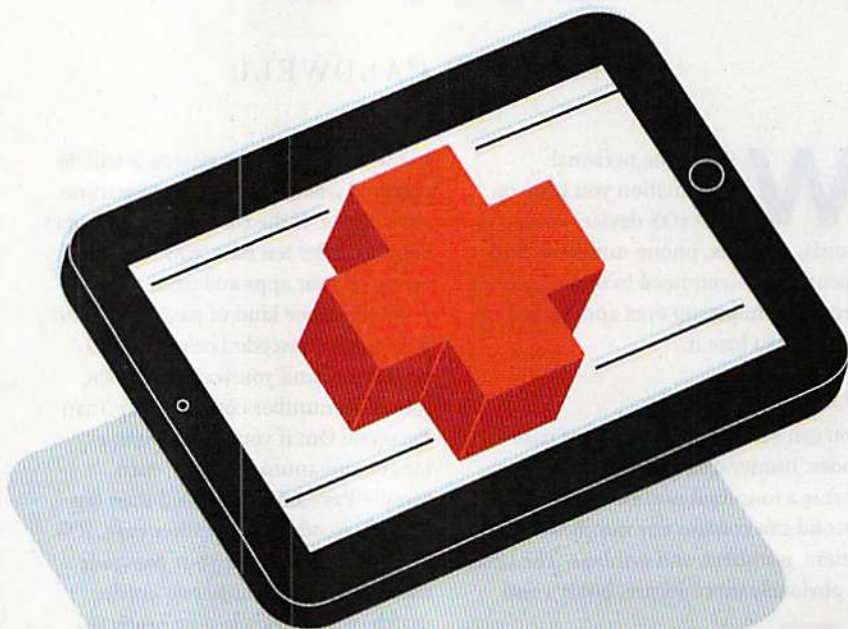
your dilemma. A crash on launch may be due to the app automatically reopening a corrupt or otherwise problematic document. The solution would be to tell the app not to do that. So, for example, if GoodReader is having problems, enable its Don't Open Anything setting.

Restart the Device Some problems may result from an unusual convergence of circumstances that are not likely to repeat. In such cases, simply restarting the iOS device may provide the clean slate needed to eradicate the trouble. To do this, press and hold the On/Off button until the red Slide To Power Off slider appears. Slide it off. Wait until shutdown is complete; it may take a minute or so. Now press and hold the

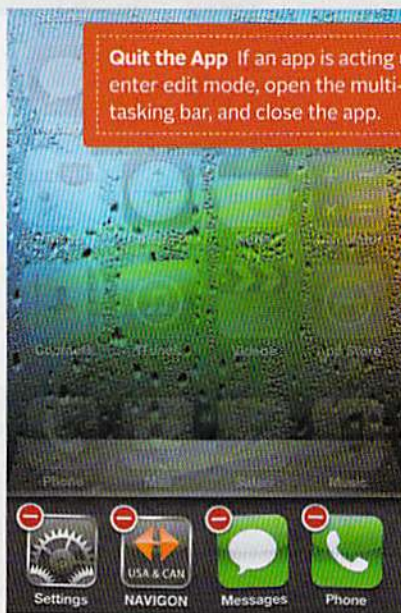
On/Off button again to restart. The Apple logo appears; after a minute or so, you should be back at the lock screen.

Check for an Update If an app's flakiness is the result of a bug, you can't do much about it. You'll have to wait for the developer to release an updated version of the app with bugs fixed. However, it may be that this update already exists. To find out, go to the Apps section of the iTunes library on your Mac and click Check For Updates (or update directly from the App Store on your iOS device). If an update exists, install it.

Reinstall the App If there isn't a newer version of the app available, try reinstalling the same version. To do this, press and hold the app's icon on your



Quit the App If an app is acting up, enter edit mode, open the multi-tasking bar, and close the app.



home screen to enter edit mode. Tap the X in the icon's upper left corner, and then tap Delete when asked. This removes the app from your iOS device.

Next, go to the App Store on your iOS device and choose to redownload the app (don't worry, you won't have to pay for it again): On the iPhone, select Updates, tap Purchased, and then select Not On This iPhone. On the iPad, select the Purchased tab and Not On This iPad. Alternatively, you can delete the app from your iTunes library on your Mac, download a new copy of the app, and sync your iOS device.

Warning: Deleting an app from an iOS device removes any data saved with the app, such as score data for games. After reinstalling the app, you may be able to retrieve the data via a backup. To attempt this, connect the iOS device to iTunes on your Mac, Control-click the device's name in the left column, and, from the contextual menu that appears, select Restore From Backup.

PROBLEMS WITH MULTIPLE APPS

Occasionally, a symptom may extend beyond an individual app. Maybe almost all your apps crash on launch or run unusually slowly. Maybe none of your apps can get online. Or maybe you have a single-app problem that none of the

remedies above resolved. In such cases, first restart the iOS device. If that fails, you've got other options.

Reset For online problems, let's assume that all Wi-Fi and cellular data settings are correctly entered and the relevant options are properly enabled. If so, the next step is to go to Settings ► General ► Reset and tap Reset Network Settings. For more general iOS problems, tap Reset All Settings. After either reset, you'll need to reenter any prior customized settings.

Restore There are two ways to restore. The simplest one is the Restore From Backup command. Try this first. If that doesn't help, it's time for a full restore. This completely erases your iOS device and reinstalls the iOS software (updating to a newer version if one exists) before restoring your backed-up data. To initiate this, connect your iOS device to iTunes on your Mac and select Restore from its Summary screen.

