

# Android

**ICE CREAM SANDWICH**



**PCWorld**  
**SUPERGUIDE**

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# Chapter 1

## Get to Know Ice Cream Sandwich



PHOTOGRAPH BY ROBERT CARDIN

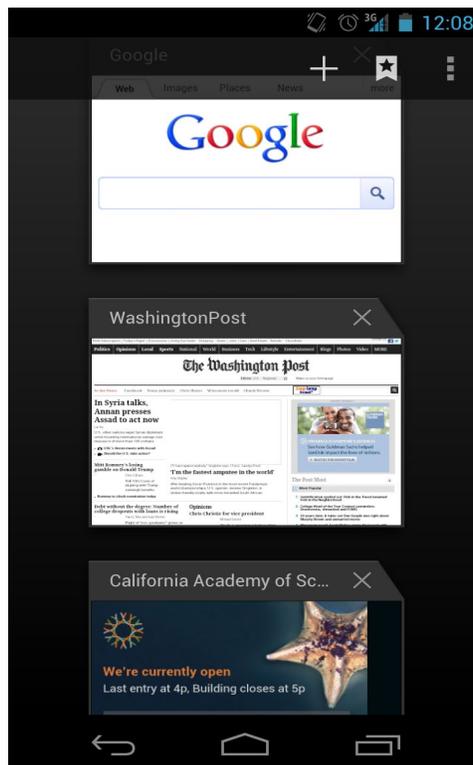
# Ice Cream Sandwich: The Most Delicious Android Yet

BY GINNY MIES

From navigation methods to fonts, Android is redesigned and refreshed in its Ice Cream Sandwich edition to meet the tastes of users. Google introduced the update to Honeycomb and Gingerbread in October 2011, alongside Samsung's debut of the Galaxy Nexus. Here are the highlights of Google's latest mobile OS.

## The Lock and Home Screens

The Android 4.0 lock screen closely resembles the one found on Android Honeycomb tablets: It shows a lock icon surrounded by a circle, which you flick outward to unlock the phone. Home screens behave as they did on earlier versions of Android (swipe left or right to navigate, open an app drawer, retrieve widgets, and so on), except you now get a customizable "favorites tray" that resembles the dock in iOS. On phones without physical navigation buttons, the Back, Home, and Recent Apps icons are located at the bottom of the screen, and they light up when touched. Currently the only phone to take advantage of these onscreen buttons is the Samsung Galaxy Nexus, but future phones may take advantage of these features as well.



Browser tab

The app drawer in Ice Cream Sandwich has been updated to look more like the one in Honeycomb, and you now scroll through apps by swiping left or right. Widgets have their own tab in the app drawer to make them easier to find. They look and work like the ones in Honeycomb—and since they're resizable, you can fit them wherever you prefer.

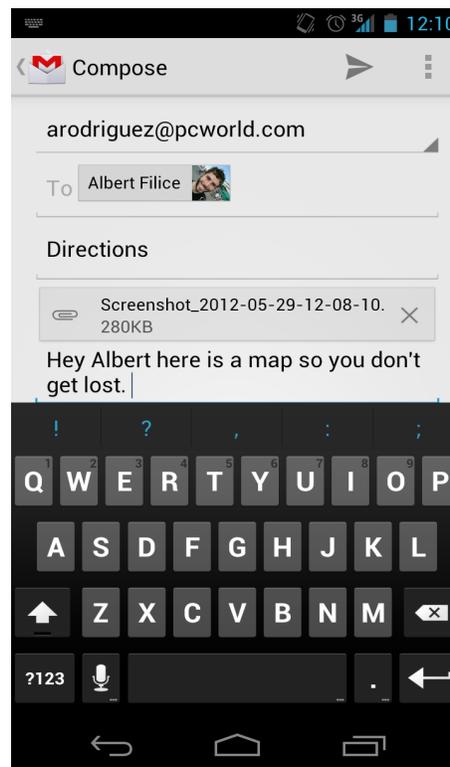
Taking another leaf out of iOS's book, Android 4.0 lets you create folders by dragging one app onto another. You can rearrange apps in folders by dragging them around, and you can rename folders to your liking.

## Recent Apps and Gestures

If you tap the Recent Apps icon, a scrollable list of running apps pops up, each with a thumbnail image of that application. You can close a particular app by flicking it away. The flicking gesture command is accepted throughout Android Ice Cream Sandwich, and it also works to dismiss specific notifications in the Notification Tray.

