

Android 2.3 User's Guide



December 1, 2010
AUG-2.3-100
Android™ mobile technology platform 2.3

Google™

Legal

Copyright © 2010 Google Inc. All rights reserved.

Google, the stylized Google logo, Android, the stylized Android logo, Nexus, the stylized Nexus logo, Nexus S, the stylized Nexus S logo, Android Market, the stylized Android Market logo, Gmail, Google Apps, Google Calendar, Google Checkout, Google Earth, Google Latitude, Google Maps, Google Talk, Picasa, SafeSearch, and YouTube are trademarks of Google Inc. All other company and product names may be trademarks of the companies with which they are associated.

Availability of Google applications, services, and features may vary by country, carrier, phone model, and manufacturer.

Contents

About this guide 11

Android basics 15

Starting Android for the first time 16

- If you don't have a SIM card in your GSM phone 16
- Your Google Account 16
- Resetting your Google Account password 17
- Additional accounts 18
- Google services 18

Getting to know the Home screen 19

Using the touchscreen 22

Using the phone's buttons 23

Using a trackball 24

Working with menus 25

- Options menus 25
- Context menus 26

Monitoring your phone's status 27

- Status icons 27
- Notification icons 28

Managing notifications 29

Using the onscreen keyboard 31

Entering text by speaking 35

Editing text 37

Opening and switching applications 40

Locking your screen 42

Customizing the Home screen 43

Connecting quickly with your contacts 45

Optimizing battery life 46

Managing how applications use memory 48

Managing downloads 54

Connecting to networks and devices 57

- Connecting to mobile networks 58**
- Connecting to Wi-Fi networks 61**
- Connecting to Bluetooth devices 64**
- Connecting to a computer via USB 67**
- Sharing your phone's mobile data connection 69**
- Connecting to virtual private networks 72**
- Working with secure certificates 74**
- Configuring Internet (SIP) calling 75**

Placing and receiving calls 77

- Placing and ending calls 78**
- Answering or rejecting calls 80**
- Working with the Call log 82**
- Calling your contacts 84**
- Placing an Internet (SIP) call 85**
- Listening to your voicemail 86**
- Dialing by voice 87**
- Options during a call 88**
- Managing multiple calls 90**

Searching by text and voice 93

- Searching your phone and the web 94**
- Using Google Search tips and tricks 100**
- Changing Google Search settings 101**
 - Search settings screen 101
 - Google Search settings screen 101
- Using Voice Actions 102**
- Voice Action commands 105**

Contacts 109

- Opening your contacts 110**
- Adding contacts 112**
- Importing, exporting, and sharing contacts 113**
- Adding a contact to your favorites 115**
- Searching for a contact 116**
- Editing contact details 117**
- Communicating with your contacts 120**

-
- Changing which contacts are displayed 122**
 - Joining contacts 124**
 - Separating contact information 126**

Accounts 127

- Adding and removing accounts 128**
- Configuring account sync and display options 131**

Gmail 135

- Gmail is different 136**
- Opening Gmail and your Inbox 137**
- Reading your messages 140**
- Composing and sending a message 144**
- Replying to or forwarding a message 146**
- Working with conversations in batches 148**
- Starring a message 149**
- Labeling a conversation 150**
- Viewing conversations by label 151**
- Synchronizing your conversations by label 152**
- Reporting spam 154**
- Searching for messages 155**
- Archiving conversations 156**
- Appending a signature to your messages 157**
- Using keyboard shortcuts 158**
 - Conversation list shortcuts 158
 - Message shortcuts 158
- Changing Gmail settings 159**
 - General Settings 159
 - Notification settings 160

Calendar 161

- Viewing your calendar and events 162**
- Working in Agenda view 164**
- Working in Day view 165**
- Working in Week view 167**
- Working in Month view 168**
- Viewing event details 169**
- Creating an event 170**

-
- Editing an event 171**
 - Deleting an event 172**
 - Setting an event reminder 173**
 - Responding to an event reminder 174**
 - Synchronizing and displaying calendars 175**
 - Changing Calendar settings 176**

Google Voice 177

- Opening Google Voice and your Inbox 178**
- Reading or listening to your voicemail 180**
- Exchanging text messages 182**
- Starring messages 183**
- Viewing messages by label 184**
- Configuring Google Voice 185**
- Placing calls with Google Voice 187**
- Changing Google Voice settings 188**
 - General Settings 188
 - Sync and notifications settings 189

Google Talk 191

- Signing in and opening your Friends list 192**
- Chatting with friends 194**
- Changing and monitoring online status 197**
- Managing your Friends list 199**
- Changing Google Talk settings 201**

Email 203

- Opening Email and the Accounts screen 204**
- Reading your messages 206**
- Responding to a message 208**
- Starring messages 209**
- Working with message in batches 210**
- Composing and sending email 211**
- Working with account folders 212**
- Appending a signature to your messages 213**
- Adding and editing email accounts 214**

Changing email account settings 217

- Account settings 217
- Incoming server settings 218
- Outgoing server settings 220

Messaging 223

Opening Messaging 224

Exchanging messages 225

Changing Messaging settings 230

- Storage settings 230
- Text message (SMS) settings 230
- Multimedia message (MMS) settings 230
- Notification settings 231

Browser 233

Opening Browser 234

Navigating within a webpage 237

Navigating among webpages 239

Working with multiple Browser windows 241

Downloading files 242

Working with bookmarks 244

Changing Browser settings 246

- Page content settings 246
- Privacy settings 247
- Security settings 248
- Advanced settings 248

Maps, Navigation, Places, and Latitude 249

Opening Maps 250

Viewing My Location and location services 251

Searching, exploring, and starring places 253

Using the Places feature in the Launcher 256

Changing map layers 257

Getting directions 259

Navigating with Google Maps Navigation (Beta) 260

Previewing and changing views of your route 261

Finding your friends with Google Latitude 264

Camera 267

Opening Camera and taking pictures or videos 268

Changing Camera settings 271

Camera mode settings 272

Video mode settings 273

Gallery 275

Opening Gallery and viewing your albums 276

Working with albums 278

Working with pictures 282

Working with videos 286

YouTube 289

Opening YouTube and watching videos 290

Discovering videos 293

Rating videos 295

Uploading and sharing videos 296

Working with playlists 298

Working with channels 299

Changing YouTube settings 300

Music 301

Transferring music files to your phone 302

Opening Music and working with your library 303

Playing music 305

Working with playlists 308

News & Weather 311

Checking the news and weather 312

Changing News & Weather settings 315

News & Weather settings 315

Weather settings 315

News settings 315

Refresh settings 316

Clock 317

Viewing the date, time, and other information 318

Setting alarms 320

Changing Clock alarm settings 322

Car Home 323

Opening Car Home 324

Customizing Car Home 326

Starting Car Home with a Bluetooth Device 328

Changing Car Home settings 329

Calculator 331

Using the Calculator 332

Tags 333

Scanning tags 334

Working with tags 335

Market 337

Opening Android Market and finding applications 338

Downloading and installing applications 341

Managing your downloads 343

Settings 347

Opening Settings 348

Wireless & networks 349

Wireless & Network settings screen 349

Wi-Fi settings screen 349

Advanced Wi-Fi settings screen 351

Bluetooth settings screen 351

Tethering & portable hotspot settings screen 352

VPN settings screen 352

Mobile networks settings screen 352

Call settings 354

Call settings screen 354

Fixed Dialing Numbers screen 355

Additional settings 355

Internet calling (SIP) accounts screen 355

Sound settings 356

Display settings 358

Location & security settings 359

Applications settings 361

Applications settings screen 361

Development screen 361

Accounts & sync settings 363

Accounts & sync settings screen 363

Account screen 363

Privacy settings 364**Storage settings 365****Language & keyboard settings 366**

Language & Keyboard screen 366

Android Keyboard settings screen 366

Device Keyboard settings screen 367

Voice input & output settings 368

Google Voice Recognition settings screen 368

Text-to-Speech settings screen 368

Accessibility settings 370**Dock settings 371****Date & time settings 372****About phone 373**

About Phone screen 373

About this guide

This guide describes how to use release 2.3 of the Android™ mobile technology platform, including updates to Android applications that have been released on the Android Market™ downloadable applications service.

This guide does not describe the physical features of your phone (its parts and accessories, how to replace its battery, turn it on , and so on) or its specifications; for that information, refer to your phone's owner's guide.

Chapter	Describes
"Android basics" on page 15	Starting Android the first time, signing into your Google™ Accounts so you can take full advantage of Google Apps™, and performing basic Android tasks.
"Connecting to networks and devices" on page 57	Configuring how your phone connects to mobile and Wi-Fi™ networks, to Bluetooth™ devices, and to a computer, and it describes how to share your phone's mobile data connection via USB or as a portable Wi-Fi hotspot. This chapter also describes how to secure your connections to virtual private networks (VPNs) and other networks.
"Placing and receiving calls" on page 77	Using your phone to place, receive, and manage multiple calls.
"Searching by text and voice" on page 93	Using Google Search to search your phone and the web by typing or speaking.
"Contacts" on page 109	Organizing and finding contact information for the people you know.
"Accounts" on page 127	Adding and synchronizing email and other accounts, including Google Accounts and Microsoft™ Exchange ActiveSync™ accounts.
"Gmail" on page 135	Sending and receiving messages using Gmail™ webmail service.
"Calendar" on page 161	Viewing and creating events on your calendar and synchronizing them with the Google Calendar™ calendaring service on the web.
"Google Voice" on page 177	Checking your voicemail and placing calls with Google Voice.

Chapter	Describes
"Google Talk" on page 191	Communicating with friends by using the Google Talk™ instant messaging service.
"Email" on page 203	Configuring your phone so you can send and receive email via a conventional email service.
"Messaging" on page 223	Exchanging text and multimedia messages with other phones.
"Browser" on page 233	Browsing the web on your phone.
"Maps, Navigation, Places, and Latitude" on page 249	Discovering the world with street and satellite data from the Google Earth™ mapping service, getting directions, finding your location, sharing your location through the Google Latitude™ user location service, navigating with spoken turn-by-turn directions from Google Maps Navigation, and the many other features available on your phone in the Google Maps™ mapping service
"Camera" on page 267	Taking and previewing photos and videos.
"Gallery" on page 275	Viewing, sharing, and uploading your photos and videos to the Picasa™ photo organizing software service and the YouTube™ user-generated content website.
"YouTube" on page 289	Viewing YouTube videos.
"Music" on page 301	Listening to music by the song, album, or playlist.
"News & Weather" on page 311	Checking the news and weather on your Home screen or in detail.
"Clock" on page 317	Checking the time and setting alarms.
"Car Home" on page 323	Using your phone effectively in the car.
"Calculator" on page 331	Calculating the solutions to math problems.

Chapter	Describes
"Tags" on page 333	Scan and work with Near Field Communication (NFC) tags.
"Market" on page 337	Finding new applications on Android Market, purchasing paid applications, and installing them.
"Settings" on page 347	Opening the Settings application and its many tools for configuring and customizing your phone.

Android basics

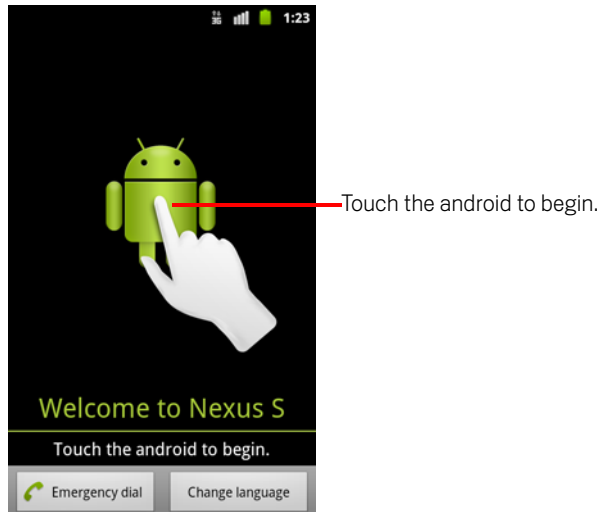
When you first turn on your phone, you have the opportunity to sign into your Google Account. Then it's a good idea to become familiar with the basics of your phone and how to use it—the Home screen, the touchscreen, menus, applications, entering text, and so on.

In this section

- “Starting Android for the first time” on page 16
- “Getting to know the Home screen” on page 19
- “Using the touchscreen” on page 22
- “Using the phone's buttons” on page 23
- “Using a trackball” on page 24
- “Working with menus” on page 25
- “Monitoring your phone's status” on page 27
- “Managing notifications” on page 29
- “Using the onscreen keyboard” on page 31
- “Entering text by speaking” on page 35
- “Editing text” on page 37
- “Opening and switching applications” on page 40
- “Locking your screen” on page 42
- “Customizing the Home screen” on page 43
- “Connecting quickly with your contacts” on page 45
- “Optimizing battery life” on page 46
- “Managing how applications use memory” on page 48
- “Managing downloads” on page 54

Starting Android for the first time

The first time you power on your phone (after setting it up, as described in your phone's owner's guide), you're prompted to touch the Android logo to begin using your phone.



Then you're prompted to create or to sign into your Google Account and to make some initial decisions about how you want to use Android and Google features.

If you don't have a SIM card in your GSM phone

If your GSM phone doesn't have a SIM card installed, you can't connect to mobile networks for voice and data services, but you can connect to a Wi-Fi network to sign into your Google Account and to use all the features of your phone, except placing a cell phone call. (CDMA phones don't rely on a SIM card to connect to mobile networks.)

If you start a GSM Android phone the first time without a SIM card, you're asked if you want to touch **Connect to Wi-Fi** to connect to a Wi-Fi network (instead of to a mobile network) to set up your phone. To learn more, see "Connecting to Wi-Fi networks" on page 61.

Your Google Account

You must sign into a Google Account to use Gmail, Google Talk, Google Calendar, and other Google Apps; to download applications from Android Market; to back up your

settings to Google servers; and to take advantage of other Google services on your phone.

Important If you want to restore your settings to this phone, from another phone that was running Android release 2.0 or later, you must sign into your Google Account now, during setup. If you wait until after setup is complete, your settings are not restored. (See “Google services” on page 18.)

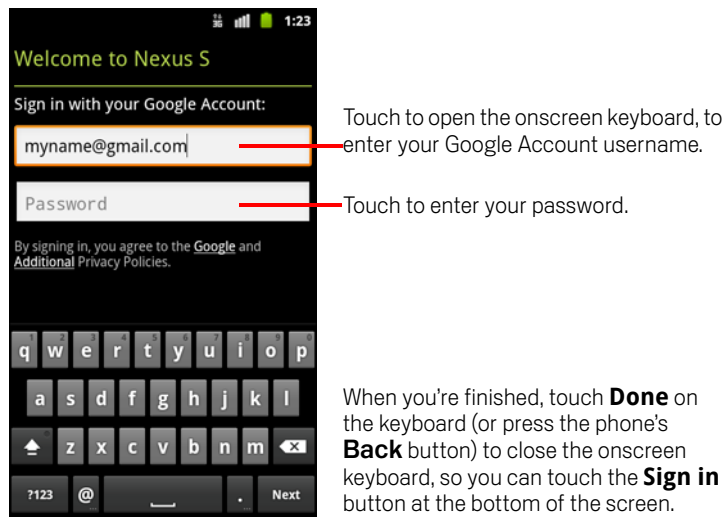
If you don’t have a Google Account, you’re prompted to create one.

If you have an enterprise Gmail account through your company or other organization, your IT department may have special instructions on how to sign into that account.

When you sign in, your contacts, Gmail messages, Calendar events, and other information from these applications and services on the web are synchronized with your phone.

If you don’t sign into a Google Account during setup, you are prompted to sign in or to create a Google Account the first time you start an application that requires one, such as Gmail or Android Market.

When you sign in, you’re prompted to enter your username and password, using the onscreen keyboard. For information about navigating the touchscreen and entering text, see “Using the touchscreen” on page 22 and “Using the onscreen keyboard” on page 31.



Resetting your Google Account password

If you have a Google Account but have forgotten your password, you must reset it before you can sign in. Go to <http://www.google.com>, click Sign In, click “Can’t access

your account?" in the sign-in box, and then follow the instructions for resetting your password.

Additional accounts

After setup, you can add Google, Microsoft Exchange ActiveSync, conventional email, and other kinds of accounts to your phone, and sync some or all of their data, as described in "Accounts" on page 127. However, only the first Google Account you sign into is backed up to Google servers. Some applications that only work with a single account display data only from the first account that you sign into.

Google services

When you sign in, you're asked whether you want to take advantage of the following Google services.

Location You can choose whether to take advantage of Google's location service, which provides applications with your approximate location without using GPS, and whether to use your location for Google search results and other Google services. For information about changing these settings later, see "Location & security settings" on page 359 and "Privacy settings" on page 364.

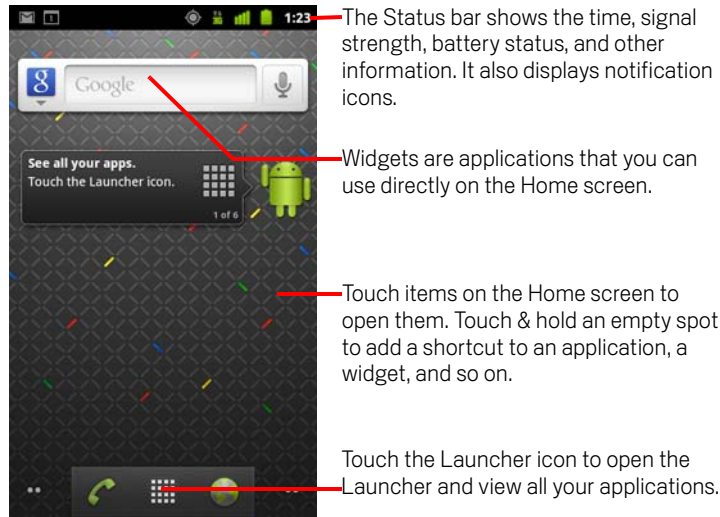
Backup You can choose to back up some of your data, such as your bookmarks, your user dictionary, your Wi-Fi passwords, and many other settings, to your Google Account, on Google servers. Some third-party applications may also take advantage of this feature. That way, when you need to replace your phone (when you upgrade or replace a lost phone), or if you reinstall an application, you can restore your settings and other data. For information about changing this setting later, see "Privacy settings" on page 364.

Date and time If you aren't connected to a mobile network, you're prompted to set the date and time on your phone. See "Date & time settings" on page 372.

Getting to know the Home screen

When you sign in, the Home screen opens.

The Home screen is your starting point to access all the features on your phone. It displays application icons, widgets, shortcuts, and other features. You can customize the Home screen with different wallpaper and display the items you want. See “Customizing the Home screen” on page 43.



At the top of the screen, the Status bar displays the time, information about the status of your phone, and icons for notifications that you’ve received. To learn more, see “Monitoring your phone’s status” on page 27 and “Managing notifications” on page 29.

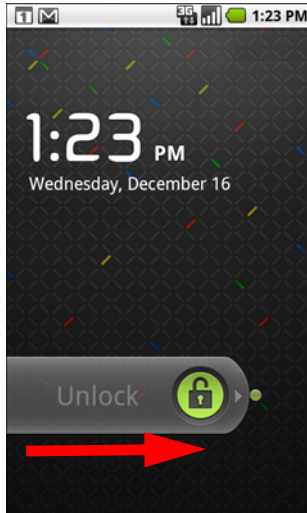
Touch the Launcher icon at the bottom of the screen to view all installed applications. See “Opening and switching applications” on page 40.

Wake up the phone

If you don't use the phone for a while, the screen dims and then darkens, to conserve the battery.


- 1 Press the **Power** button.

If you've locked your screen, you must draw an unlock pattern or enter a PIN or password to unlock it. See "Locking your screen" on page 42.



- 2 Drag the lock icon to the right.
The last screen you were viewing opens.

Return to the Home screen

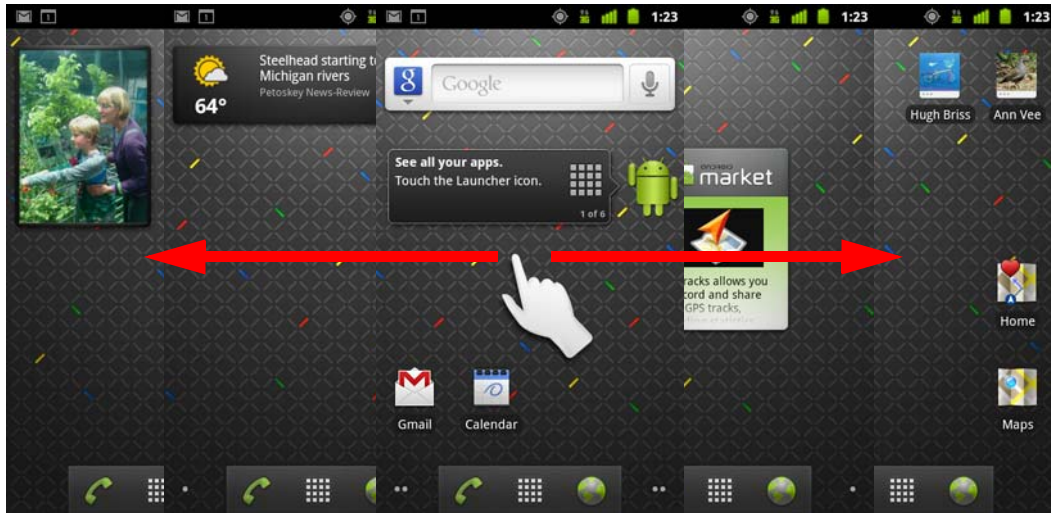
- ▶ Press the **Home**  button at any time, in any application.

View other parts of the Home screen

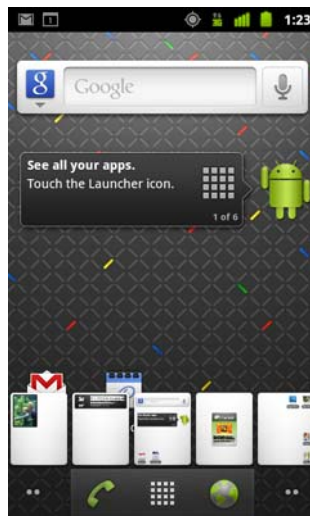
- ▶ Slide your finger left or right across the Home screen.

Extensions to the Home screen provide more space for widgets, shortcuts, and other items. For more on sliding, see “Using the touchscreen” on page 22.

Small dots at the lower left and right indicate which screen you're viewing.



- ▶ Touch & hold the small dots on the lower left or right of the screen to view thumbnails of the Home screen and its extensions, which you can touch to open.



Using the touchscreen

The main way to control Android features is by using your finger to manipulate icons, buttons, menu items, the onscreen keyboard, and other items on the touchscreen. You can also change the screen's orientation.

Touch To act on items on the screen, such as application and settings icons, to type letters and symbols using the onscreen keyboard, or to press onscreen buttons, you simply touch them with your finger.

Touch & hold Touch & hold an item on the screen by touching it and not lifting your finger until an action occurs. For example, to open a menu for customizing the Home screen, you touch an empty area on the Home screen until the menu opens.

Drag Touch & hold an item for a moment and then, without lifting your finger, move your finger on the screen until you reach the target position. You drag items on the Home screen to reposition them, as described in "Customizing the Home screen" on page 43, and you drag to open the Notifications panel, as described in "Managing notifications" on page 29.

Swipe or slide To swipe or slide, you quickly move your finger across the surface of the screen, without pausing when you first touch it (so you don't drag an item instead). For example, you slide the screen up or down to scroll a list, and in some Calendar views you swipe quickly across the screen to change the range of time visible.





Double-tap Tap quickly twice on a webpage, map, or other screen to zoom. For example, you double-tap a section of a webpage in Browser to zoom that section to fit the width of the screen. Double-tapping after pinching to zoom in some applications, such as Browser, reflows a column of text to fit the width of the screen.

Pinch In some applications (such as Maps, Browser, and Gallery), you can zoom in and out by placing two fingers on the screen at once and pinching them together (to zoom out) or spreading them apart (to zoom in).

Rotate the screen On most screens, the orientation of the screen rotates with the phone as you turn it from upright to its side and back again. You can turn this feature on and off, as described in "Display settings" on page 358.

Using the phone's buttons

Your phone's physical buttons and soft buttons offer a variety of functions and shortcuts. Refer to your phone's owner's guide for details about the location of the buttons on your phone.

Button	Press	Press & hold
Back 	Opens the previous screen you were working in. If the onscreen keyboard is open, closes the keyboard.	
Menu 	Opens a menu with items that affect the current screen or application.	
Home 	Opens the Home screen. If you're viewing the left or right extended Home screen, opens the central Home screen.	Opens the most recently used applications screen.
Search 	On the Home screen, opens Google search for searching your phone and the web. In many applications, opens a search box for searching within the application.	Opens Google search by voice.
Power	Turns off the screen.	Opens a menu with options for Airplane mode, for Silent mode, and for powering off the phone.
Volume Up / Down	When a call is in progress, increases or decreases the call volume. When the phone is ringing, silences the ringer. On the Home screen when no call is in progress, increases or decreases the ringtone volume, or sets the phone to be silent or to vibrate instead of ringing. In other applications, controls the volume of music, spoken directions, and other audio.	Quickly increases the ringtone volume to maximum or minimum.

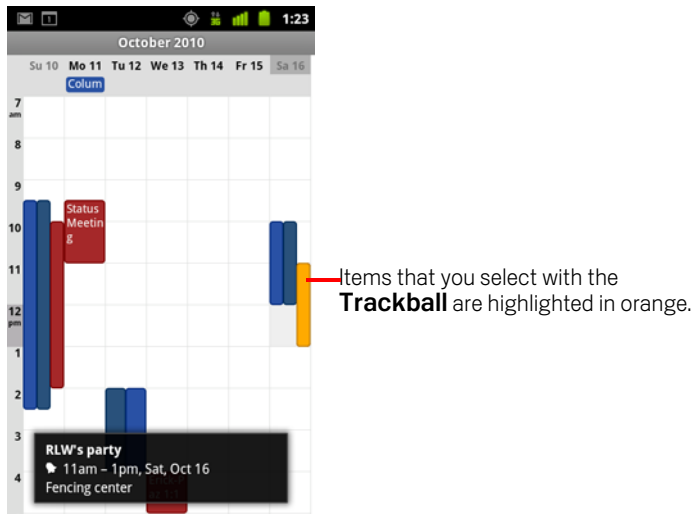
Using a trackball

If your phone includes a trackball (or similar navigating device you can use to select items on screen), you may find some actions are easier using it than using your finger, such as:

- Opening an event in a crowded calendar
- Selecting a link or form field on a web page
- Selecting text to edit

Use the Trackball

- ▶ Roll the **Trackball** to select items on the screen.
The selected item is highlighted in orange.





- ▶ Pressing the **Trackball** is equivalent to touching the selected item with your finger.
- ▶ Pressing & holding the **Trackball** is equivalent to touching & holding the selected item with your finger, for opening context menus, starting apps, and so on.

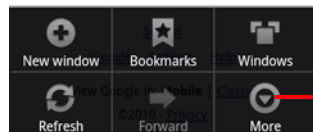
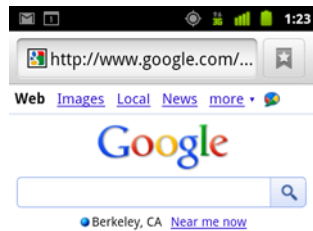
Working with menus

There are two kinds of Android menus: options menus and context menus.

Options menus

Options menus contain tools that apply to the activities of the current screen or application, not to any specific item on the screen. You open options menus by pressing the **Menu** button . Not all screens have options menus; if you press **Menu**  on a screen that has no options menu, nothing happens.

Some screens have more options menu items than can fit in the main menu; you touch **More** to open a menu of additional items.

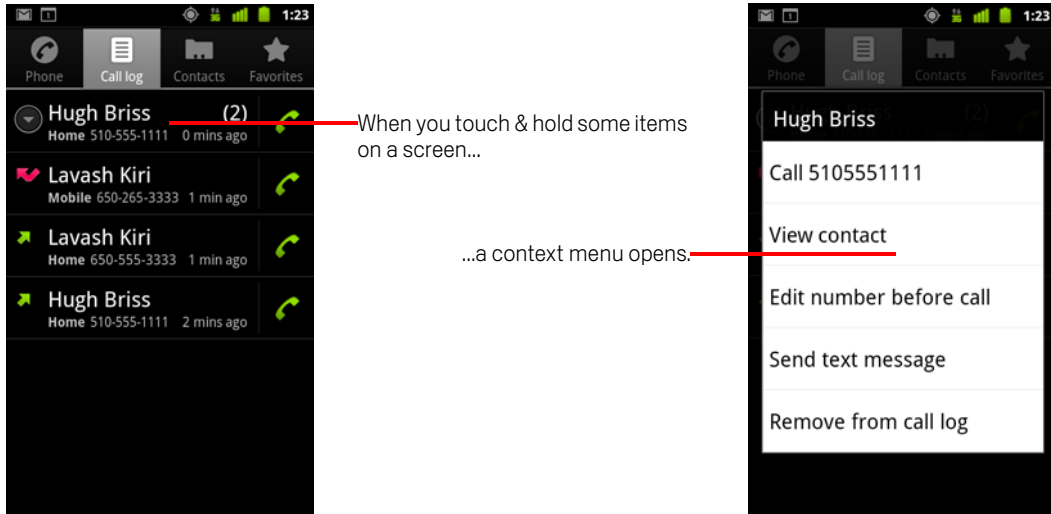


Options menus contain items that apply to the current screen or to the application as a whole.

Touch to open more menu items.

Context menus


Context menus contain tools that apply to a specific item on the screen. You open a context menu by touching & holding an item on the screen. Not all items have context menus. If you touch & hold an item that has no context menu, nothing happens.



Monitoring your phone's status

The Status bar appears at the top of every screen. It displays icons indicating that you've received notifications (on the left) and icons indicating the phone's status (on the right), along with the current time.





























If you have more notifications than can fit in the status bar, a plus icon  prompts you to open the Notifications panel to view them all. See “Managing notifications” on page 29.

Status icons

The following icons indicate the status of your phone. To learn more about the different kinds of mobile networks, see “Connecting to networks and devices” on page 57.





























Network status icons turn green if you have a Google Account added to your phone and the phone is connected to Google services, for syncing your Gmail, Calendar events, contacts, for backing up your settings, and so on. If you don't have a Google Account or if, for example, you're connected to a Wi-Fi network that is not connected to the Internet, the network icons are white.

	Connected to GPRS mobile network		Roaming
	GPRS in use		No signal
	Connected to EDGE mobile network		No SIM card installed
	EDGE in use		Vibrate mode
	Connected to 3G mobile network		Ringer is silenced
	3G in use		Phone microphone is mute
	Mobile network signal strength		Battery is very low
	Connected to a Wi-Fi network		Battery is low
	Bluetooth is on		Battery is partially drained
	Connected to a Bluetooth device		Battery is full

	Airplane mode		Battery is charging
	Alarm is set		GPS is on
	Speakerphone is on		Receiving location data from GPS

Notification icons

The following icons indicate that you've received a notification. See "Managing notifications" on page 29 for information about responding to these notifications. In addition these icons, applications you install on your phone may use their own notification icons.

	New Gmail message		More notifications
	New text or multimedia message		Call in progress
	Problem with text or multimedia message delivery		Call in progress using a Bluetooth headset
	New Google Talk message		Missed call
	New voicemail		Call on hold
	Upcoming event		Call forwarding is on
	Data is syncing		Song is playing
	Problem with sign-in or sync		Uploading data
	SD card or USB storage is full		Downloading data
	An open Wi-Fi network is available		Download finished
	Phone is connected via USB cable		Connected to or disconnected from virtual private network (VPN)
	Phone is sharing its data connection via USB (USB tethering)		Carrier data use threshold approaching or exceeded
	Phone is sharing its data connection as a Wi-Fi hotspot (Wi-Fi tethering)		Application update available
	Phone is tethered in multiple ways		System update available

Managing notifications

Notification icons report the arrival of new messages, calendar events, and alarms, as well as ongoing events, such as when call forwarding is on or the current call status.

When you receive a notification, its icon appears in the Status bar, along with a summary that appears only briefly. For a table of notification icons, see “Notification icons” on page 28.


If your phone uses a trackball light for notifications, the light pulses once or repeatedly when you receive a new notification. Depending on your settings and the model of your phone, you may also hear a notification sound, the phone may vibrate, and LEDs may blink. These settings and adjusting sound volume and other general notification settings is described in “Sound settings” on page 356.

You can open the Notifications panel to view a list of all your notifications.

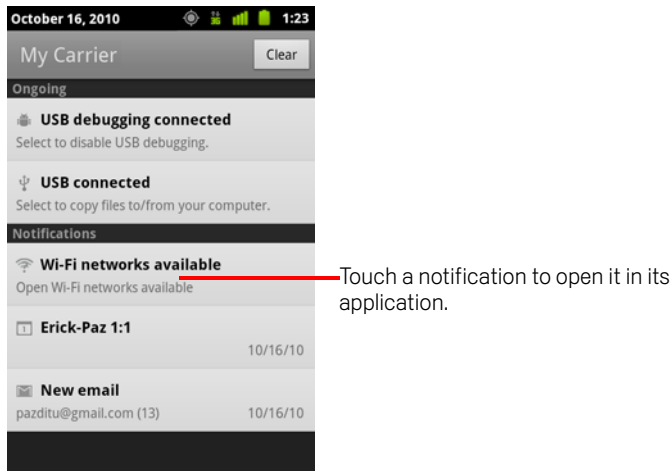
Applications whose activities produce notifications, such as Gmail and Google Talk, have their own settings, which you can use to configure whether and how they send notifications, whether they sound a ringtone, vibrate, and so on. See the documentation for those applications for details.

Open the Notifications panel

- ▶ Drag the Status bar down from the top of the screen.

On the Home screen, you can also press **Menu**  and touch **Notifications**.

The Notifications panel displays your wireless provider and a list of your current notifications. Notifications about ongoing activities are listed first, followed by Notifications about events, such as new mail notifications or Calendar reminders.




Respond to a notification

- 1 Open the Notifications panel.
Your current notifications are listed in the panel, each with a brief description.
- 2 Touch a notification to respond to it.
The Notifications panel closes. What happens next depends on the notification. For example, new voicemail notifications dial your voicemail box, and network disconnect notifications open the list of configured networks so you can reconnect.

Clear all notifications


- 1 Open the Notifications panel.
- 2 Touch **Clear** at the top right of the panel.
All event-based notifications are cleared; ongoing notifications remain in the list.

Close the Notifications panel

- ▶ Drag the tab at the bottom of the Notifications panel to the top of the screen. Or just press the **Back**  button.
The panel also closes when you touch a notification to respond to it.

Using the onscreen keyboard

You enter text using the onscreen keyboard. Some applications open the keyboard automatically. In others, you touch a text field where you want to enter text to open the keyboard.

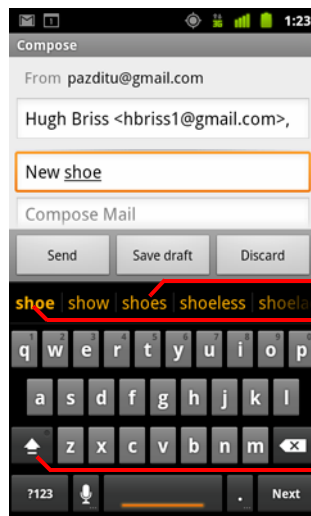
The onscreen keyboard has a number of settings, as described in “Language & keyboard settings” on page 366. You can open the Android keyboard settings by touching & holding the Microphone key  and in the small window that opens, dragging to the Settings icon.

You can enter text by speaking instead of by typing. See “Entering text by speaking” on page 35.

Enter text by typing

- 1 Touch a text field.

The onscreen keyboard opens.



Touch a suggestion to enter it in place of the underlined word in the text box.

Press space or a punctuation mark to enter the bold suggestion.

Touch once to capitalize the next letter you type. Touch & hold for all caps.

If you touch in a text field where there is already text entered, the insertion point is set where you touch and the insertion point tab appears. You can drag the insertion point by its tab to move the insertion point, to pick exactly where you

want to add more text. You can also select a word or more at a time and copy, cut, and paste text. See “Editing text” on page 37.

- 2 Touch the keys on the keyboard to enter text.

What you type appears in the text field and in the strip above the keyboard, in black text on a white background. When the keyboard has a suggestion for what you might be typing, the word you’re typing is underlined in the text field and the suggestions appear in orange in the strip above the keyboard. The boldfaced suggestion at the left of the strip is the keyboard’s best suggestion. You can drag the strip to the left to bring any additional suggestions into view.



- 3 Press space or a punctuation mark to enter the boldfaced suggested word.

If you touch the space key, the suggestion strip offers a series of punctuation marks you can touch, to replace the space with.

Or touch another suggested word to enter it.

If you touch a word that is not in the system or user dictionary, it’s entered and you’re prompted to touch the word again if you want to add it to the user dictionary.

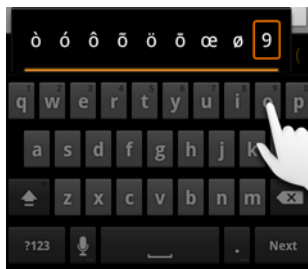
You can view, edit, or delete the words that you add to the dictionary. See “Language & keyboard settings” on page 366.

- 4 Use the Delete key  to erase characters to the left of the cursor.
- 5 When you’re finished typing, press **Back**  to close the keyboard.

Some applications add special keys to the keyboard that make it easier to navigate from one text field to another.

Enter numbers, symbols, and other characters

- ▶ Touch & hold one of the top-row keys and then without moving your finger, lift your finger, to enter the number indicated in black on that key. Keys with alternate characters display an ellipsis (...) below the character.



- ▶ Touch & hold a vowel or the C, N, or S key to open a small window where you can drag onto the accented vowel or other alternate letter or number you want to enter.

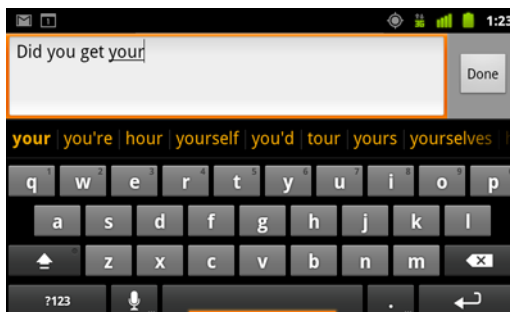
- ▶ Press the Symbols key **?123** to switch to the numbers and symbols keyboard. Press the Alt key on the symbols keyboard to view additional symbols; press it again to switch back.
- ▶ Touch & hold the Period key (.) to open a small window with a set of common symbols.



- ▶ Touch & hold a number or symbol key to open a window of additional symbols. When you touch a key, a larger version displays briefly over the keyboard. Keys with alternate characters display an ellipsis (...) below the character.
- ▶ On some phones, you can touch & hold the Shift or Symbols key with one finger, touch one or more capital letters or symbols to enter them, and then left both fingers to return to the lowercase alphabet keyboard.