Fix Restore Errors Sometimes (though rarely), an attempted restore (or even an iOS update or device sync) will fail. When this happens, you typically get an error message that includes a number. For example, the message may read: "iTunes could not sync to the iPhone *iPhonename* because an unknown error occurred (-19)." The key information here

is the number. An Apple support article lists most of the possible numbers, with specific advice on what to do in each case: Access the article at support.apple.com/kb/TS3694.

THE DEVICE WON'T BOOT OR RESTART

The most anxiety-provoking symptom you can have is an iOS device that fails to start up: You cannot get the lock screen or home screen to appear after a restart. Most often, you wind up with a useless black display. You have two options here.

Reset the Device Press and hold the On/Off button and the Home button simultaneously for around ten seconds. This tries to force a restart. If you're lucky, it succeeds.

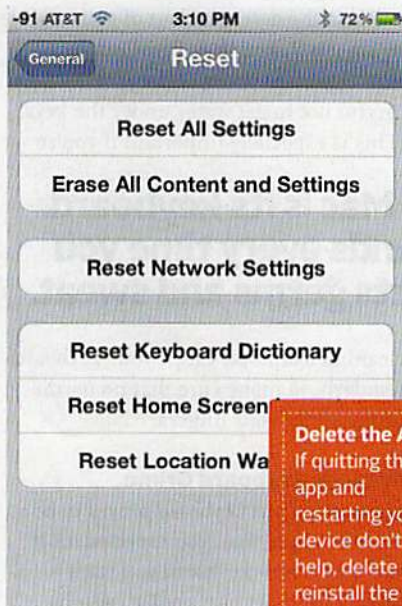
Put the Device in Recovery Mode

This is the fix of last resort. Do it only if all else has failed. Press and hold the On/Off and Home buttons simultaneously until the screen goes black. Then immediately release the On/Off button, but continue holding the Home button. Eventually, you should see a screen showing a USB plug and the iTunes icon.

Connect the iOS device to iTunes on your Mac, as the screen suggests. A message should appear on your Mac saying, "iTunes has detected an iPhone in recovery mode." At this point, opt to do a full restore. Eventually, you'll be asked whether you want to restore from your backup or set up the device as new. Select the backup option, choosing between iTunes versus iCloud backups as appropriate to your situation. If this fails, your backup data may be corrupt. Try again, setting up the device as new. Doing so means abandoning your backup data. But, if it succeeds, at least your iOS device will be working again.

If all attempts fail, and you can't successfully diagnose any error number that appears, it's time to set up an appointment with the Geniuses at an Apple Store.

Senior Contributor **Ted Landau** is the founder of MacFixIt (www.macfixit.com) and the author of *Macworld's Bugs & Fixes* column.



Delete the App If quitting the app and restarting your device don't help, delete and reinstall the app.

WORKING MAC

Tips, Tricks, and Tools to Make You and Your Mac More Productive

Think Clean

Simple ways to clear the grunge, dirt, and dust from your computer and peripherals

BY KIRK MCELHEARN

It's spring: time to give your Mac the once-over to make sure it's spick-and-span. I'm not talking about deleting cache files or removing old apps you no longer use. I'm talking about cleaning your Mac's screen and keyboard, or its dusty, grungy innards. It's not a difficult chore, and keeping your Mac clean helps it run smoother and can also help keep you from getting sick. Here's how to do it.

Reclaim Your Keyboard

It's a fair bet that the dirtiest part of your Mac is its keyboard. Even if you wash your hands every time you sit down to type, the keyboard still collects germs and sweat from your fingers, as well as the dust in your room or office. This can make for sticky keys and can transfer cold viruses, or worse.

To start, unplug your keyboard from your computer or, in the case of a wireless keyboard, remove its batteries. (If you're cleaning a laptop keyboard, shut down the computer and unplug the power adapter.) Blow out any dust with a can of compressed air.

The dirtiest part of your Mac is its keyboard. Even if you wash your hands every time you sit down to type, it collects germs and sweat.

Next, clean your keys with disinfecting wipes. (Apple recommends Lysol and Clorox disinfecting wipes.) Since the alcohol evaporates, there's no risk of liquid damaging the keyboard, and it's a better disinfectant than soap.

If you don't have wipes, you can put a drop of standard dishwashing detergent in a glass of water. Soak a soft cloth in



this concoction and then wring it out until it's barely damp. Now gently wipe the cloth over the keys to get rid of the dirt and grime.

Rinse the detergent out of your cloth, wring it out, and then finish up by wiping your keyboard off again. Be very careful not to get water under the keys. (This is especially important if you're

cleaning a laptop.) Clean your keyboard regularly, to make sure that no germs fester under your fingers.

Prevent Keyboard Grime

If cleaning your keyboard proves to be a thornier chore than you expected, or if you have a new keyboard you want to protect from pet hair, cookie crumbs,

and the like, you might want to use a keyboard protector, such as iSkin's ProTouch (\$25 to \$35; www.iskin.com), a silicone keyboard film that's easy to pop off and wash.

You can get one for your desktop keyboard and one for your laptop, so when you're out in a coffee shop, say, you can make sure that no spilled liquids get under your keys (see "Snack Shield").

An even thinner option is the \$25 Moshi ClearGuard CS for an Apple Keyboard (macworld.com/7622). Moshi also offers a line of ClearGuard protectors for laptop users (macworld.com/7623).

Dust Up

While most Macs today are designed so you can't open them, the Mac Pro remains the one model that's easy to get inside. Unfortunately, because of the way it's designed, it also collects a lot of dust. I had one for several years, and found I had to clean it every few months.