Besides accepting gestures, the Notification Tray now displays photos and supports music controls, so you don't have to go into a specific app in order to skip a song or pause the music. The Notification Tray is now accessible without your having to unlock your phone, too: Just drag the tray down from the lock screen, and you can quickly jump to new text messages or email by tapping a notification. I like the fact that you can quickly get into apps without having to unlock the phone first, but I hope Google puts a security measure in place so that not just anyone can access your private communications.

Speaking of security, in Android 4.0 your face can unlock your phone. Ice Cream Sandwich and the Galaxy Nexus support facial recognition, so you can set the phone to unlock only if it recognizes your face.



Easy email

## Core Apps Updated

All the core Android apps are getting a face-lift and new features, though the Browser, Calendar, and Gmail received the most significant upgrades.

The Browser now supports incognito mode, and your bookmarks from the desktop Chrome browser now sync to the Browser in Ice Cream Sandwich. Google has added support for tabbed browsing, and you can quickly view which tabs are open, each with a live preview of that page. As with the notifications and Recent Apps list, you can quickly close tabs by flicking them away.

The biggest update to the Browser has to be the capability to save pages for offline reading. You can save Web pages exactly as they are, and access them even when you don't have a data connection. This function is great for people who find an interesting article they want to read, but are going to be in an area with little to no data coverage.

Gmail also received a substantial update, and is now much faster to use, thanks to the new Action Bar at the bottom of the screen. The bar is context-sensitive and changes depending on where you are in Gmail. For example, when you're viewing your inbox, the Action Bar has options for composing a new message, searching for a specific message, and so on. However, once you select one or more email messages, the Action Bar buttons offer options to delete, archive, or move those selected messages.

In the Calendar app, you can now pinch to zoom in on your calendar to see more details about specific events, or you can zoom out to see all your events for that day. The feature is pretty cool, and it beats tapping each event individually to find out more.

## Camera and Gallery

The camera in Ice Cream Sandwich has support for zero shutter lag--allowing you to rapidly take series of photos with little to no delay between shots.

Once you snap a photo, you can quickly share it by tapping on it. A list of applications that you could use to share the photo will pop up, and you can quickly select where you'd like to send the photo. For photos that need a touch-up, Ice Cream Sandwich provides an impressive array of photo-editing tools. Among them are various filters (which representatives lovingly described as "hipster"), the capability to adjust the image angle, red-eye removal, cropping capabilities, and a few others. Any edits you make to a photo will create a copy, in case you ever want to go back to the original.

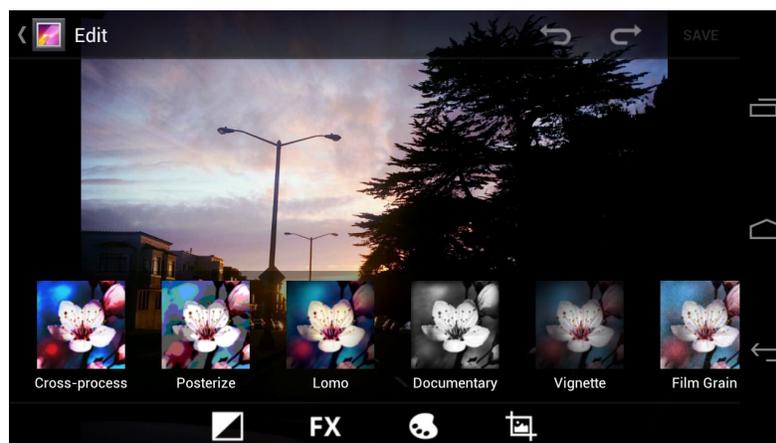


Image-editing tools

Ice Cream Sandwich also comes with a simple-to-use panorama mode. You just set the mode to panoramic, and then take the first picture. A slider at the bottom of the screen guides you so that you know when to move the phone, and you can preview the image as the device stitches the pictures together.

Video recording gains continuous focus, as well as support for time-lapse and video snapshots. As with the Notification Tray, you can quickly access the phone camera from the phone lock screen by flicking the lock icon to the left. A small camera icon pops up, and you can launch straight into the Camera app.