Change the keyboard orientation

- ▶ Turn the phone sideways or upright. The keyboard is redrawn to take best advantage of the new phone orientation. Many people find the larger, horizontal onscreen keyboard easier to use.



You can control whether the screen changes orientation automatically when you turn the phone. See “Display settings” on page 358.

Change the keyboard language

If you've used the Android Keyboard settings to make more than one language available when using the onscreen keyboard (see "Android Keyboard settings screen" on page 366), the current keyboard language is displayed on the Space key and you can switch languages.

- 1 Touch & hold the Space key.
- 2 Without lifting your finger, move it to the left or right until the language you want appears in the center of the small window above the Space key.





- 3 Lift your finger.
- If you have many languages available, you may have to repeat these steps to find the language you want.

Entering text by speaking

You can use voice input to enter text by speaking. Voice input is an experimental feature that uses Google's speech-recognition service, so you must have a data connection on a mobile or Wi-Fi network to use it.


Turn on voice input

If the onscreen keyboard does not display a Microphone key , voice input is not turned on or you have it configured to display on the symbols keyboard.

- 1 Press **Home** , press **Menu** , then touch **Settings > Language & keyboard > Android keyboard**.
- 2 Touch **Voice input**.
- 3 Touch the option for where you want the Microphone key (on the main keyboard or the Symbols keyboard). Or touch **Off** to turn off voice input.

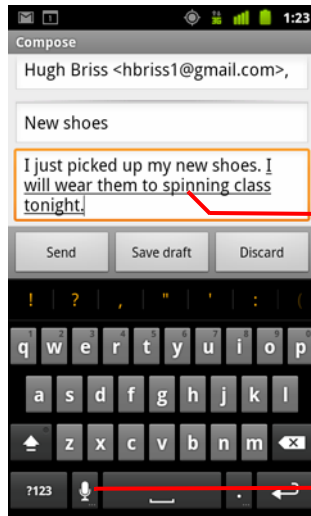
Enter text by speaking

You can enter text by speaking, in most places that you can enter text with the onscreen keyboard.

- 1 Touch a text field, or a location in text you've already entered in a text field.
- 2 Touch the Microphone key  on the keyboard (if you set the Microphone key to appear on the symbols keyboard, touch the Symbol key first).


- 3 When prompted to “Speak now,” speak what you want to enter.

Say “comma,” “period,” “question mark,” “exclamation mark,” or “exclamation point” to enter punctuation.



Text that you enter by speaking is underlined. You can delete it, or you can continue entering text to keep it.

Touch to enter text by speaking.

When you pause, what you spoke is transcribed by the speech-recognition service and entered in the text field, underlined. You can press the Delete key  to erase the underlined text. If you start typing or entering more text by speaking, the underline disappears.

You can edit the text that you enter by typing or speaking. See “Editing text” on page 37.

Editing text

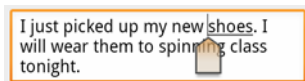
You can edit the text you enter in text fields and use menu commands to cut, copy, and paste text, within or across applications. Some applications don't support editing some or all of the text they display; others may offer their own way to select text you want to work with.

Edit text

- 1 Touch the text you want to edit.

The cursor is inserted where you touched.

The cursor is a blinking vertical bar that indicates where text you type or paste will be inserted. When it first appears, it has an orange tab you can use to drag it, to move it if you want.

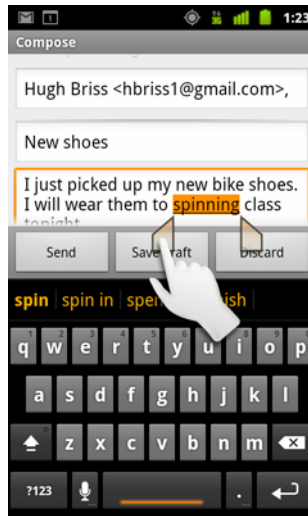


- 2 Drag the cursor by its orange tab to the location where you want to edit text.
The orange tab disappears after a few moments, to get out of your way. To make it reappear, just touch the text again.
- 3 Type, cut, paste, or delete text.
- 4 Press the **Back** ← button when you're finished typing, to close the keyboard.

Select text

You select text that you want to cut, copy, delete, or replace.

- 1 Touch & hold the text or word you want to select.
- 2 Touch **Select word** or **Select all** in the menu that opens.
The selected text is highlighted in orange, with a tab at each end of the selection.



Drag a selection tab to expand or reduce the range of selected text.

- 3 Drag either selection tab to expand or reduce the range of selected text.
If you change your mind, you can unselect the text by touching unselected text in the same or in another text field, or press the **Back** ← button.
- 4 Touch the selected text to open a menu you can use to cut or copy your selection or, if you have previously cut or copied text, replace the selected text by pasting.
You can also simply enter text by typing or speaking, to replace the selection with what you type, or press the Delete key to delete the selected text.

Cut or copy text

- 1 Select the text to cut or copy.
See “Select text” on page 37.
- 2 Touch the selected text.
The selection tabs must be showing to cut or copy selected text. If the selection tabs aren't showing, they reappear when you touch the text, so you can touch the text again to open the Edit Text menu.
- 3 Touch **Cut** or **Copy** in the Edit Text menu.
If you touch **Cut**, the selected text is removed from the text field. In either case, the text is stored in a temporary area on the phone, so that you can paste it into another text field.

Paste text

- 1** Cut or copy the text to paste.
See “Cut or copy text” on page 38.
- 2** Place the cursor in the text field where you want to paste the text, or select text you want to replace by pasting.
You can paste text that you copied from one application into a text field in any application.
- 3** Touch **Paste** in the menu that opens.
The text is inserted at the cursor. The text that you pasted also remains in a temporary area on the phone, so you can paste that same text in another location.


Opening and switching applications

The Launcher has icons for all of the applications on your phone, including any applications that you downloaded and installed from Android Market or other sources.

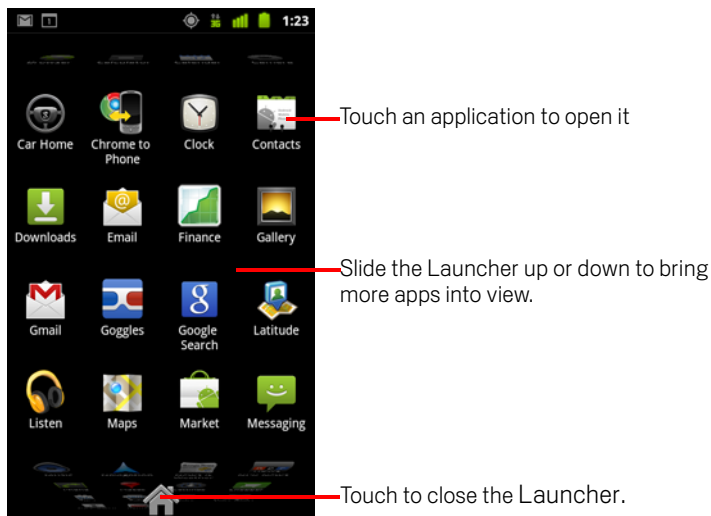
When you open an application, the other applications you've been using don't stop; they keep on running: playing music, opening webpages, and so on. You can quickly switch among your applications, to work with several at once. The Android operating system and applications work together to ensure that applications you aren't using don't consume resources unnecessarily, stopping and starting them as needed. For this reason, there's no need to stop applications unless you're certain that one you downloaded is misbehaving. For details about how applications use memory and how you can manage them, see "Managing how applications use memory" on page 48.

See "Market" on page 337 to learn how to discover and install additional applications (including productivity tools, utilities, games, references, and many other kinds of software) on your phone.


Open and close the Launcher

- ▶ On the Home screen, touch the Launcher icon  to open it.

If you have more applications than can fit on the Launcher in one view, you can slide the Launcher up or down to view more.



You can add an application icon to the Home screen by touching & holding it on the Launcher until it vibrates and then dragging it to a location on the Home screen.



- ▶ Touch the Home icon on the Launcher or the **Home** button  to close the Launcher.

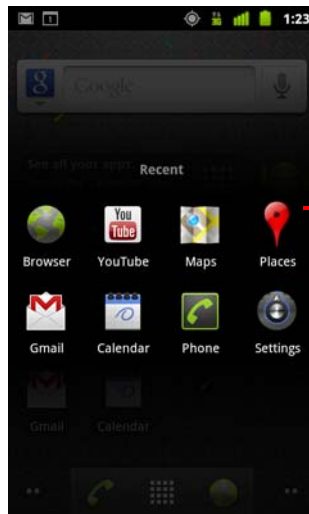
The Launcher closes automatically if you touch an icon to open its application or if you move an icon from the Launcher to the Home screen.

Open an application

- ▶ Touch an application's icon on the Launcher.
- OR**
- ▶ Touch an application's icon on the Home screen.

Switch to a recently used application

- 1 Press & hold the **Home** button .
A small window opens, with icons of applications that you've used recently.
- 2 Touch an icon to open its application.
Or press **Back**  to return to the current application.



Touch an icon to open an application you've used recently.

Locking your screen

You can lock your screen so that only you can unlock it to make calls, access your data, buy applications, and so on. You may also be required to lock your screen by a policy set by an email or other account you add to your phone.

See “Location & security settings” on page 359 for other ways to protect your phone and privacy.


Lock your screen

- 1 On the Home screen, press **Menu**  and touch **Settings > Location & security**.

- 2 Touch **Set up screen lock**.

If you already have a screen lock configured, touch **Change screen lock** to change how you lock your screen or to turn off screen locking.

- 3 Touch **Pattern, PIN, or Password**.

If you touch **Pattern**, you're guided to create a pattern you must draw to unlock the screen. The first time you do this, a short tutorial about creating an unlock pattern appears. You can press **Menu**  and touch **Help** at any time for a refresher. Then you're prompted to draw and redraw your own pattern.

If you touch PIN or Password, you're prompted to set a numeric PIN or a password you must enter to unlock your screen.

The next time you turn on your phone or wake up the screen, you must draw your unlock pattern or to enter your PIN or password to unlock it.

Customizing the Home screen

You can add application icons, shortcuts, widgets, and other items to any part of any Home screen where there's free space. You can also change the wallpaper.

For an introduction to the Home screen, see “Getting to know the Home screen” on page 19.

Add an item to the Home screen

- 1 Open the Home screen where you want to add the item.

For an introduction to working with the Home screen, including how to switch Home screens, see “Getting to know the Home screen” on page 19.

- 2 Press **Menu**  and touch **Add**.

Or just touch & hold an empty location on the Home screen.

If there are no empty spots on the Home screen, **Add** is dimmed; you must delete or move an item before you can add another item, or switch to another Home screen.

- 3 In the menu that opens, touch the type of item to add.

You can add the following types of items to the Home screen.

Shortcuts Add shortcuts to applications, a bookmarked webpage, a favorite contact, a destination in Maps, a Gmail label, a music playlist, and many other items. The shortcuts available depend on the applications you have installed.

Widgets Add any of a variety of miniature applications (widgets) to your Home screen, including a clock, a music player, a picture frame, the Google search bar, a power manager, a calendar that shows upcoming appointments, and a News & Weather widget. You can also download widgets from Android Market.

Folders Add a folder where you can organize Home screen items, or folders that contain all your contacts, contacts with phone numbers, or starred contacts. Your folders' contents are kept up to date automatically.

Move an item on the Home screen


- 1 Touch & hold the item you want to move, until it vibrates. Don't lift your finger.

- 2 Drag the item to a new location on the screen.


Pause at the edge of the screen to drag the item onto another Home screen pane.

- 3 When the item is where you want it, lift your finger.

Remove an item from the Home screen

- 1 Touch & hold the item you want to remove, until it vibrates. Don't lift your finger. The Launcher icon changes to a Trash Can icon  .
- 2 Drag the item to the Trash Can icon.
- 3 When the icon turns red, lift your finger.

Change the Home screen wallpaper

- 1 Press **Menu**  and touch **Wallpapers**.
You can also touch & hold an empty area of the Home screen and in the menu that opens, touch **Wallpapers**.
- 2 Touch **Gallery**, **Live wallpapers**, or **Wallpapers**.
Touch **Gallery** to use a picture that you have captured using the camera or copied to your phone. You can crop the picture before setting it as a wallpaper. Working with pictures is described in "Gallery" on page 275.
Touch **Live wallpapers** to open a scrolling list of animated wallpapers installed on your phone. Some live wallpapers change according to the time of day, in response to touching the screen, tell the time, or offer other information. Some live wallpapers have a **Settings** button.
Touch **Wallpapers** to open a screen where you can sample the wallpaper images that come with the phone. Slide the miniature images left and right to view the samples. Touch a sample to view a larger version.
- 3 Touch **Save** or **Set wallpaper**.

Rename a folder

- 1 Touch the folder to open it.
- 2 Touch & hold the folder window's title bar.
- 3 Enter a new name in the dialog that appears.
- 4 Touch **OK**.

Connecting quickly with your contacts

As you build up your list of contacts on your phone, you can use Quick Contact for Android in many applications to quickly start a chat, email, or text message, to place a call, or to locate your contacts. Quick Contact for Android is a special icon that you can touch to open a bubble with options for quickly initiating a connection to that contact.

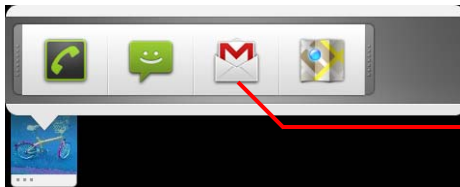
- ▶ Identify a Quick Contact icon by its frame.

Contacts that you can access with Quick Contact are displayed differently in different applications, but usually with a picture frame that looks like this:



- ▶ Touch a Quick Contact icon to open a bubble with icons for all the ways you can communicate with the contact.

If there are more icons than can fit in the bubble, drag them left and right to view them all.



Touch an icon to start communicating with the contact in that application.

- ▶ Touch an icon to open its application, where you can start communicating with your contact right away.

You can also touch an icon to edit the contact's information in Contacts, to view the contact's address in Google Maps, and so on, depending on which applications and accounts are configured on your phone.

You can add a shortcut for a contact to your Home screen, which you can then touch to open Quick Contact for Android for that contact. For more information about adding shortcuts to the Home screen, see "Customizing the Home screen" on page 43.


Optimizing battery life

You can extend your battery's life between charges by turning off features that you don't need. You can also monitor how applications and system resources consume battery power.

Extend the life of your battery

- ▶ Turn off radios that you aren't using.
If you aren't using Wi-Fi, Bluetooth, or GPS, use the Settings application to turn them off. See “Wireless & networks” on page 349 and “Location & security settings” on page 359. (The GPS receiver is only turned on when you're using an application that makes use of it.)
- ▶ Turn down screen brightness and set a shorter screen timeout.
See “Display settings” on page 358.
- ▶ If you don't need them, turn off automatic syncing for Gmail, Calendar, Contacts, and other applications.
See “Configuring account sync and display options” on page 131.
- ▶ Use the Power Control widget to check and control the status of radios, the display brightness, and syncing.
Adding widgets is described in “Customizing the Home screen” on page 43.
- ▶ If you know you won't be near a mobile or Wi-Fi network for a while, switch to Airplane mode.
Your phone uses extra power to search for mobile networks. See “Disable phone calls (Airplane mode)” on page 79.

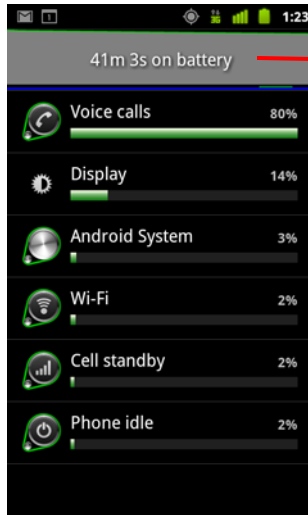
Check the battery charge level

- ▶ On the Home screen, press **Menu**  and touch **Settings > About phone > Status**.
The battery status (charging, discharging) and level (as a percentage of fully charged) are displayed at the top of the screen.

Monitor and control what uses the battery

The Battery Use screen shows which applications consume the most battery power. You can also use it to turn off applications that you've downloaded, if they are consuming too much power.

- ▶ On the Home screen, press **Menu**  and touch **Settings > Applications > Battery use**.



Touch the discharge graph to open a screen with details about battery use by the phone's screen, radios, and other features.

The Battery Use screen lists the applications that have been using the battery, from greatest to least battery use.

The discharge graph at the top of the screen shows the pace of battery discharge since you last changed the phone (short periods of time when you were connected to a charger are shown as thin green lines at the bottom of the chart), and how long you've been running on battery power.

- ▶ Touch an application in the Battery Use screen to learn details about its power consumption.
Different applications offer different kinds of information. Some applications include buttons that open screens with settings to adjust power use.
- ▶ Touch the discharge graph to open a screen with details about when the phone's radios, screen, and other features were using the battery.

Managing how applications use memory

As described in “Opening and switching applications” on page 40, you typically don’t need to worry about managing applications beyond installing, opening, and using them. The operating system manages how they use memory and other resources automatically. But there are times when you may want to know more about how applications are using the memory and other resources in your phone.

Applications use two kinds of memory in your phone: storage memory and RAM. Applications use storage memory for themselves and any files, settings, and other data they use. They also use RAM (memory that is designed for temporary storage and fast access) when they are running.

All phones have internal storage. This is the memory where most applications and many kinds of files and data for those applications are stored. The operating system manages and carefully guards internal storage, because it can contain your private information; you can’t view its contents when you connect the phone to a computer with a USB cable.

Depending on your model of phone, your phone also has either internal USB storage or a removable SD card. This is the memory whose contents you can view and copy files to and from when you connect your phone to a computer (as described in “Connecting to a computer via USB” on page 67). Some applications are also designed to be stored in this memory, rather than in internal memory, by default or as an option.



The operating system also manages how applications use your phone’s RAM. It only allows applications and their component processes and services to use RAM when they need it. It may cache processes that you’ve been using recently in RAM, so they restart more quickly when you open them again, but it will erase the cache if it needs the RAM for new activities.

You manage how applications use storage memory directly and indirectly in many ways as you use your phone, for example, by:

- Installing or uninstalling applications (see “Market” on page 337 and “Uninstall an application” on page 52)
- Downloading files in Browser, Gmail, and other applications
- Creating files (for example, by taking pictures)
- Deleting downloaded files or files you created (see “Managing downloads” on page 54 and the documentation for the applications you use)
- Using a computer to copy files to or delete files from your USB storage or SD card (see “Connecting to a computer via USB” on page 67)
- Changing whether an application is installed in internal storage or in your phone's USB storage or SD card, if the application supports it (see “Change where an application is stored” on page 52)

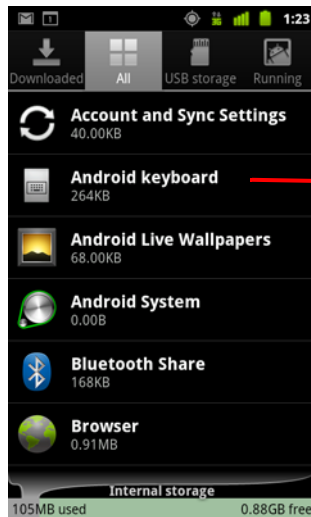
You rarely need to manage how applications use RAM: the operating system does this for you. But you can monitor how applications use RAM and stop them if they misbehave as described in “Stop a misbehaving application” on page 52.

Open the Manage applications screen

- ▶ Press **Home** , press **Menu** , and touch **Manage apps**.

OR

- ▶ Open the Settings application and touch **Applications > Manage applications**.



Touch an application to open a screen with details about it and options for managing it.

The Manage Applications screen has four tabs, with lists of applications and their components in each. At the bottom of each tab is a graph of the memory used by the items in the list and amount of free memory.

- ▶ Touch an application, process, or service in a list to open a screen with details about it and, depending on the item, to change its settings, stop it, uninstall it, and so on.

Most of these tasks are described in this section.

- ▶ Touch the **Downloaded** tab to view the applications you've downloaded from Market or other sources.
- ▶ Touch the **All** tab to view all the applications installed on your phone.


The list includes applications that are bundled with your release of Android and applications you downloaded from Market or other sources.

- ▶ Touch the **USB storage** or **SD card** tab (depending on your model of phone) to view the applications installed there.

Checked items are installed on your USB storage or SD card. Unchecked items are installed in your phone's internal storage, but are designed so that you can move them if you want. See "Change where an application is stored" on page 52.

- ▶ Touch the **Running** tab to view the applications and their processes and services that are running or cached.

See "Stop a misbehaving application" on page 52.

- ▶ When viewing the **Downloaded**, **All**, **USB storage**, or **SD card** tab, press **Menu**  and touch **Sort by size** or **Sort by name** to switch the order of the list.

Get details about an application

- 1 Open the Manage applications screen.
- 2 Touch an application, process, or service.


The Application Info screen for each application lists its name and version, along with details about the application. Depending on the application and where it came from, it may also include buttons for managing the application's data, forcing the application to stop, and uninstalling the application. It also lists details about the kinds of information about your phone and data that the application has access to.

Different kinds of applications have different kinds of information and controls, but commonly include:

- Use the **Force stop** button to stop an application that is misbehaving (see “Stop a misbehaving application” on page 52).
- If you installed the application from Android Market or another source, you can use the **Uninstall** button to remove the application and all of its data and settings from the phone. See “Market” on page 337 and “Uninstall an application” on page 52 for more information about uninstalling and reinstalling applications.
- **Storage** Gives details about the amount of phone storage that an application uses.
- You can delete an application's settings and other data by touching the **Clear data** button.
- You can use the Move to USB storage or Move to SD card (depending on your model of phone) and the Move to phone buttons to change where some applications are stored; see “Change where an application is stored” on page 52.
- **Cache** If the application stores data in a temporary area of the phone's memory, lists how much information is stored, and includes a button for clearing it.
- **Launch by default** If you have configured an application to launch certain file types by default, you can clear that setting here.
- **Permissions** Lists the kinds of information about your phone and data the application has access to.

Stop a misbehaving application

You can monitor how much RAM running applications and cached processes are using and if necessary, stop them.

- 1 Open the Manage applications screen.
- 2 Touch the **Running** tab.
- 3 Press **Menu** , and touch **Show cached processes** or **Show running services** to switch back and forth.

The Running tab shows the applications, processes, and services that are currently running or that have cached processes and how much RAM they are using. The graph at the bottom of the screen shows the total RAM in use and the amount free.

You can touch a misbehaving application, process, or service and in the screen that opens touch the **Stop** button. You can also touch the **Report** button, to send the developer information about how the application misbehaved on your phone.

Important Stopping an application or operating system processes and services disables one or more dependant functions on your phone. You may need to restart your phone to restore full functionality.

Uninstall an application

You can uninstall applications you downloaded from Market and other sources. (You can also use Market to uninstall applications you downloaded from there; see "Managing your downloads" on page 343)

- 1 Open the Manage applications screen.
- 2 Touch the **Downloads** tab.
- 3 Touch the application you want to uninstall.
- 4 Touch the **Uninstall** button.
- 5 Touch **OK** in the screen that asks you to confirm you want to uninstall the application.

Change where an application is stored

Some applications are designed to be stored on your phone's USB storage or SD card (depending on your model of phone), rather than in internal storage. Others are designed so you can change where they are stored. You may find it helpful to move large applications off of your internal storage, to make more room for other applications that don't offer the option. Many large applications are designed this way for exactly this reason.

- 1 Open the Manage applications screen.
- 2 Touch the **USB storage** or **SD card** tab.

The tab lists the applications that must be or can be stored on your phone's USB storage or SD card. Each application lists the amount of storage it uses on your phone's internal storage (even when not stored there, all applications use at least a small amount of internal storage).

Applications that are stored on your phone's USB storage or SD card are checked.

The graph at the bottom shows the amount of memory used and free of your phone's USB storage or SD card: the total includes files and other data, not just the applications in the list.

- ▶ Touch an application in the list.
The Storage section of the application's details screen shows details about the memory used by the application. If the application can be moved, the **Move** button is active.
- ▶ Touch **Move to USB storage** or **Move to SD** card to move the bulk of the application from the phone's internal storage.
- ▶ Touch **Move to phone** to move the application back to the phone's internal storage.


Managing downloads

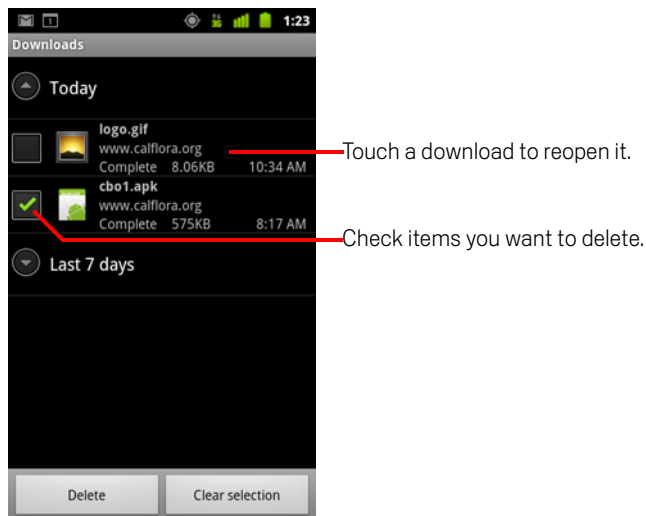
Files, applications, and other items you download in Browser, Gmail, or Email are stored on your phone's USB storage or SD card (depending on your model of phone). You can use the Downloads application to view, reopen, or delete what you've downloaded.

Some mobile networks place restrictions on the size of the files you can download, to manage the demands on their networks or to help you avoid unexpected charges. When you try to download an oversized-file when connected to such networks, you're asked or required to delay downloading the file, until you are next connected to a Wi-Fi network, when the download will resume automatically. You can view and manage these queued files in the Downloads application as well.


Downloaded files are stored in the **download** directory in your USB storage or SD card. You can view and copy files from this directory when connected to a computer, as described in "Connecting to a computer via USB" on page 67.

Open Downloads and manage downloaded files

- ▶ Touch the Downloads icon  on the Home screen or in the Launcher. See "Opening and switching applications" on page 40.



- ▶ Touch an item to reopen it.
- ▶ Touch headings for earlier downloads to view them.

- ▶ Check items you want to delete; then touch **Delete**.
The item is deleted from your phone's USB storage or SD card.
- ▶ Press **Menu** , and touch **Sort by size** or **Sort by time** to switch back and forth.

Connecting to networks and devices

Your phone can connect to a variety of networks and devices, including mobile networks for voice and data transmission, Wi-Fi data networks, and Bluetooth devices, such as headsets. You can also connect your phone to a computer, to transfer files from your phone, and share your phone's mobile data connection via USB or as a portable Wi-Fi hotspot.

In this section

"Connecting to mobile networks" on page 58

"Connecting to Wi-Fi networks" on page 61

"Connecting to Bluetooth devices" on page 64

"Connecting to a computer via USB" on page 67

"Sharing your phone's mobile data connection" on page 69

"Connecting to virtual private networks" on page 72

"Working with secure certificates" on page 74

"Configuring Internet (SIP) calling" on page 75

Connecting to mobile networks






When you assemble your phone with a SIM card from your wireless service provider (if necessary—CDMA phones don't use a SIM), your phone is configured to use your provider's mobile networks for voice calls and for transmitting data. (Refer to your phone's owner's guide and your carrier for more information.)

Your phone is configured to work with many mobile carriers' networks. If your phone does not connect to a network when you insert a SIM card and turn it on, contact your carrier to obtain the details of its access point name. See “Edit or create a new access point” on page 59.

Different locations may have different mobile networks available. Initially, your phone is configured to use the fastest mobile network available for data. But you can configure your phone to use only a slower 2G network for data, to extend the life of your battery between charges. You can also configure your phone to access a different set of networks entirely, or to behave in special ways when roaming.



The icons in the Status bar indicate which kind of data network you're connected to and the voice and data network signal strength.

Network status icons turn green if you have a Google Account added to your phone and the phone is connected to Google services, for syncing your Gmail, Calendar events, contacts, for backing up your settings, and so on. If you don't have a Google Account or if, for example, you're connected to a Wi-Fi network that is not connected to the Internet, the network icons are white.

	Connected to the fastest 3G networks (UMTS or HSDPA)
	Connected to the second-fastest network (EDGE)
	Connected to a 2G network (GPRS)
	The more bars are lit, the stronger the wireless signal
	Connected to another wireless service provider's network (roaming)



When you're connected to slower networks, you may want to postpone using your phone for data-intensive tasks until you are connected to a faster network again, or find a Wi-Fi network to connect to. See “Connecting to Wi-Fi networks” on page 61.

Determine what network you're using

- 1 Press **Home** , press **Menu** , and touch **Settings** to open the Settings application.
- 2 Touch **Wireless & networks** > **Mobile networks** > **Access Point Names**.
The name of the wireless service provider you're currently registered with is selected in the list.



Disable data when roaming

You can prevent your phone from transmitting data over other carriers' mobile networks when you leave an area that is covered by your carrier's networks. This is useful for controlling expenses if your cell plan doesn't include data roaming.

- 1 Press **Home** , press **Menu** , and touch **Settings**, to open the Settings application.
- 2 Touch **Wireless & networks** > **Mobile networks** and uncheck **Data roaming**.
With **Data roaming** unchecked, you can still transmit data with a Wi-Fi connection. See "Connecting to Wi-Fi networks" on page 61.





Limit your data connection to 2G networks

You can extend your battery life by limiting your data connections to 2G networks (GPRS or EDGE). When you are connected to a 2G network, you may want to postpone activities that transmit a lot of data, such as sending, uploading, or downloading pictures or video, until you are connected to a faster mobile or other wireless network.

- 1 Press **Home** , press **Menu** , and touch **Settings** to open the Settings application.
- 2 Touch **Wireless & networks** > **Mobile networks** and check **Use only 2G networks**.

Edit or create a new access point

If you and your wireless service provider determine that you need to change the settings of your current access point name (APN) or to create a new one, you must obtain the APN and detailed settings from your provider.

- 1 Press **Home** , press **Menu** , and touch **Settings** to open the Settings application.
- 2 Touch **Wireless & networks** > **Mobile networks** > **Access Point Names**.
- 3 Touch an existing APN to edit it. Or press **Menu**  and touch **New APN**.
Enter the APN settings that you obtained from your wireless service provider by touching each setting that you need to edit.
- 4 When you're finished, press **Menu**  and touch **Save**.
- 5 If you created a new APN, touch it in the APNs screen to start using it.

Connecting to Wi-Fi networks

Wi-Fi is a wireless networking technology that can provide Internet access at distances of up to 100 meters, depending on the Wi-Fi router and your surroundings.



To use Wi-Fi on your phone, you access a wireless access point, or “hotspot.” Some hotspots are open and you can simply connect to them. Others are hidden or implement other security features, so you must configure your phone so it can connect to them.


There are numerous systems for securing Wi-Fi connections, including some that rely on secure certificates or other schemes to ensure that only authorized users can connect. For information about installing secure certificates, see “Working with secure certificates” on page 74.

Turn off Wi-Fi when you’re not using it, to extend the life of your battery between charges.

The Status bar displays icons that indicate Wi-Fi status.

Network status icons turn green if you have a Google Account added to your phone and the phone is connected to Google services, for syncing your Gmail, Calendar events, contacts, for backing up your settings, and so on. If you don’t have a Google Account or if, for example, you’re connected to a Wi-Fi network that is not connected to the Internet, the network icons are white.

	Connected to a Wi-Fi network (waves indicate connection strength)
	Notification that an open Wi-Fi network is in range

When you connect to a Wi-Fi network, the phone obtains a network address and other information it needs from the network, using the DHCP protocol. To configure the phone with a fixed IP address and other advanced settings, press **Menu**  and touch **Advanced**. See “Advanced Wi-Fi settings screen” on page 351.

Turn Wi-Fi on and connect to a Wi-Fi network

If you're adding a Wi-Fi network when first setting up your phone, Wi-Fi is turned on automatically, so you can skip to step 4.

1 Press **Home** , press **Menu** , and touch **Settings**.

2 Touch **Wireless & networks > Wi-Fi settings**.

3 Check **Wi-Fi** to turn it on.

The phone scans for available Wi-Fi networks and displays the names of those it finds. Secured networks are indicated with a Lock icon.

If the phone finds a network that you connected to previously, it connects to it.

4 Touch a network to connect to it.

If the network is open, you are prompted to confirm that you want to connect to that network by touching **Connect**.

If the network is secured, you're prompted to enter a password or other credentials. (Ask your network administrator for details.)

When you're connected to a network, you can touch its name in the Wi-Fi settings screen for details about the speed, security, address, and related settings.

Receive notifications when open networks are in range

By default, when Wi-Fi is on, you receive notifications in the Status bar when your phone detects an open Wi-Fi network.

1 Turn on Wi-Fi, if it's not already on.

2 In the Wi-Fi settings screen, check **Network notification**.

You can uncheck this option to stop receiving notifications.

Add a Wi-Fi network

You can add a Wi-Fi network so the phone will remember it, along with any security credentials, and connect to it automatically when it is in range. You must also add a Wi-Fi network to connect to it, if the network does not broadcast its name (SSID), or to add a Wi-Fi network when you are out of range of it.

To join a secured network, you need to contact the network's administrator to learn what security scheme is deployed on it and to obtain the password or other required security credentials. For more information about installing secure certificates, see "Working with secure certificates" on page 74.

- 1 Turn on Wi-Fi, if it's not already on.

If you're adding a Wi-Fi network when first setting up your phone, Wi-Fi is turned on automatically.

- 2 In the Wi-Fi settings screen, touch **Add Wi-Fi network** (at the bottom of the list of discovered networks).
- 3 Enter the SSID (name) of the network. If the network is secured, touch the Security menu and then touch the type of security deployed on the network.
- 4 Enter any required security credentials.
- 5 Touch **Save**.

The phone connects to the wireless network. Any credentials that you entered are saved, so you are connected automatically the next time you come within range of this network.

Forget a Wi-Fi network

You can make the phone forget about the details of a Wi-Fi network that you added—for example, if you don't want the phone to connect to it automatically or if it is a network that you no longer use.

- 1 Turn on Wi-Fi, if it's not already on.
- 2 In the Wi-Fi settings screen, touch & hold the name of the network.
- 3 Touch **Forget network** in the dialog that opens.

Connecting to Bluetooth devices



Bluetooth is a short-range wireless communications technology that devices can use to exchange information over a distance of about 8 meters. The most common Bluetooth devices are headphones for making calls or listening to music, hands-free kits for cars, and other portable devices, including laptops and cell phones.

There are several Bluetooth profiles that define the features and communications standards for Bluetooth devices. For a list of the profiles supported by your phone, refer to your phone's owner's guide.



To connect to a Bluetooth device, you must turn on your phone's Bluetooth radio. The first time you use a new device with your phone, you must "pair" them, so that they know how to connect securely to each other. After that, you can simply connect to a paired device.

Turn off Bluetooth when you're not using it, to extend the life of your battery between charges. You may also be required to turn Bluetooth off in some locations. Bluetooth is turned off in Airplane mode.

Status bar icons indicate Bluetooth status.



	Bluetooth is on
	Connected to a Bluetooth device

Turn Bluetooth on or off

- 1 Press **Home** , press **Menu** , and touch **Settings** to open the Settings application.
- 2 Touch **Wireless & networks**.
- 3 Check or uncheck **Bluetooth** to turn it on or off.



Change your phone's Bluetooth name

Your phone has a generic Bluetooth name by default, which is visible to other devices when you connect them. You can change the name so that it is more recognizable.

- 1 Press **Home** , press **Menu** , and touch **Settings** to open the Settings application.
- 2 Touch **Wireless & networks** > **Bluetooth settings**.
The Bluetooth settings screen opens.
- 3 If Bluetooth isn't turned on, check **Bluetooth** to turn it on.
- 4 Touch **Bluetooth name**, enter a name, and touch **OK**.



Pair your phone with a Bluetooth device

You must pair your phone with a device before you can connect to it. Once you pair your phone with a device, they stay paired unless you unpair them.

- 1 Press **Home** , press **Menu** , and touch **Settings** to open the Settings application.
- 2 Touch **Wireless & networks** > **Bluetooth settings**.
- 3 If Bluetooth isn't turned on, check **Bluetooth** to turn it on.
Your phone scans for and displays the IDs of all available Bluetooth devices in range.
- 4 If the device you want to pair with isn't in the list, make it discoverable.
See the documentation that came with your device to learn how to make it discoverable by your phone, and for other instructions for pairing.
- 5 If your phone stops scanning before you make the other device discoverable, touch **Scan for devices**.
- 6 Touch the ID of the other device in the list in Settings to pair them.
The devices pair with each other. If you're prompted to enter a passcode, try entering 0000 or 1234 (the most common passcodes), or consult the documentation that came with the device to learn its passcode.
If the pairing is successful, your phone connects to the device.

Connect to a Bluetooth device


Once paired, you can connect to a Bluetooth device—for example, to switch devices or to reconnect after the phone and the device come back into range.

- 1 Press **Home** , press **Menu** , and touch **Settings** to open the Settings application.
- 2 Touch **Wireless & networks** > **Bluetooth settings**.
- 3 If Bluetooth isn't turned on, check **Bluetooth** to turn it on.
- 4 In the list of devices, touch a paired but unconnected device in the list.
If the device you expected isn't displayed, touch **Scan for devices**.

When the phone and the device are connected, the device is displayed as connected in the list.

Configure the Bluetooth features you want to use

Some Bluetooth devices have multiple profiles. Profiles can include the ability to transmit your phone conversations, to play music in stereo, or to transfer files or other data. You can select which profiles you want to use with your phone.

- 1 Touch & hold the device in the Bluetooth settings screen.
- 2 Touch **Options** in the menu that opens.
A screen opens with a list of the device's profiles.
- 3 Check or uncheck a profile to use it or not.
- 4 When you're finished, press **Back** .

Disconnect from a Bluetooth device

- 1 Touch the device in the Bluetooth settings screen.
- 2 Touch **OK** to confirm that you want to disconnect.

Unpair a Bluetooth device

You can unpair a Bluetooth device to erase all pairing information about it.

- 1 Touch & hold the device in the Bluetooth settings screen.
- 2 Touch **Unpair** or **Disconnect & unpair** in the menu that opens.

Connecting to a computer via USB

You can connect your phone to a computer with a USB cable, to transfer music, pictures, and other files between your phone and the computer. Your phone stores these files in internal USB storage or on a removable SD card, depending on your model of phone (see your phone's owner's guide for details about its features).

Warning! When connecting your phone to a computer and mounting its USB storage or SD card, you must follow your computer's instructions for connecting and disconnecting USB devices, to avoid damaging or corrupting files.

If you are using USB tethering, you must turn that off before you can use USB to transfer files between your phone and computer. See "Sharing your phone's mobile data connection" on page 69.

Connect your phone to a computer via USB

- 1** Use the USB cable that came with your phone to connect the phone to a USB port on your computer.

You receive a notification that the USB is connected.

- 2** Open the Notifications panel and touch **USB connected**.

For details on working with the Notifications panel, see "Managing notifications" on page 29.

- 3** Touch **Turn on USB storage** in the screen that opens to confirm that you want to transfer files.

When the phone is connected as USB storage, the screen indicates that USB storage is in use and you receive a notification.

Your phone's USB storage or SD card is mounted as a drive on your computer. You can now copy files back and forth. For more information, see the documentation for your computer.

During this time, you can't access the USB storage or SD card from your phone, so you can't use applications that rely on them, such as Camera, Gallery, and Music. You also can't share your phone's data connection with your computer via USB.



Disconnect your phone from the computer

Warning! Carefully follow your computer's instructions to unmount the USB storage or SD card and disconnect USB devices correctly, to avoid losing information.

- 1 Unmount the USB storage or SD card on your computer.
- 2 Open the Notifications panel and touch **Turn off USB storage**.
- 3 Touch **Turn off USB storage** in the screen that opens.

Safely remove an SD card from your phone



If your phone has an SD card (rather than internal USB storage), you can safely remove the SD card from your phone any time the phone is turned off, as described in your phone's owner's guide. If you need to remove the SD card while the phone is on, you must unmount the SD card from the phone first, to prevent corrupting or damaging the SD card.

- 1 Press **Home** , press **Menu** , and touch **Settings**, to open the Settings application.
- 2 Touch **Storage**.
- 3 Touch **Unmount**.

You can now safely remove the SD card from the phone.

Erase your phone's USB storage or SD card




If your phone uses an SD card, you may need to erase a new one before you can use it with your phone. You can also erase your phone's USB storage or SD card, for example, if you are giving the phone or SD card to someone else and want to erase your personal information from it. (See "Factory data reset" on page 364 for information on erasing all the data on your phone.)

- 1 Press **Home** , press **Menu** , and touch **Settings**, to open the Settings application.
- 2 Touch **Storage**.
- 3 Touch **Erase**. On the screen that warns you that formatting will erase its contents, touch **Erase**.

Sharing your phone's mobile data connection

You can share your phone's mobile data connection with a single computer via a USB cable: USB tethering. You can also share your phone's data connection with up to eight devices at once, by turning your phone into a portable Wi-Fi hotspot. (Not all carriers and phones support these features.)

When your phone is sharing its data connection, an icon appears in the Status bar and as an ongoing notification in the Notifications panel (see "Managing notifications" on page 29).



	USB tethering is active
	Portable Wi-Fi hotspot is active
	Both USB tethering and portable hotspot are active


For the latest information about tethering and portable hotspots, including supported operating systems and other details, visit android.com/tether.

Share your phone's data connection via USB

If your computer is running Windows 7 or a recent distribution of some flavors of Linux (such as Ubuntu), you typically don't need to prepare your computer for tethering. But if you're running an earlier version of Windows or another operating system, you may need to prepare your computer to establish a network connection via USB. For the most current information about which operating systems support USB tethering and how to configure them, visit android.com/tether.



You can't share your phone's data connection and USB storage or SD card (depending on your phone) via USB at the same time. If you are using your USB connection to copy files to or from your computer, you must disconnect first. See "Connecting to a computer via USB" on page 67.


- 1 Use the USB cable that came with your phone to connect your phone to your computer.
- 2 Press **Home** , press **Menu** , and touch **Settings** to open the Settings application.
- 3 Touch **Wireless & networks** > **Tethering & portable hotspot**.
- 4 Check **USB tethering**.

The phone starts sharing its mobile network data connection with your computer, via USB connection. An ongoing notification  is added to the Status bar and Notifications panel.

- 5 Uncheck **USB tethering** to stop sharing your data connection. Or just disconnect the USB cable.

Share your phone's data connection as a portable Wi-Fi hotspot

- 1 Press **Home** , press **Menu** , and touch **Settings** to open the Settings application.
- 2 Touch **Wireless & networks** > **Tethering & portable hotspot**.
- 3 Check **Portable Wi-Fi hotspot**.



After a moment, the phone starts broadcasting its Wi-Fi network name (SSID), so you can connect to it with up to 8 computers or other devices. An ongoing notification  is added to the Status bar and Notifications panel.

When **Portable Wi-Fi hotspot** is checked, you can change its network name or secure it. See "Rename or secure your portable hotspot" on page 71.

- 4 Uncheck **Portable Wi-Fi hotspot** to stop sharing your data connection via Wi-Fi.

Rename or secure your portable hotspot

You can change the name of your phone's Wi-Fi network name (SSID) and secure its Wi-Fi network.

- 1 Press **Home** , press **Menu** , and touch **Settings** to open the Settings application.
- 2 Touch **Wireless & networks > Tethering & portable hotspot**.
- 3 Ensure **Portable Wi-Fi hotspot** is checked.
- 4 Touch **Portable Wi-Fi hotspot settings**.
- 5 Touch **Configure Wi-Fi hotspot**.

The Configure Wi-Fi hotspot dialog opens.

You can change the network SSID (name) that other computers see when scanning for Wi-Fi networks.

You can also touch the Security menu to configure the network with Wi-Fi Protected Access 2 (WPA2) security, with a preshared key (PSK).

If you touch the **WPA2 PSK** security option, a password field is added to the Configure Wi-Fi hotspot dialog. If you enter a password, you will need to enter that password when you connect to the phone's hotspot with a computer or other device. Or touch **Open** in the Security menu to remove security from your Wi-Fi network.

- 6 Touch **Save**.




Connecting to virtual private networks

Virtual private networks (VPNs) allow you to connect to the resources inside a secured local network, from outside that network. VPNs are commonly deployed by corporations, schools, and other institutions so that their users can access local network resources when not on campus, or when connected to a wireless network.

There are numerous systems for securing VPN connections, including some that rely on secure certificates or other schemes to ensure that only authorized users can connect. For information about installing secure certificates, see “Working with secure certificates” on page 74.

To configure VPN access from your phone, you must obtain the details from your network administrator.

Add a VPN

- 1 Press **Home** , press **Menu** , and touch **Settings**, to open the Settings application.
- 2 Touch **Wireless & networks > VPN settings**.
- 3 Touch **Add VPN**.
- 4 Touch the type of VPN to add.
- 5 In the screen that opens, follow the instructions from your network administrator to configure each component of the VPN settings.
- 6 Press **Menu**  and touch **Save**.

The VPN is added to the list on the VPN settings screen.

Connect to a VPN


- 1 Open the Settings application.
- 2 Touch **Wireless & networks > VPN settings**.
The VPNs you've added are listed on the VPN settings screen.
- 3 Touch the VPN to which you want to connect.
- 4 In the dialog that opens, enter any requested credentials and touch **Connect**.

When you're connected to a VPN, you receive an ongoing notification in the Status bar. If you are disconnected, you receive a notification that you can use to return to the VPN settings screen so that you can reconnect to it. See “Managing notifications” on page 29.

Disconnect from a VPN

- ▶ Open the Notifications panel and touch the ongoing notification for the VPN connection.

Edit a VPN

- 1 Open the Settings application.
- 2 Touch **Wireless & networks** > **VPN settings**.
The VPNs you've added are listed on the VPN settings screen.
- 3 Touch & hold the VPN whose settings you want to edit.
- 4 In the dialog that opens, touch **Edit network**.
- 5 Edit the VPN settings you want.
- 6 Press **Menu**  and touch **Save**.

Delete a VPN

- 1 Open the Settings application.
- 2 Touch **Wireless & networks** > **VPN settings**.
The VPNs you've added are listed on the VPN settings screen.
- 3 Touch & hold the VPN you want to delete.
- 4 In the dialog that opens, touch **Delete network**.
- 5 Touch **OK** in the dialog that asks you to confirm you want to delete the VPN.

Working with secure certificates

If your organization's VPN or Wi-Fi networks rely on secure certificates, you must obtain the certificates (in files that conform to the PKCS #12 standard) and store them in your phone's secure credential storage, before you can configure access to those VPN or Wi-Fi networks on your phone.



If your network administrator instructs you to download the certificates from a website, you're prompted to set a password for the credential storage when you download the certificates.

For more information about working with credential storage, see "Location & security settings" on page 359.

Install a secure certificate from your phone's USB storage or SD card

- 1 Copy the certificate from your computer to the root of its USB storage or SD card (that is, not in a folder).

See "Connecting to a computer via USB" on page 67 for information about connecting your phone to a computer and copying files.

- 2 Press **Home** , press **Menu** , and touch **Settings**, to open the Settings application.

- 3 Touch **Location & security**.

- 4 Touch **Install from USB storage** or **Install from SD card** (depending on your model of phone).

- 5 Touch the file name of the certificate to install.

Only the names of certificates that you have not already installed on your phone are displayed.

- 6 If prompted, enter the certificate's password and touch **OK**.

- 7 Enter a name for the certificate and touch **OK**.

If you have not already set a password for your phone's credential storage, you're prompted to enter a password for it twice and then touch **OK**. For more information about credential storage, see "Location & security settings" on page 359.

You can now use the certificate that you installed when connecting to a secure network. For security, the certificate is deleted from the USB storage or SD card.





Configuring Internet (SIP) calling

If you have an account with an Internet calling service that supports the Session Initiation Protocol (SIP) for voice calls on Internet Protocol (IP) networks, you can add that account to your phone so you can place and receive Internet calls, whenever you are connected to a Wi-Fi network.


When you have configured your phone for Internet calling, you can use your Internet calling account for all calls or just to place calls to Internet calling addresses. You can also configure your phone to receive Internet calls.

See “Placing an Internet (SIP) call” on page 85 to learn how to call contacts using Internet calling

Add an Internet calling account

- 1 Press **Home** , press **Menu** , and touch **Settings**, to open the Settings application.
 - 2 Touch **Call settings** > **Accounts** (under Internet call settings).
 - 3 Touch **Add account**.
 - 4 In the screen that opens, follow the instructions from your Internet calling service provider to configure the settings for your account.
 - 5 Press **Menu**  and touch **Save**. Or just press **Back** .
- The account is added and you can now use it to place and receive Internet calls.

Edit or remove an Internet calling account

- 1 Open the Call settings and touch **Accounts**.
- 2 Touch the account you want to edit.
In the screen that opens, make the edits you want.
- 3 Press **Menu**  and touch **Save**. Or touch **Remove account**.

Configure which calls use Internet calling

You can configure your phone to place all calls using Internet calling (when you're connected to a Wi-Fi network), just calls to Internet calling addresses, or to ask each time you place a call.

- 1 Open the Call settings.
- 2 Touch **Use Internet calling** (under Internet call settings).
- 3 In the dialog that opens, touch the Internet calling option you want.

Change the primary Internet calling account

If you add more than one Internet calling account to your phone, you can change which account is used by default when you place calls (the primary account).

- 1 Open the Call settings and touch **Accounts**.
- 2 Touch the account you want to make the primary account.
- 3 In the screen that opens, check **Set as primary account**.

Configure your phone to receive Internet calls

By default, your phone is configured to make Internet calls, but not to ensure that you will receive them. But you can configure your phone to listen for Internet calls made to an Internet calling account you added to your phone. Because this requires the phone to maintain a connection with a Wi-Fi data network, it reduces the life of your phone's battery between charges.

- 1 Open the Call settings and touch **Accounts** (under Internet call settings).
- 2 Check **Receive incoming calls**.

Unchecking this option does not prevent you from receiving calls; it just makes it unlikely that your phone will be available to receive a call at the moment someone tries to call your Internet calling address.

Placing and receiving calls

You can place a phone call by dialing a phone number. You can also touch a number in your contacts, on web pages, and other places. When you're on a call, you can answer incoming calls or send them to your voicemail box. You can even set up conference calls with several participants.

You can also use Google Voice to manage your voicemail and to place calls from your phone, as described in "Google Voice" on page 177.

In this section

"Placing and ending calls" on page 78

"Answering or rejecting calls" on page 80

"Working with the Call log" on page 82

"Calling your contacts" on page 84

"Placing an Internet (SIP) call" on page 85

"Listening to your voicemail" on page 86

"Dialing by voice" on page 87



"Options during a call" on page 88

"Managing multiple calls" on page 90

Placing and ending calls

You can place calls with the Phone application. You can also place calls when working in the Call log (see “Working with the Call log” on page 82) or in Contacts (see “Communicating with your contacts” on page 120).

Open Phone

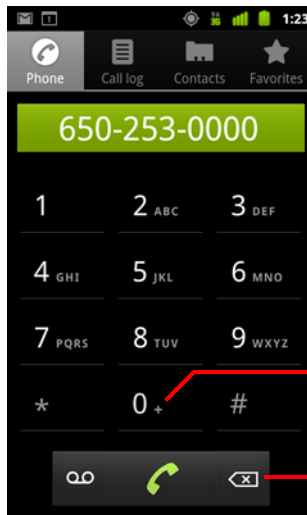
- ▶ Touch the Phone icon  at the bottom of the Home screen or the Phone application icon  in the Launcher or on the Home screen.

OR

- ▶ If you're already working with Contacts or the Call log, touch the **Phone** tab.



Place a call by dialing

- 1 Open Phone.



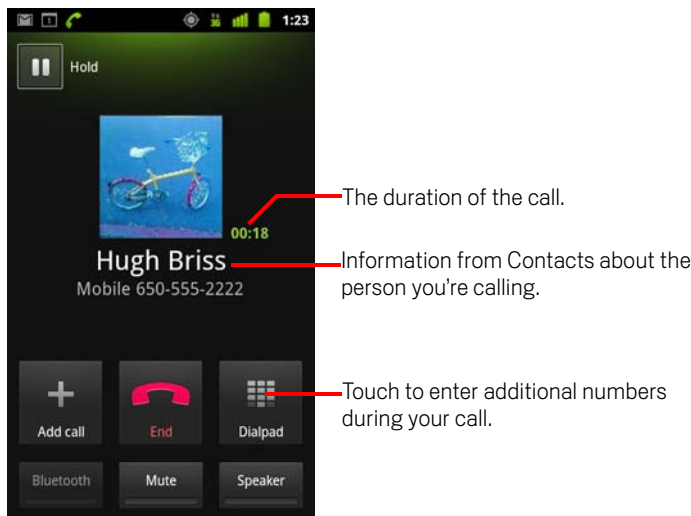
Touch & hold to enter +.

Touch to erase a digit. Touch & hold to erase the entire number.

- 2 Touch the keys on the Phone tab to enter the phone number.
If you enter a wrong number, touch  to erase digits one by one.
To erase the entire number, touch & hold .

To dial an international number, touch & hold the **0** key to enter the plus (+) symbol. Then enter the international prefix for the country, followed by the full phone number.

- 3 Touch the green phone icon  to dial the number that you entered.



You can switch applications during a call—for example, to look up information by using the Browser. The green phone icon appears in the Status bar while the call is underway.

Press the **Volume Up / Down** button to adjust the call volume.

Use the onscreen buttons to place the current call on hold, to add a caller, and for other options, as described in “Options during a call” on page 88.

End a call

- ▶ Touch End .

Disable phone calls (Airplane mode)

Some locations may require you to turn off your phone's mobile, Wi-Fi, and Bluetooth wireless connections. You can turn off all these wireless connections at once by placing your phone in Airplane mode.

- 1 Press & hold the **Power** button
- 2 Touch **Airplane mode**.

You can also use the Settings application to turn Airplane mode on and off and to configure other mobile and network settings. See “Wireless & networks” on page 349.

Answering or rejecting calls

When you receive a phone call, the Incoming Call screen opens with the caller ID and any additional information about the caller that you have entered in Contacts. See “Contacts” on page 109.

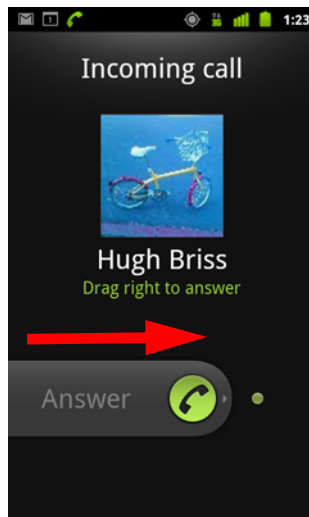
All incoming calls are recorded in the Call log. See “Working with the Call log” on page 82. If you miss a call, you receive a notification. See “Managing notifications” on page 29.

Answer a call

- ▶ Drag the green phone icon to the right.

If you were already on a call, the first call is placed on hold while you answer the new call.

To silence the ringer before answering the call, press the **Volume Down** button.

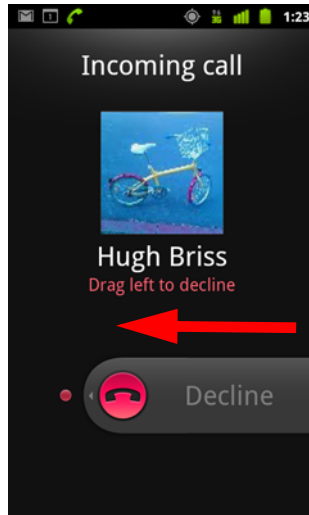


Drag the green phone to the right to answer the call.

Decline a call and divert it to voicemail

- ▶ Drag the red phone button to the left.

The caller is sent directly to your voicemail box to leave a message.



Drag the red phone to the left to send the caller directly to your voicemail box.

Working with the Call log

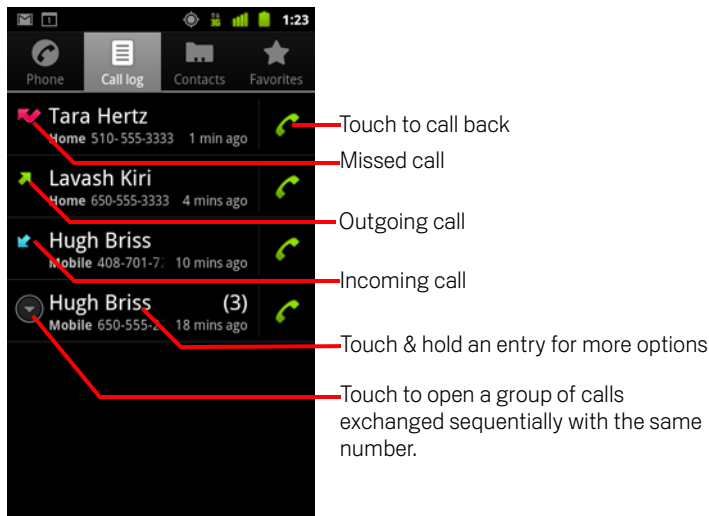
The Call log is a list of all the calls you've placed, received, or missed. It offers a convenient way to redial a number, return a call, or add a number to your Contacts.

Open the Call log


- ▶ Press the **Call** button.

Or, if you have the **Phone** or **Contacts** tab open, touch the **Call log** tab.

Calls are listed with the most recent at the top. Calls exchanged sequentially with the same number are grouped. Scroll to view earlier entries in the log.



Dial a number in the Call log

- ▶ Touch the green phone icon  at the right of the entry.

You can also touch & hold the entry to open a menu with options for communicating with that contact in other ways.

Add an entry's number to your Contacts


- 1 Touch & hold the entry.
- 2 Touch **Add to contacts** in the menu that opens.
- 3 In the list of contacts that opens, touch **Create new contact** at the top, or scroll to find and then touch an existing contact to which you want to add the number.

For more information about creating and editing contacts, see "Contacts" on page 109.

Take other actions on a Call log entry

- ▶ Touch a Call log entry to open a screen where you can call the contact again, send the contact a message, add the number to your Contacts, and learn more about the original call.
- ▶ Touch & hold a Call log entry to open a menu where you can call the contact, view contact information, edit the number before you redial, and more.

Clear the Call log

- ▶ While viewing the Call log, press **Menu**  and touch **Clear call log**.
You can also touch & hold an entry in the log. In the menu that opens, touch **Remove from call log** to remove just that entry from the log.

Calling your contacts

Instead of entering the number in the Phone tab, you can touch one of your contact's phone numbers to dial it.

You can also quickly call a contact by using Quick Contact. See "Connecting quickly with your contacts" on page 45.

Adding, editing, and performing other tasks with your contacts is described in "Contacts" on page 109. If you have contacts on the web, they're synchronized with your phone when you first connect to your Google Account.

Call a contact

- 1 Open your contacts.

For example, touch the Contacts icon  in the Launcher. Or touch the Phone icon  on the Home screen and then touch the **Contacts** tab.

- 2 Touch the contact to call.

You can search for or scroll to find a contact.

- 3 Touch the phone number to use to call the contact.

See "Communicating with your contacts" on page 120 for more options.

Call a favorite contact

- 1 Open your list of favorites.

For example, touch the Phone icon  on the Home screen and then touch the **Favorites** tab.

The list of your favorite contacts is followed by a list of the numbers that you call most often.

You can add and remove favorites by touching the star next to their names, while you're viewing information about the Contact. See "Adding a contact to your favorites" on page 115.

- 2 Touch the favorite to call.

- 3 Touch the phone number to use to call the contact.


Placing an Internet (SIP) call

You can place calls via the Internet when connected to a Wi-Fi network, rather than via your mobile network, if you have configured your phone to use an Internet calling account. Internet calling is based on the Session Initiation Protocol (SIP) for voice calls on Internet Protocol (IP) networks.

Adding an Internet calling account and configuring your phone to use it are described in “Configuring Internet (SIP) calling” on page 75.

Call a contact’s Internet calling address

You must add (or have synced) a contact’s Internet calling address in Contacts to place an Internet call to them.

- ▶ Touch a contact’s Quick Contact icon and then touch the SIP icon .

OR

- ▶ Touch a contact in Contacts or Favorites and in the screen that opens, touch **Internet call**.

OR

- ▶ Touch an Internet call in the Call log.

Phone places the call, displaying the Internet calling address and **Internet call** on the Dialing screen.


Once you’re on the call, you end the call, add other Internet calls, and use the other Phone features in the same way as you would for a mobile network call.

Call a phone number using Internet calling

If you have configured your phone to place all calls using Internet calling or to ask for each call, you simply place calls to contacts with phone numbers as described in this chapter, whenever you are connected to a Wi-Fi network: the call is placed using Internet calling instead of using your mobile network and the phone displays **Internet call**.

Important Calling a phone number using Internet calling requires that your service provider supports it, and may incur additional charges. Be sure to check with your service provider for details.

Listening to your voicemail

When you have a new voicemail message, the voicemail icon  appears in the Status bar.


If you have not set up your voicemail number, or if you need to change it, you can do that with the Call settings. See “Call settings” on page 354.

Listen to your voicemail

- ▶ Open the Notifications panel and touch **New voicemail**.

Responding to notifications is described in “Managing notifications” on page 29.

OR

- ▶ Open Phone and touch the voicemail icon  on the Phone tab.

Opening Phone is described in “Placing and ending calls” on page 78.


Typically, your carrier’s voicemail system guides you through the process of listening to and managing your voicemail. The first time you call your voicemail, it also guides you through the process of recording greetings, setting a password, and so on.

Dialing by voice

You can use the Voice Dialer application to place a phone call by speaking the name of a contact or a phone number.

You can also use Voice Search to dial a number, to search the web by speaking, to send a message, and to use voice actions to perform many other common tasks, as described in “Searching by text and voice” on page 93.

Place a call by speaking

- 1 Touch the Voice Dialer icon  in the Launcher or on the Home screen.

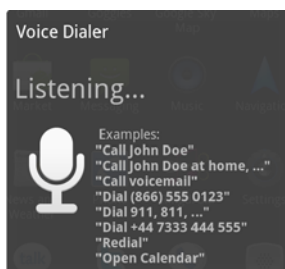
See “Opening and switching applications” on page 40 to learn more about opening and switching applications.

If you have a Bluetooth headset that supports “voice-recognition” or “voice-dialing,” you may be able to open Voice Dialer by pressing your headset’s main button or in some other way, and dial by voice using your headset. For details, see the documentation that came with your headset.

The Voice Dialer opens, listening for your spoken instructions, and displaying some hints for how to use it.

- 2 Say “Call” followed by the name of the contact to call.


Or follow one of the suggestions for dialing a number or controlling your phone in other ways.

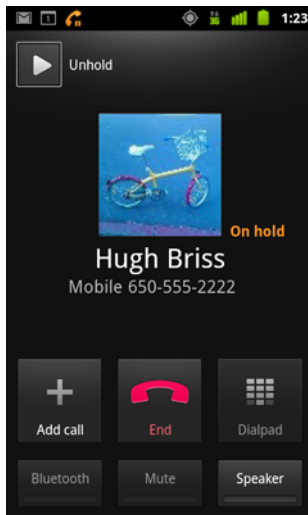


Options during a call


When a call is in progress, you can put a call on hold, create a phone conference, mute your microphone, and more. See “Managing multiple calls” on page 90.

Place a call on hold

- ▶ Touch the Hold icon .



The current call screen indicates that you have a call on hold.

A Hold  icon appears in the Status bar to remind you that you have a call on hold. From any other application, you can open the Notifications panel and touch the entry for the call on hold to return to the current call screen.

Take the call off hold by touching the Unhold button.

Mute the microphone during a call

- ▶ Touch Mute.

The Mute button lights up green to indicate that the microphone is muted.

The Mute icon appears in the Status bar to remind you that the microphone is turned off.

When viewing the current call screen, you can unmute the microphone by touching the Mute icon again.

The microphone is unmuted automatically when the current call ends.

Turn the speakerphone on or off

- ▶ Touch Speaker.

The Speaker button lights up green to indicate that the speakerphone is on.

The Speaker icon appears in the Status bar and the sound from your call is played through the phone's speaker.

When viewing the current call screen, you can turn the speakerphone off by touching the Speaker icon again.

The speaker is turned off automatically when your current call ends.

Warning! To avoid damage to your hearing, do not hold the phone against your ear when the speakerphone is turned on.

Switch between a Bluetooth headset and the phone

When a Bluetooth headset is paired and connected to your phone, you can conduct all calls on the headset for hands-free conversation.

For details about configuring the phone to use a Bluetooth headset, see "Connecting to Bluetooth devices" on page 64.

When using the Bluetooth headset during a call, the current call screen has a blue border and the Ongoing Call icon turns blue in the Status bar.

- ▶ Touch the Bluetooth icon to switch from the headset to the phone or vice versa.

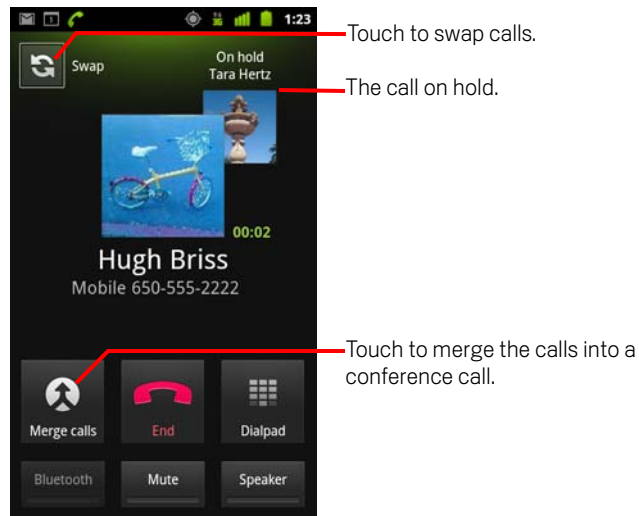
Managing multiple calls

If you accept a new call when you're already on a call, you can switch between the two callers or merge the two calls into a single conference call. You can also set up a conference call with multiple callers.

Switch between current calls

- ▶ Touch the Swap icon .

The current call is put on hold and you join the other call.



Set up a conference call

Contact your wireless service provider to learn whether they support conference calls and how many participants you can include.

- 1 Place a call to the first participant.
- 2 When you're connected, touch **Add call**.

The first participant is put on hold and you're prompted to dial the second caller.

- 3 Place the next call, using the Phone tab, the Call log, or your contacts.
- 4 When you're connected, touch **Merge calls**.

The participant is added to the conference call.



You can add as many callers as your carrier supports.

During a conference call, touch **Manage** to drop a conference call participant or to talk privately with one of the participants.

End a conference call and disconnect all callers

- ▶ Touch **End**.

Searching by text and voice

You can search for information on your phone and on the web using Google Search. You can search the web by speaking with Voice Search. And you can use Voice Actions in Voice Search to perform a number of common tasks, such as sending messages.

In this section

“Searching your phone and the web” on page 94

“Using Google Search tips and tricks” on page 100

“Changing Google Search settings” on page 101



“Using Voice Actions” on page 102

“Voice Action commands” on page 105

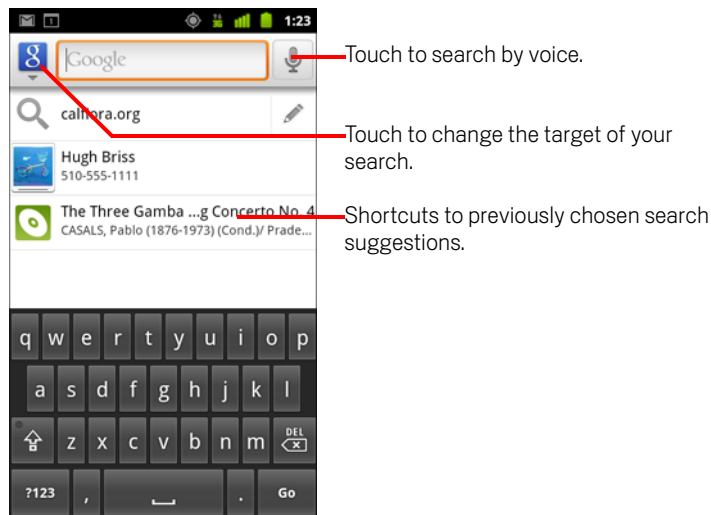
Searching your phone and the web


You can use Google Search to find information on the web as well as items and information on your phone. You can also use Voice Search to search the web by speaking, instead of by typing.

Search your phone and the web by typing

- 1 Press the **Home** button  to return to the Home screen.
- 2 Press the **Search** button .

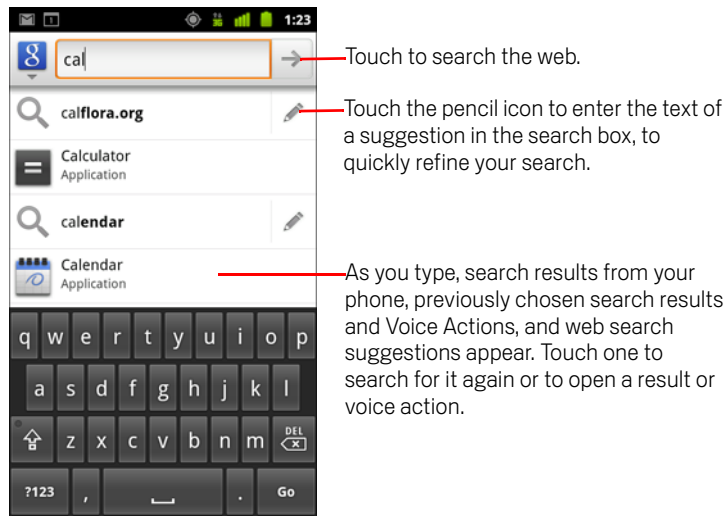
The Google search box opens, where you can enter what you want to search for, above shortcuts to previously chosen search results and voice action commands.




In applications such as Gmail and Contacts, the application's own search box opens when you press the **Search** button . These search boxes are identified by the application's own icon in the search box. See the documentation for those applications for information about searching in them.


You can also open Google search by touching the Search widget on the Home screen, if you have added it there. See "Add dedicated Search widgets to your Home screen" on page 98.

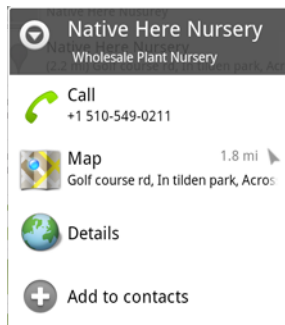
- 3 Start entering what you want to search for, or touch a previously chosen search result.



As you type, matching items on your phone and suggestions from Google web search are added to the list of previously chosen search results.

You can touch a suggestion's pencil icon  to enter it in the search box. If you do, new suggestions appear and you can enter more text or touch the pencil icon next subsequent suggestions to quickly refine your search.

Business listings are indicated by a Maps marker icon . Touch one to open a business listing panel, with icons you can touch to call, map, get details about, or add the business to your contacts.




You can use the Search settings to configure some aspects of Google web search (for example, whether it makes suggestions below the search box as you type), and what phone features you want to include in searches. You can also clear the

list of recently chosen searches. See “Changing Google Search settings” on page 101.


- 4 If what you’re searching for is in the list of suggestions, phone search results, or previously chosen search results, touch it in the list.

The item opens in the appropriate application, such as Contacts or the Browser.

- 5 If what you’re searching for is not in the list, touch the arrow icon  in the search box or touch the Go key on the onscreen keyboard to search the web.

The Browser opens, displaying results of a Google search on the web. See “Browser” on page 233.

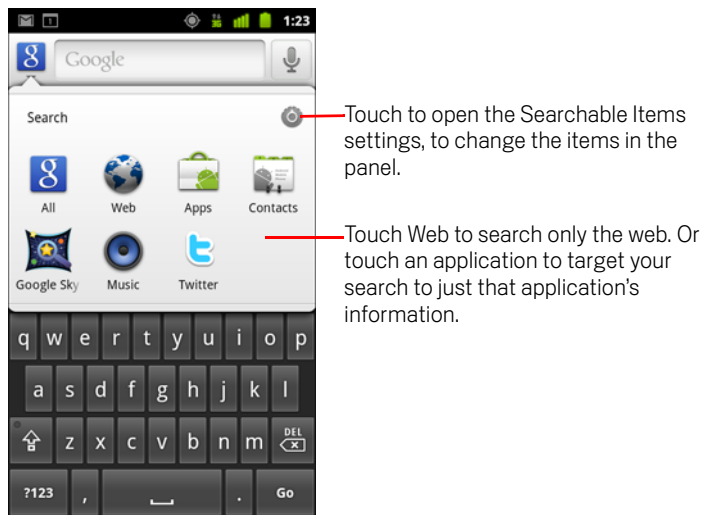
Target where you want to search



Initially, the Google search box displays the All icon , indicating that it's configured to search and provide suggestions from both the web and your phone. But you can target your searches to just the web or to just a single application's information on your phone.

You can configure what applications and other collections of information you want to be able to search for on the phone; see “Change what you can target when searching the phone” on page 98.

- 1 Open Google search.
- 2 Touch the icon at the left of the Google search box.

The search targets panel opens with icons for All, for Web, and for the applications you've checked in the Searchable items settings (see “Change what you can target when searching the phone” on page 98).



If the panel of icons does not open, you pressed the **Search** button  while working in an application that has its own search feature (see the documentation for that application to learn about searching it). To search elsewhere, return to the Home screen and press the **Search** button  again.


- 3 Touch the icon that represents where you want to search.

You can now target your searches to just that application, by entering text. As you type, only suggestions from that application are displayed below the search box.

Change what you can target when searching the phone

Many applications can make some or all of their information searchable from the Google search box. The applications whose information is searchable are included in searches targeted at all information, as suggestions below the box as you type. They also make their icons available so you can target your searches just to their information (see “Target where you want to search” on page 97).

You can change which applications are targetable by Google search.

- 1 Open the search targets panel and touch the settings icon .
The Searchable Items screen lists the applications you can target when searching, along with a description of information they make searchable.
- 2 Check or uncheck the applications whose information you want to be able to search.


Add dedicated Search widgets to your Home screen

You can add one or more Search widgets to your Home screen, dedicated to searching in a particular place: just the web or a specific application’s information on your phone. When you touch a dedicated Search widget on your Home screen, it opens Google search with that location targeted by default.

- 1 Touch & hold an empty location on a Home screen.
See “Getting to know the Home screen” on page 19 and “Customizing the Home screen” on page 43 for more about your Home screens and adding widgets.
- 2 Touch **Widgets** in the Add to Home screen menu.
- 3 Touch **Google Search** in the Choose widget menu.
- 4 Touch the Web icon or the icon for the application you want to dedicate the widget to targeting.
See “Target where you want to search” on page 97 and “Change what you can target when searching the phone” on page 98 for more about targeting searches and making information on your phone available for searching.
The widget is added to your Home screen.

Manage your search privacy

You can control how your search history is stored and used on your phone and the web in a number of ways.

- 1 Open Google Search.
- 2 Press **Menu** , and touch **Search settings**.
- 3 Touch **Clear shortcuts** if to erase from your phone the list of previously chosen search results that appear as suggestions below the Google Search box.
- 4 Touch **Google Search** and uncheck **Use My Location** to stop informing Google of your location when using Google Search, and thus no longer include local results.
- 5 Touch **Google Search** and touch **Manage search history** to open Browser with a web-based interface for viewing and managing the web search history associated with your Google Account.


Using Google Search tips and tricks

The following techniques are examples of shortcuts to getting the most out of Google Search and Voice Search. For the latest list of tips and tricks, visit the [Google Help Center](#).

What you want	What to type or say	Examples
Sports information	[team's name]	San Francisco Giants
Pictures	Pictures of [topic] images of [topic]	Pictures of San Francisco Images of cats
Convert measurements	[original measurement] in [new measurement]	30 degrees Celsius in Fahrenheit
Movie showtimes	Movie" Movie [location] [movie name]	Movie Movie Chicago The Horse's Mouth
Word definition	Define [word]	Define campanile
Weather forecast	Weather Weather [location]	Weather Weather Detroit
Identify an area code	Area code [###]	Area code 215
Identify a Zip code	Zip code [#####]	Zip code 46202
Time	Time Time [location]	Time Time in London
Flight information	[Airline] [flight number]	American airlines flight 390
Translation	Translate to [language] [phrase]	Translate to Spanish, Where is the Palace Hotel?
Calculator	[A math phrase]	75 divided by 6
Food	[Type of food] [Type of food] in [location]	Mexican food Mexican food in Urbana, Illinois

Changing Google Search settings

You use the Search settings to configure Google search, including setting which data on your phone you want to be able to search.

- ▶ To change Google Search settings, press **Menu** , and touch **Search settings** when you're using the Google Search box.

Search settings screen

Google Search See “Google Search settings screen” on page 101.

Searchable items Opens a screen where you can check and uncheck the kinds of data you can search for on your phone; see “Change what you can target when searching the phone” on page 98.

Clear shortcuts Erases the list of previously chosen search results that appear as suggestions below the Google search box.

Google Search settings screen

Show web suggestions Check to display suggestions for Google web searches below the Google search box as you type.

Use My Location Check to include your location when using Google search and other Google services. When you check this option, you're asked whether you consent to allowing Google to use your location when providing these services.

Search history Check to use suggestions from the web-based Google search history, from your Google Account.



Manage search history Opens Browser with a web-based interface for viewing and managing the web search history associated with your Google Account.