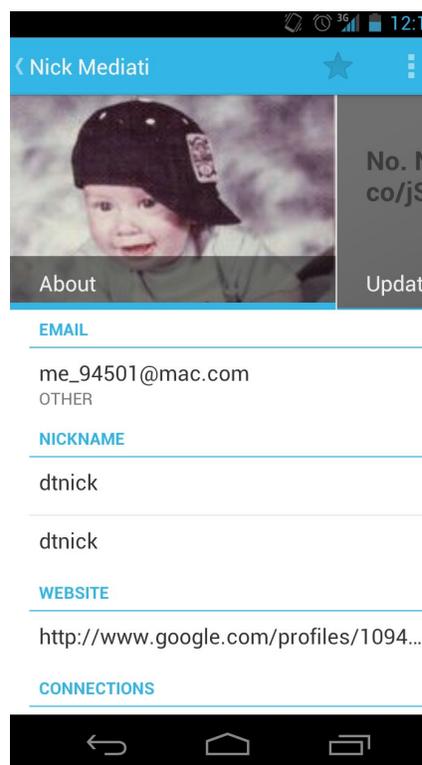
## People App and the Dialer

The Contacts app is revamped, as the new People app. The People app functions in the same way as the Contacts app found in Android 2.x, but it changes contact cards to show much more information at a glance. Nice, big photos replace the tiny thumbnails, and you can quickly see a contact's recent photos or status updates. If that person is your friend on a social network, that data is automatically pulled so that you can easily see their latest tweet, for instance, without having to open the Twitter app. Though described as an evolution of the current Contacts app, this version feels more like a fine-tuning than a sensational leap forward.

The Dialer also has a few tweaks here and there. Those big photos in the People app take up the entire screen whenever someone calls you, and you can send a Quick Response to anyone whose call you decline. Quick Responses are customizable canned text-message replies that you can send to a caller to explain why you rejected their call.

## Android Beam

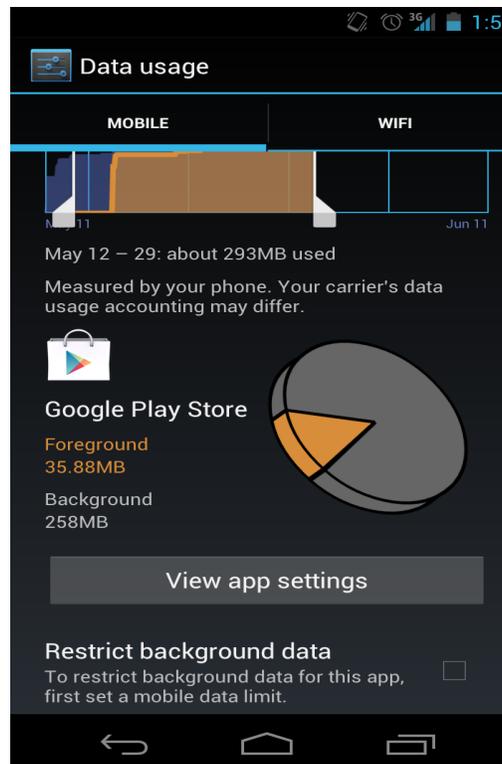
Google is really pushing near-field communications with its Google Wallet app, and Android Beam in Ice Cream Sandwich is just another reason to own an NFC-equipped phone. With Android Beam, you can share any contacts or content between two Android devices just by tapping them together. You can share Web pages, maps, and even apps. It's handy if you need to give your friends directions, or if you want to share an article you found while browsing the Web.



Android 4 contacts

## Odds and Ends

If you're worried about going over your monthly data cap, you'll enjoy the data monitor built into Ice Cream Sandwich. By going to Settings, Data Usage, you can see a chart of how much data you have used that month, as well as an estimate of your expected usage. You can also set limits and alerts so that you know exactly when you exceed your data limit, and can avoid getting hit with overages. You can also select specific sections of the chart to see which apps used the most data that day; the phone will show you a breakdown of how much data that app uses, and allow you to restrict the app so that it consumes data only when you want it to



Data-usage map

This feature is a huge step forward in giving users more control over their phones, and it should help save people the headache of accidentally exceeding data limits.

Android 4.0 adds a handful of new live wallpapers, as well as a new font aptly named Roboto. The live wallpapers are kind of neat, but Roboto is interesting because it is designed for high-density displays. Barometer support is also added, although its use is unclear.

Ice Cream Sandwich is a massive step forward for Android, further helping to bridge the gap between phones and tablets.

# Apple's iOS 5 vs. Google's Android 4.0 Ice Cream Sandwich

BY IAN PAUL

Apple's iOS 5 and the new iPhone 4S got some new competition late Wednesday after Google introduced Android 4.0, Ice Cream Sandwich, running on the new Samsung Galaxy Nexus. ICS offers a host of new features, including improved voice commands, an enhanced browser, facial recognition, photo enhancements, and changes to core apps such as Gmail and Calendar. The Galaxy Nexus hardware boasts a 4.65-inch Super AMOLED display with 1280-by-720-pixel resolution, a 1.2GHz dual-core processor, a near-field communication chip, a 5-megapixel rear-facing camera, and a 1.3-megapixel front-facing camera.