Using Voice Actions

You can use Voice Actions in Voice Search to call your contacts, get directions, send messages, and to perform a number of other common tasks, in addition to searching the web.

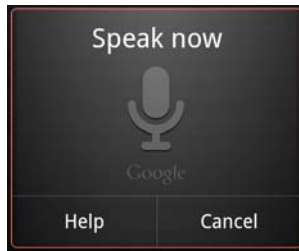
For the current list of languages and locations supported by Voice Actions, visit the Google Mobile Help Center at <http://www.google.com/support/mobile>

Use Voice Actions to search the web or perform other tasks

- 1 Press & hold the **Search** button . Or touch the Microphone icon  in the Google search box or in the Browser's URL box.

The first few times you open Voice Search, it offers hints about how to use it and offers to play an introductory video. You can touch **Speak now** to use Voice Search at any time.

Subsequently, a dialog opens, prompting you to speak Voice Actions or search the web. You can touch Help to open the hints screen again.



- 2 Speak the voice action you want to use, or the words you want to search for.

The complete set of Voice Actions is detailed in “Voice Action commands” on page 105.

When you're finished speaking, Voice Search analyzes your speech and initiates the action.

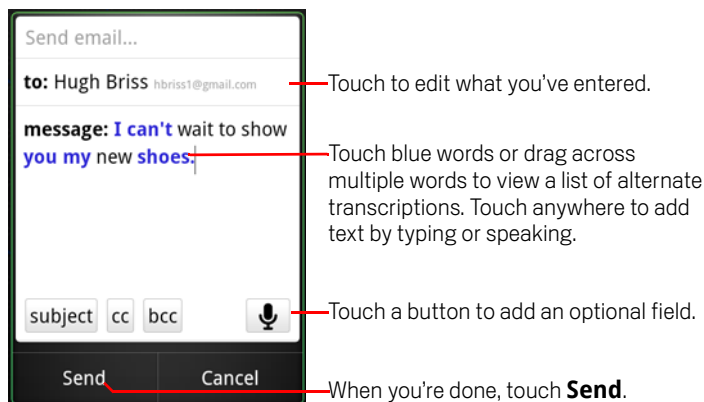
If you have the **Use My Location** setting checked in the Google Search settings, local results are featured in your search results (see “Changing Google Search settings” on page 101).

If Google Search didn't understand what you said, it presents a list of similar-sounding search terms and actions, which you can touch to continue with that action.

Some Voice Actions open a panel where you're prompted to complete the action, by speaking or typing, as described in “Complete a Voice Action” on page 103.

Complete a Voice Action

Some Voice Actions, such as “send email” and “note to self,” open a panel that prompts you to complete the action by speaking or typing more information.



- ▶ Touch any text already entered in the panel to add or edit the text by speaking or typing.
- ▶ Touch blue words or phrases or drag across multiple words to view a list of other possible transcriptions or to edit by speaking or typing.
Voice Search displays words that it is confident it has transcribed accurately in black. Words or phrases with alternate transcriptions available are displayed in blue.
- ▶ Touch a button at the bottom of the window to add any optional fields (you can also speak the name and content of any of these fields in your original voice action).
- ▶ When you're done, touch the button appropriate to completing the action, such as **Send** or **Set**.

Voice Action commands

You can search and control your phone with the following Voice Action commands.

Say	Followed by one or more optional words	Results	Examples
Words you want to search for		Browser opens with the result of your search.	"bike shoes"
"Call" followed by a name from your contacts	"home," "mobile," or "work"	If there is a single match, Phone opens and calls the contact. If there is more than one match, you're prompted to pick the number you want to call.	"Call Mike LeBeau at home."
"Map of" followed by an address, name, business name, type of business, or other location		Maps opens with the result of a Maps search for the words you spoke.	"Map of Golden Gate Park, San Francisco."
"Directions to" followed by an address, name, business name, type of business, or other destination		Maps opens with directions to your destination, or a list of possible matching destinations.	"Directions to 1299 Colusa Avenue, Berkeley, California."
"Navigate to," followed by an address, name, business name, type of business, or other destination		Maps opens with spoken, turn-by-turn directions to your destination, or a list of possible matching destinations.	"Navigate to Union Square, San Francisco."

Say	Followed by one or more optional words	Results	Examples
The name of one of your contacts.		If there is a single match, Contacts opens with details about your contact. Or if there is more than one match, you're prompted to pick a contact.	"Mike LeBeau"
"Call" followed by the digits of a phone number		Phone calls the phone number you spoke.	"Call 650 555 1234"
"Call" followed by a business name		Voice Search searches Maps for a matching business and then calls it.	"Call Native Here Nursery"
"Go to" followed by a search string or URL		Voice Search searches for a matching web site and if it finds one, opens its URL in Browser. Otherwise, it opens the result of a Google search in the Browser.	"Go to Google.com"
"Send SMS" or "Send text"	"To" one or more contacts "Message" followed by the message you want to send (speak any punctuation you want to include)	Voice Search opens a panel where you can complete the message before sending via the Messenger application.	"Send text to Hugh Briss, message, I can't wait to show you my new shoes, period"

Say	Followed by one or more optional words	Results	Examples
"Send email"	"To" one or more contacts "Cc" one or more contacts "Bcc" one or more contacts "Subject" followed by a subject "Message" followed by the message you want to send (speak any punctuation you want to include)	Voice Search opens a panel where you can complete the message before sending via the Gmail application.	"Send email to Hugh Briss, subject, new shoes, message, I can't wait to show you my new shoes, period."
"Note to self" followed by the message you want to send to yourself		Voice Search opens a panel where you can complete the message before sending it to yourself via the Gmail application.	"Note to self: remember the milk"
"Set alarm"	"Time" or "for" followed by a time, such as "10:45am" or "20 minutes from now" "Label" followed by a label for the alarm	Voice Search opens a panel where you can set the time and label for the alarm, before setting it via the Clock application.	"Set alarm for 7:45pm, label, switch the laundry"
"Listen to" followed by words for music you want to search for, such as the name of a song, artist, or album		If you have an application installed that understands the "listen to" voice action, that application opens with the results of your search for music.	"Listen to: smells like teen spirit"

Contacts

Contacts gives you quick and easy access to the people you want to reach. When you first turn on your phone and sign into your Google Account, any existing Google contacts are downloaded to your phone. After that, your contacts are synchronized: any changes you make to your contacts on the phone or the web are made in both places the next time you sync. Contacts from Exchange ActiveSync accounts are also synced in this way.

Information about your contacts is shared with other applications, such as Gmail, Google Talk, Messaging, Gallery (for sharing photos and videos), and so on.

If you have more than one account with contact information, Contacts joins duplicates into a single entry. You can also manage that process manually.


In this section

- “Opening your contacts” on page 110
- “Adding contacts” on page 112
- “Importing, exporting, and sharing contacts” on page 113
- “Adding a contact to your favorites” on page 115
- “Searching for a contact” on page 116
- “Editing contact details” on page 117
- “Communicating with your contacts” on page 120
- “Changing which contacts are displayed” on page 122
- “Joining contacts” on page 124
- “Separating contact information” on page 126

Opening your contacts

Open Contacts to add, view, and communicate with your friends and acquaintances.

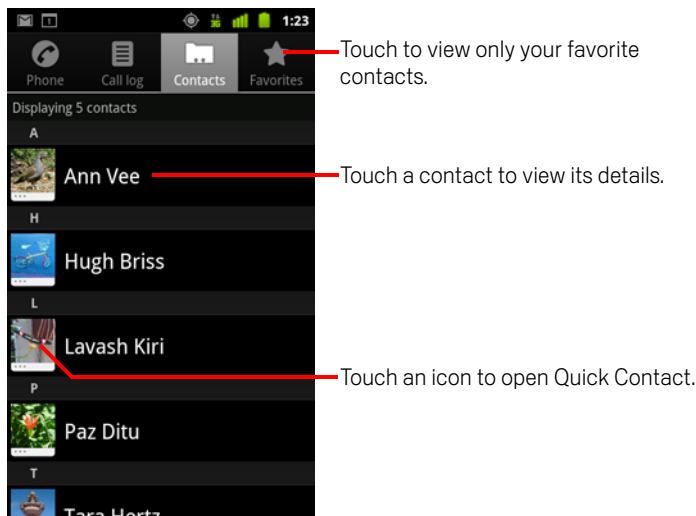
Open your contacts

- ▶ Touch the Contacts icon  on the Home screen or in the Launcher.

You can also open Contacts by using Quick Contact. See “Connecting quickly with your contacts” on page 45.

All of your contacts are displayed alphabetically in a scrolling list. Each contact is followed by the default phone number.

If you have a new phone and haven't added any contacts yet, Contacts displays a message with hints on how to start adding contacts to your phone.



You can drag the list up or down to scroll it, or slide your finger up or down to scroll quickly. Either way, a tab briefly appears to the right of the list, which you can drag up and down to scroll very quickly, while displaying the letter of the alphabet for the contacts you're scrolling past.

Open a list of your favorite contacts

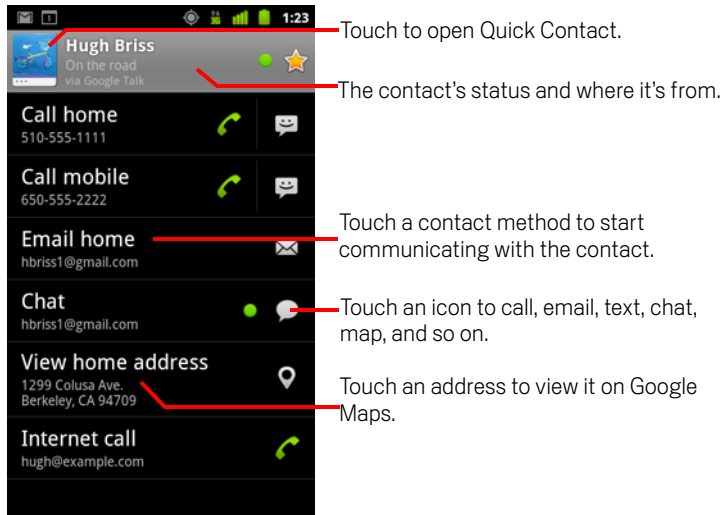
- ▶ Open your contacts and touch the **Favorites** tab.

The Favorites tab lists the contacts you've added to the list (see “Adding a contact to your favorites” on page 115), followed by a list of your most frequently called contacts.

View details about a contact


- 1 Open your contacts.
- 2 Touch the contact whose details you want to view.

Entries for communicating with the contact are followed by details.



Touch a communication method to start dialing, texting, or emailing the contact by using the listed number, address, and so on.

Touch an address to view it on Google Maps. See “Maps, Navigation, Places, and Latitude” on page 249.



You can also press **Menu**  and touch **Edit contact** to edit the contact's information (see “Editing contact details” on page 117), or touch **Delete contact** to delete all information about the contact.

Adding contacts

You can add contacts on your phone and synchronize them with the contacts in your Google Account, Microsoft Exchange ActiveSync account, or other accounts that support syncing contacts.

When you reply to or forward an email message to an email address that is not in Contacts, the email address is added as a contact. Contacts tries to join new addresses with existing contacts, to create a single entry. You can also manage that process manually. See "Joining contacts" on page 124 and "Separating contact information" on page 126.

Add a new contact

- 1 Open your contacts.
- 2 Press **Menu**  and touch **New contact**.
- 3 If you have more than one account with contacts, touch the account to which you want to add the contact.
- 4 Enter the contact's name.
- 5 Touch a category of contact information, such as phone numbers and email addresses, to enter that kind of information about your contact.
Scroll the page to view all categories.
- 6 Touch a category's plus button  to add more than one entry for that category—for example, to add both work and home numbers.
Touch the button to the left of the item of contact information to open a menu with preset labels, such as **Mobile** and **Work** for a phone number, or touch **Custom** in the menu to create your own label.
- 7 Touch the Picture Frame icon to select a picture to display next to the name in your lists of contacts and in other applications.




- 8 When you're finished, touch **Done**.

Importing, exporting, and sharing contacts

If you have contacts stored in vCard format on an SD card, USB storage, or SIM (depending on your model of phone), you can import them into Contacts on your phone. You can export contacts in vCard format onto an SD card or USB storage, to back them up to a computer or other device. And you can send a contact via email.

Import contacts from your SIM card

Your service provider may store some contacts on your SIM card, such as customer care and voicemail numbers. You may also have stored contacts on the SIM card if you're moving it from another phone. You can add some or all of these contacts to the Contacts application.

- 1 Open your contacts.
- 2 Press **Menu**  and touch **Import/Export**.
- 3 Touch **Import from SIM**.
- 4 If you have more than one account on your phone, touch the account into which you want to import the contacts.


A list of the contacts on the SIM appears.

- 5 Touch & hold a contact and touch **Import** in the menu that opens. Or press **Menu**  and touch **Import all**.

Import contacts from your SD card or USB storage

You can copy individual or group contacts in vCard format onto your SD card or USB storage and then import them into one of your accounts on the phone. See "Connecting to a computer via USB" on page 67 for details about copying files from your computer.

You may also have contacts stored on an SD card from another device. Refer to your phone's owners' guide for details about working with SD cards.

- 1 Open your contacts.
- 2 Press **Menu**  and touch **Import/Export**.
- 3 Touch **Import from SD card** or **Import from USB storage** (depending on your model of phone).
- 4 If you have more than one account on your phone, touch the account into which you want to import the contacts.
- 5 If you have more than one vCard file on the SD card or USB storage, touch the option to import a single contact file, multiple contact files, or all of the contact files.

The contacts are imported.

Export contacts to your SD card or USB storage


You can export all of the contacts on your phone to your SD card or USB storage, as a group vCard file. You can then copy this file to a computer or another device that can work with files in this format, such as an address book application. See “Connecting to a computer via USB” on page 67.

- 1 Open your contacts.
- 2 Press **Menu**  and touch **Import/Export**.
- 3 Touch **Export to SD card** or **Export to USB storage** (depending on your model of phone).
- 4 Touch **OK** to confirm.

Contacts creates a file with the .vcf extension on your SD card or USB storage. This file contains all of your contacts.

Share a contact

You can share a contact with someone by emailing it to them in vCard format.

- 1 Open Contacts.
- 2 Open the contact you want to share.
- 3 Press **Menu**  and touch **Share**.


A Gmail compose message screen opens, with the contact attached as a vCard (.vcf) file.

Address, write, and send the email, as described in “Composing and sending a message” on page 144.

Adding a contact to your favorites

The Favorites tab contains the contacts you've starred as favorites followed by the short list of the contacts you communicate with most frequently. Contacts you add to your favorites are also added to the Starred in Android group in Contacts on the web.

Add a contact to your favorites

- 1 Open your contacts.
- 2 Touch a contact to view its details.
- 3 Touch the star to the right of the contact's name.
The star turns gold .



Remove a contact from your favorites list

- 1 Open your contacts and touch the **Favorites** tab.
- 2 Touch a contact to view its details.
- 3 Touch the gold star to the right of the contact's name.
The star turns gray and the contact is removed from your favorites.

Searching for a contact

You can search for a contact by name.

Search for a contact

- 1 Open your contacts.
- 2 Press the **Search** button .
- 3 Start entering the name of the contact you're searching for.
As you type, contacts with matching names appear below the search box.
- 4 Touch a matching contact in the list to open its Details screen. Or touch the Magnifying Glass  icon to open a screen with a list of matching contacts.

Editing contact details


You can change or add details about your contacts. You can also set the ringtone for when a specific contact calls, or divert all calls from a contact to your voicemail.

Some contact entries contain information from multiple sources: information that you added manually, information that Contacts joined from multiple accounts to consolidate duplicates, and so on. When you edit a contact entry, the information from each source is grouped in its own color-coded, labeled section. If you find duplicate entries in Contacts, you can join them into a single entry, as described in “Joining contacts” on page 124. If you find information from unrelated contacts was joined in error, you can separate them, as described in “Separating contact information” on page 126.

Changes that you make to information from one source do not affect the information from other sources. For example, if you have information about a contact from a Google Account and an Exchange ActiveSync account and both are configured to sync contacts, edits to the information from the Google Account are synced to that account on the web, but the information from the Exchange ActiveSync account remains unchanged.

For more information about working with multiple accounts, see “Accounts” on page 127.

Edit contact details



- 1 Open your contacts or favorites.
- 2 Touch & hold the contact whose details you want to edit; In the menu that opens, touch **Edit contact**.
You can also press **Menu**  and touch **Edit contact** while viewing a contact's details.
- 3 Edit the contact information, using the same controls as when you create a contact.
See “Adding contacts” on page 112.
- 4 Touch **Done**.

Change a contact's default phone number

A default phone number appears below the contact's name in the Contacts list. The default phone number is used when you initiate a call or send a text message from the list by touching & holding a contact.


- 1 Open your contacts or favorites.
- 2 Touch the name of a contact in the list to view its details.
- 3 Touch & hold the phone number to use as the contact's default phone number.
- 4 Touch **Make default number** in the menu that opens.
The default phone number is marked with a checkmark .

Divert all of a contact's calls to your voicemail


- 1 Open your contacts or favorites.
- 2 Touch the name of a contact in the list to view its details.
- 3 Press **Menu**  and touch **Options**.
- 4 Check **Incoming calls**.
- 5 Press **Back** .

When this contact calls you, your phone doesn't ring and the caller is sent directly to your voicemail.

Set a ringtone for a contact

- 1 Open your contacts or favorites.
- 2 Touch the name of a contact in the list to view its details.
- 3 Press **Menu**  and touch **Options**.
- 4 In the scrolling list of ringtones that opens, touch the one to play when the contact calls.
The ringtone plays a sample.
- 5 Touch **OK**.

Delete a contact

- 1 Open your contacts or favorites.
- 2 Touch the name of a contact in the list to view its details.
- 3 Press **Menu**  and touch **Delete contact**.

If you delete a contact from Google Contacts (or another account with editable contacts), the contact is also deleted from Contacts on the web the next time you sync your phone.

You can't delete contacts from a read-only account, such as Facebook. Instead, a dialog informs you that the contact will be hidden. To restore hidden contacts from a read-only account, you must delete that account from your phone and then add it again.

If the contact contains information from both editable accounts (such as Contacts) and from a read-only account (such as Facebook), a dialog informs you that the information from the read-only account will be hidden, not deleted.

- 4 Touch **OK** to confirm that you want to delete the contact.

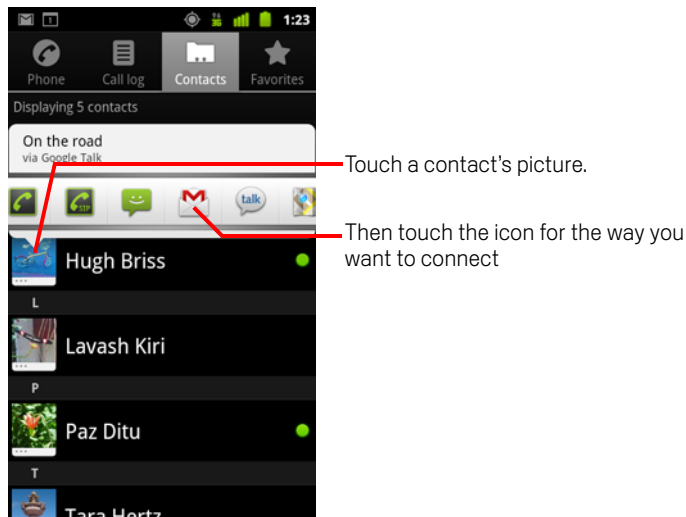
Communicating with your contacts

From the Contacts or Favorites tab, you can quickly call or send a text (SMS) or multimedia message (MMS) to a contact's default phone number. You can also open details to view a list of all the ways you can communicate with that contact.

This section describes ways to initiate communication when viewing your list of contacts. The Contacts application shares your contacts with many other applications, such as Gmail (see "Gmail" on page 135) and Messaging (see "Messaging" on page 223).

Connect by using Quick Contact for Android

- 1 Touch a contact's picture to open Quick Contact for Android.



- 2 Touch the icon for the way you want to connect.

The icons available depend on the information you have for the contact and the applications and accounts on your phone.

For more information, see "Connecting quickly with your contacts" on page 45.

Communicate with a contact

- 1 Open your contacts or favorites.
- 2 Touch the contact with whom you want to communicate.
You can also just touch the Green Phone icon in the list of favorites or in the Call log to call the displayed number.
- 3 In the contact's details screen, touch the way to start communicating with the contact.
For phone numbers, you switch automatically to the Phone application as the number is called. For other kinds of communication, you switch automatically to the appropriate application, with the contact's address entered.

Call a contact's default number

- 1 Open your contacts or favorites.
- 2 Touch & hold the entry for the contact to call.
- 3 Touch **Call** in the menu that opens.
The actual menu item depends on the default number you set for your contact, so it may be **Call Mobile**, **Call Work**, and so on.
You switch to the Phone application automatically as the number is called. For more information about placing phone calls, see "Placing and receiving calls" on page 77.

Send a text or multimedia message to a contact's default number


- 1 Open your contacts or favorites.
- 2 Touch & hold the contact to call.
- 3 Touch **Text contact** in the menu that opens.
You switch automatically to the Messaging application, with the contact's phone number entered in a new message. For more information about sending text and multimedia messages, see "Messaging" on page 223.
You can also use Quick Contact to start sending a text or multimedia message. See "Connecting quickly with your contacts" on page 45.

Changing which contacts are displayed


You can hide contacts that don't have phone numbers. You can also configure which groups of contacts, for each account, you want to display in the Contacts list.

Set whether contacts without phone numbers are displayed

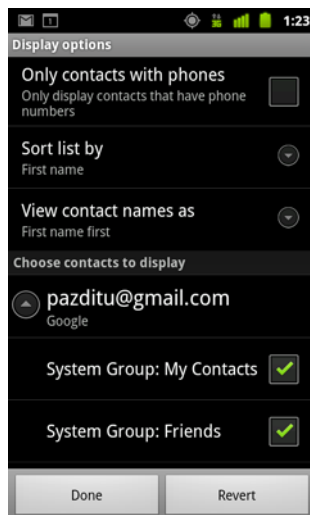
If you use your list of contacts only to call people, you can hide any contacts that don't have phone numbers.

- 1 Open your list of contacts.
- 2 Press **Menu**  and touch **Display options**.
- 3 Check or uncheck **Only contacts with phones**.

Change what groups are displayed

- 1 Open your list of contacts.
- 2 Press **Menu**  and touch **Display options**.
- 3 Touch an account to open its list of groups.

An account's groups depend on the kind of account.




4 Check or uncheck the groups whose contacts you want to view in Contacts. This action affects only the display of groups of contacts with this screen. Your sync settings are not affected.

5 Touch **Done**.

A message appears while your changes are made. If your change affects a great many contacts, this can take a short while.

Change how contacts are displayed

1 Open your list of contacts.

2 Press **Menu**  and touch **Display options**.

3 Touch **Sort list by** to set whether contacts are listed in order of their last name or first name.

4 Touch **View contact names as** to set whether you want to view contacts with their last name or first name first.

Joining contacts

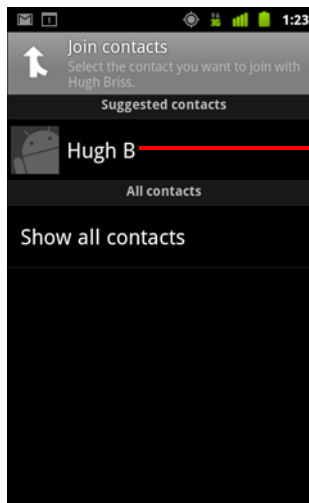
When you add an account or add contacts in other ways, such as by exchanging emails, Contacts attempts to avoid duplication by joining any new contact information with existing contacts under a single entry. You can also join contacts manually.

You can also use Contacts on the web to eliminate duplicate entries, with the **Find & merge duplicates** command in the **More actions** menu (see Contacts on the web for more information).

Join contacts

- 1 Open your contacts or favorites.
- 2 Touch the contact entry to which you want to add information.
This is the contact you will see in Contacts after the join.
- 3 Press **Menu** ☰ and touch **Edit contact**.
- 4 Press **Menu** ☰ and touch **Join**.

Likely contacts are displayed at the top of the screen. You can touch Show all contacts to pick a contact from your full list of contacts.



- 5 Touch the contact whose information you want to join with the first contact.
The information from the second contact is added to the first contact, and the second contact is no longer displayed in the Contacts list.

See “Editing contact details” on page 117 for details about how to view where a contact’s information came from, including automatic and manually joined



information. See “Separating contact information” on page 126 for information about how to separate contacts joined in error.

Separating contact information

Each contact on your phone may contain information from a variety of sources—you may have entered it, Contacts may have joined information automatically when you added an account, you may have joined contacts manually, and so on.

If contact information from different sources was joined in error, you can separate the information back into individual contacts on your phone.

Separate contact information

- 1 Open your contacts or favorites.
- 2 Touch the contact entry whose information you want to separate.
- 3 Press **Menu**  and touch **Edit contact**.
- 4 Press **Menu**  and touch **Separate contact**.

The contact information is separated into individual contacts in the list of contacts.

Accounts

You can sync contacts, email, calendar events, and other information with your phone from multiple Google Accounts, Microsoft Exchange ActiveSync accounts, or other kinds of accounts, depending on the applications installed on your phone.

For example, you could start by adding your personal Google Account, so your personal email, contacts, and calendar are always available. Then you could add an Exchange ActiveSync account from work, so you can read your work email and have your work contacts handy.

You configure how your account interacts with the applications on your phone using the Account & Sync settings and the settings in Gmail, Calendar, Email, and other applications. Use a web browser to change your password and other general account settings.

In this section

“Adding and removing accounts” on page 128

“Configuring account sync and display options” on page 131

Adding and removing accounts

You can add multiple Google Accounts and Microsoft Exchange ActiveSync accounts. You may also be able to add other kinds of accounts, depending on your applications. Some you can add in the Accounts & Sync settings, as described in this section. Others you add using an application that works with those kinds of accounts; for example, you can add IMAP and POP3 email accounts with the Email application (see “Adding and editing email accounts” on page 214).

Add an account

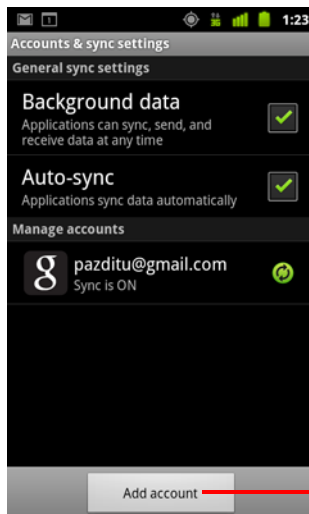
To add some accounts, you may need to obtain details from an IT support representative about the service to which the account connects. For example, you may need to know the account’s domain or server address.

- 1 Open the Accounts & Sync Settings screen.

You can do this in Contacts by pressing **Menu**  and touching **Accounts**, or directly in the Settings application.

The Accounts & Sync Settings screen displays your current sync settings and a list of your current accounts.

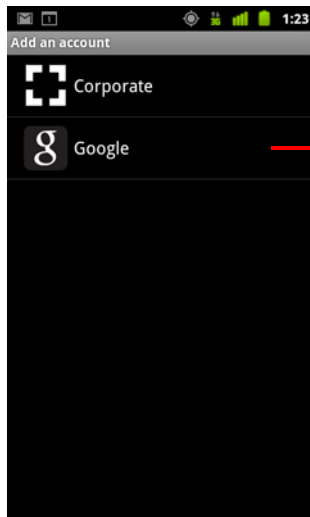
See “Configuring account sync and display options” on page 131.



Touch Add account.

- 2 Touch **Add account**.

- 3 Touch the kind of account to add.



Touch the kind of account to add.

- 4 Follow the onscreen steps to enter the required and optional information about the account.

Most accounts require a username and password, but the details depend on the kind of account and the configuration of the service you're connecting to.

For details about adding accounts based on Microsoft Exchange ActiveSync, see "Adding and editing email accounts" on page 214 and the detailed tables in "Changing email account settings" on page 217. These sections also describe how to add an email account based on IMAP, POP3, or SMTP, using the Email application.

- 5 Configure the account.

Depending on the kind of account, you may be asked to configure what kinds of data you want to sync to the phone, name the account, and other details.

When you're finished, the account is added to the list in the Accounts & Sync Settings screen. Depending on how you configured the account, email, contacts, and other information start syncing to your phone.

See "Configuring account sync and display options" on page 131 for details about changing how the account is configured.

Remove an account

You can remove an account to delete it and all information associated with it from your phone, including email, contacts, settings, and so on.

You can't remove the first Google Account you signed into on the phone, except by deleting all personal information from your phone. See "Privacy settings" on page 364 to learn how to do that.

- 1 Open the Accounts & Sync Settings screen.

You can do this in Contacts by pressing **Menu**  and touching **Accounts**, or directly in the Settings application.

The Accounts & Sync Settings screen displays your current sync settings and a list of your current accounts.

- 2 Touch the account to delete.
- 3 Touch **Remove account**.
- 4 Confirm that you want to remove the account.

Configuring account sync and display options




You can configure background data use and synchronization options for all of the applications on your phone. You can also configure what kinds of data you synchronize for each account. Some applications, such as Gmail and Calendar, have their own synchronization settings.

Some applications, such as Contacts, Gmail, and Calendar, can sync data from multiple applications. Others sync data only from the first Google Account you sign into on your phone, or from an account associated specifically with that application.

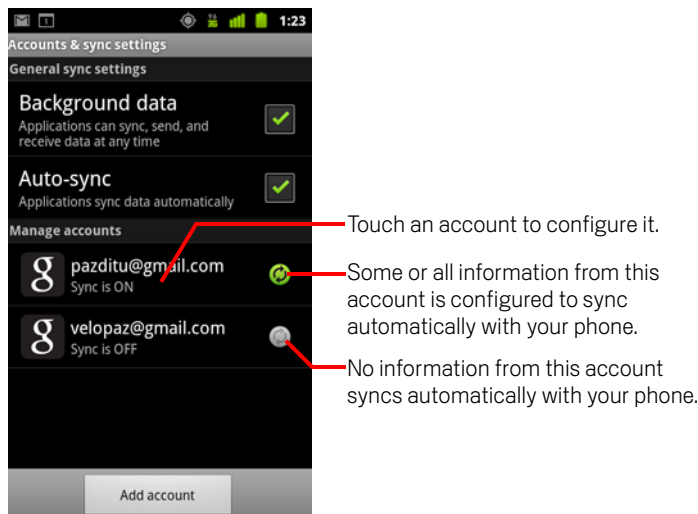
For some accounts, syncing is two-directional; changes that you make to the information on your phone are made to the copy of that information on the web. Your Google Account works this way. Other accounts support only one-way sync; the information on your phone is read-only.


Configure general sync settings


- 1 Open the Accounts & Sync Settings screen.

You can do this in Contacts by pressing **Menu**  and touching **Accounts**, or directly in Settings (press **Home** , press **Menu** , and touch **Settings**).

The screen displays your current sync settings and a list of your current accounts.



 indicates that some or all of an account's information is configured to sync automatically with your phone.

 indicates that none of an account's information is configured to sync automatically with your phone.

- 2 Check or uncheck **Background data** to control whether applications and services can transmit data when you are not working with them directly (that is, when they are running in the background).


If you uncheck this option, Gmail stops receiving new mail, Calendar stops syncing events, and so on, until you touch the **Refresh** menu item or send an email.

- 3 Check or uncheck **Auto-sync** to control whether changes you make to information on the phone or on the web are automatically synced with each other.

For example, when this option is checked, changes that you make in Contacts on the phone are automatically made in Google Contacts on the web.

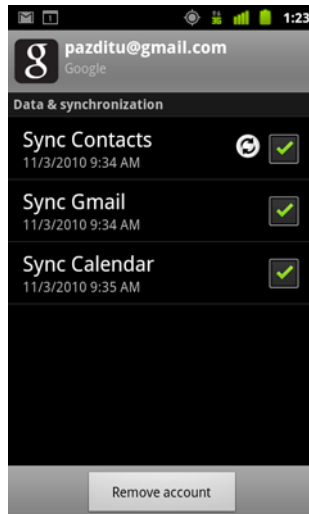
If you uncheck this option, you may be able to use an application's tools to sync data manually. See "Sync information manually" on page 132.

Sync information manually

- 1 Open the Accounts & Sync Settings screen.
- 2 Touch the account whose data you want to sync.
- 3 Press **Menu**  and touch **Sync now**.

Change an account's sync settings

- 1 Open the Accounts & Sync Settings screen.
- 2 Touch the account whose sync settings you want to change.
The Data and Synchronization screen opens, displaying a list of the kinds of information the account can sync.
Checked items are configured to sync to your phone.



- 3 Check or uncheck the kinds of information you want to sync to the phone.
Unchecking an option does not remove the information from your phone; it simply stops it from being kept in sync with the version on the web. To remove the information previously synced for the account, you must remove the account.

Gmail

Gmail is Google's web-based email service. When you first set up your phone, you configured it to use an existing Gmail Account, or you created a new account. The first time you open the Gmail application on your phone, your Inbox contains the messages from your Gmail Account on the web.

In this section

- "Gmail is different" on page 136
- "Opening Gmail and your Inbox" on page 137
- "Reading your messages" on page 140
- "Composing and sending a message" on page 144
- "Replying to or forwarding a message" on page 146
- "Working with conversations in batches" on page 148
- "Starring a message" on page 149
- "Labeling a conversation" on page 150
- "Viewing conversations by label" on page 151
- "Synchronizing your conversations by label" on page 152
- "Reporting spam" on page 154
- "Searching for messages" on page 155
- "Archiving conversations" on page 156
- "Appending a signature to your messages" on page 157
- "Using keyboard shortcuts" on page 158
- "Changing Gmail settings" on page 159

Gmail is different

Gmail is web-based Your messages are stored on Google servers, but you read, write, and organize messages with the Gmail application on your phone or in a web browser. Because your mail is stored on Google servers, you can search your entire message history, backed by the speed and power of Google search.

Actions that you take in one place are reflected everywhere. For example, if you read a message in Gmail on your phone, it's marked as read in a web browser. And a message that you send using a browser, or even a draft of a message, is visible in Gmail on the phone.

Gmail is conversation-based Each message and all replies to it are grouped in your Inbox as a single conversation. In other email applications, replies to messages are spread across your Inbox, typically by date received, so a message and the replies to it are separated by other messages. Gmail makes it easy to follow the thread of a conversation.

Gmail is organized by labels, not by folders By tagging messages with labels, you can organize your conversations in many different ways. In other email applications, each message can live in only one folder. For example, with Gmail you can label a conversation with your mother about your brother's birthday present with both "Mom" and "Dave." Later, you can look for the message under either label. Using folders, you'd have to store the message in the "Mom" folder or the "Dave" folder, not both.


Gmail for the phone is optimized for mobile: for advanced tasks, use a web browser The best place to organize and learn about Gmail and your Google Account is the web. For example, you can't use the Gmail application on the phone to create the labels and filters that you use to organize your messages, but you can label a message on the phone. Gmail on the web offers complete information about the service, so it's the best place to learn about all of the features of Gmail.

Gmail is for Gmail Of course you can use Gmail to send email to any email address, and anyone can send email to you at your Gmail address. But if you want to read messages from another email service provider (using your AOL, Yahoo!, or other email account), you use the Email application. See "Email" on page 203.

Opening Gmail and your Inbox

When you open Gmail, your most recent conversations are displayed in your Inbox. When you return to Gmail after using other applications, the last screen you were working with is displayed.

Open Gmail

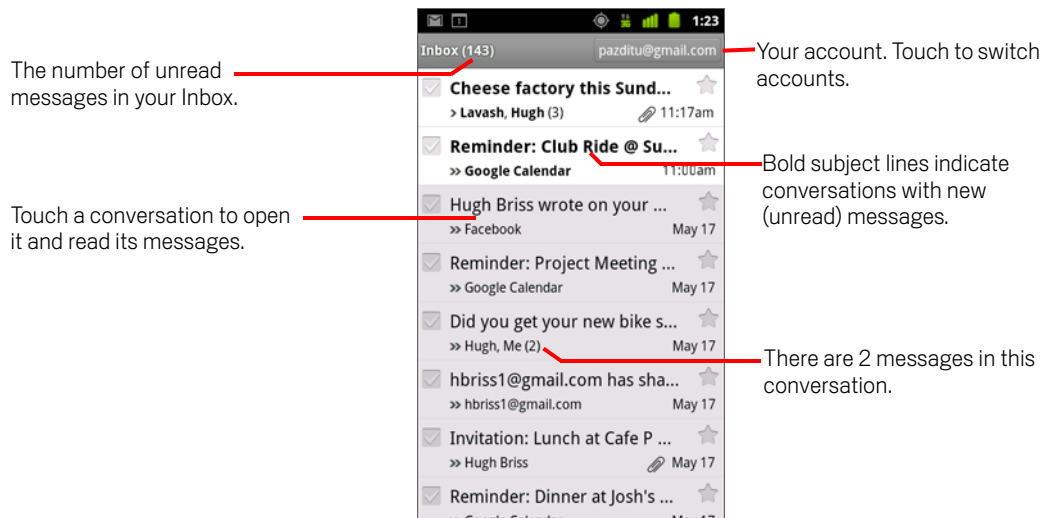
- ▶ Touch the Gmail icon  on the Home screen or in the Launcher.

See “Opening and switching applications” on page 40 to learn more about opening and switching applications.

Your Inbox displays those conversations with the newest messages at the top. All of your conversations are displayed in your Inbox unless you delete, archive, or filter them.

The current Google Account is displayed at the top right of the Inbox. If you have more than one account, you touch the current account to switch accounts, as described in “Switch accounts” on page 138. Adding and working with accounts is described in “Accounts” on page 127.

Conversations with new messages have bold subject lines. To read a message in a conversation, touch its subject. See “Reading your messages” on page 140.



» indicates messages sent directly to you.

› indicates messages that you were CC'd on.

Other messages were sent to you as part of a group.

Open your Inbox when Gmail is running

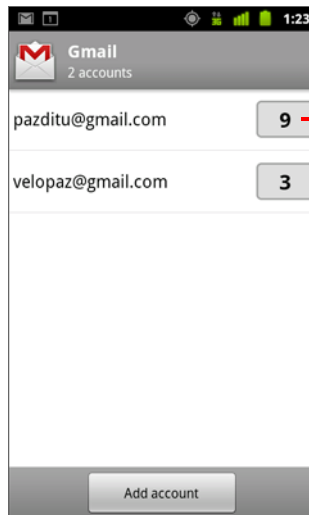
- ▶ Press **Back** ← until you return to your Inbox.
- OR**
- ▶ When reading a message, press **Menu** ≡ and touch **Go to Inbox**.
- OR**
- ▶ When viewing a list of labeled conversations, press **Menu** ≡ and touch **More > Go to Inbox**.

Switch accounts

Gmail displays conversations, messages, and settings from one Google Account at a time. If you have more than one account, you can open the Accounts screen to view how many unread messages you have in each account and to switch accounts.

Adding and configuring accounts is described in “Accounts” on page 127.

- 1 From your Inbox, touch the current account at the top right of the screen. Or press **Menu** ≡ and touch **Accounts**.



- 2 Touch the account that contains the email you want to read.

Use Gmail offline

If you aren't connected to a mobile data or Wi-Fi network (for example, if you're in Airplane mode), you can use Gmail to read or reread the messages currently synced to

your phone (see “Synchronizing your conversations by label” on page 152) and to compose messages.

Messages that you send are stored on your phone with the Outbox label, until your connection is restored, when they are sent automatically. You can view the messages stored with the Outbox label; see “Viewing conversations by label” on page 151.

Reading your messages

When viewing a list of conversations in your Inbox or in any list of labeled conversations, you can open a conversation to read its messages.

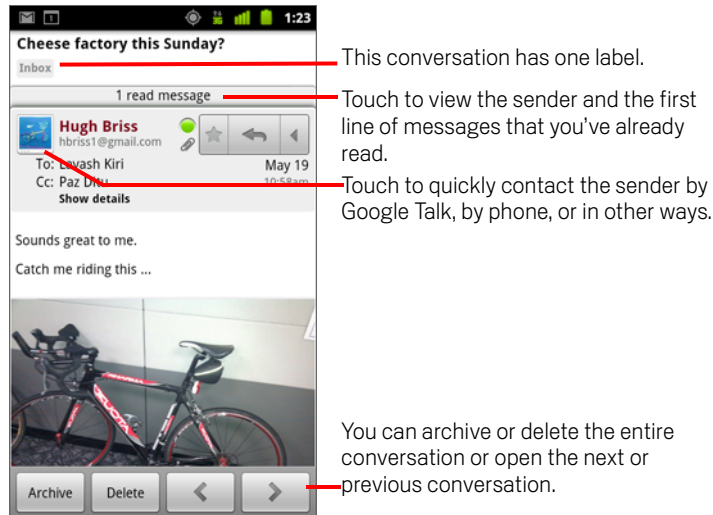
Gmail “pushes” new messages to your phone automatically: you don’t need to refresh your Inbox manually (but see “Synchronizing your conversations by label” on page 152).

When you receive a new message, you also receive a notification in the Status bar, unless you’ve turned off Gmail notifications using Gmail settings, where you can also set whether Email notifications vibrate the phone and configure other notification settings (see “Changing Gmail settings” on page 159). When you touch a Gmail notification, it opens the Inbox that contains the new message or, if you have new mail in more than one account, it opens the Accounts screen.

Read a message

- ▶ Touch a conversation that contains the message you want to read.

A conversation opens to the first new (unread) message, or to the first starred message, if you’ve previously starred a message in the conversation. See “Starring a message” on page 149.



This conversation has one label.

Touch to view the sender and the first line of messages that you've already read.

Touch to quickly contact the sender by Google Talk, by phone, or in other ways.

You can archive or delete the entire conversation or open the next or previous conversation.

The message header shows who sent the message, when, who it was sent to, and other information. Icons indicate whether the message has an attachment and the sender's Google Talk online status. For more information, touch **Show details**.

You can touch the message sender's Quick Contact icon to open a list of ways you can quickly contact the sender. See "Connecting quickly with your contacts" on page 45.

When reading messages in a conversation, you can use the buttons at the bottom of the screen to archive the entire conversation (see "Archiving conversations" on page 156) or to delete it. If you delete a conversation, you can touch **Undo** in the bar at the top of the screen to undelete it. (Conversations you delete from the Trash label are not deleted in Gmail on the web.)

Use the left and right arrow buttons at the bottom of a message to open the next or previous conversation in the Inbox.

Work with attachments

Gmail can display some kinds of attached images (.png, jpeg, depending on your phone) in a message. Others have a **Preview** or **Download** button you can use. Depending on the applications installed on your phone, you may also be able to download and read a variety of kinds of files, including spreadsheets (.xls), word-

processing documents (.doc), or PDF files (.pdf). Other applications may add support for opening other kinds of file.


Attachments you download are stored on your phone's USB storage or SD card. Image files are added to albums in Gallery. Viewing, reopening, and deleting downloaded files is described in "Managing downloads" on page 54.

Copy text from a message

You can copy text from messages you receive, so you can paste it into a message you compose or into text fields in other applications.

- 1 Open a message and scroll the text you want to copy into view.

See "Reading your messages" on page 140.

- 2 Press **Menu**  and touch and touch **More > Select text**.

- 3 Use your finger to drag across the text you want to copy.

The text you selected is copied to the clipboard.

You can now use the techniques described in "Editing text" on page 37 to paste the copied text into a message you compose or into a text field in another application.

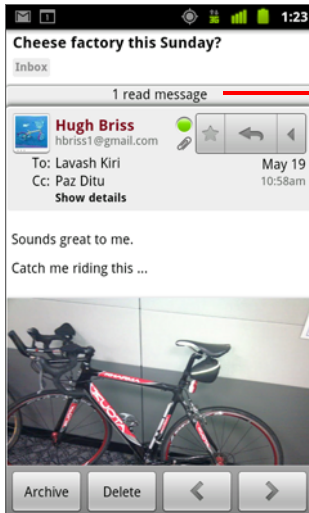
Reread a message

When you open a conversation, messages that you've already read are hidden, in a tab that indicates the number of hidden messages.

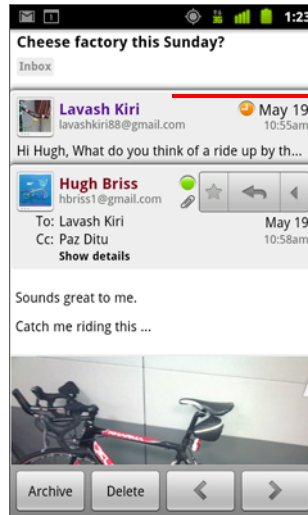
- 1 Touch the tab that indicates the number of previously read messages.

The tab expands into tabs that list the sender and the first line of each read message.

- 2 Touch an expanded tab to reread the message.




Touch the tab that indicates the number of unread messages to view their summary tabs.



Touch the tab of a message you've already read to open it, so you can read it again.



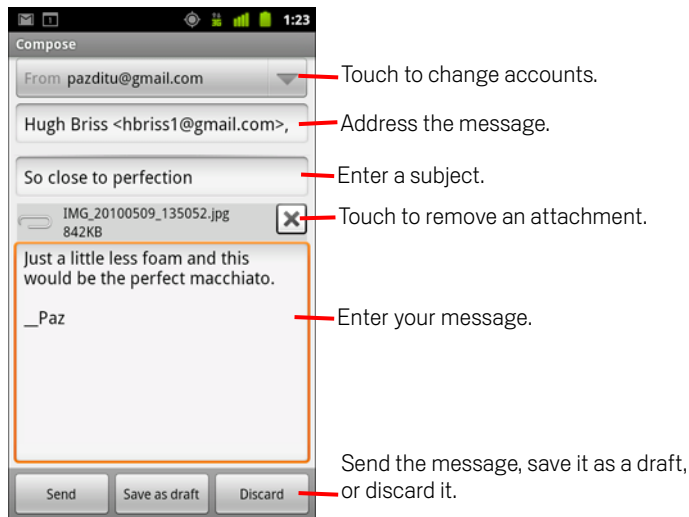
When reading a message or when its tab is selected, you can press **Menu**  and touch **Mark unread** to return a read message to the unread state—for example, to remind yourself to read it again later.

Composing and sending a message

You can compose and send a message to one or more people or groups with Gmail or other email addresses.

Compose and send a message

- 1 When viewing the Inbox or other list of conversations, press **Menu** ☰ and touch **Compose**.



- 2 Set the account you want to send the email from.
The Gmail account you are sending the email from is displayed at the top of the screen. If you have more than one Gmail account, you can touch the displayed account to pick the one you want to send the message from.
- 3 Address the message.
- 4 Enter a subject for the message.
- 5 Enter the text of the message.
See “Using the onscreen keyboard” on page 31 and “Editing text” on page 37.

6 Touch **Send**.


If you're not ready to send the message, touch **Save as draft** instead. You can read your drafts by opening messages with the Draft label. See "Viewing conversations by label" on page 151.

Touch **Discard** to abandon the message, including any saved drafts.

If you aren't connected to a network—for example, if you're working in Airplane mode—the messages that you send are stored on your phone with the Outbox label until you connect to a network again.


Send a copy or blind copy of a message

You can send a copy or blind copy of a message to one or more addresses.

- ▶ While composing a message, press **Menu**  and touch **Add Cc/Bcc** to add Cc and Bcc fields you can enter addresses in.

As you enter text, matching addresses are offered from your Contacts list. See "Contacts" on page 109. You can touch a suggested message or enter a new one.

Attach a photo to a message

- ▶ While composing a message, press **Menu**  and touch **Attach** to send a photo with the message.

See "Gallery" on page 275 to learn about working with photos.



Important Do not delete the original of an attachment before the message is completely sent (that is, it has the Sent label, not the Outbox label), or the attachment will not be sent.

- ▶ If you change your mind, touch the small box to the right of an attachment to remove it from your message.

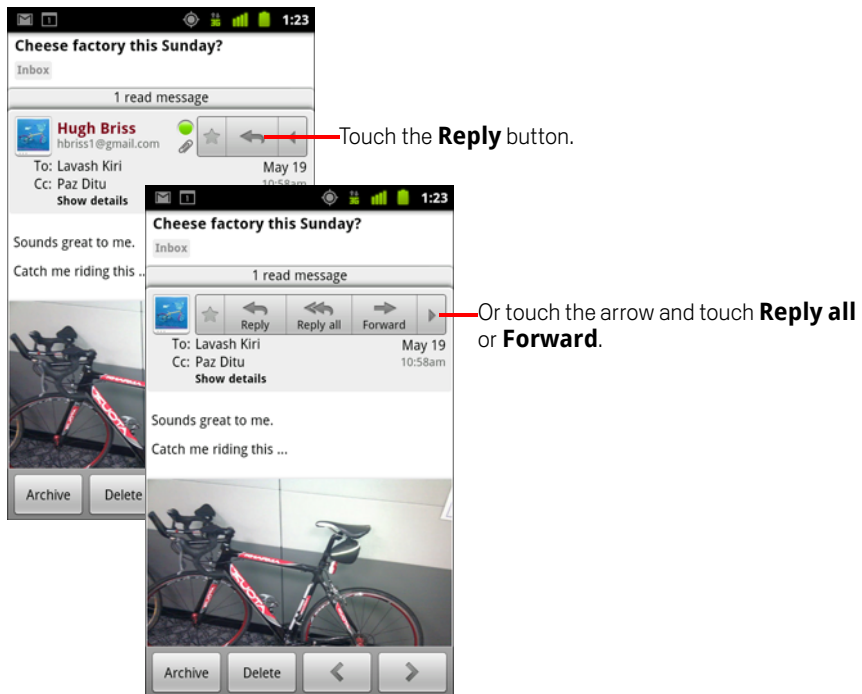
Replying to or forwarding a message

You can continue a conversation by replying to a message or by forwarding it.

Reply to or forward a message

- 1 Touch the **Reply** button  in the message header. Or touch the arrow  and touch **Reply all** or **Forward**.

You can change the default button from **Reply** to **Reply all**. See “Changing Gmail settings” on page 159.

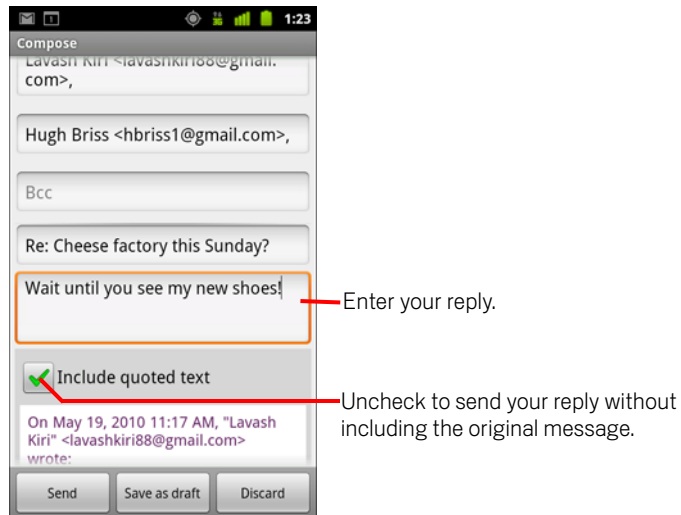


Replying to or forwarding messages without changing the subject adds your reply to the current conversation. Changing the subject starts a new conversation.

The message opens in a new screen where you can add or remove addresses, edit the subject, and add or remove text or attachments, as described in “Composing and sending a message” on page 144. (Attachments are included automatically in messages you forward, but not in messages you reply to.)

You can add one or more people to an ongoing conversation by replying to all and then adding the new people's addresses to the reply.

All of the messages in the conversation, up to the one you are replying to or forwarding, are included in the new message; any messages that follow the message you forward are omitted.



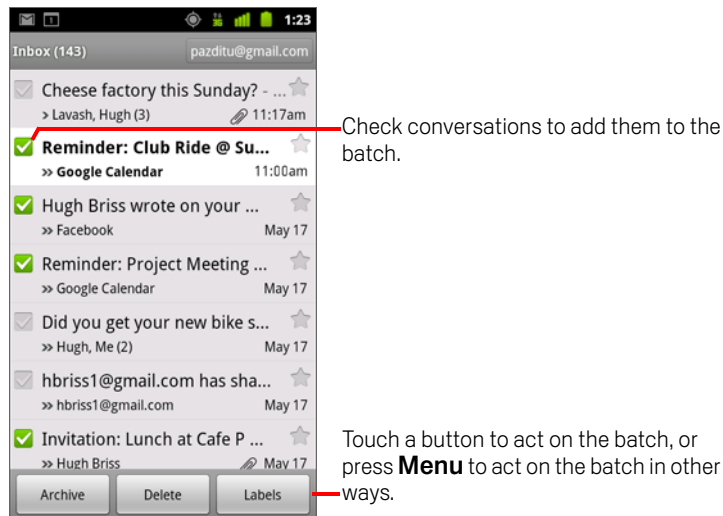
2 Touch **Send**.

Working with conversations in batches

You can archive, label, delete, or perform other actions on a batch of conversations at once, in your Inbox or in another labeled list of conversations.

- 1 In the Inbox or other conversation list, check the conversations that you want to work with as a batch.

When you check a conversation, the **Archive**, **Delete**, and **Labels** buttons appear at the bottom of the screen.



Check conversations to add them to the batch.

Touch a button to act on the batch, or press **Menu** to act on the batch in other ways.

- 2 Touch **Archive**, **Delete**, or **Labels**. Or press **Menu**  and touch **Add star**, **Report spam**, **Mute**, **Mark read/Mark unread**, or **Deselect all**.

Your action affects the entire batch of messages.

If you delete a batch of conversations, you can touch **Undo** in the yellow bar at the top of the screen to undelete them. You can also use **Undo** after muting, archiving, and reporting spam.

If you never work with batches of messages, you can hide the checkboxes to leave more room for the subjects of conversations. See “Changing Gmail settings” on page 159.

Starring a message

You can star an important message to make it easy to locate again. Conversations with starred messages display a star in your Inbox and other conversation lists. To view just conversations with starred messages, see “Viewing conversations by label” on page 151.

Star a message

- ▶ While reading a message, touch the star in its header.

OR

- ▶ While viewing a list of messages in a conversation list, touch a message's star.

The star turns gold .

Unstar a message

- ▶ Touch its star again.

Unstar all messages in a conversation


- ▶ Touch the conversation's star in a conversation list.

Labeling a conversation

You organize conversations by labeling them. Gmail has several built-in labels. You can add your own labels and assign them colors by using Gmail on the web (custom label colors you create on the web are not supported in Gmail on the phone).

Viewing labeled conversations is described in “Viewing conversations by label” on page 151.

Label a conversation


- 1 When reading a conversation's messages, press **Menu**  and touch **Change labels**.
- 2 In the dialog that opens, check the labels to assign to the conversation.
- 3 Touch **OK**.

Label a batch of conversations at once

You can assign or change the labels of one or more conversations at once.

- 1 In your Inbox or other conversation list, check the conversations to label. See “Working with conversations in batches” on page 148.
- 2 Touch the **Labels** button at the bottom of the screen.
- 3 In the dialog that opens, check the labels to assign to the conversation.
- 4 Touch **OK**.

Change a conversation's labels

- 1 When reading a conversation's messages, press **Menu**  and touch **Change labels**.

You can also change the labels of a batch of conversations, in the same way that you label a batch of conversations, by touching the **Labels** button.


- 2 In the dialog that opens, check or uncheck the labels.
- 3 Touch **OK**.

Viewing conversations by label

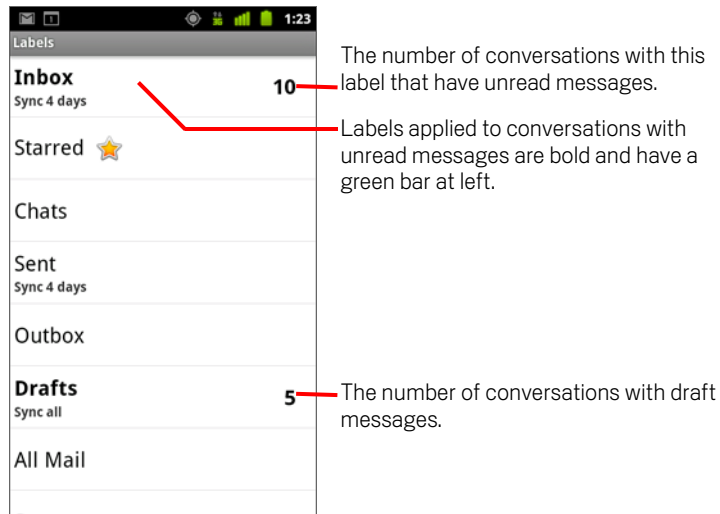
You can view a list of the conversations that have the same label, including conversations with starred messages.

You can control how many conversations are kept current on your phone, by label and by time, as described in “Synchronizing your conversations by label” on page 152.

See “Labeling a conversation” on page 150 or “Starring a message” on page 149 for information about assigning labels and stars.

- 1 When viewing your Inbox or another conversation list, press **Menu**  and touch **Go to labels**.

Your labels are presented in a scrolling list. Label colors are those Gmail assigns by default, or those you assigned to labels by using Gmail on the web.



- 2 Touch a label to view a list of conversations with that label.

The conversation list resembles your Inbox, but the label replaces “Inbox” at the top left of the list. You work with labeled conversation lists in the same way that you work with your Inbox.

Synchronizing your conversations by label

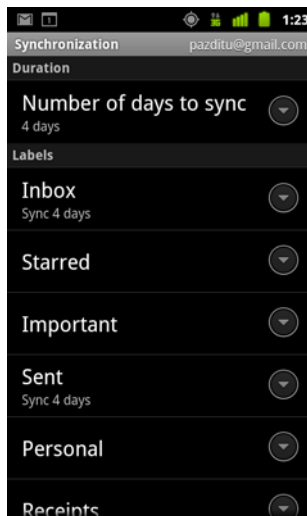
The Gmail webmail service has the resources to store all the messages you've ever sent or received; your phone does not. To save space, Gmail downloads only some of your messages to your phone. You can set which conversations' messages are kept current on your phone, by label, and what portion of those conversations, by time.

You use the Settings application to control how and when applications synchronize their data. See "Accounts & sync settings" on page 363.

Select which labels to synchronize

- 1 Open your Inbox.
- 2 Press **Menu**  and touch **More > Settings > Labels**.

The Synchronization settings screen opens, displaying a list of your Gmail labels, for the account listed at the top of the screen. Below each label is its current synchronization setting: **Sync all**, **Sync 4 days**, or no label (not synchronized).



- 3 Touch a conversation label whose synchronization settings you want to change.


A dialog for that conversation label opens, with three options:

Sync none Don't download any conversations that have only this label.

Sync 4 days Download the previous 4 (or number of days you set) of conversations.

Sync all Download all conversations with this label.


Set how many days to synchronize

- 1 Open your Inbox.
- 2 Press **Menu**  and touch **More > Settings > Labels**.
- 3 Touch **Number of days to sync**.
- 4 Enter the number of days and touch **OK**.

Reporting spam

The Gmail webmail service is quite effective at preventing spam (junk mail) from reaching your Inbox. But when spam does make it through, you can help improve the Gmail service by reporting the conversation as spam.

Report a conversation as spam

- ▶ While reading the conversation's messages, press **Menu**  and touch **More** > **Report spam**.

OR

- ▶ Check one or a batch of conversations in your Inbox or other conversation list, press **Menu** , and touch **Report spam**.

See "Working with conversations in batches" on page 148.

When you report a conversation as spam, the conversation and all its messages are removed from your Inbox. You can view the messages you've marked as spam by viewing messages with the Spam label. See "Viewing conversations by label" on page 151.

Searching for messages


You can search for messages that contain one or more words in their contents or in their addresses, subjects, labels, and so on.

When you search for messages, all of the messages in your Gmail account on the web are included (except those labeled Trash or Spam), not just those that you've synchronized onto your phone. For this reason, you must have a data connection to search for messages in Gmail.

You can also use the advanced search options that are described on the Gmail website.

1 In the Inbox, press **Menu**  and touch **Search**.

Or press the **Search** button .

2 Enter the word or words to search for and touch the Go button on the onscreen keyboard or the magnifying glass icon  at the right of the search box. Or touch words you searched for previously, in the list below the search box.

A conversation list opens, displaying all of the conversations with messages that contain the words you searched for. The words you searched for are displayed in the title bar.

You work with the conversations in this list just as you would with the conversations in your Inbox or any other conversation list.

When you open a conversation in a search result list, the word you searched for is highlighted wherever it occurs in the conversation's messages.

Words you search for are stored by the phone and suggested for later Gmail searches. You can erase these stored words with Gmail settings; see "Changing Gmail settings" on page 159.

Archiving conversations

You can archive conversations, to move them out of your Inbox without deleting them. Archived conversations are assigned the All Mail label, and they retain any other labels you've assigned to them. See "Viewing conversations by label" on page 151. They're also included in search results. If someone replies to a message that you've archived, its conversation is restored to your Inbox.

- ▶ While viewing a list of conversations, touch & hold a conversation and touch **Archive** in the menu that opens.

OR

- ▶ Check one or more conversations in your Inbox or other conversation list and touch **Archive**.


See "Working with conversations in batches" on page 148.

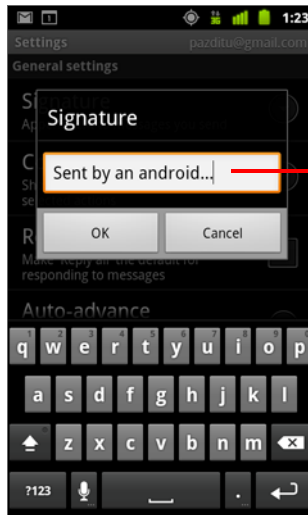
OR

- ▶ When reading a message, touch **Archive** at the bottom of the screen.

Appending a signature to your messages

You can append one or a few lines of plain text to every message you send from your phone, such as your name, contact information, or even “Sent by an android.” This signature is independent of any signature you append to messages you send from Gmail on the web.

- 1 Open your Inbox or another labeled list of conversations.
- 2 Press **Menu**  and touch **More** > **Settings** > **Signature**.



Enter a signature to append to your messages; then touch **OK**.

- 3 Enter a signature.
- 4 Touch **OK**.

Using keyboard shortcuts

If your phone has a physical keyboard, you can use the following keyboard shortcuts to manage your conversations and messages. Additional shortcuts are available if your phone has a **Trackball** or other pointing device.

Conversation list shortcuts

You can use the following keyboard shortcuts when viewing a conversation list, such as your Inbox.

u	Refresh list
c	Compose
Enter	Open conversation
y	Archive conversation
Alt + Trackball-roll-up	Jump to top of list
Alt + Trackball-roll-down	Jump to end of list
Shift + Space	Page up
Space	Page down

Message shortcuts


You can use the following keyboard shortcuts when reading messages.

r	Reply to last message in conversation
a	Reply all to last message in conversation
f	Forward last message in conversation
y	Archive conversation

Changing Gmail settings

You can change a number of settings for Gmail. Each Gmail account has its own settings, so your changes affect only the current account. See “Switch accounts” on page 138.

Notification volumes and some synchronization settings are changed in the Settings application. See “Settings” on page 347.

- ▶ To change Gmail settings, open your Inbox, press **Menu** , and touch **More** > **Settings**.

General Settings

Signature Opens a dialog where you can enter text to append to every message you send. See “Appending a signature to your messages” on page 157.

Confirm actions Opens a dialog where you can check which actions open a dialog asking you to confirm that action: archiving, deleting, and sending messages.

Reply all When checked, replaces the **Reply** button in message headers with the **Reply all** button, so you don't need to touch the arrow to access it.

Auto-advance Opens a dialog where you can set which screen opens when you delete or archive a conversation whose messages you are viewing: the messages in the next conversation, the previous conversation, or the Inbox or other conversation list you're working with.

Message text size Opens a dialog where you can select the size of text in the messages you read.

Batch operations When checked, adds a check box to the left of each conversation, so you can add it to a batch. See “Working with conversations in batches” on page 148.

Clear search history Touch to remove the history of the words you've searched for previously in Gmail in any account. See “Searching for messages” on page 155.

Labels Opens the Labels screen, where you can manage which conversations are synchronized. See “Synchronizing your conversations by label” on page 152.

Notification settings

Email notifications When checked, you receive a notification when you have new email. See “Managing notifications” on page 29.

Select ringtone Opens a dialog where you can select the ringtone to sound when you receive a new email notification, including the phone’s default ringtone and a silent option.

Vibrate Opens a dialog where you can configure the phone to vibrate whenever you receive a Gmail notification, only when the phone is in Silent mode, or never. See “Sound settings” on page 356.

Notify once Check to receive a notification from Gmail only the first time you have new email since you last read your messages, rather than each time a new message arrives.

Calendar

Calendar on the phone works with the web-based Google Calendar calendaring service for creating and managing events, meetings, and appointments. It also works with the Microsoft Exchange ActiveSync calendaring service.

Calendar on the phone is optimized for the phone. Some Calendar features, such as creating Calendars, are only available in Google Calendar on the web. Visit <http://calendar.google.com> to learn about the features of the web version of Calendar.

In this section

“Viewing your calendar and events” on page 162

“Working in Agenda view” on page 164

“Working in Day view” on page 165

“Working in Week view” on page 167

“Working in Month view” on page 168

“Viewing event details” on page 169

“Creating an event” on page 170

“Editing an event” on page 171

“Setting an event reminder” on page 173

“Responding to an event reminder” on page 174

“Synchronizing and displaying calendars” on page 175

“Changing Calendar settings” on page 176

Viewing your calendar and events


Open Calendar to view events you've created or that others have invited you to.

When you first set up your phone, you configured it to use an existing Google Account, or you created a new account. The first time you open the Calendar application on your phone, it displays any existing calendar events from your Google Account on the web.

You can add additional accounts with Google Calendar or Microsoft Exchange calendars to your phone, and configure them to display in Calendar. See "Accounts" on page 127.

When you first set up Calendar to synchronize events on your phone, it includes events from the previous month through one year in the future. Subsequently, Calendar keeps a year's worth of future events synchronized between your phone and the web, plus any later events that you add to your calendar using Calendar on your phone.

Open Calendar

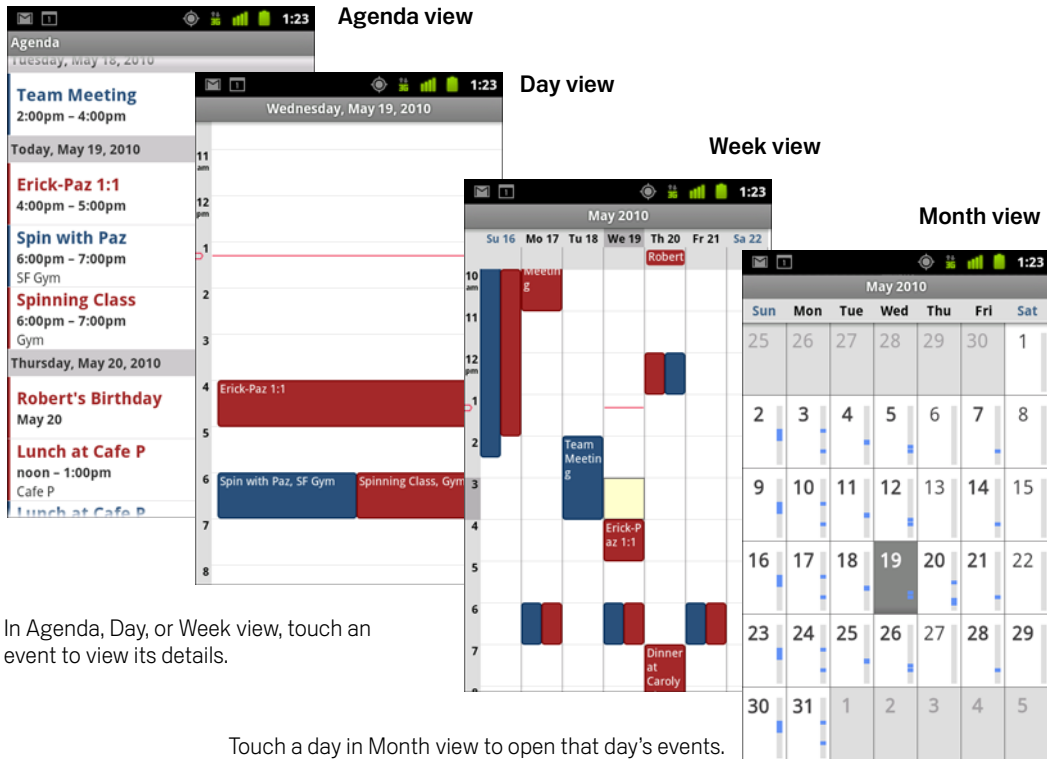
- ▶ Touch the Calendar icon  on the Home screen or in the Launcher.

See "Opening and switching applications" on page 40 to learn more about opening and switching applications.

Events from each account you've added to your phone and configured to synchronize calendars is displayed in Calendar. For information about adding accounts, see "Accounts" on page 127.

Events from each calendar are displayed in a different color. For information about which calendars are displayed on your phone, see "Synchronizing and displaying calendars" on page 175.

Calendar shows the current time (the red marker and horizontal line in some views) and the time for events using your local time zone by default, as provided by the mobile network you're connected to. If you're traveling, you can set a home time zone and use it in Calendar instead. See "Changing Calendar settings" on page 176.



Change your calendar view

- ▶ Press **Menu** and touch **Agenda**, **Day**, **Week**, or **Month**.

Each view displays the events in your calendar for the period of time that you specify. For details, see:

“Working in Agenda view” on page 164

“Working in Day view” on page 165

“Working in Week view” on page 167

“Working in Month view” on page 168

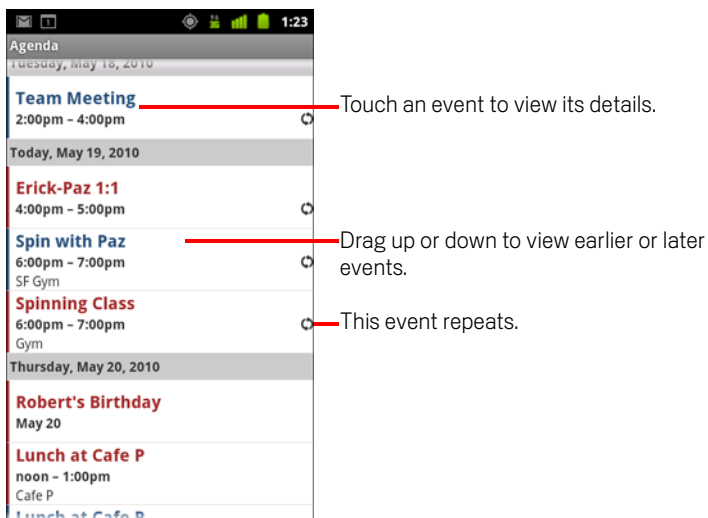
- ▶ To view more information about an event in Agenda view, touch the event.
- ▶ To view the events of a day in Month view, touch a day.

Working in Agenda view

Agenda view is a list of your events in chronological order. All-day and multiday events are listed at the start of each day. Days without events are not shown.

Switch to Agenda view

- ▶ Press **Menu** ☰ and touch **Agenda**.



Learn more about events in Agenda view

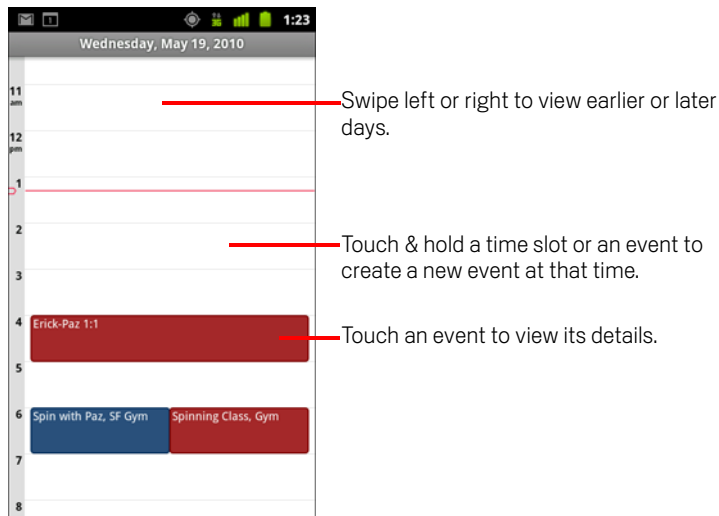
- ▶ Touch an event.
A screen with details about the event opens. See “Viewing event details” on page 169.

Working in Day view

Day view displays a chart of the events of one day, in a table of one-hour rows. A red line indicates the current time. All-day and multiday events are displayed at the top. Part of the title of each event is displayed in the rows that correspond to when it occurs.

Switch to Day view

- ▶ Press **Menu** ☰ and touch **Day**.



- ▶ Swipe left or right to view other days.

Learn more about events in Day view

- ▶ Touch an event to view its details.
See "Viewing event details" on page 169.
- ▶ Touch & hold an event to open a menu with options for viewing, editing, or deleting the event and for creating a new event at that time.

Add an event in Day view

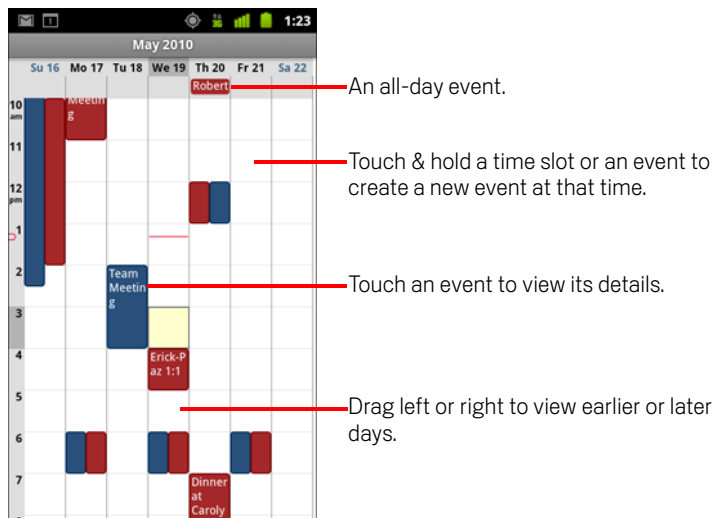
- ▶ Touch & hold an empty spot or an event in the day to open a menu with the option for creating a new event at that time.
See “Creating an event” on page 170.

Working in Week view

Week view displays a chart of the events of one week. All-day and multiday events are displayed at the top.

Switch to Week view

- ▶ Press **Menu** ☰ and touch **Week**.



Learn more about events in Week view

- ▶ Touch an event to view its details.
See "Viewing event details" on page 169.
- ▶ Touch & hold an event to open a menu with options for viewing, editing, or deleting the event, and for creating a new event at that time.

Add an event in Week view

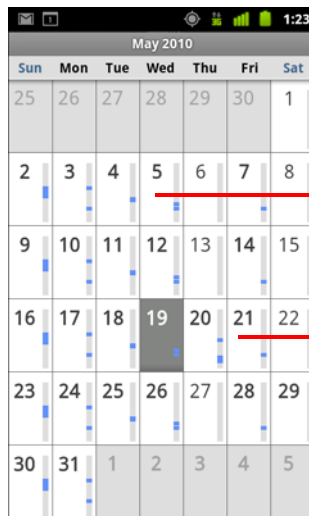
- ▶ Touch & hold an empty spot or an event in the week to open a menu with the option for creating a new event at that time.
See "Creating an event" on page 170.

Working in Month view

Month view displays a chart of the events of the month. Segments of each day with scheduled events are blue in the day's vertical bar.

Switch to Month view

- ▶ Press **Menu** ☰ and touch **Month**.



Drag up or down to view earlier or later months.

Touch a day to view the events of that day.

View more information about events in Month view

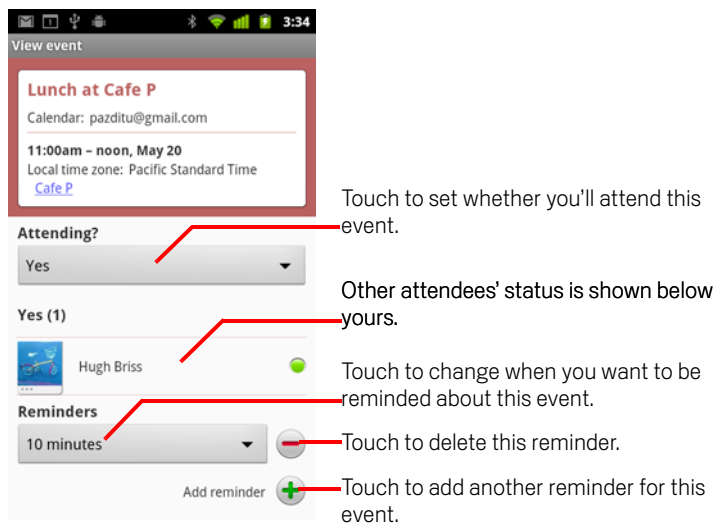
- ▶ Touch a day to view its events in Day view.
See "Working in Day view" on page 165.

Viewing event details

You can view more information about an event in a number of ways, depending on the current view.

View information about an event

- ▶ In Agenda, Day, or Week view, touch an event to view its details.
- ▶ In Month view, touch a day to switch to Day view. Then touch an event to view its details.



You can set or change whether you will attend the event by using the **Attending?** menu.

Other attendees' status is displayed below your own.

Event times are shown in the time zone set by your local mobile carrier, unless you configure Calendar to work in your home time zone; see "Changing Calendar settings" on page 176.

You change any event reminders or touch the plus **+** button to add one. See "Setting an event reminder" on page 173.