Ice Cream Sandwich on the Galaxy Nexus will launch in November; pricing has not been announced.

Since ICS is now on its way, and Apple's iOS 5 and the iPhone 4S were released recently, prospective smartphone buyers can choose between the new versions of the two leading smartphone brands. And the differences between the two are many: Do you want deep voice-command integration with the iPhone 4S's Siri digital assistant, or will Voice Actions for Android be enough for you? Do you want to take a lot of panoramic shots, or do you prefer a solid camera without too many features?

Before you decide whether to land in the iOS camp or the Android camp in the coming weeks, here's a look at the highlights of the new versions of both operating systems.

## Camera

**Apple's iOS 5 vs. Google's Android 4.0 Ice Cream Sandwich** Apple and Google have made improvements to their respective camera software, and both operating systems now offer users the ability to access the phone's camera from the lock screen. Apple also added to iOS 5 the ability to use grid lines to line up your shot, as well as pinch-to-zoom.

Google's Ice Cream Sandwich has a new panoramic mode that stitches together multiple snapshots to create a larger scene. ICS's new panoramic mode includes a slider at the bottom of the screen to help you align the series of shots. The panoramic shot above was posted to Google+ by Google employee Matt Cutts. The photo was taken at Yosemite National Park using a Nexus S running ICS.

**Photo Improvements** Once you're done taking photos, both ICS and iOS 5 have baked-in tools to help you improve your pictures, allowing you to crop and rotate, remove red-eye, and auto-enhance. ICS will also let you set levels and add Instagram-style filters.

**Voice Commands** Apple's iOS 5 vs. Google's Android 4.0 Ice Cream Sandwich Google has added some enhancements to Voice Actions for Android in Ice Cream Sandwich, but anyone hoping for an answer to iOS 5's Siri integration will be disappointed. However, ICS voice-command software now has a hands-free feature that lets you activate voice actions just by speaking to your phone, instead of pressing a button.

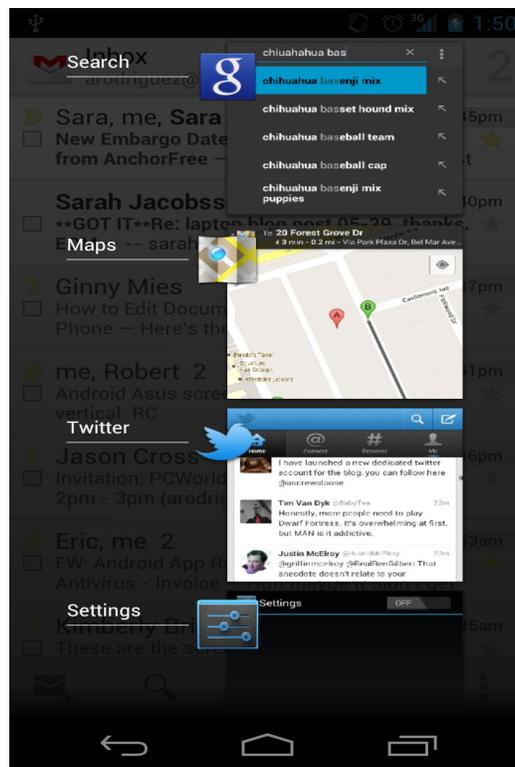
People purchasing the new iPhone 4S get to take advantage of iOS 5's new Siri personal digital assistant, which lets you carry out a number of tasks using voice commands. Some of the most interesting Siri features include creating calendar appointments, setting alarms and timers, retrieving

basic facts and figures from Wolfram Alpha, and adding location-based reminders.

Both voice-command services also let you do things such as play music, search the Web, and dictate notes, SMS, and email messages.

**Browser** Ice Cream Sandwich has beefed up browser capabilities with new features such as Google Chrome bookmark sync, incognito mode, and the ability to save full Web pages for offline reading. Apple's iOS 5 browser includes tabbed browsing for the iPad (added to Android tablets with Honeycomb), private browsing, Safari Reader, and Reading List, a feature that lets you save Web pages to read later. Unlike ICS, however, Reading List does not allow offline caching. Reading List syncs across all your iCloud-enabled devices, including desktop PCs.

**Notifications and Multitasking** Apple's iOS 5 vs. Google's Android 4.0 Ice Cream Sandwich Apple borrowed liberally from Android for iOS 5's new notification system. The new iPhone system includes the appearance of incoming notifications at the top of your iOS device's screen, as well as a full-screen notifications center that you can swipe down from the top of the screen.



Ice Cream Sandwich's notifications include a few enhancements, one of which allows users to pull down the notifications window from the lock screen. Google has also added a new feature called the Recent Apps list, which lets you view thumbnail images of all your running apps and jump between them with one tap.

## New Apps and Features

**Apple's iOS 5 vs. Google's Android 4.0** Ice Cream Sandwich has a new People app that is reminiscent of Windows Phone 7's people hub. The new Android app includes a larger profile photo for each of your contacts, and integrates their social networking status updates from services such as Google+

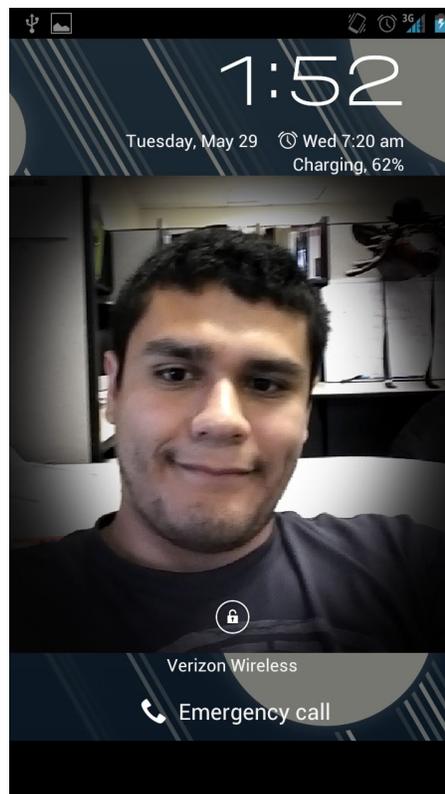
and Twitter. ICS also has a new Gmail app that promises faster performance, includes a new preview pane, and lets you search the past 30 days' worth of your email offline. Google has also updated Calendar, Maps, and Music, but the company has yet to fully demonstrate what the new changes are. A new data-usage app shows you how much data you've been using on a graph; you can also see usage forecasts to plan around your bandwidth caps

ICS also offers a new sharing feature called Android Beam, which lets you share apps, contacts, music, and videos by tapping two phones together. Android Beam works only with devices that carry near-field communication chips. In addition, ICS supports Wi-Fi Direct, a Bluetooth competitor that lets you connect two devices directly using Wi-Fi signals (no Internet connection required).

Apple added to iOS 5 a Reminders app that is location aware (Siri integration for iPhone 4S only). You'll also find Newsstand, for receiving automatic updates from iOS news and magazine apps such as The New York Times, The Daily, and The Economist. Apple's Blackberry Messenger rival, iMessage, lets you send text messages to other iOS 5 devices (including the iPad). iMessage doesn't count against your monthly text messaging allotment from your carrier, but it does use 3G data if you're not on Wi-Fi.

**Cloud Backup** Apple's iOS 5 vs. Google's Android 4.0 Ice Cream Sandwich Android users have been able to store items in the cloud for some time, including purchased apps and now music (with Google Music) and photos (via Google+). Apple is playing catch-up in some ways with the addition of iCloud, which includes syncing apps across all your devices, although both services are reaching music and photo storage around the same time. iCloud also syncs your documents for you, and iOS 5 users can now get over-the-air system updates to their iOS devices via Wi-Fi. Android has had over-the-air updates for a while.

Google also added a minor but interesting security feature that lets you unlock your phone with facial recognition. And ignoring phone calls gets easier with a new set of canned responses that lets you text a caller to tell the person why you didn't answer your phone.



# 6 Reasons Your Work Phone Deserves Ice Cream Sandwich

BY JOSEPH FIEBER

This year's update to Android 4.0, code-named Ice Cream Sandwich (ICS), contains numerous changes to make Android friendlier than ever, and that may even make you more productive. Here are notable changes that will make you want a new Android phone, or hope that yours can upgrade.

## 1. Data Usage Monitoring

With unlimited data plans, you didn't need to be concerned about how data-intensive your apps were. There was no worrying about syncing via Wi-Fi instead of while on the road. With unlimited data now a rarity, however, knowing your data usage is important. ICS not only includes an app for viewing data usage, but for estimating if you'll exceed your limit. It even allows you to set up alerts to let you know when you're approaching your limit, and lets you cap usage so you don't incur additional charges.

## 2. Camera

If your work involves capturing images, ICS adds a big improvement. Where current versions of Android generally require you to unlock the phone and then open an app to take pictures, ICS will let you activate the camera from the lock screen. It will also include "[zero shutter lag](#)", allowing you to capture multiple shots quickly, and easily capture what you are seeing, instead of pressing a button, waiting a second or two, and missing what you hoped to capture.