If you have permission to change events, you can press **Menu** to edit or delete the event, as described in "Editing an event" on page 171.

Creating an event

You can use Calendar on your phone to create events that appear on your phone and in Google Calendar on the web.

Create an event

- 1 In any Calendar view, press **Menu**  and touch **New event** to open an Event details screen for a new event.

You can also touch & hold a spot in Day, Week, or Month view. In the menu that opens, touch **New event** to open the Event details screen with that day and time already entered.

- 2 Add details about the event.

Enter a name, time, and optional additional details about the event.

When setting a date or time, you can use the plus and minus buttons in the dialog or touch the date or time and enter it, using the onscreen keyboard.

You can use the default time zone or set a different one for this event. The default time zone for your events is the one set by your local mobile carrier, unless you configure Calendar to work in your home time zone; see “Changing Calendar settings” on page 176.

If you have more than one calendar, you can choose the calendar to which to add the event.

Touch the plus **+** button to add more reminders. See “Setting an event reminder” on page 173.)

- 3 Invite guests to the event.

In the Guests field, enter the email addresses of everyone you want to invite to the event. Separate multiple addresses with commas (,). If the people to whom you send invitations use Google Calendar, they'll receive an invitation in Calendar and by email.

- 4 Press **Menu**  and touch **Show extra options** to add details about the event.



- 5 Scroll to the bottom of the Event details screen and touch **Done**.

The event is added to your calendar.

Editing an event

You can edit an event that you created on the phone or on the web. You can also edit events created by others, if they have given you permission.


Edit an event

- 1** Open the summary of the event.
See “Viewing event details” on page 169.
- 2** Press **Menu**  and touch **Edit event**.
The Event Details screen opens. This is the same screen described in “Creating an event” on page 170.
Press **Menu**  and touch **Show extra options** to add or edit event details.
- 3** Make your changes to the event.
- 4** Scroll to the bottom of the screen and touch **Done**.

Deleting an event

You can delete an event that you created on the phone or on the web. You can also delete events created by others, if they have given you permission.

Delete an event

- 1 Open the summary of the event.
See “Viewing event details” on page 169.
- 2 Press **Menu**  and touch **Delete event**.
- 3 In the dialog that opens, touch **OK**.

Setting an event reminder

You can set one or more reminders for an event, whether or not you created the event or have permission to edit its other details.

Set an event reminder

- 1** Open the event summary.
See “Viewing event details” on page 169.
- 2** If you already have a reminder set, touch the Plus button **+** to add a reminder.
A new reminder is added, for 10 minutes before the event.
- 3** Touch the reminder time, and in the dialog that opens touch the length of time before the event that you want to be reminded of.
When the time comes, you receive a notification about the event. See “Responding to an event reminder” on page 174.
You can use Google Calendar on the web to configure additional reminder settings.


Delete an event reminder

- 1** Open the event summary.
- 2** Touch the reminder’s Minus button **-**.

Responding to an event reminder

If you set a reminder for an event, the Upcoming Event icon appears in the Notifications area of the Status bar when the reminder time arrives. See “Managing notifications” on page 29.

Respond to an event reminder

- ▶ If you receive notifications in the Status bar, drag the Status bar down to open the Notifications panel. Then touch the event notification to open the list of Calendar notifications.
- ▶ If you receive notifications with alerts, the Calendar notifications list opens, listing all notifications awaiting your response.
- ▶ Touch an event in the Calendar Notifications list to view more information about that event.
- ▶ Touch **Snooze all** in the Calendar Notifications list to turn off all event reminders for 5 minutes.
- ▶ Touch **Dismiss all** in the Calendar Notifications list to delete all reminders in the list.
- ▶ Press **Back**  when viewing the Calendar Notifications list to keep the reminders pending. The icon remains in the Status bar and the reminders remain in the Notifications panel.

Synchronizing and displaying calendars

When you add a Google Account or Microsoft Exchange ActiveSync account to your phone that includes a calendar service, and you configure that account to synchronize calendar events to the phone, the events from that calendar are added and kept up to date in Calendar on the phone.

You control whether an account synchronizes changes to calendar events between a Google or other calendar service with the Settings application's Accounts & Sync Settings screen (see "Accounts & sync settings" on page 363). You configure which calendars to store on the phone (for quicker access) and which of those to show or hide on the phone in Calendar.




Set whether calendars are stored on the phone or visible

- 1 Press **Menu** , touch **More > Calendars**.

The Calendars screen displays all the calendars you've added or subscribed to for each account that is configured to synchronize events to your phone, organized by account. (Calendars for accounts you've configured not to synchronize Calendar events are not included in the list.)

Touch the name of an account to show or hide its calendars on your phone.

An icon to the right of each calendar indicates whether its events are synchronized (in this context, stored on) the phone and whether they are visible in Calendar.

	Calendar events stored on phone and visible in Calendar
	Calendar events stored on phone but not visible in Calendar
	Calendar events not synchronized to phone


- 2 Touch the icon next to a calendar to change whether it is stored on the phone and visible in Calendar.

You remain subscribed to Calendars that you configure not to store on the phone and you can still work with them with Google Calendar on the web, or in other calendaring services.

- 3 Touch **OK**.

Changing Calendar settings

You can change the following settings for how Calendar displays event and how it notifies you of upcoming events.

- ▶ To change Calendar settings, open a Calendar view, press **Menu** , and touch **More > Settings**.

Use home time zone Check to use your home time zone when viewing calendars and event information in Calendar when you're traveling, rather than the local time zone reported by the mobile network you're connected to.

Home time zone Opens a dialog where you can set the time zone to use in Calendar when you're traveling, if you have the **Use home time zone** setting checked.

Hide declined events Check if you don't want to see events to which you've declined invitations.

Set alerts & notifications Opens a dialog where you can configure event reminders to open an alert, send you a notification, or turn off event notifications on your phone. See "Setting an event reminder" on page 173 and "Responding to an event reminder" on page 174.

Select ringtone Opens a dialog where you can select the ringtone to sound when you receive an event reminder.

Vibrate Opens a dialog where you can configure the phone to vibrate whenever you receive an event reminder, only when the phone is in Silent mode, or never. See "Sound settings" on page 356.

Default reminder time Opens a dialog where you can select the default time before an event for event reminders.

Build version The version of Calendar you are using.

Google Voice

You can use Google Voice for your voicemail service, in place of your mobile carrier's voicemail service. Google Voice gives you a visual interface to all of your voicemail messages—you can access your messages in the order you want, read transcripts of your messages, and listen to your messages, using a karaoke-style interface that makes it easy to replay any part.

You can also use Google Voice to make international calls, in place of your carrier's long-distance service, to take advantage of Google Voice's low international calling rates.

If you already have a Google Voice account with a Google phone number, you can configure your phone to place some or all calls via Google Voice. The people you call will see your Google phone number instead of your cell phone number as your caller ID.

To learn more about Google Voice, including how to get a Google Voice number, go to <http://www.google.com/voice>.

Google Voice is currently available only in the United States.

In this section

“Opening Google Voice and your Inbox” on page 178

“Reading or listening to your voicemail” on page 180

“Exchanging text messages” on page 182

“Starring messages” on page 183

“Viewing messages by label” on page 184

“Configuring Google Voice” on page 185

“Placing calls with Google Voice” on page 187

“Changing Google Voice settings” on page 188

Opening Google Voice and your Inbox

You can check your Google Voice Inbox, exchange messages, and perform other tasks with Google Voice.

You don't use the Voice application to place calls—you do that with the Phone application. See “Placing calls with Google Voice” on page 187.

The first time you open Google Voice, you are prompted to configure it, as described in “Configuring Google Voice” on page 185.



Open Google Voice

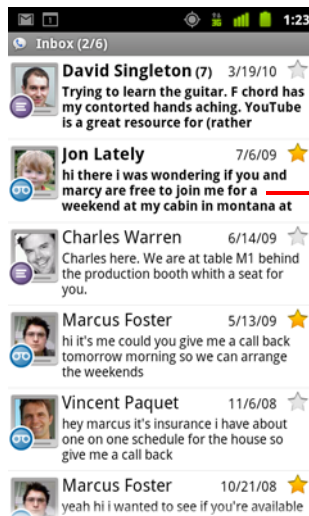
- ▶ Touch the Google Voice icon  in the Launcher or on the Home screen.

See “Opening and switching applications” on page 40 to learn more about opening and switching applications.

The first time you open Google Voice, a setup wizard helps you to select which Google Voice features to use with your phone and then to configure the features that you want.

After the initial setup, Google Voice opens to the last screen you were viewing or, if you have not used Google Voice recently, your Inbox.


Your Inbox displays any voicemail (marked with a ) and text messages (marked with a ) you've received, along with the sender, the date the message was sent, and the first few words of the message.



Touch a voicemail or text message to open it.


Open your Inbox

You can return to your Inbox from any Google Voice screen.

- ▶ Press the **Back**  button until the Inbox screen appears.

Check your account balance

When you first create a Google Voice account, you have a balance of US\$0.10 for toll calls. You must sign into your account using a browser to add to your balance, but you can check your current balance on the phone.

- ▶ In your Google Voice Inbox, press **Menu**  and touch **Balance**.
A dialog displays your current account balance.

Reading or listening to your voicemail

Your Google Voice inbox contains a list of the voicemail messages you've received. You can also listen to your voicemail with the Phone application, just as you would listen to voicemail from your mobile carrier's voicemail service. See "Listening to your voicemail" on page 86.

Transcripts of your voicemail are also emailed to you.

To read a transcript of your voicemail

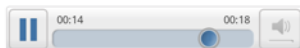
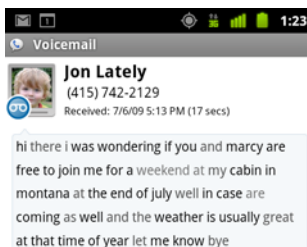
- 1 Open Google Voice and your Inbox.

See "Opening Google Voice and your Inbox" on page 178.



Your Inbox displays your messages. For each message, you can see who sent it, when you received it, and a transcript of the beginning of the message.

- 2 Touch a message to read it.


The transcript of the message is displayed in a window that also contains information about the message, including the name and number of the person who left it.




Listen to your voicemail

- 1 Open Google Voice and your Inbox.
- 2 Touch a message to listen to it.
The controls for listening to the voicemail are at the bottom of the screen.
- 3 Touch the Play icon  to listen to the message.
The message plays through the earpiece or the speaker, depending on the preference you set. See "Changing Google Voice settings" on page 188.
Touch the Speaker icon  to play the message through the phone's speaker, instead of the earpiece.
You can also pause and resume play, and you can drag the progress indicator back and forth to listen to different parts of the message.

Reply to a message

- 1 Open a message as you would to read or listen to it.
- 2 Press **Menu**  and touch **Call** or **Text**.
If you touch **Call**, the Phone application opens and places a call to the number of the person who left the message.
If you touch **Text**, a Google Voice window opens in which you can compose a text message, as described in "Exchanging text messages" on page 182.


Delete a message

- ▶ Open the message as you would to read or listen to it, press **Menu** , touch **More**, and touch **Delete**.
OR
- ▶ Touch & hold the message in the Inbox or other folder of labeled messages. In the menu that opens, touch **Delete**.
You can view your deleted messages by viewing messages with the Trash label. See "Viewing messages by label" on page 184.

Exchanging text messages

You can use Google Voice to send and receive text (SMS) messages.

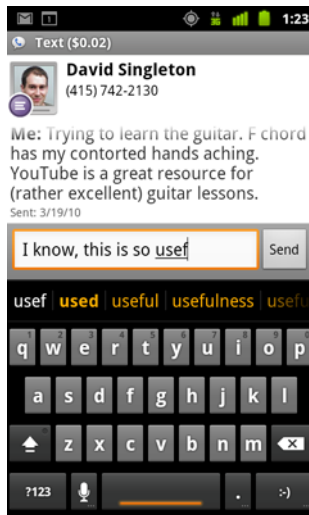
Send a text message

- 1 Open your Inbox.
- 2 Press **Menu**  and touch **Compose**.
- 3 Enter the phone number to which you want to send the message.
You can also enter the name of a contact with a mobile number.
- 4 Enter a short text message.
- 5 Touch **Send**.

Read and reply to a text message

When someone sends a text message to your Google Voice number, you receive a notification that it's in your Google Voice Inbox.

- 1 Open the Notifications panel and touch the notification that you have a message.
(See “Managing notifications” on page 29.)
You can also touch any message that's in your Inbox.
The message, and any previous messages in the conversation, is displayed.
- 2 To reply to the message, enter a short message and touch **Send**.



Starring messages

You can star voicemail and text messages to make them easy to keep track of.

Star a message

- ▶ While viewing a list of messages in your Inbox or other folder, touch a message's star.


The star turns gold .

Unstar a message

- ▶ Touch its star again.

View your starred messages

You can open a folder that contains just your starred messages.

- 1 While viewing your Inbox or another folder of messages, press **Menu**  and touch **Labels**.


See “Viewing messages by label” on page 184.

- 2 Touch **Starred**.

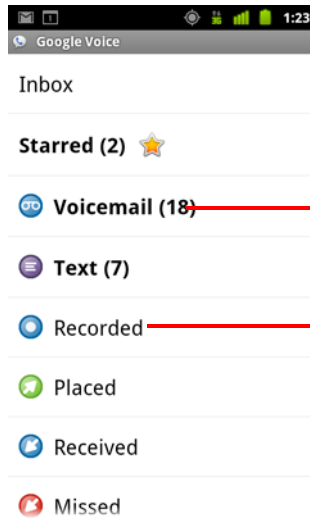
A folder opens with a list of your starred messages.

Viewing messages by label

You can view a list of the messages that have the same label, such as Voicemail, Text, Placed, Received, and so on.

- 1 While viewing your Inbox or another folder of messages, press **Menu**  and touch **Labels**.

Google Voice labels are presented in a scrolling list.



The number of messages with this label that are unread.

Touch a label to open a folder that lists messages with this label.

- 2 Touch a label to view a folder containing the messages with that label.

The folder resembles your Inbox, but the label replaces “Inbox” in the title bar. You work with labeled conversation lists in the same way that you work with your Inbox.

Configuring Google Voice

The first time you open Google Voice, a wizard helps you to configure Google Voice services on your phone. If you sign out, the wizard reappears the next time you start Google Voice. You can also change the services to use at any time, by changing the Google Voice settings. See “Changing Google Voice settings” on page 188.

Configure Google Voice

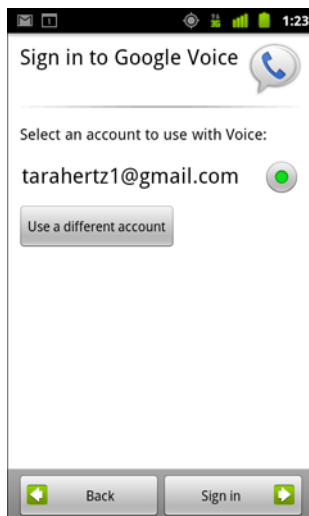
- 1 Open Google Voice.

The Welcome screen opens, where you start the process of configuring Google Voice on your phone. The options that the wizard offers you depend on whether you already have a Google Voice account and on the features supported by your mobile carrier.


- 2 Sign into Google Voice.

The account you sign into is the Google Account whose Inbox you open to read messages. It's also the Google Account that you use for any other Google Voice services that you decide to use with your phone.

Touch **Sign in** to sign into the primary Google Account on your phone. Or touch **Use a different account** to sign in using a different Google Account.



- 3** If requested, touch Next to verify your phone number via a text message.
Google Voice uses this step to ensure that it can communicate with your phone.
- 4** Enter a voicemail PIN.
This is the code you use to check your voicemail from the Phone application.
- 5** Choose which calls you want to make using Google Voice.
You can choose to make all international calls via Google Voice, to take advantage of Google Voice's low international calling rates; to be prompted each time you make a call; or to never use Google Voice for calls.

If you signed into a Google Account that has a Google Voice number, you can also choose to make all calls via Google Voice. If you do, the people you call will see your Google Voice number as your Caller ID, instead of your phone number.
- 6** Configure your voicemail service.
The Google Voice application opens the Settings application, which prompts you to select Google Voice or your mobile carrier for your voicemail service.
- 7** Press **Back**  when you're done configuring voicemail.
- 8** Touch Finish in the screen that describes Inbox synchronization.
For more information, see "Sync and notifications settings" on page 189.

Your Google Voice Inbox opens. See "Opening Google Voice and your Inbox" on page 178 for more information on getting started with Google Voice.

Placing calls with Google Voice

Placing calls with Google Voice is almost the same as placing calls via your mobile carrier, depending on whether you have a Google number and how you have configured Google Voice on the phone.

- 1 Call a contact just as you would without Google Voice.
- 2 If you've configured Google Voice to ask whether you want to use it each time you place a call, touch **Call with Google Voice** in the dialog.

If you've configured Google Voice to use it for all calls, this dialog doesn't appear.


Google Voice displays a message, reminding you that you are placing the call via Google Voice.

If the call is a toll call, Google Voice plays a message with the per-minute charge and the number of minutes at this rate you have remaining in your Google Voice account.

Continue with the call as you would without Google Voice, as described in "Placing and receiving calls" on page 77.

Changing Google Voice settings

You can change a number of Google Voice settings, including which services you want to use on your phone and how you want to be notified of new messages.

- ▶ To change all Google Voice settings except which voicemail service to use, open your Google Voice Inbox, press **Menu** , and touch **Settings**.
- ▶ To change which voicemail service to use, use the Settings application.
For more information, see “Call settings” on page 354.

General Settings

Making calls Opens a dialog where you can configure whether to use Google Voice to make some or all phone calls, as described in “Configuring Google Voice” on page 185.

This phone’s number Opens a dialog where you change or add your phone’s phone number to work with Google Voice.

Voicemail playback Opens a dialog where you can configure your voicemail to play via your phone’s earpiece or speaker by default.

Sync and notifications See “Sync and notifications settings” on page 189.

Sign out Touch to stop using any Google Voice services on your phone and to resume using your mobile carrier’s voicemail service and your phone’s number as its caller ID. The next time you start Google Voice, the wizard prompts you to configure it again. See “Configuring Google Voice” on page 185.

Legal information Touch to open a screen where you can read about the Google Voice terms of service, privacy policy, program policy, and other important legal information.

My Google Voice number Displays the Google Voice number you have configured to use for making and receiving calls on this phone.

Build number The version of Google Voice installed on your phone.

Sync and notifications settings

Synchronize inbox Check to receive notifications from Google Voice as soon as new messages arrive in your Inbox. You must have background data checked in the Accounts & Sync settings to use this feature (see “Accounts & sync settings” on page 363).

Background data Touch to open the Accounts & Sync settings; see “Accounts & sync settings” on page 363.

Notifications via text message Check to receive a notification in the Status bar whenever you receive a new message in your Google Voice Inbox. (Don't check both this feature and the Synchronize Inbox feature, or you will receive two notifications for each new message.)

Inbox notifications Check to receive notifications for new messages.

Select ringtone Select a ringtone to sound when you receive a notification from Google Voice.

Vibrate The phone vibrates when you receive a notification from Google Voice.

Light The **Trackball** flashes when you receive a notification from Google Voice.

Google Talk

Google Talk is Google's instant messaging service. You can use it to communicate in real time with other people who also use Google Talk, on a phone, on the web, or with a desktop application.

In this section

"Signing in and opening your Friends list" on page 192

"Chatting with friends" on page 194

"Changing and monitoring online status" on page 197

"Managing your Friends list" on page 199


"Changing Google Talk settings" on page 201

Signing in and opening your Friends list

You sign into Google Talk to chat with your friends.

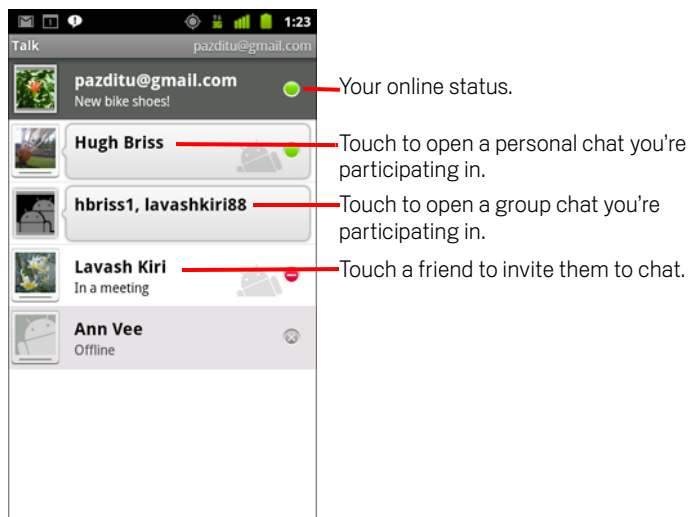
You remain signed in, even when you're using other applications, until you deliberately sign out.

Open Google Talk and sign in

- ▶ Touch the Google Talk icon  in the Launcher or on the Home screen.

See “Opening and switching applications” on page 40 to learn more about opening and switching applications.

When you first open Google Talk, your Friends list is displayed. This list includes all of the friends you've added by using Google Talk on the web, on the phone, or with a desktop application. Adding friends to this list so you can invite them to chat is described in “Managing your Friends list” on page 199.



Inviting friends to chat and accepting invitations to chat is described in “Chatting with friends” on page 194.

Return to your Friends list

You can return to your Friends list when chatting with a friend, so that you can invite another friend to chat, add a friend, and so on.

- ▶ Press **Menu**  and touch **Friends list**.

Sign out of Google Talk

You can sign out of Google Talk—for example, if you want to switch the focus of all chats and invitations to Google Talk on a computer. Signing out can also extend your battery life.

- ▶ On your Friends list, press **Menu**  and touch **Sign out**.

You no longer receive chat notifications or see others' Google Talk status in other applications, such as Gmail.

Chatting with friends

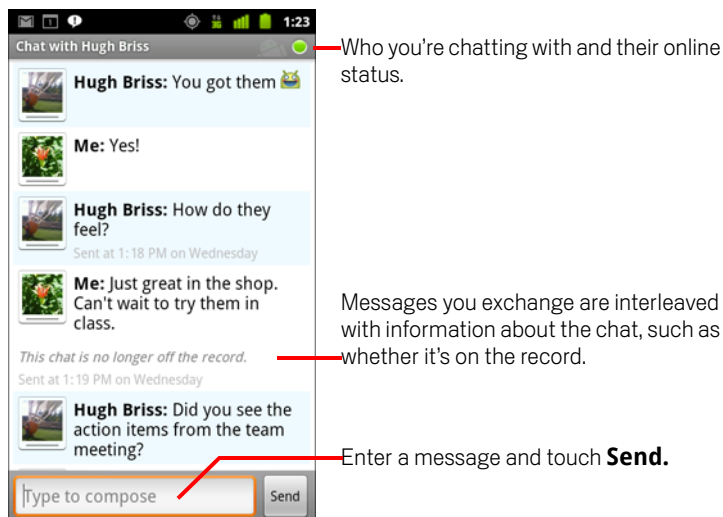
Chat with a friend

- 1 Touch a friend in your Friends list.

If you're already chatting with someone, you can press **Menu** ☰ and touch **Friends list** to invite another friend to chat.

The chat screen opens.

- 2 Enter your message and touch **Send**.



The messages that you exchange are interleaved on the screen with information about the chat, such as whether it's on the record, the time a message was sent if there's no response after a short while, and so on.

You can enter a smiley icon (an emoticon) on the onscreen keyboard by touching & holding the Smiley key and then touching a smiley. You can also press **Menu** ☰ and touch **More > Insert smiley** to open a scrolling list of smileys.

Your chat session remains open until you end it.

Friends you're chatting with are displayed at the top of your Friends list.

Accept an invitation to chat

When a friend sends you a Google Talk message, you receive a notification. Their entry in the Friends list jumps to the top and displays the message.

- ▶ Touch the friend in your Friends list.

OR

- ▶ Open the Notifications panel and touch the chat notification.
See "Managing notifications" on page 29.


A chat window opens where you can exchange messages with your friend.

Switch between active chats

If you have more than one chat going, you can switch between chats.

- ▶ In the Friends list, touch the name of the person you want to chat with.

OR


- ▶ On a chat screen or in the Friends list, press **Menu**  and touch **Switch chats**, then touch the friend you want to chat with.

OR

- ▶ While chatting with a friend, swipe left or right across the screen.

Invite a friend to join a group chat

When you're chatting, you can invite additional friends to join a group chat.

- 1 On a chat screen, press **Menu**  and touch **Add to chat**.
- 2 Touch the name of the friend to invite.



The friend you invited and the current participants receive an invitation to a group chat. Each one who accepts the invitation joins the group chat.

In a group chat, everyone can see everyone else's messages.

Group chats appear at the top of your Friends list, with a group chat icon.


Chat on or off the record

Your Google Talk messages are stored, so you can review them later and even search for them in the Chats folder in Gmail. But if you'd rather not store the messages in a chat, you can go off the record.

- ▶ On a chat screen, press **Menu**  and touch **Chat off record**.
To resume saving the messages in the chat, press **Menu**  and touch **Chat on record**.






End a chat

When you end a chat, the friend is no longer at the top of your Friends list and the chat is not displayed in the Switch Chats screen. The text of the chat is not discarded—if you restart the chat, the conversation is displayed in the new chat window where you left off.

- ▶ In your Friends list, touch & hold the friend you want to stop chatting with. In the menu that opens, touch **End chat**.
- OR**
- ▶ While on a chat screen, press **Menu**  and then touch **End chat**.

Changing and monitoring online status

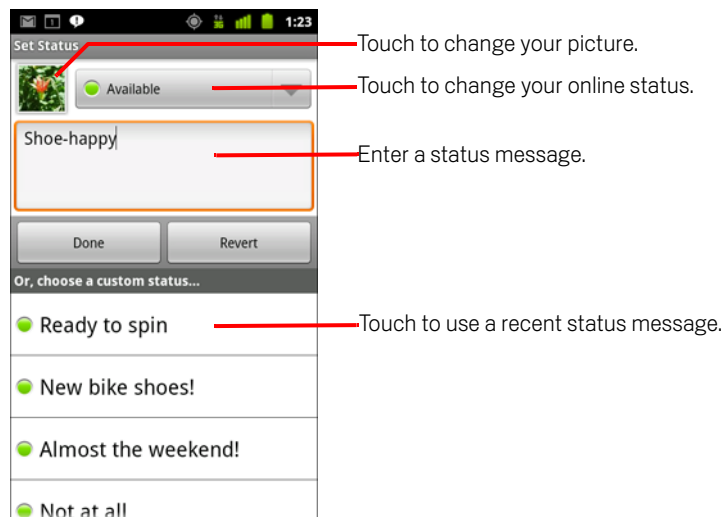
Icons in Google Talk, Gmail, Google Maps, and other applications indicate your and your friends' Google Talk status.

	Available: Signed into Google Talk and available to chat
	Away: Signed into Google Talk but not active
	Busy: Signed into Google Talk but too busy to chat
	Signed out of Google Talk
	Invisible: Signed into Google Talk but appear signed out to others

You can change your online status. You can also change the status message you share with other Google Talk users and the picture that others see.


Change your online status

- 1 Touch your own entry at the top of your Friends list.
- 2 In the screen that opens, touch the status menu at the top of the screen.



- 3 Touch a status in the dialog.
- 4 Touch **Done**.
Your status and any message appear in your contact's Friends lists and in other locations where your status or status message are displayed.

Change your status message

- 1 Touch your own entry at the top of your Friends list.
- 2 In the screen that opens, enter a status message or if you already have one, edit it.
In addition to the standard status settings, you can also select a message that you've entered previously. Or press **Menu**  and touch **Clear custom messages** to erase them and start over.
- 3 Touch Done.

Change your picture

- 1 Touch your own entry at the top of your Friends list.
- 2 In the screen that opens, touch your picture at the top left.
- 3 In the dialog that opens, touch **Change** (or touch **Remove** to remove your picture and not replace it).
A Gallery screen opens with all the pictures on your phone, organized onto groups. Browsing pictures in Gallery is described in "Working with pictures" on page 282.
- 4 Open a collection and then touch the picture to use.
- 5 Crop the picture.
Cropping pictures is described in "Working with pictures" on page 282.
- 6 Touch **Save**.


Managing your Friends list

Your Google Talk Friends list contains the friends you've invited or accepted invitations from, to become friends in Google Talk. Friends can invite each other to chat in Google Talk and see each others' online status in Google Talk and other applications, such as in Gmail and Maps.

The Google Talk Friends list is sorted by your friends' online status: active chats, online, busy, and offline. Within each status group, friends are listed alphabetically.

Add a friend to your Friends list

You can invite anyone with a Google Account to become your friend in Google Talk, so you can chat with each other and view each others' online status.

- 1 In the Friends list, press **Menu**  and touch **Add friend**.
- 2 Enter your friend's address and touch **Send invitation**.

Your friend's address in Google Talk is a Gmail or other email address that is configured to connect to Google Talk.

View and accept an invitation to become a friend

When a contact invites you to become a friend in Google Talk, you receive a notification in the Status bar and the invitation appears in your Friends list.

- 1 Touch the invitation in the Friends list.
- 2 Touch **Accept** in the menu that opens.

Or touch **Cancel** if you don't want to chat with and share your Google Talk status with the sender.

View a list of pending invitations to friends

- ▶ In the Friends list, press **Menu**  and touch **More > Invites**.

All the friends to whom you've extended invitations to become friends on Google Talk appear in the list until they accept or cancel your invitation.

View all friends or only those most popular with you

By default, only the friends that you frequently chat with—the most popular with you—are shown in the Friends list. But you can view all friends instead.

- ▶ In the Friends list, press **Menu** ☰ and touch **All friends**.

To switch back to just the friends with whom you chat most frequently, touch **Most popular** in the menu.

Make a friend popular

You can set a friend to appear always in your Friends list.

- 1 In the Friends list, touch & hold a friend's name.

If you don't see the friend's name, press **Menu** ☰ and touch **All friends**.

- 2 Touch **Always show friend** in the menu that opens.

To remove a friend from this list, touch & hold the friend's name in the Friends list. In the menu that opens, touch **Auto show friend**.

Block a friend

You can block a friend from sending you messages. When blocked, your friend is also removed from your Friends list.

- 1 In the Friends list, touch & hold the friend's name.

If you don't see the friend, press **Menu** ☰ and touch **All friends**.

- 2 Touch **Block friend** in the menu that opens.


You can view a list of your blocked friends by opening your Friends list, pressing **Menu** ☰, and touching **More > Blocked**. You can unblock a friend by touching the friend's name in the blocked list and then touching **OK** in the dialog that opens.

Changing Google Talk settings


You can configure Google Talk to send you a notification with the contents of each message that you receive in a chat, and also to sound a ringtone or vibrate the phone.

You can also configure Google Talk to sign you in automatically when you turn on your phone, and you can set whether the mobile indicator is displayed next to your name in other people's Friends lists.

Configure notifications for new Google Talk messages

- 1 In the Friends list, press **Menu**  and touch **Settings**.
- 2 Check or uncheck **IM notifications** to set whether you receive a notification in the Status bar when a new chat message arrives.
- 3 Touch **Select ringtone** to open a list of the ringtones that you can choose to sound when you receive notification of a new chat.
- 4 Touch **Vibrate** to set whether the phone vibrates whenever you receive notification of a new message, only when the phone is in Silent mode, or never.

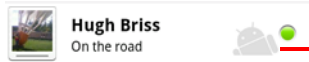
Configure notifications for new friend invitations

- 1 In the Friends list, press **Menu**  and touch **Settings**.
- 2 Check or uncheck **Invitation notifications** to set whether you receive a notification in the Status bar when a someone invites you to become a friend in Google Talk.

Show or hide the mobile indicator to friends

- 1 In the Friends list, press **Menu**  and then touch **Settings**.
- 2 Check or uncheck **Mobile indicator**.

If **Mobile indicator** is checked, your friends see an outline of an android next to your name in their Friends list when you're signed into Google Talk on the phone.



Your friend is signed into Google Talk on his phone.

Set whether you sign into Google Talk automatically

1 In the Friends list, press **Menu**  and then touch **Settings**.

2 Check or uncheck **Automatically sign-in**.

When **Automatically sign-in** is checked, you are signed into Google Talk when you turn on your phone.

Signing in and out of Google Talk is described in "Signing in and opening your Friends list" on page 192.

Email

You use the Email application to read and send email from services other than Gmail. Email includes a wizard that makes it easy to configure it for several popular email service providers.

In this section

“Opening Email and the Accounts screen” on page 204

“Reading your messages” on page 206

“Responding to a message” on page 208

“Starring messages” on page 209

“Working with message in batches” on page 210

“Composing and sending email” on page 211

“Working with account folders” on page 212

“Appending a signature to your messages” on page 213


“Adding and editing email accounts” on page 214

“Changing email account settings” on page 217

Opening Email and the Accounts screen

You use the Email application to read email from services other than Gmail.

Open Email

- ▶ Touch the Email icon  on the Home screen or in the Launcher.
See “Opening and switching applications” on page 40.

The first time you open Email, a setup wizard opens to help you add an email account, as described in “Adding and editing email accounts” on page 214.

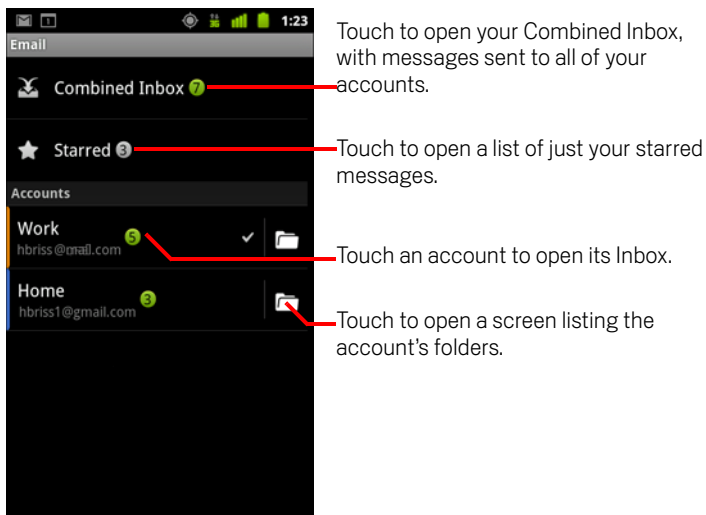
After the initial setup, Email opens to the last screen you were viewing or, if you have not used Email recently, it displays the contents of your Inbox (if you have only one account) or the Accounts screen (if you have multiple accounts).

You can also add a shortcut to your Home screen to an account's Inbox, so that you can open it directly from the Home screen. See “Customizing the Home screen” on page 43 for details about adding shortcuts.

Open the Accounts screen

The Accounts screen lists your Combined Inbox and each of your email accounts. If you have starred, draft, or unsent messages in any of your accounts, the folders for those items from all accounts are displayed as well.

- ▶ From a folder screen, press **Menu**  and touch **Accounts**.



Each folder and account on the Accounts screen displays the number of unread messages in green, or the total number of messages in gray.

You can touch a combination folder, such as the Combined Inbox folder, to view the messages it contains.

You can also touch an account to view its Inbox, or an account's folder icon to view a list of that account's folders.

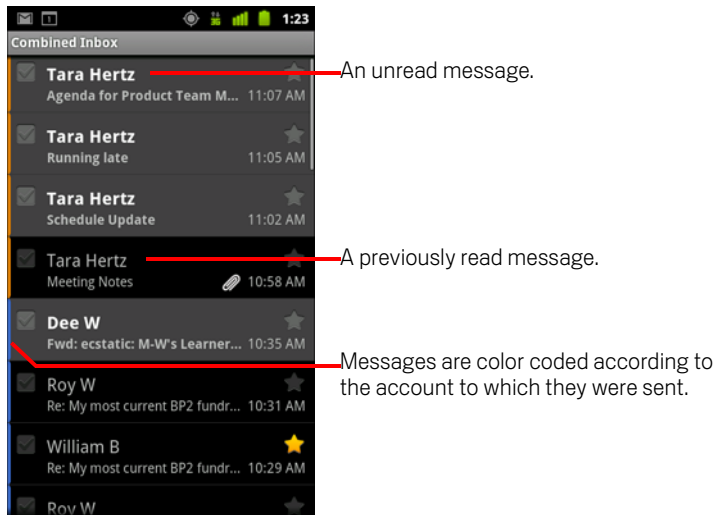
The account from which you send email by default is indicated with a checkmark.

Open your Combined Inbox

If you have configured Email to send and receive email from more than one account, you can view all messages sent to all accounts in your Combined Inbox.

- 1 Open the Accounts screen.
- 2 Touch **Combined Inbox**.

Messages in the Combined Inbox are color coded along their left sides, by account, using the same colors that are used to color code your accounts in the Accounts screen.



Only some of your account's recent email is downloaded to your phone. To download earlier messages in batches for IMAP or POP3 accounts, touch **Load more messages** at the bottom of the list of email. For Exchange ActiveSync accounts, you can change how many days or weeks of email to store on your phone; see "Adding and editing email accounts" on page 214.

Reading your messages

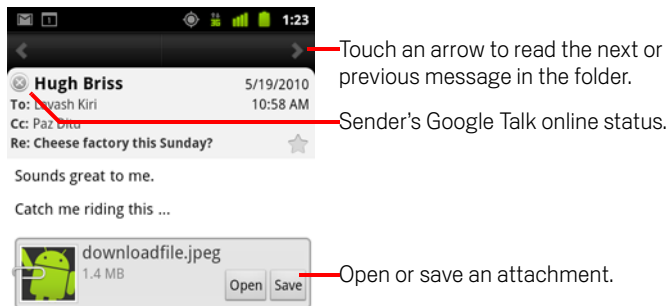
You can read messages in your Combined Inbox or in the Inbox or other folders for individual accounts.

When you receive a new message, you also receive a notification in the Status bar, unless you've turned off Email notifications using the Email Account settings, where you can also set whether Email notifications vibrate the phone and pick a ringtone. See "Change an account's settings" on page 216. When you touch an Email notification, it opens the combined Inbox.

Read a message

- 1 Open the Combined Inbox, an account's Inbox, or another folder of messages.
- 2 Touch the message to read.

The message opens in a screen with information about who sent it, the date it was sent, and related information at the top, followed by the contents of the message.



Some attached images are displayed in the message; others have buttons for opening them. Attachments you download are stored on your phone's USB

storage or SD card, depending on your model of phone. Viewing, reopening, and deleting your downloaded files is described in “Managing downloads” on page 54.

The Google Talk online status is shown next to the name of the sender of each message. You can touch that status indicator to open Quick Contact. See “Connecting quickly with your contacts” on page 45.

You can reply to, forward, delete, or take other actions on a message, as described in “Responding to a message” on page 208.

Responding to a message

You can reply to or forward a message that you receive. You can also delete messages and manage them in other ways.

Reply to or forward a message

- ▶ While reading a message, touch **Reply** or **Reply all**.