## 3. Bookmark Sync

Chances are you do most of your Web browsing on a desktop or laptop computer. You never know when you'll want to access what you've bookmarked. Bookmark syncing between your computer's Chrome browser and ICS allows you to have access to all your bookmarks no matter where you are, bringing your on-the-road experience one step closer to your office capabilities.

## 4. Keyboard

Using the on-screen keyboard to take notes or fill in forms can be challenging, especially on phones with small and medium-size screens. ICS brings big improvements to the stock keyboard, making it more accurate in capturing your taps, as well as offering improved auto-correction for when it doesn't get it quite right.

## 5. Speech to Text

Speech to text conversion is not new to Android, but improvements in ICS make it much easier and more powerful. Instead of you speaking and then waiting for the translation, text is now converted while you speak, and pauses won't automatically end your input. This makes speech input in virtually any app, especially dictation type apps, far more appealing and useful.

## 6. Voicemail

Getting voicemail on the road is quite common, and ICS adds improvements to make dealing with them better. There's the capability to [speed up the playback of your voicemail](#), allowing you to make it through a long message more quickly. You'll also see voicemails listed in your call log. An application programming interface (API) has been added that will allow developers to have voicemails transcribed, so a carrier could potentially enable its voicemail system to include this [visual voicemail feature](#), much like Google Voice users have had for some time.

# Ice Cream Sandwich Does Business

The new platform brings in features that could be very useful for businesses of all sizes. Better multitasking, voicemail and call management, an improved email client, and a unified calendar make this update compelling. Here's a look at a number of those features.

**Multitasking:** When you get an email about a meeting to discuss a document, you want to be able to switch quickly between that message, your calendar, and your office program. Multitasking in Ice Cream Sandwich is more visual with recent apps now showing as thumbnails rather than as just an icon.

**Improved Lock Screen:** Ice Cream Sandwich adds many task shortcuts to the lock screen. Without unlocking the phone, you can now jump directly to the camera, pull down the notification window, and manage music playback.

**Quickly Respond to Incoming Calls by Text:** When a call comes in and you're not in a place where you can answer, you now have the option to dismiss the call and send a text reply at the same time. From the incoming call screen, you can slide a control to see a list of optional responses, and tap one of them to send it and end the call.

**Spelling Checker and Improved Dictionaries:** The red line makes an appearance in Ice Cream Sandwich with a new spelling checker. When you tap on a misspelled word, you'll get multiple spelling suggestions and options to delete the word or add it to the dictionary. The software keyboard also offers improved word suggestions and better handling of double-typed characters, skipped letters, and missing spaces.

**Improved Voice Input:** Upgrades to the voice input engine include continuous listening and streaming voice recognition. This means you can talk as long as you want with whatever pauses you want. When dictation is finished, possible errors are underlined and can be replaced with a tap.

**Better Control Over Data Usage:** For users on tiered data plans, Ice Cream Sandwich adds new controls for managing network data usage. You can set warning levels, hard limits, disable mobile data completely, or just limit the data used by individual apps.

**Better Contact Management and Improved Email:** A new People app integrates contacts throughout the system. Profiles are richer, with large pictures, phone numbers and addresses, accounts, status updates, and a new button for connecting on integrated social networks. Sending email is easier with improved auto-completion of recipients. You can also create "quick responses"--blocks of frequently used text stored in the app and inserted from a menu.

**Integrated Calendar and Visual Voicemail:** The updated calendar app integrates personal, work, school, and social agendas. The revised calendar API will allow third-party apps to add events to the shared database to manage alerts, attendee lists, dates, and reminders. Apps can also read from the database to display alerts and reminders. The phone app will now feature visual voicemail, with transcriptions. Third-party apps can also add voice messages and transcriptions to the inbox.

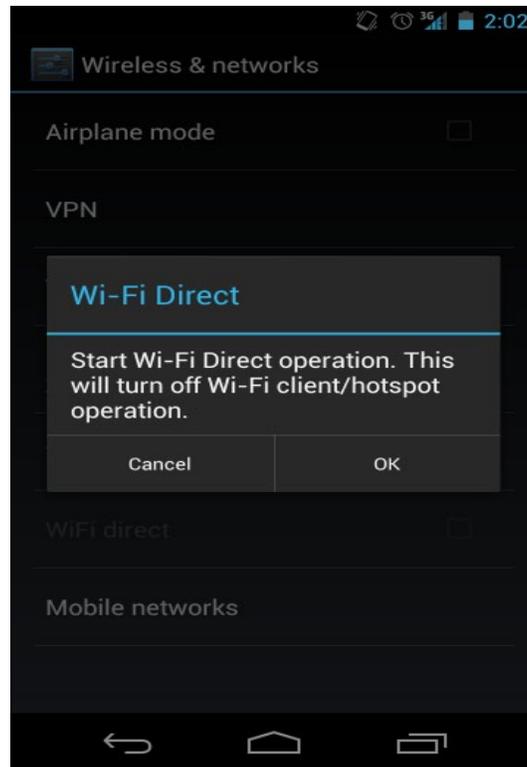


**Easier Screenshots:** You'll no longer need to root your phone or install a third-party app to grab a screenshot. Hardware buttons will allow you to snap a screenshot and store it locally. From there, you can edit it or share it through the Gallery or other image-editing app.

**Android Beam:** Android Beam is a content-sharing feature for phones that have NFC (Near Field Communication) enabled. With Beam, you can share apps, contacts, music, videos, and other content by touching two NFC-enabled phones together and then tapping them to send.

**Face Unlock:** The fingerprint swiper on the original Motorola Atrix may not have gone over so well, but with Ice Cream Sandwich, you can use your face to unlock the phone. The OS takes advantage of facial recognition technology to register and recognize faces when unlocking the device. The phone will still have a PIN backup system if you're having a particularly bad hair day.

**Wi-Fi Direct:** Wi-Fi Direct support allows users to employ a peer-to-peer connection to connect directly over Wi-Fi. Third-party apps can take advantage of this technology to instantly share files and other media between devices or with a desktop PC. You could also use the feature to stream media to a Wi-Fi-enabled TV or to send a file to a Wi-Fi printer.



**Better Stylus Support:** Ice Cream Sandwich will better support stylus input including use of tilt and distance, pressure, buttons, and erasers. The platform will distinguish between finger, stylus, and mouse. This gives app developers the opportunity to create precise drawing apps as well as apps using handwriting and shape recognition.

**Enterprise Enhancements—VPN and Camera Policies:** A new API for VPN allows developers to build or extend their own VPN solutions with secure credential storage. There is also a standard, built-in VPN client that provides access to L2TP and IPSec protocols. Administrators can now remotely disable the camera on a device managed with the Device Policy Manager for users working in sensitive environments. Enterprise encryption has also improved with support for EAS v14. It supports EAS certificate authentication, provides ABQ strings for device type and mode, and allows automatic sync to be disabled while roaming.

# Chapter 2

## Android Tips & Tricks



PHOTOGRAPH BY ROBERT CARDIN

# Defend Your Phone From Annoying Mobile Ads

BY LIANE CASSAVOY



Your Android phone used to be an ad-free paradise—a place where you could play games, check email, and make a few calls, all without being bothered by those pesky sales pitches that have taken over your PC. But not anymore: As Android's popularity has grown, so too has its attractiveness to advertisers.

Ads are arriving on your Android phone, inside games and apps, in your mobile browser, and even as push notifications. These ads distract you when you're playing a game, blink and flash when you're simply trying to browse the Web, and eat up the little bit of data available on your not-so-unlimited data plan.

What's an Android user to do? Hope is not lost: We can help. No, we can't promise an ad-free experience—nor would we want to. Remember, some websites and app developers rely on ads to stay in business. But we can suggest ways to cut down on bothersome ads, at least to a certain degree.

## Ad-Blocking Apps

If you browse the Android Market, you'll see a number of apps that promise to block all ads on your Android device, but the vast majority of these apps--such as the well-regarded [AdAway](#), [NetSpector Sniffer/Ad Blocker](#), or [AdFree Android](#)--are available only for rooted phones. The reason these apps work exclusively on rooted phones is because they often make changes to the hosts file, something that's allowed only on rooted devices. If you've rooted your Android phone, you can try any of these apps and see if they work for you. For this article, I did not test any ad-blocking tools that required a rooted phone.

**NOTE:** Rooting a smartphone gives you complete control over your handset, allowing you access to all of the files on your device. With a rooted phone, you can remove unwanted software, run root-only applications (such as ad blockers), and install other versions of Android (known as ROMs). However, you do void your warranty when you root your phone.

# Chapter 3

## Android Apps



PHOTOGRAPH BY ROBERT CARDIN

# The Best Browsers for Your Android Phone

Here are five of the most promising browser apps to use with your Android smartphone or tablet.

BY MEGAN GEUSS

In choosing a browser for your phone, you have to take into account the more tenuous data connection, the smaller screen, and the kinds of tasks that you need or want to do on your handset. Here's a look at some of the most popular Android browsers, to help you decide which one is right for you.