OR

- ▶ Press **Menu**  and touch **Reply**, **Reply all**, or **Forward**.

A Compose Message window opens with the addresses (when replying), subject, and a copy of the message you're responding to filled in.

You can send this message as you would a new message, as described in “Composing and sending email” on page 211.

Mark a message as unread

You can to return a read message to the unread state—for example, to remind yourself to read it again later. You can also mark a batch of messages as unread; see “Working with message in batches” on page 210.

- ▶ While reading a message, press **Menu**  and touch **Mark as unread**.

Delete a message

You can delete a message from its folder. You can also delete a batch of messages; see “Working with message in batches” on page 210.

- ▶ While reading a message, touch **Delete**.

OR

- ▶ Press **Menu**  and touch **Delete**.

For most kinds of accounts, deleted messages are moved to a Trash folder, so you can retrieve them if you deleted them in error.


Starring messages

You can star an important message to make it easy to keep track of. Once you star a message, a Starred folder is added to the Accounts screen. You can also star a batch of messages (see “Working with message in batches” on page 210).

Star a message

- ▶ While reading a message, touch the star in its header.

OR

- ▶ While viewing a list of messages in a folder, touch a message's star.
The star turns gold .

Unstar a message

- ▶ Touch its star again.

View your starred messages

You can open a folder that contains the starred messages from all of your accounts.

- 1 Open the Accounts screen.
See “Opening Email and the Accounts screen” on page 204.

- 2 Touch **Starred**.
A folder opens with a list of your starred messages.

You can also open an account's individual Starred folder. See “Working with account folders” on page 212.

Working with message in batches

You can delete, star, or mark unread a batch of messages at once.

- 1 In the Inbox or mailbox, check the messages that you want to work with as a batch.

When you check one or more messages, the **Mark unread**, **Add star**, and **Delete** buttons appear at the bottom of the screen.

- 2 Touch **Mark unread**, **Add star**, or **Delete**.


You can also press **Menu**  and touch **Deselect all**.

Your action affects the entire batch of messages.

Composing and sending email

You can send email to your contacts or to other people or groups.

Compose and send a message

1 Press **Menu**  and touch **Compose**.

2 Address the message.

As you enter text, matching addresses are offered from your Contacts. You can touch a suggested address or enter a new one. Separate multiple addresses with commas.

See "Contacts" on page 109 for more information.

3 Press **Menu**  and touch **Add Cc/Bcc** to address a copy or blind copy of the message.


4 Enter a subject for the message.

5 Enter the text of the message.

For information about entering and editing text, see "Using the onscreen keyboard" on page 31 and "Editing text" on page 37.

6 Press **Menu**  and touch **Attach** to send a photo with the message.

7 Touch **Send**.

If you're not ready to send the message, touch **Save as draft** to save it in a Drafts folder. You can open the combined Drafts folder for all accounts on the Accounts screen or just your account's Drafts folder. See "Working with account folders" on page 212. Touch a draft message in a Drafts folder to resume working on it. Your message is also saved as a draft if you press **Back**  before sending it.

Touch **Discard** to abandon a message, including any saved drafts.

If you aren't connected to a network, for example, if you're working in airplane mode, the messages that you send are stored in your Outbox folder until you're connected to a network again. If it contains any messages, the Outbox is displayed on the Accounts screen.

Working with account folders

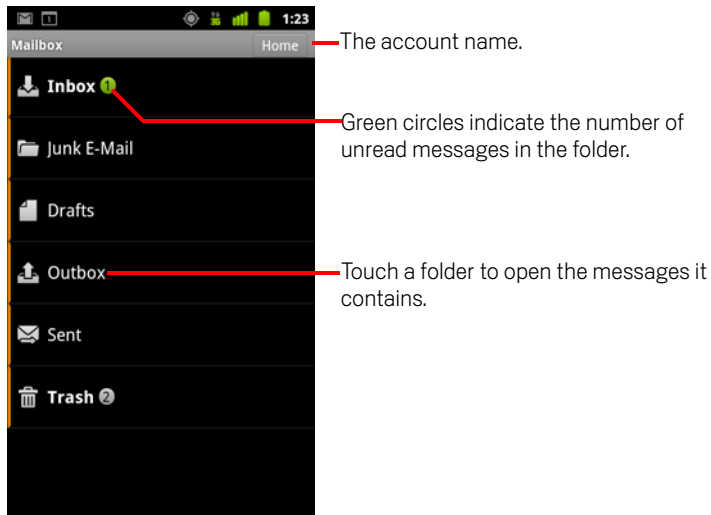
Each account has Inbox, Outbox, Sent, and Drafts folders. Depending on the features supported by your account's service provider, you may have additional folders.

View an account's folders

- 1 Open the Accounts screen.
- 2 Touch an account's folder icon.

You can also open an account's folders while viewing its Inbox or other folder, by touching **Menu** ☰ and then touching **Folders**.

The account's Folders screen opens, with a scrolling list of the folders in the account. Touch a folder to view a list of the messages it contains.



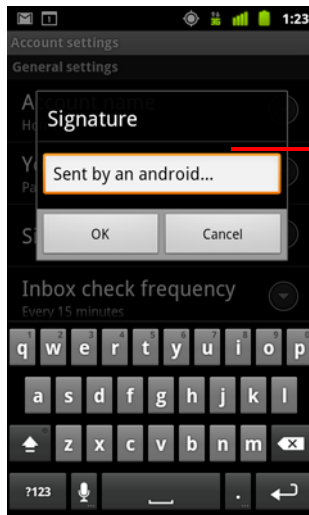
Appending a signature to your messages

You can append one or a few lines of text to every message you send from an account, such as your name, contact information, or even “Sent by an android.”

- 1 Open the Accounts screen.
- 2 Touch & hold the account whose settings you want to change. In the menu that opens, touch **Account settings**.

You can also open the settings for an account while you're viewing its inbox, by pressing **Menu** ☰ and touching **Account settings**.

- 3 Touch **Signature**.



Enter a signature to append to your messages; then touch **OK**.

- 4 Enter a signature.
- 5 Touch **OK**.
- 6 When you're finished changing settings, press **Back** ↶.


Adding and editing email accounts

The first time you open Email, you are prompted to set up an email account. After that, you can configure Email to send and receive email from additional accounts. The accounts that you configure are displayed in the Accounts screen. See “Opening Email and the Accounts screen” on page 204.

The Email setup wizard helps you set up your account for many popular email systems, including those based on IMAP and POP3, so you can read and work with the same email as you do on a computer in Thunderbird, Mac Mail, in a web browser, or with another email application. If your service provider requires additional settings, or if your service provider is unknown to Email, you can enter the necessary details manually, though you will typically need to contact your email service provider to determine the right settings for your account.

You can also set up an a Microsoft Exchange ActiveSync account (Exchange 2003 and 2007), so you can read and work with the same email as you do on a computer using Microsoft Outlook. Email supports username and password authentication for Exchange ActiveSync accounts, and your IT administrator may set additional security policies for the account (contact your IT administrator for more information).


Add an email account

- 1** Open the Accounts screen.
See “Opening Email and the Accounts screen” on page 204.
- 2** Press **Menu**  and touch **Add account**.
In the Setup Email screen, enter your email address and password.
If you’re adding a second or subsequent email address, you can also check the option to use the new account to send all outgoing messages.
- 3** Touch **Next**. Or, if you need to enter email account settings the wizard can't configure for you, touch **Manual setup**.
If you touch **Next**, Email attempts to communicate with your email service provider to validate your account for sending and receiving mail, using just your email address and password. This is sufficient for most email services.
Depending on the service provider, you may be asked what kind of email account you have. If you’re not sure, check the settings in the application you use to send and receive email on your computer, or ask your email service provider.
If the wizard determines that your service provider requires additional information, or if you touched **Manual setup**, you’re prompted to enter your email account details.
The details you enter are different, depending on the email service type. These details are described in “Changing email account settings” on page 217. Contact your email service provider for the values required for your account.
If you are adding an Exchange ActiveSync account, you’re prompted to set how often and how you want to check for new email, how many days or weeks worth of email to store on your phone, and a number of other options (see “Changing email account settings” on page 217). You’re also asked whether you want to synchronize your contacts and calendar from the Exchange ActiveSync server to your phone. You can change these settings later in the Contacts and Calendar applications. See “Configuring account sync and display options” on page 131 and “Synchronizing and displaying calendars” on page 175.
- 4** Enter any other information requested by the type of account you're adding and touch **Done**.
- 5** Enter a name for the account and touch **Done**.
Email starts downloading your email messages and you can start using it to send and receive messages using the new account.

Change an account's settings

You can change a number of settings for an account, including how often you check for email, how you're notified of new mail, and details about the servers the account uses to send and receive mail.


- 1 Open the Accounts screen.
- 2 Touch & hold the account whose settings you want to change. In the menu that opens, touch **Account settings**.

You can also open the settings for an account while you're viewing its inbox, by pressing **Menu**  and touching **Account settings**.

For descriptions of the settings that you can change, see "Changing email account settings" on page 217.

- 3 When you're finished changing settings, press **Back** .

Delete an email account

- 1 Open the Accounts screen.
On some Email screens, you can press **Menu**  and touch **Accounts**.
- 2 Touch & hold the account to delete.
- 3 Touch **Remove account** in the menu that opens.
- 4 Touch **OK** in the dialog to confirm that you want to delete the account.

Changing email account settings

You can change the following settings for each email account when you create it or at any later time. See “Adding and editing email accounts” on page 214.

These settings apply only to the account you’re working with. To change the settings for another email account, you must switch accounts; see “Opening Email and the Accounts screen” on page 204.

Account settings

Account name The name of the account as it appears in the Accounts and Folders screens.

Your name Your name as it appears to others when they receive email from you.

Signature Opens a dialog where you can enter a signature to append to the messages you send from this account. See “Appending a signature to your messages” on page 213.

Inbox check frequency Opens a dialog where you can set how often Email checks for new email sent to this account.

Amount to synchronize For Exchange ActiveSync accounts, opens a dialog where you can set how many days or weeks of email to store on the phone.

Default account Use this account’s outgoing email server for the email you compose and send when you are not currently viewing or working with email from a specific account.

Email notifications Set whether you want to receive notifications when you receive new email sent to this account.

Select ringtone Select a ringtone to sound when you receive an email notification for this account.

Vibrate Opens a dialog where you can set the phone to vibrate whenever you receive an email notification for this account, only when the phone is in Silent mode. or never.

Incoming settings Opens a screen where you can configure settings for how you receive email for this account. See “Incoming server settings” on page 218.

Outgoing settings Opens a screen where you can configure settings for how you send email from this account. (Microsoft Exchange ActiveSync accounts do not have separate outgoing server settings.) See “Outgoing server settings” on page 220.

Sync contacts For accounts that can sync contacts, check to sync contacts from this account to your phone. See “Configuring account sync and display options” on page 131.

Sync calendar For accounts that can sync calendars, check to sync calendar events from this account to your phone. See “Configuring account sync and display options” on page 131.

Incoming server settings

Your account's incoming settings are different, depending on the kind of email service for the account: Exchange ActiveSync, IMAP, or POP3.

Settings for Microsoft Exchange ActiveSync accounts:

Domain\Username	If your Exchange ActiveSync server requires that you specify a domain, enter it before the backslash. Otherwise, just enter your username (the part before the @example.com in your email address) after the backslash. (The backslash is optional if you're just entering your username; Email enters the correct syntax for domains and usernames when communicating with the server.)
Password	The password for your email account.
Server	The fully resolved hostname of the Exchange ActiveSync server, for example, owa.example.com.
Use secure connection (SSL)	Check this option if your Exchange ActiveSync server requires you to connect to the server securely, or if you prefer to connect securely.
Accept all SSL certificates	Check this option if you want to accept a server certificate from your Exchange ActiveSync server that is self-signed, out of date, or in some other way not accepted by the Email application.

Settings for IMAP accounts:

Username	Depending on the requirements of your email service provider, your full email address or just your username (that is, the part before @example.com in your email address).
Password	The password for your email account.
IMAP server	The fully resolved domain name of your email service provider's IMAP server, for example, imap.example.com.
Port	Set the Security type first to enter the typical server port number in this field automatically. Or enter a different port number if your email service provider requires it.
Security type	Select the security type required by your email service provider. Select the (Accept all certificates) option for your security type to accept a server certificate from your IMAP server that is self-signed, out of date, or in some other way not accepted by the Email application.
IMAP path prefix	Leave blank unless instructed to enter a specific prefix by your email service provider.

Settings for POP3 accounts:

Username	Depending on the requirements of your email service provider, your full email address or just your username (that is, the part before @example.com in your email address).
Password	The password for your email account.
POP3 server	The fully resolved domain name of your email service provider's POP3 server, for example, pop3.example.com.

Port	Set the Security type first to enter the typical server port number in this field automatically. Or enter a different port number if your email service provider requires it.
Security type	Select the security type required by your email service provider. Select the (Accept all certificates) option for your security type to accept a server certificate from your POP3 server that is self-signed, out of date, or in some other way not accepted by the Email application.
Delete email from server	Use to configure Email to cause your email service provider to delete from its server any email you delete in the Email application, or to never delete email from the server.

Outgoing server settings

If you use an IMAP or POP3 account for receiving email, you typically use an SMTP server to send email from that account. Microsoft Exchange ActiveSync accounts do not have separate outgoing server settings.

SMTP server	The fully resolved domain name of your email service provider's SMTP server, for example, smtp.example.com.
Port	Set the Security type first to enter the typical server port number in this field automatically. Or enter a different port number if your email service provider requires it.
Security type	Select the security type required by your email service provider. Select the (Accept all certificates) option for your security type to accept a server certificate from your SMTP server that is self-signed, out of date, or in some other way not accepted by the Email application.

Require sign-in	Check this option to enter a username and password for your SMTP server, if your email service provider requires that you enter them to send email.
Username	Your username on the SMTP server (this may not be the same as your username on the POP3 or IMAP server for incoming mail). Visible only if Require sign-in is checked.
Password	Your password on the SMTP server (this may not be the same as your username on the POP3 or IMAP server for incoming mail). Visible only if Require sign-in is checked.

Messaging

You can use Messaging to exchange text messages (SMS) and multimedia messages (MMS) with your friends on their mobile phones.

In this section


“Opening Messaging” on page 224

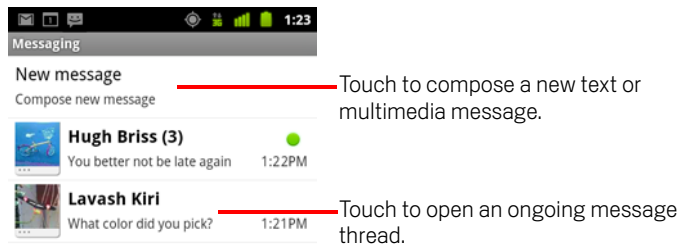
“Exchanging messages” on page 225

“Changing Messaging settings” on page 230

Opening Messaging


Open Messaging

- ▶ Touch the Messaging icon  on the Home screen or in the Launcher. See "Opening and switching applications" on page 40 to learn more about opening and switching applications. The Messaging window opens, where you can create a new message or open an ongoing message thread.



- ▶ Touch **New message** to start a new text or multimedia message.
 - ▶ Touch an existing message thread to open it.
- Creating and responding to messages is described in "Exchanging messages" on page 225.

Delete a message thread from the Messaging window

- 1 Touch & hold the message thread.
 - 2 Touch **Delete thread** in the menu that opens.
- You can also press **Menu**  and touch **Delete threads** to delete all message threads from the window.

Exchanging messages

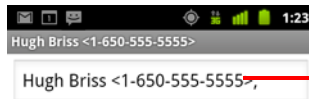
You can send text (SMS) messages of up to 160 characters to another mobile phone. If you keep typing after the limit, your message is delivered as a series of messages.

Multimedia (MMS) messages can contain text and a picture, a recorded voice, an audio file, a video, or a picture slideshow.

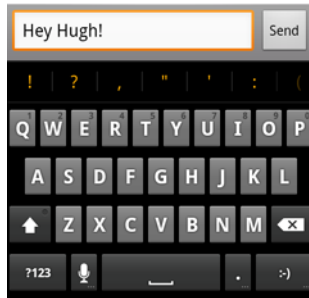
Messaging automatically converts a message into a multimedia message if you send it to an email address instead of a phone number, add a subject, or attach a media file.


Send a text message

- 1** On the Messaging screen, touch **New message**.
- 2** Enter a mobile phone number in the **To** field.
As you enter the phone number, matching contacts appear. You can touch a suggested recipient or continue entering the phone number.
You can also enter the name of a contact with a mobile number.
- 3** Touch the composition text box to start entering your message.




Enter a mobile phone number or the name of a contact with a mobile number.



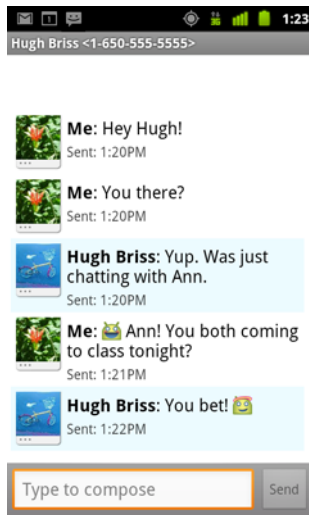
You can enter a smiley icon (an emoticon) on the onscreen keyboard by touching & holding the Smiley key and then touching a smiley. You can also press **Menu**  and touch **Insert smiley** to open a scrolling list of smileys.

As you near the 160-character limit, a counter appears in the top right corner of the text box to tell you how many characters are left. If you go over that limit, a new message is created, which is joined with its predecessors when received.



If you press **Back**  while composing a message, it's saved as a draft in your Messaging window. Touch the message to resume composing it.

4 Touch **Send**.

The Message window opens, with your message after your name. Responses appear in the window. As you view and send additional messages, a message thread is created.



Create and send a multimedia message

- 1** On the Messaging screen, touch **New message**.
- 2** Enter a mobile phone number or email address in the **To** field.
As you type, matching contacts appear. You can touch a suggested contact or continue typing.
You can also enter the name of a contact with a mobile number.
- 3** Touch the composition text box to start entering your message.
- 4** Press **Menu**  and touch **Add subject** to add a message subject.
- 5** Press **Menu**  and touch **Attach** to open a menu where you can touch the kind of media file to attach to the message.
If you touch **Pictures**, you're prompted to touch a picture to attach it.
If you touch **Capture picture**, Camera opens so you can take a picture and attach it.
If you touch **Videos**, you're prompted to touch a video to attach it.
If you touch **Capture video**, Camcorder opens so you can shoot a video and attach it.
If you touch **Audio**, you're prompted to touch a ringtone to attach it.
If you touch **Record audio**, a screen opens where you can record a spoken message and attach it.
If you touch **Slideshow**, a screen opens where you can assemble photos into a slideshow of up to 10 slides to attach to the message.
Use the buttons in the Compose Message screen to preview or remove the media attachment.
- 6** Touch **Send MMS**.

Respond to messages you receive

If you're working in a message window, messages that you receive are displayed in it. Otherwise, you receive a new message notification and a new message icon appears in the Status bar. See "Managing notifications" on page 29.

When you touch the new message notification, the Message window opens, where you can reply to the message.

If Auto-retrieve is unchecked, you must touch **Download** to view the message. See "Changing Messaging settings" on page 230.

If the message contains a media file, touch **Play** to view, watch, or listen to it. Touch & hold the media file to open a menu with an option for saving the message on your SD card or USB storage (depending on your model of phone).

- ▶ Touch & hold a message to open a menu with number of options for working with the message and its sender's information.

Most of these options are described in this section.

Forward a message

- 1 Touch & hold a message in a message window.
- 2 Touch **Forward** in the menu that opens.
- 3 Enter a recipient for the message and edit the content if you want.
- 4 Touch **Send**.

Lock a message

You can lock a message so it won't be deleted if you reach your storage limits (see "Storage settings" on page 230). If you try to delete a thread that contains a locked message, you're asked to confirm that you want to delete it.

- 1 Touch & hold a message in a message window.
- 2 Touch **Lock message** in the menu that opens.

A lock icon appears to the right of the message.


Unlock a message by touching & holding it and then touching **Unlock message**.

View details about a message

- 1 Touch & hold a message in a message window.
- 2 Touch **View message details** in the menu that opens.

Changing Messaging settings

You can change a number of Messaging settings.

- ▶ To change Messaging settings, open the Messaging window, press **Menu** , and touch **Settings**.

Storage settings

Delete old messages Check to delete older messages in a thread when the **Text message limit** or **Multimedia message limit** is reached. Uncheck to keep all messages.

Text message limit Touch to set the number of messages to save per thread of text messages. When the limit is reached, older messages are deleted if **Delete old messages** is checked.

Multimedia message limit Touch to set the number of messages to save per thread of multimedia messages. When the limit is reached, older messages are deleted if **Delete old messages** is checked.

Text message (SMS) settings

Delivery reports Check to receive delivery reports for the messages you send.

Manage SIM card messages Touch to open a window where you can work with messages stored on your SIM card—for example, if you used the SIM card in another kind of phone where you exchanged text messages.

Multimedia message (MMS) settings

Delivery reports Check to receive a report on the messages you send.

Read reports Check to receive reports when your messages are read or deleted.

Auto-retrieve Uncheck to download only the heading of multimedia messages, which you can then touch to open a menu to download the whole message. This is useful for controlling how much data you download, for example, when connected to a slow data network.

Roaming auto-retrieve Uncheck to download only the header of multimedia messages when connected to other carrier's data networks. This is useful for avoiding unexpected charges, if your contract has limits on data roaming.

Notification settings

Notifications Check to receive a notification whenever you receive a new message. See “Managing notifications” on page 29.

Select ringtone Opens a dialog where you can select the ringtone to sound when you receive new message notifications.

Vibrate Opens a dialog where you can set the phone to vibrate whenever you receive a new message notification, only in Silent mode, or never.

Browser

You use Browser to view webpages and to search for information on the web.

In this section

“Opening Browser” on page 234

“Navigating within a webpage” on page 237

“Navigating among webpages” on page 239

“Working with multiple Browser windows” on page 241

“Downloading files” on page 242

“Working with bookmarks” on page 244


“Changing Browser settings” on page 246

Opening Browser

Use Browser to surf the web.

Some websites have two versions of their sites: full-size for computer-based web browsers and another for mobile devices. They may allow you to switch back and forth. Full-size sites are often harder to navigate on a mobile browser than sites designed for use on mobile devices.

Open Browser

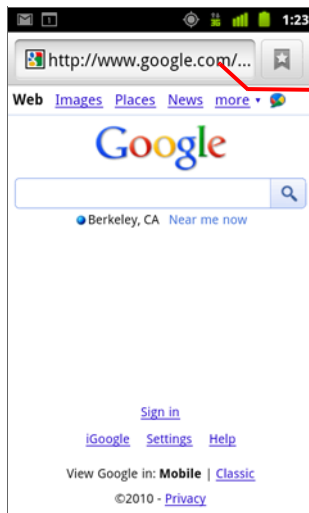
- ▶ Touch the Phone icon  at the bottom of the Home screen or the Phone application icon the Launcher or on the Home screen.

See “Opening and switching applications” on page 40.

Browser also opens when you touch a web link—for example, in an email or text message.

When you open Browser, the last webpage you were viewing is displayed. If you have not used Browser recently, your home page opens.

The web address (URL) of the current page is displayed at the top of the window, unless a mobile site scrolls the URL bar off the top of the screen (if so, just drag the page down to bring the URL bar into view).



The address (URL) of the current page.

Some sites scroll the URL bar off the top of the screen, but you can drag the page down or press **Menu** to see it again.

Open a webpage or search the web

- 1 Touch the URL box at the top of the Browser screen.


If the URL box isn't visible, press **Menu**  or just drag the page down until the URL box comes into view.




- 2 Enter the address (URL) of a webpage. Or enter terms you want to search for. As you enter text, your web search engine makes suggestions of webpages and queries.

You can also touch the Microphone icon to search by voice (see “Using Voice Actions” on page 102).

You can set the web search engine you want to use. See “Changing Browser settings” on page 246. The Microphone icon is only available if you are using the Google search engine. Other search engines may also not provide search suggestions.

- 3 Touch a suggestion or enter an address and touch the arrow icon .

If you touch a suggested page or enter an address and touch the arrow icon , that webpage opens.

If you touch a suggested query, your web search engine opens with the results.

Refresh the current page

- ▶ Press **Menu**  and touch **Refresh**.

The webpage is reopened, updating any content that has changed.

Stop opening a page

If a webpage is taking a long time to open, or if you change your mind, you can stop it from opening.

- ▶ Touch the Cancel icon  to the right of the URL.

OR

- ▶ Press **Menu**  and touch **Stop**.


Get more information about the current page

- ▶ Press **Menu**  and touch **More > Page info**.

A dialog opens with the page's title and full address (URL).

Set your home page

Your home page opens when you open a new Browser window, and when you start Browser after restarting your phone or after not using it for a while.

- 1 Browse to the page you want to set as your home page.
- 2 Press **Menu**  and touch **More > Settings > Set home page**.
- 3 Touch Use current page. Or enter a different page's address (URL).
- 4 Touch **OK**

If you prefer to open new Browser windows without opening a webpage by default, leave this field blank. This can make new Browser windows open more quickly.

Navigating within a webpage

Webpages that are optimized for mobile devices typically open at a size appropriate for your phone. Often, you can't zoom or even scroll their contents.


Webpages that aren't designed specifically for mobile devices typically open in overview mode—the page is zoomed out so you can get the big picture. You can change how pages open, as described in “Changing Browser settings” on page 246.

Scroll a webpage

- ▶ Slide your finger on the screen.

Zoom in or out on a webpage

You may not be able to zoom in or out on webpages designed for mobile devices.


- 1 Slide your finger slightly on the screen to reveal the **Zoom** control .
- 2 Touch the plus or minus side of the Zoom control to zoom in or out.

Quickly zoom into a section of a webpage

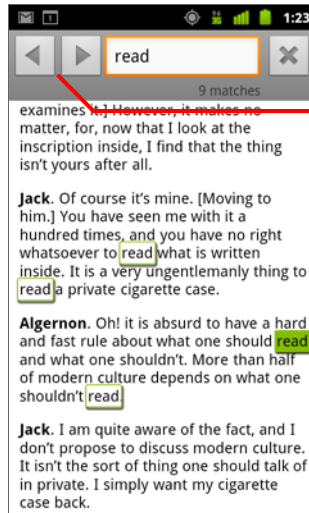
You may not be able to zoom in or out on webpages designed for mobile devices.

- ▶ Double-tap on the section of the webpage you want to view.
The webpage zooms in so that you can read all the text in that section by scrolling up and down.
If you adjust your zoom level in this view, Browser remembers your preference while you stay on that page.
- ▶ To return to the default zoom level, double-tap again.
- ▶ Touch an area with two fingers at once and pinch them together to zoom out; spread them apart to zoom in. Double-tap after zooming in this way, to reflow a column of text to fit the screen (if you have the Auto-fit pages setting checked, as described in “Page content settings” on page 246).

Find text on a webpage

- 1 Press **Menu**  and touch **More > Find on page**.
- 2 Enter the text you're looking for.

As you type, the first word with matching characters is highlighted on the screen, and subsequent matches are boxed.



Touch to jump to the previous or next matching word.

- 3 Touch the left or right arrow to scroll to and highlight the previous or next matching word.



Navigating among webpages

You can open links on a webpage, navigate back and forward, and review your browsing history, just as in any web browser. You can also take advantage of some shortcuts for working with links and other kinds of information.

Open a link



- ▶ Touch a link to open it.
Links that you touch are highlighted in orange until the webpage they refer to opens in the window.

Go back and forward among the pages you've opened


- ▶ Press the **Back**  button.
- OR**
- ▶ Press **Menu**  and touch **Forward**.

View your Browser history

As you browse the web, Browser keeps track of the pages you visit, to help you find your way back later. "Changing Browser settings" on page 246 describes the setting that clears your history.

- 1 Touch the bookmark icon  at the top right of the screen.
- 2 Touch the **History** tab.
You can also press & hold the **Back**  button when viewing a webpage to open the History tab.
The pages you've visited are grouped chronologically. Bookmarked pages have a gold star. Touch a star to add or remove that page from your bookmarks.
- 3 Touch a time period to view the pages you've visited.
- 4 Touch & hold a page in the list to open a menu with options for opening the page, adding it or removing it from you bookmarks, sharing page, removing it from your history, and so on.
- 5 Touch a page in the history to reopen it.

View your most frequently visited pages

- 1 Touch the bookmarks icon  at the top right of the screen.
- 2 Touch the **Most visited** tab.

The pages you've visited most frequently are listed in order. Bookmarked pages have a gold star. Touch a star to add or remove that page from your bookmarks.
- 3 Touch & hold a page in the list to open a menu with options for opening the page, adding it or removing it from your bookmarks, sharing page, removing it from your history, and so on.
- 4 Touch a page to open it.

Follow shortcuts for links, phone numbers, and addresses

Browser recognizes links, as well as some phone numbers, addresses, and similar information, as information that you may want to act on directly.

- ▶ Touch & hold a link to open a menu with shortcuts for opening, bookmarking, saving, and sending the link via email.
- ▶ Touch a phone number to open the Phone application with the number entered. See “Placing and ending calls” on page 78.
- ▶ Touch a street address to open it in Maps.

For more information, see “Maps, Navigation, Places, and Latitude” on page 249.

Working with multiple Browser windows

You can open up to eight Browser windows at once and switch among them.

Open a new Browser window

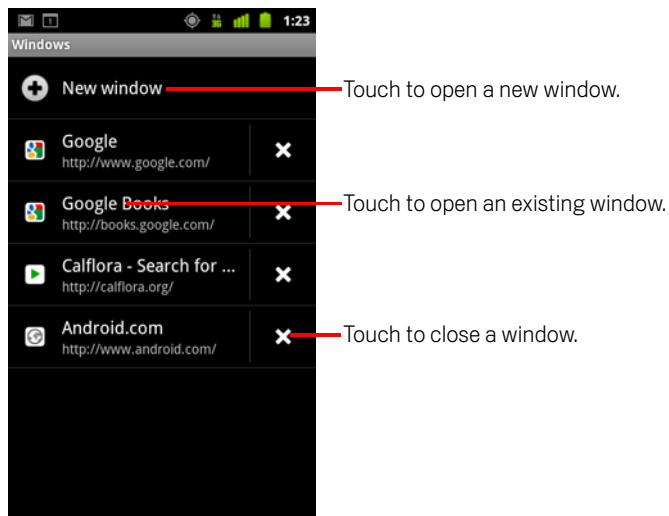
- ▶ Press **Menu** ☰ and touch **New Window**.
- ▶ Press **Menu** ☰ and touch **Windows**. In the screen that opens, touch **New window**.

New windows open with your home page.

Switch Browser windows

- 1 Press **Menu** ☰ and touch **Windows**.

Your open windows are displayed.



- 2 Touch a window to open it.

Close a Browser window

- 1 Press **Menu** ☰ and touch **Windows**.
All open windows are displayed in a scrolling list of thumbnails.
- 2 Touch the Close Box ✕ on the window to close it.



Downloading files

You can download files and even applications from webpages. The files that you download are stored on your phone's USB storage or SD card, depending on your model of phone. Viewing, reopening, and deleting your downloaded files is described in "Managing downloads" on page 54.

Allow installing applications from the web or email

By default, your phone is configured to prevent you from installing applications that you download from the web or receive with an email message.

Warning! Applications downloaded from the web can be from unknown sources. To protect your phone and personal data, download applications only from trusted sources, such as Android Market.

- 1 Press **Home** , then press **Menu**  and touch **Settings > Applications**.
- 2 Check **Unknown sources**.
- 3 Touch **OK** in the dialog, to confirm you want to allow downloading applications from sources other than Market.

Download a file



Different webpages offer different mechanisms for downloading pictures, documents, applications, and other files.

- ▶ Touch & hold an image or a link to a file or to another webpage. In the menu that opens, touch **Save**.


If the file is in a format supported by an application on the phone, it is downloaded to your SD card or USB storage.

Cancel a download

If you change your mind about downloading a file, or start downloading one by accident, you can cancel the download in progress.

- 1 Press **Menu**  and touch **More > Downloads**.
- 2 Touch & hold an item in the list and in the menu that opens, touch **Cancel download**. Or press **Menu**  again and touch **Cancel all downloads**.

View the files you've downloaded

- ▶ Press **Menu**  and touch **More > Downloads**.



The Downloads application opens, with a list of the files you've downloaded in Browser and other applications.


See "Managing downloads" on page 54.

Working with bookmarks

You can bookmark webpages so that you can quickly return to them.

Bookmark a webpage



- 1 Open the webpage to bookmark.
- 2 Touch the bookmark icon  at the top of the screen (or press **Menu**  and touch **Bookmarks**) and at the top of the Bookmarks screen, touch **Add**.

You can also press **Menu**  and touch **More > Add bookmark**.


- 3 Edit the name and the address if necessary and touch **OK**.

The bookmark is added to your list of bookmarks.

Open a bookmark

- 1 Touch the bookmark icon  at the top of the screen.
Or press **Menu**  and touch **Bookmarks**.



A window opens with a list of your bookmarks, sorted by how often you visit them.

Bookmarks are displayed in thumbnail view by default. To see them as a list, press **Menu**  and touch **List view**.



- 2 Touch a bookmark to open it.

The bookmark opens in the current window. If you prefer to open it in a new window, touch & hold the bookmark and touch **Open in new window** in the menu.

Edit a bookmark

- 1 Touch the bookmark icon  at the top of the screen.
Or press **Menu**  and touch **Bookmarks**.
- 2 Touch & hold the bookmark to edit.
- 3 Touch **Edit bookmark** in the menu
- 4 Edit the name or address in the dialog that opens.
- 5 Touch **OK**.

Share a bookmark



- 1 Touch the bookmark icon  at the top of the screen.
Or press **Menu**  and touch **Bookmarks**.
- 2 Touch & hold the bookmark to share.
- 3 Touch **Share link** in the menu.
- 4 Touch the application you want to use to send the bookmark.
The application opens with the bookmark's address entered.

Add a bookmark shortcut to the Home screen

You can add a shortcut to your phone's Home screen that you can touch to open one of your bookmarks in a Browser window.


- 1 Touch & hold an empty spot on your phone's Home screen.
- 2 Touch **Shortcut**.
- 3 Touch **Bookmarks**.
- 4 Touch a bookmark to add it.
The bookmark icon is added to the Home screen.

Delete a bookmark

- 1 Touch the bookmark icon  at the top of the screen.
Or press **Menu**  and touch **Bookmarks**.
- 2 Touch & hold a bookmark to delete it.
- 3 Touch **Delete bookmark** in the menu.
- 4 Touch **OK**.

Changing Browser settings

You can configure a number of Browser settings, including several that you can use to manage your privacy.

- ▶ To open the Browser settings screen, press **Menu**  and touch **More > Settings**.

Page content settings

Text size Opens a dialog where you can increase or decrease the size of the text that Browser uses when displaying webpages.

Default zoom Opens a dialog where you can increase or decrease the magnification level that Browser uses when first opening a webpage.

Open pages in overview Uncheck to open webpages displaying their top-left corners at 100% size. Check to open webpages zoomed out, in an overview.

Text encoding Opens a dialog where you can change the character-encoding standard that Browser uses when displaying text on a webpage.

Block pop-up windows Check to prevent websites from opening windows unless you request it.

Load images Uncheck to omit images when Browser displays a webpage. This speeds webpage display, which can be useful if you have a slow connection, but many websites make little sense with text alone.

Auto-fit pages Check to have Browser optimize the presentation of text and other elements of webpages to fit your phone's screen. Checking this option also causes the browser to reflow a column of text to fit the screen if you double-tap the screen directly after zooming with your fingers. Uncheck to view pages as designed for a computer screen, and to cause double-tapping to simply switch between zoomed-in and default view.

Landscape-only display Check to display pages in landscape (horizontal) orientation on your screen, regardless of how you are holding the phone.

Enable JavaScript Uncheck to prevent JavaScript from running on webpages. Many webpages function correctly only if they can run JavaScript on your phone.

Enable plug-ins Uncheck to disable plug-ins from webpages.

Open in background Check to open new windows in the background when you touch & hold a link and touch **Open in new window**. This is useful when you are working with windows that take a long time to download and display. Press **Menu** , touch **Windows**, and then touch the new window to view it. Uncheck if you prefer new windows that you open in this way to open in place of the current window. See “Switch Browser windows” on page 241.

Set home page Opens a dialog where you can enter the URL of a page that you want to open whenever you open a new Browser window. If you prefer to open new Browser windows more quickly, by not opening any page by default, leave the dialog blank.

Privacy settings

Clear cache The browser stores the text and images of the webpages you visit so that they open more quickly when you revisit them. Touch **Clear cache** to delete these temporary files.

Clear history The browser keeps track of the webpages you visit, so you can quickly find them and open them again later. (See “View your Browser history” on page 239.) Touch **Clear history** to delete this record.

Accept cookies Many webpages store, read, and update files called cookies on your phone, for your convenience. For example, some password-protected sites use cookies so you don't have to sign in each time you visit. Other sites use cookies to remember your preferences. Uncheck to prevent webpages from storing cookies on your phone.

Clear all cookie data Touch to delete all cookies from your phone.

Remember form data Browser remembers what you enter in some form fields on a site and helps you reenter that text the next time you use that form. Uncheck to disable this feature.

Clear form data Touch to delete all the information the Browser remembers about what you've entered in forms.

Enable location Check to permit websites with location-specific content to ask whether you want to share your location, using your phone's location information. To provide a website with your location, you must also have location sharing enabled in the Settings application. See “Privacy settings” on page 364.

Clear location access Opens a dialog where you can clear the permissions you've granted to websites in the past, to access your location. If those websites want permission to access your location again, you must grant it again.

Security settings

Remember passwords Browser can remember your passwords for some webpages that require you to sign in, to make it quicker to sign into those pages on repeat visits. Uncheck to prevent Browser from storing passwords.

Clear passwords Touch to delete any passwords that Browser has stored.

Show security warnings Uncheck to prevent Browser from warning you about websites with common security problems, such as outdated or invalid certificates.

Advanced settings

Set search engine Opens a dialog where you can select the web search engine you want to use when you enter web addresses (URLs) or search terms in the URL box. The search engines available depend on your location. The Microphone icon is available in the URL box only when you are using the Google search engine.

Website settings Opens a screen where you can view advanced settings for particular websites.

Reset to default Touch to delete all Browser data, including your browsing history, cookies, passwords, and bookmarks, and to restore all the Browser settings to their original values.

Maps, Navigation, Places, and Latitude

You use Maps to find your current location; to view real-time traffic conditions, to get detailed directions by foot, public transportation, bicycle, or car; and to navigate by using spoken, turn-by-turn driving instructions through Google Maps Navigation (Beta).