Note: Though third-party browsers are available for iOS as well as for Android, Apple doesn't allow such tools to replace the built-in Safari browser altogether. For that reason, we've chosen to focus on Android browsers here. (For a detailed appraisal desktop and laptop browser options, see ["Which Browser Should You Use?"](#) For tricks, tweaks, and add-ons to improve the performance of your Chrome, Firefox, Internet Explorer, or Safari browser, see ["21 Ways to Buff Up Your Browser."](#))

## Dolphin Browser HD

If you're an RSS fiend, [Dolphin Browser HD](#) may become your new best friend. Dolphin lets you create a webzine from popular websites' RSS feeds, presenting simplified versions of Web pages with much of the clutter removed to make them easier to read. Though Dolphin can't transform every website into a webzine, it's a handy tool for people who read extensively on the Web. Dolphin also supports tabbed browsing and gesture commands, enabling you to issue specific instructions to your mobile device by drawing shapes on the touchscreen. You can draw a circle to reload the page, for example, or you can draw an F to instruct the browser to load Facebook

## Firefox for Android

Like its desktop counterpart, [Firefox for Android](#) is all about the add-ons, which, for the mobile version, include URL Fixer (for correcting common typos in URLs) and Reading List (for saving Web pages to read offline). Firefox for Android is an excellent choice for users who want to tweak and tune their browsers, and add their own personal touches. Unfortunately, the browser can be a bit slow to start up, and it consumes a lot of RAM--a potential problem if you have an older or underpowered Android phone. Firefox for Android also supports tabbed browsing, and you can sync between the mobile app and Firefox on your desktop, to pick up on one device right where you left off on the other.

## Opera Mobile and Opera Mini

Opera has two mobile browsers: the full-size (12MB) Opera Mobile, and the smaller (767KB) [Opera Mini](#). Opera Mini sends your page requests to a server, which compresses the pages before transmitting them to your device, making this space-saving browser much faster than [Opera Mobile](#). For its part, Opera Mobile does a better job than Opera Mini of rendering pages so that they look the way they would on your desktop. Opera browsers don't support add-ons, but both of these Opera apps do let you sync your mobile bookmarks with the desktop version of Opera, and both of them permit tabbed browsing.

## Chrome for Android Beta

If you have an Android smartphone that runs Ice Cream Sandwich, [Chrome for Android](#) might be a good choice. Mobile Chrome supports tabbed browsing, but it doesn't support Flash plug-ins at all. Instead, you'll find some advanced HTML 5 features, plus synchronization with your desktop browser's bookmarks and settings. Although Chrome for Android doesn't offer extensions yet, it probably will support additional capabilities in the future.

# Chapter 4

## Tablet Apps



PHOTOGRAPH BY ROBERT CARDIN

# Android Widgets: The Best of the Best

Give your home screen a massive power boost with these excellent widgets for Android tablets.

BY JR RAPHAEL

Widgets are among Android's most powerful features, and with the large screen space of a tablet, they shine more brightly than ever. Widgets are live, functioning programs that run on your home screen--letting you scroll through the latest news and weather, for example, or thumb through your inbox--without your having to open the full-blown app. By default, Google includes a handful of useful widgets with Android (and some manufacturers tack on additional preloaded widgets of their own), but plenty of other treasures are available. Here are 11 exceptional Android widgets worth snagging for your tablet.



## HD Widgets

Available for \$2, [HD Widgets](#) provides a huge set of classy and elegant widget options for your Android tablet's home screen. You can choose anything from a full-screen five-day forecast tracker to a header-like time and temperature banner. Each widget is highly customizable, too. You can change the layout, clock style, and background--and even include an interactive power control panel on the widget if you want to. Tapping the weather section of any widget brings up an attractive overlay with detailed forecast information for your area.



## AccuWeather for Honeycomb

Though far less robust than HD Widgets, AccuWeather's [AccuWeather for Honeycomb](#) app has some admirable weather widget features of its own. AccuWeather supplies a single widget for your tablet's home screen--a 4-by-1-inch box that shows the temperature along with an icon depicting the conditions for any area you choose. The nicest touch is the widget's ability to report on conditions in multiple cities: You can specify any number of locations for the widget to include, and then flip through to see the forecast for each one, right from your home screen. AccuWeather for Honeycomb is free.

# Thanks for reading.

We hope you've found a few good Android pointers and hints in this Superguide. PCWorld also offers superguides on Windows 7 and Speeding Up Everything. Take a look at [www.pcworld.com/superguide](http://www.pcworld.com/superguide).

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