You can find street addresses, landmarks, and places of business, and locate these points-of-interest directly on a street map or satellite image. In some areas, you can view street-level imagery of businesses and neighborhoods. With Google Latitude, you can view your friends' locations on your maps and share your location and other information with them.

The Maps app also contains three features that allow for quick access to Google Places, Navigation (Beta), and Latitude; these appear as app icons in the Launcher.

Maps does not have information about every location.

In this section

“Opening Maps” on page 250

“Viewing My Location and location services” on page 251

“Searching, exploring, and starring places” on page 253

“Using the Places feature in the Launcher” on page 256

“Changing map layers” on page 257

“Getting directions” on page 259

“Navigating with Google Maps Navigation (Beta)” on page 260

“Previewing and changing views of your route” on page 261

“Finding your friends with Google Latitude” on page 264

Opening Maps

Google Maps for Android includes the Maps application as well as the Latitude, Navigation, and Places components, each available within Maps and as a separate shortcut in the Launcher.

Open Maps

- ▶ Touch the Maps  icon in the Launcher or on the Home screen.

For more information about using the features independently from Maps, please see “Finding your friends with Google Latitude” on page 264, “Navigating with Google Maps Navigation (Beta)” on page 260, and “Using the Places feature in the Launcher” on page 256.

Move the map

- ▶ Drag the map with your finger.

Zoom on the map

- ▶ Touch the plus or minus side of the Zoom control

OR

- ▶ Double-tap a location on the map with one finger zoom in that location; tap once with two fingers to zoom out.

OR

- ▶ Touch an area with two fingers at once and spread them apart to zoom in; pinch them together to zoom out.



Not all zoom levels are available for all locations.

Viewing My Location and location services

The My Location feature on Google Maps lets you center the map on your current approximate location using a variety of methods to determine where you're located.

Enable location services


You must have location services turned on to view your location in Maps and to use your location to find local resources.

- 1 Press **Home** , press **Menu** , and touch **Settings > Location & security**.
- 2 Check the My Location options that you want to use.

Check **Use wireless networks** to allow the phone to determine your approximate location by using Wi-Fi and mobile networks.

Check **Use GPS satellites** to allow your phone to determine your location to street-level accuracy. (GPS works best when you have a clear view of the sky.)

View your location

- ▶ Touch the My Location  icon in the search bar.

The map centers on a blue arrow that indicates your location. A blue circle around the arrow indicates that your actual location is within the circle.



Depending on which My Location options you've enabled, you'll see varying degrees of approximation, with GPS satellites providing the best accuracy, followed by wireless networks, then cell networks.

Searching, exploring, and starring places

Google Maps allows you to explore the world around you. You can search for a location or browse the area around you using the Places feature.

Search

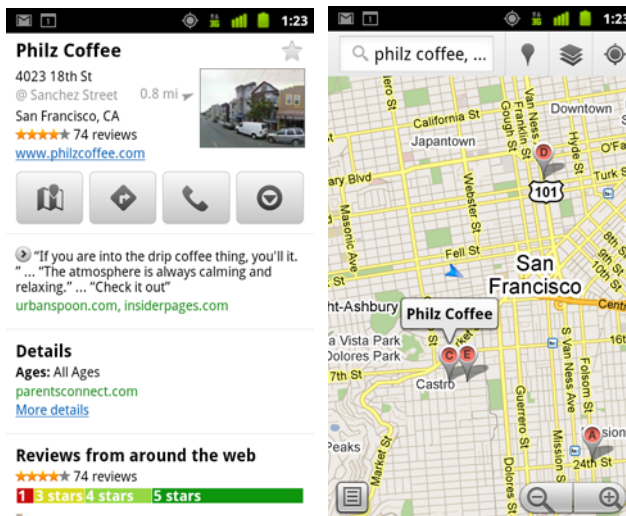
- 1 In the search box, enter the place you're looking for. You can enter an address, a city, or a type of business or establishment—for example, "museums in San Francisco."
- 2 Touch **Go** to search.

As you enter information, suggestions from your previous searches and from popular searches appear in a list below the search box. You can touch a suggestion to search for it.

View search results

After searching, markers with letter labels indicate search results on the map.

- ▶ Touch a marker to open a balloon that contains a label with summary information about a location.
- ▶ Touch the balloon to open a screen with more information, as well as options for obtaining directions and more.



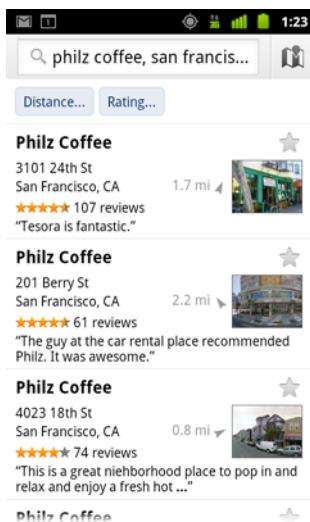
View location details

You can obtain the address and other information about an area on a map. The amount of information depends on the location.

- ▶ Touch and hold a location, star, or labeled feature, or select a search result on the map.

A balloon opens over the location, with the address and a thumbnail from Street View, if available, and the address.

- ▶ Touch a balloon to open a screen with tools for learning more about the location. From this screen, you can get directions or navigation, make a phone call, explore Street View, and read reviews and ratings about a place.



Star and unstar a location


You can star any location or labeled feature on a map to make it easy to spot when you're signed into Google Maps on your phone or on the web.

- 1 Touch and hold a location or labeled feature on a map.
- 2 Touch the balloon that opens.
- 3 Touch the gray star ★ at the top of the screen to star the location (or touch a gold star to unstar that location).

View a list of Starred Places

You can open a list of your starred locations, so you can quickly go to a starred location on the map. The list includes locations you've starred when signed into Maps on the phone or the web.



- 1 While viewing a map, press **Menu**  and touch **More > Starred Places**.

The list of your starred items and their addresses opens. You can press **Menu**  and touch **Refresh** to update the list.

Touch a location in the list to view it on a map.


Clear your search history

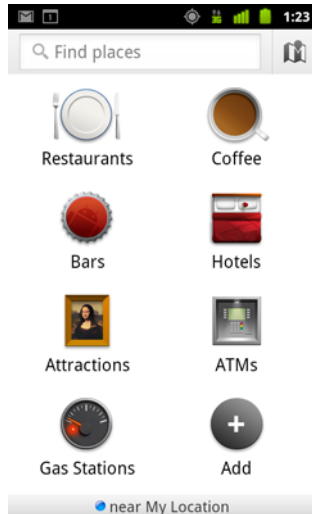
Google Maps stores items you've searched for to make it easy to search for them again later. You can clear your search history in the Settings application.

- 1 Press **Home** , press **Menu** , and touch **Settings > Applications > Manage applications**.
- 2 Touch the **All** tab.
- 3 Touch Maps in the scrolling list.
- 4 Touch **Clear data**.

Using the Places feature in the Launcher


Places uses your current location to find businesses near to your current position.

- 1 Touch the Places icon  in the Launcher or on the Home screen.
See “Opening and switching applications” on page 40.



- 2 Choose from a set of pre-listed place categories (such as Restaurants and ATMs), or create your own category by touching **Add**.

Once you've made your selection, you'll see a list of search results close to you, with their general distance from your current position and relative location indicated by a small arrow.

If you'd like to see your results on a map, touch the Map icon  in the upper-right corner of the screen (this will launch the Google Maps app).

Press **Menu** , and touch **My Maps** to see a list of your My Maps.


Press **Menu** , and touch **Starred Places** to see a list of your Starred Places.

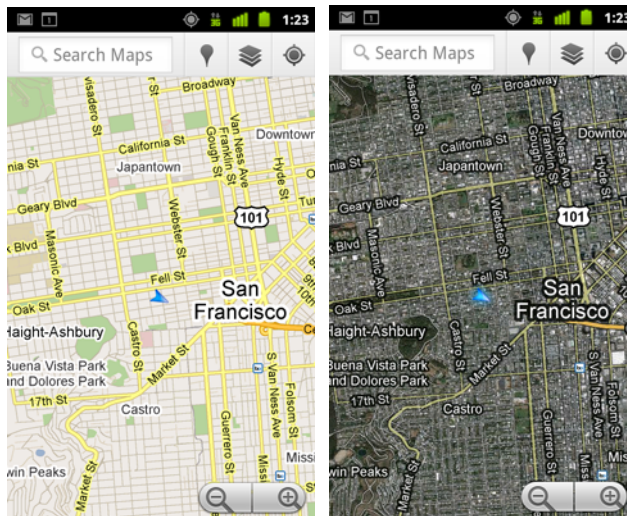
- 3 Touch a result to find out more information, leave a review, or get directions.

Changing map layers

Initially, Google Maps opens with a street map. Enable Layers to view satellite or terrain imagery of a location, check on traffic, access Street View, and much more.

Change map layers

- 1 Touch the Layers icon  in the search bar.
A dialog opens with a list of layers as well as shortcuts to any recent searches.
Touch **More Layers** to access My Maps, Wikipedia information, and more.
Touch **Clear map** to clear the map of all layers.
- 2 Touch the layer you'd like to view. Or touch a checked layer to hide it.
Depending on the layer, its information appears over the base map or changes the map entirely.



Access Street View

Street View offers street-level images of a location, which you can navigate, zoom in to, and so on. Street View isn't available for all areas.

- 1 Touch & hold a location on a map to open a balloon with the address and a Street View thumbnail.
- 2 Touch the balloon.
- 3 In the screen that opens, touch the Street View icon.

Navigate within Street View

Use your finger to pan the map.

- ▶ Drag the Pegman icon in the lower-left corner to a point in the image in order to zoom directly to that point.
- ▶ Double-tap a point in Street View with one finger to zoom in; touch once with two fingers to zoom out
- ▶ Press **Menu** ☰ and touch **Compass mode** to use the phone itself to navigate Street View. Tilt, pan, or turn the phone to change the view. Touch **Compass mode** again to end it.
- ▶ Press **Menu** ☰ and touch **Report image** to open a web-based form for reporting to Google about images with inappropriate content or privacy concerns.
- ▶ Press **Menu** ☰ and touch **Go to map** to leave Street View.

Getting directions

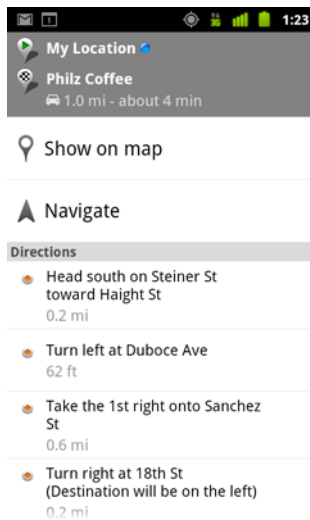
Maps can provide directions for travel by foot, public transportation, bicycle, or car.

You can add a shortcut to a destination to your Home screen, so that you can simply touch the shortcut to get directions to that location from wherever you are.

Get directions

- 1 While viewing a map, press **Menu** ☰ and touch **Directions** 📍 .
- 2 Enter a start and end point and select the mode of transportation (car, public transit, bicycle, or walking).
If you have enabled My Location, this will appear in the Start point field by default.
- 3 Touch the icon for car, public transit, bicycling, or walking directions.
- 4 Touch **Go**.

The directions to your destination appear in a list.



Touch **Show on map** to see your route displayed on a map.

- 5 Press **Menu** ☰ for options relevant to the directions you requested, such as reversing directions, routes that avoid freeways or tolls, or to report a problem with the directions to Google.

Navigating with Google Maps Navigation (Beta)


Google Maps on Android contains a feature called Navigation (Beta), which provides turn-by-turn directions and guides you along your route to your destination.

Use Navigation (Beta) within Maps

You can start Navigation after finding Driving Directions with one touch:


- 1 Get Driving Directions from your location to a destination of your choice.
- 2 Touch **Navigate** to start receiving turn-by-turn guidance.

You can also navigate directly to a location from its details page:

- 1 Go to the details page of a location.
- 2 Touch the Directions icon .
- 3 Touch **Driving Navigation** to start receiving turn-by-turn guidance.

Walking Navigation is also available as a separate guidance mode. To use, select **Walking Navigation** instead of **Driving Navigation**.

Add a navigation shortcut to the Home screen

- 1 From the Home screen, press **Menu**  and touch **Add**.
 - 2 Touch **Shortcuts**, then **Directions & Navigation**.
 - 3 Enter a destination address in the Destination field.
 - 4 Ensure the car is selected in the Travel By section and that **Turn-by-turn navigation** is checked.
 - 5 Name your shortcut, select a shortcut icon, and touch **Save**.
- Your shortcut is added to the Home screen.

Use voice commands

- 1 From the Home screen, touch the microphone icon.
 - 2 When prompted to speak, say "Navigate to" followed by a location.
 - 3 If prompted, touch a destination in the list of suggestions.
- Turn-by-turn guidance will start automatically.

Previewing and changing views of your route



You can view your progress on your route with a number of layers of information. You can zoom in and out of the map and drag the map to view adjacent areas. You can also view your progress in Satellite or Street View and check traffic conditions along your route.

Preview your route

You can preview each turn in your route in Navigation, Satellite, and other views.


- 1 Touch the banner at the top of the screen.
- 2 Touch a left or right arrow to preview the next or previous segment of your route.
When you preview a route, touch the Pegman icon to switch to the street-level view of your route. In street-level view, touch the Pegman icon again to switch to Street View, where you can drag your finger to change your view. Learn more about Street View in “Changing map layers” on page 257.
- 3 When you’re finished previewing, touch the Navigation icon to return to your current location and next turn direction.

Change views of your route

- ▶ Press **Menu**  and touch **Route Info** for a high-level summary view of your route, with options to pick a new route, see traffic information, and so on.
- ▶ Touch the List view icon while on the Route Info screen to view each turn in your route as a scrolling list of written directions.
- ▶ Press **Menu**  and touch **Layers** to switch to views that show traffic or a Satellite View, or to show the locations of parking, restaurants, and other landmarks along your route.
- ▶ Drag on the map to view adjacent areas, or touch the map to see controls for zooming in and out.


Filter your route

While you receive turn-by-turn guidance, you can filter your route to avoid tolls and highways.

- 1 Press **Menu**  and touch **Route Info**.
- 2 Touch the Settings icon.
- 3 Choose your route preferences, then touch **OK** to update your route.

Find route alternatives

You can request an alternate route from Google Maps Navigation (Beta).

- 1 Press **Menu**  and touch **Route Info**.
- 2 Touch the Alternate Route icon.
Alternate routes are displayed on the map (if available).
- 3 Select the alternate route you'd like to use to resume turn-by-turn guidance.


Obtain information about your journey

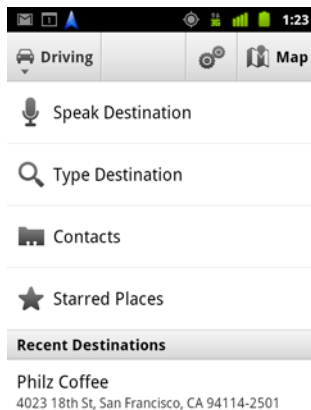
Google Maps Navigation (Beta) provides an estimated length of time your journey will take in the lower-left corner of the screen.

- ▶ Touch the colored dot in the lower-left corner of the screen to quickly view traffic conditions along your route, as well as an estimated time of arrival. Touch the Navigation icon to return to turn-by-turn guidance


Using the Navigation feature in the Launcher

The Navigation feature provides options to customize your route and access to recent routes you've found. You can also enter Navigation mode without having a set destination from this screen.

- ▶ Touch the Navigation icon  in the Launcher or on the Home screen.
See "Opening and switching applications" on page 40.
Select a destination from the list of destination options, or select a recent destination to start turn-by-turn guidance.
Touch the Settings icon to customize your route to avoid highways or tolls.
Touch **Map** to begin tracking your journey, even if you haven't chosen a destination.




Select a destination while en route.

- 1 Press **Menu**  and touch **Set Destination**.
- 2 Select a destination from the list of destination options.

Exit Navigation (Beta)

You can exit Navigation mode when you reach your destination, or at any time.

- ▶ Press **Menu**  and touch **Exit Navigation**.
You return to the previous Maps view.

Finding your friends with Google Latitude

Google Latitude lets you and your friends view each others' locations on maps and share status messages with each other. In Latitude you can also send messages and emails, make phone calls, and get directions to your friends' locations.

Your location is not shared automatically. You must join Latitude and then invite your friends to view your location, or accept invitations from your friends.

Join Latitude

- ▶ While viewing a map, press **Menu**  and touch **Join Latitude**.

The first time you join Latitude, you're prompted to accept or reject the Google privacy policy.

When you've joined Latitude, the menu item changes to **Latitude**.


Open Latitude

After you join Latitude, you can open it to find your friends and view their updates.

- ▶ While viewing a map, press **Menu**  and touch **Latitude**.

Invite friends to share their locations

After you join Latitude, you can start to share your location with your friends. Only friends whom you have explicitly invited or accepted can see your location.

- 1 Open Latitude, press **Menu** , and touch **Add friends**.
- 2 Touch **Select from Contacts** or **Add via email address** in the menu that opens.

If you touched **Select from Contacts**, a scrolling list of all your contacts opens. Check all of the contacts you want to invite.

If you touched **Add via email address**, you can enter one or more email addresses, separated by commas, of the friends you want to invite.

- 3 Touch **Add friends** at the bottom of the screen.

If your friends already use Latitude, they receive an email request and a notification on Latitude. If they have not yet joined Latitude, they receive an email inviting them to sign into Latitude with their Google Account.

Respond to an invitation

When a friend invites you to share your location in Latitude, you can respond in the following ways.

Accept and share back You and your friend can see each other's locations.

Accept, but hide my location You can see your friend's location, but they can't see yours.

Don't accept. No location information is shared between you and your friend.

View your friends' locations

You can view your friends' locations on a map or in a list.

Your friends' locations are shown when you open Maps. Each friend is represented by their picture from Contacts with an arrow that points to their approximate location. If a friend has chosen to share city-level locations, their picture doesn't have an arrow and appears in the middle of the city.

If your friends use Google Talk, their online status (Available, Busy, and so on) is indicated by a circular icon below their pictures. For more information, see "Changing and monitoring online status" on page 197.

- ▶ To see a friend's profile and connect, touch the photo.
Your friend's name appears in a balloon.
- ▶ Touch a friend's balloon to open a screen with details about your friend and many connection options.

When you open Latitude you see a list of your Latitude friends, with a summary of their last known locations, status, and so on. Touch a friend in the list to open a screen with details about the friend and many connection options.

Manage connections with your friends

Touch a friend's contact details balloon in Map view or touch a friend in List view to open the friend's profile. In the Profile screen, you can communicate with your friend and set privacy options.

Show on map Shows the friend's location on the map.

Chat using Google Talk Opens a Google Talk chat window with that friend.

Send email Opens Gmail with a message addressed to the friend.

Directions Gets directions to the friend's location.

Hide from this friend Stop sharing your location with this friend in Latitude, in a list or on a map. To share your location with this friend again, touch **Unhide from this friend**.

Share only city level location Share only the city you are in, not your street-level location. Your friend sees your picture in the middle of the city you are in. To share more precise locations again, touch **Best available location**.

Remove Remove the friend from your list and stop sharing locations altogether.

Control what you share

You have control over how and when your friends can find you in Latitude. Only the last location sent to Latitude is stored with your Google Account. If you turn off Latitude or are hiding, no location is stored.

▶ Open Latitude, touch your own name, and touch **Edit privacy settings**.

You can set the following privacy options.

Detect your location Let Latitude detect and update your location as you move. The update frequency is determined by several factors, such as your phone's battery charge level and how recently your location has changed.

Set your location Set the location shared with others as an address you enter; or, from Contacts, pick a spot on a map, or resume having Latitude share your actual location.

Hide your location Hide your location from all your friends.

Sign out of Latitude Disable Latitude and stop sharing your location or status. You can always join Latitude again.

For more information about privacy, visit <http://www.google.com/support/mobile/bin/topic.py?topic=21223>

Camera

Camera is a combination camera and camcorder that you use to shoot and share pictures and videos.

Pictures and videos are stored on the phone's SD card or USB storage (depending on your phone). You can copy your pictures and videos to a computer, as described in "Connecting to a computer via USB" on page 67.

You can view your pictures and videos on the phone, edit them, share them, and so on with Gallery. See "Gallery" on page 275.

In this section

"Opening Camera and taking pictures or videos" on page 268

"Changing Camera settings" on page 271

Opening Camera and taking pictures or videos


You take pictures and shoot videos with Camera.

Camera's many settings are described in "Changing Camera settings" on page 271.

You can also view your pictures with the Gallery application, as described in "Gallery" on page 275.

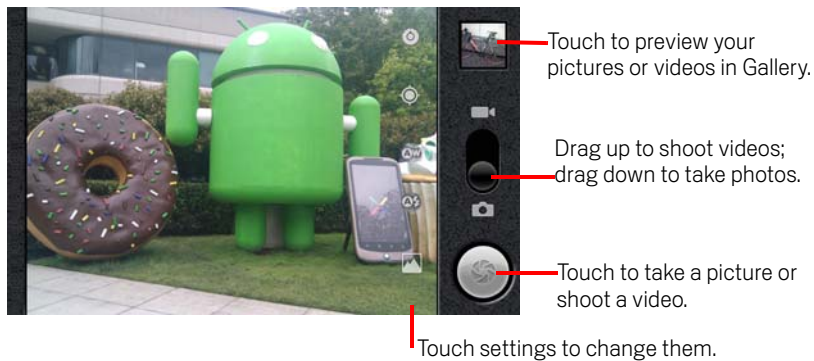
Important Be sure to clean the protective lens cover with a microfiber cloth before taking pictures. A lens cover with smudges from fingers can cause blurry pictures with a "halo" effect.

Open Camera

- ▶ Touch the Camera icon  in the Launcher or on the Home screen.

See "Opening and switching applications" on page 40 to learn more about opening and switching applications.

Camera opens in Landscape mode, ready to take a picture or shoot a video.



Take a picture




- 1 If necessary, drag the control to the Camera position.



- 2 Adjust your exposure, flash, and other settings if you wish. Or leave them on automatic.

See “Changing Camera settings” on page 271. The preview image changes as you change the settings.

- 3 Frame your subject on screen.

Depending on your phone's features, you can set whether you want to use the front or back camera, by touching the front  or back . Select Camera icon or zoom in or out by touching the Zoom icon  and then touching a zoom level.

- 4 Touch the onscreen Shutter icon.



If your phone has a **Trackball** or dedicated **Camera** button, you can press that to take the picture (see your phone's owner's guide for details about its buttons).

The camera brings the image into focus. When the image is in focus, the focus indicators in each corner turn green and the camera takes a picture.

You can also touch & hold the Shutter icon (or your phone's button) to focus first, before taking a picture; then lift your finger to take a focused picture more quickly.

Slide your finger off the Shutter icon and release your finger to cancel taking the picture.



The picture you just took is displayed for a moment, and then is displayed as a thumbnail.

- 5 Touch the thumbnail to view, share, and work with your pictures in Gallery

See “Gallery” on page 275.

Switch between front and back cameras

If your phone has both a front and back camera (see your phone's owner's guide), you can select the camera you want to preview and take pictures with.

- ▶ Touch the onscreen **Select Camera** icon to switch between the back camera  and the front camera . The preview switches to show the scene viewed from the camera you selected. Not all features (such as flash) are available for the front camera.

Take pictures with digital zoom

If your phone's camera supports digital zoom (see your phone's owner's guide), you can zoom in or out of a scene before taking a picture.

- ▶ Touch the onscreen **Zoom** icon **1x** and then touch the amount of zoom you want.

OR

- ▶ Double-tap the screen to zoom all the way in or out.

Pictures that you take with digital zoom may be smaller (in pixels) than the size you set with the **Picture Size** setting. See "Camera mode settings" on page 272.

Shoot a video


- 1 If necessary, drag the control to the **Video** position.



- 2 Select the camera you want to use and adjust the quality, color effect, flash, and other settings if you wish. Or leave them on automatic.

See "Changing Camera settings" on page 271. The preview image changes as you change the settings. Different phones support different video settings.

- 3 Point the lens to frame the scene where you want to start.

- 4 Touch the onscreen **Start Video**  icon.

Camera starts shooting the video. The time remaining to shoot counts down at the left; when less than a minute is left, the countdown turns red.

- 5 Touch the **Stop Video**  icon to stop shooting.

An image from your most recent video is displayed as a thumbnail at the top right.

If your phone has a **Trackball** or dedicated **Camera** button, you can press that to start and stop the video (see your phone's owner's guide for details about its buttons).

- 6 Touch the thumbnail to view, share, and work with your videos in **Gallery**. See "Gallery" on page 275.


Changing Camera settings

Camera has automatic settings that you can use to take quick point-and-shoot photographs and videos. But Camera also offers a number of ways to control your exposures, including controlling the focus, turning the flash on and off, and adjusting the white balance. You can even shoot negatives and other special effects.

When in Video mode, Camera includes settings for controlling picture and video quality and video length, whether to store the location where you take your pictures, and so on.

The settings in Camera depend on the features supported by your phone.

Change Camera settings

- 1** Open the Camera screen for taking pictures or shooting videos and touch the icon for the settings you want to change.
The settings open over the screen.
- 2** Touch the setting category you want to control and then touch a setting.
Camera settings are described in “Camera mode settings” on page 272. Video settings are described in “Video mode settings” on page 273.
- 3** Press **Back**  to close the Settings menus.
Icons on the screen indicate the current settings.
- 4** Take your pictures using the new settings.

Camera mode settings

When in Camera mode, Camera settings are displayed on screen.



Settings Touch to open a scrolling list of settings:

- **Focus mode** Touch to set Camera to use its Autofocus feature (**Auto**), or to more quickly take pictures focused at infinity (**Infinity**) or close-ups (**Macro**). See your phone's owner's guide to learn which focus features it supports.
- **Exposure** Touch to adjust the exposure.
- **Scene mode** Touch to select a preset combination of camera settings designed for special scenes, such as the beach or fireworks displays. See your phone's owner's guide to learn whether it supports scene modes.
- **Picture size** Touch the size (in pixels) of the pictures you take. For phones that support this size, VGA is 640x480 pixels.
- **Picture quality** Touch the quality of the pictures you take (that is, the trade-off you prefer between picture quality and file size that Camera uses when compressing the photo into a file).
- **Color effect** Touch a special effect for your shots, such as monochrome, sepia tone, or negative.
- **Restore to defaults** Touch to restore all of Camera's settings to their default values.

Store location Check to include the location of each picture you take, using the phone's GPS.



Location stored with photo



Location not stored with photo

White balance Touch to select how Camera adjusts colors in different kinds of light, to achieve the most natural-looking colors for your shots. Or allow Camera to adjust the white balance automatically.



Automatic



Incandescent



Daylight



Fluorescent



Cloudy

Flash mode Touch to set whether Camera relies on its light meter to decide whether a flash is necessary, or to turn it on or off for all shots.



Automatic



On



Off

1x Zoom Touch to zoom from 1x to 2x. See “Take pictures with digital zoom” on page 270 for other ways to zoom in and out. See your phone’s owner’s guide to learn whether it supports digital zoom.

Select camera Touch to select the camera you want to use (if your phone has more than one camera).



Back camera



Front camera

Video mode settings

As in Camera mode, Video mode settings are displayed on screen.



Settings Touch to open a scrolling list of settings:

- **Color effect** Touch a special effect for your videos, such as monochrome, sepia tone, or negative.
- **Restore to defaults** Touch to restore all of Camera’s settings to their default values.

White balance Touch to select how Camera adjusts colors in different kinds of light, to achieve the most natural-looking colors for your videos. Or allow Camera to adjust the white balance automatically.



Automatic



Incandescent



Daylight



Fluorescent



Cloudy

Flash mode Touch to illuminate your video by turning on the flash lamp. See your phone’s owner’s guide to learn whether it supports flash for videos.



On



Off

Video quality Touch the video quality and maximum length combination appropriate for viewing on a computer or for sharing with others via Messaging or YouTube:

High (30m)

Low (30m)

MMS (Low, 30s)

YouTube (High, 10m)

Select camera Touch to select the camera you want to use (if your phone has more than one camera).



Back camera



Front camera

Gallery

You use Gallery to view pictures and play videos that you've taken with Camera, downloaded, or copied onto your SD card or USB storage (depending on your model of phone). You can also view pictures in a Picasa web album. You can perform basic editing tasks on pictures and set them as your wallpaper or contact picture. You can also share your pictures and videos with friends, via email or messaging, or by uploading them to the Picasa and YouTube web sites.

In this section

"Opening Gallery and viewing your albums" on page 276

"Working with albums" on page 278


"Working with pictures" on page 282

"Working with videos" on page 286

Opening Gallery and viewing your albums

Open Gallery to view albums of your pictures and videos.


Open Gallery and view your albums

- ▶ Touch the Gallery icon  in the Launcher or on the Home screen.

OR

- ▶ Open Gallery from Camera by touching the thumbnail image at the top right.

OR

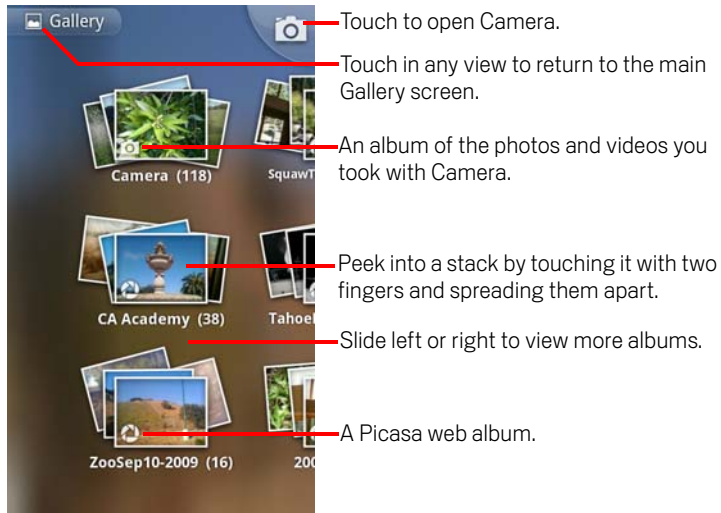
- ▶ Open Gallery from Camera by pressing **Menu**  and touching **Gallery**.


See "Opening and switching applications" on page 40 to learn more about opening and switching applications. See "Camera" on page 267 for more about taking pictures and shooting videos with your phone.

Gallery presents the pictures and videos on your SD card or USB storage (depending on your model of phone), including those you've taken with Camera and those you downloaded from the web or other locations.

If you have a Picasa account associated with a Google Account that you've added to your phone, and if you have configured it to sync with Picasa, Gallery also presents your Picasa web albums. See "Configuring account sync and display options" on page 131.

If you have a great many pictures or videos on your SD card or USB storage or in Picasa web albums, it may take Gallery a few minutes when you open it to discover and organize them.



- ▶ Touch an album to open it and view its contents.
The pictures and videos in the album are displayed in chronological order. See “Working with albums” on page 278.
- ▶ Peek into an album stack by touching it with two fingers and spreading them apart.
- ▶ Touch a picture or video in an album to view it.
See “Working with pictures” on page 282 and “Working with videos” on page 286.
- ▶ Return to the main Gallery screen at any time by touching its icon  at the top left of the screen.

Working with albums

Albums are groups of images and videos in folders on your SD card or USB storage (depending on your model of phone) or in Picasa web albums.

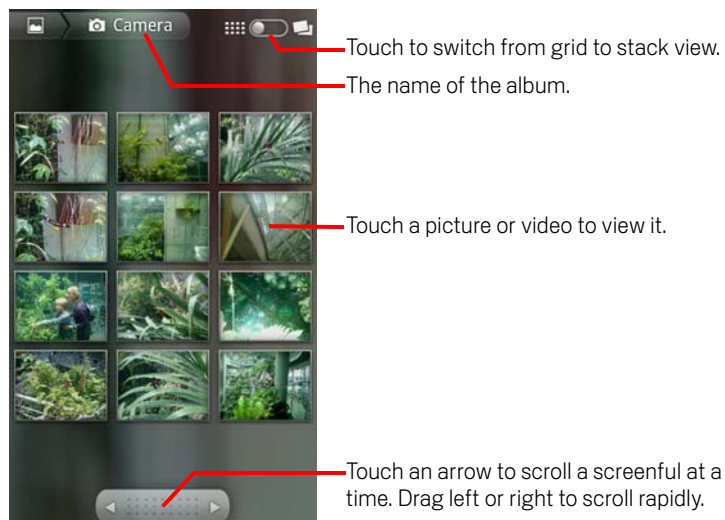
Open an album and view its contents

- ▶ Open Gallery and touch the album whose contents you want to view.

See “Opening Gallery and viewing your albums” on page 276.

Albums open displaying the pictures and videos they contain in a chronologically ordered grid. The name of the album is shown at the top of the screen.

You can touch a picture or video to view it, as described in “Working with pictures” on page 282 and “Working with videos” on page 286.

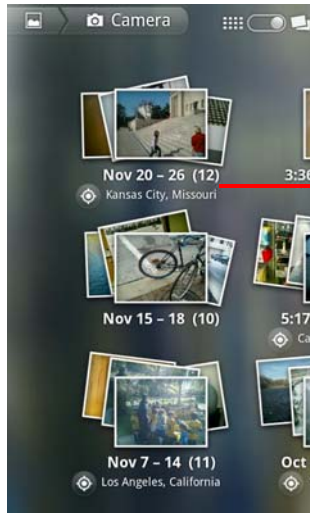


- ▶ Touch an arrow in the scroll tool at the bottom of the screen to scroll images a screenful at a time.
- ▶ Drag the scroll tool to the left or right to scroll more or less quickly. The date of the images in view is displayed, so you can scroll by date.
- ▶ You can also scroll through an album by swiping left or right.


Change how the contents of an album are displayed

You can view the images and videos in your albums in a chronological grid or in stacks, sorted by the date and the location where they were taken. You switch album views with the Album View switch at the top right of the screen.

- ▶ Drag the Album View switch  to the right to view the contents of the album in stacks.



Stacks are sorted by the date and location where you took them.

- ▶ Drag the Album View switch  to the left to view the album contents in a chronological grid again.

Work with batches of pictures or videos

In addition to working with whole albums and with individual pictures, you can select one or more pictures or videos in an album to work on them in batches—for example, to send a few pictures from an album to a friend.

1 Open the album to view the pictures and videos to work with.

2 Press **Menu**  twice.

3 Check or uncheck the items you want to work with.

You can uncheck all items you've checked by touching **Deselect All** at the top right of the window.

4 Use the controls at the bottom of the screen to act on the checked items.

The controls available depend on the mix of items you've selected. For information about sharing and editing pictures and videos, see “Working with pictures” on page 282 and “Working with videos” on page 286.

Share an album

You can share the entire contents of one or more albums.

You can also share individual images or videos from an album, as described in “Working with pictures” on page 282 and “Working with videos” on page 286.

1 Open the main Gallery window.

See “Opening Gallery and viewing your albums” on page 276.

2 Press **Menu**  twice.


3 Check or uncheck the albums you want to share.

4 Touch **Share** at the bottom of the screen. In the menu that opens, touch the application to use to share the selected albums.

The application that you selected opens with the pictures from the selected albums or links, attached to a new message. For information about addressing and sending the message, see the section on that application.


Important If you are sharing an album via Gmail, do not delete the original of an attachment before the message is completely sent (that is, it has the Sent label, not the Outbox label), or the attachment will not be sent.

Get details about an album

- 1 Open the main Gallery window.
See “Opening Gallery and viewing your albums” on page 276.
- 2 Press **Menu**  twice.
- 3 Check or uncheck the albums you want to want details about.
- 4 Touch **More** at the bottom of the screen. In the menu that opens, touch **Details**.

Delete an album

You can delete an album and its contents from your SD card or USB storage.

- 1 Open the main Gallery window.
See “Opening Gallery and viewing your albums” on page 276.
- 2 Press **Menu**  twice.
- 3 Check or uncheck the albums you want to delete.
- 4 Touch **Delete** at the bottom of the screen. In the dialog that opens, touch **Confirm Delete**.

Working with pictures

Use Gallery to view pictures that you've taken with Camera, downloaded, copied onto your SD card or USB storage (depending on your model of phone), or that are stored in Picasa web albums. You can also edit the pictures on your phone and share them with friends.

View and browse pictures

- ▶ Open a Gallery album and touch a picture.

See “Opening Gallery and viewing your albums” on page 276 and “Working with albums” on page 278.



Touch the picture to see the controls.

Drag left or right to see the next or previous picture in the album.

Touch to zoom in or out.

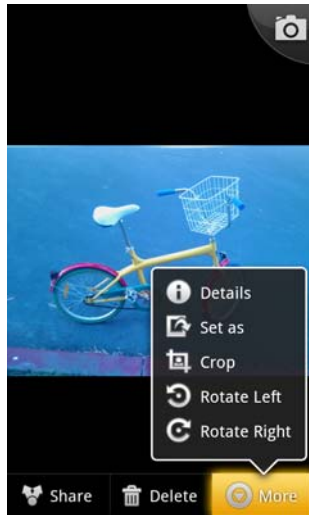
- ▶ Turn the phone to view the picture in upright (portrait) or sideways (landscape) orientation.
The picture is displayed (but not saved) in the new orientation.
- ▶ Touch the picture to view the Zoom and other controls.
- ▶ Touch a Zoom icon, double-tap the screen, or pinch two fingers together or spread them apart to zoom in or out.
- ▶ When the picture is zoomed in, drag the picture to view parts that are not in view.
- ▶ When the picture is zoomed to fit in the window, drag left or right to view the next or previous picture in the album.

Watch a slideshow of your pictures

- ▶ Touch a picture to view the controls and touch **Slideshow**.
- ▶ Touch a picture to end the slideshow.

Rotate a picture

- 1 Touch a picture to view the controls and touch **Menu**.
- 2 Touch **More**.
A menu opens with tools for working with the picture.



- 3 Touch **Rotate left** or **Rotate right**.
The picture is saved with the new orientation.

Use a picture as a contact icon or as Home screen wallpaper

- 1 Touch the picture to view the controls and touch **Menu**.
- 2 Touch **More**.
- 3 Touch **Set as**.

If you touch **Contact icon**, you're prompted to select the contact to associate with the picture and then crop the picture.

If you touch **Wallpaper**, you're prompted to crop the picture.

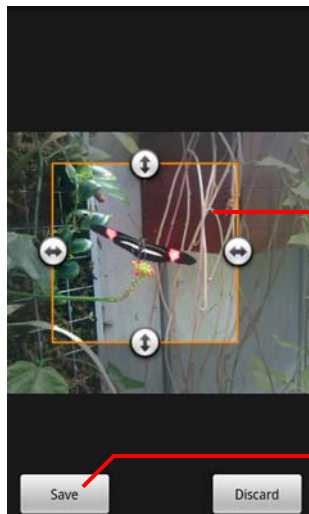
Crop a picture

You can save a zoomed-in portion of a picture by cropping it. You can only crop pictures that are on your SD card or USB storage (not those, for example, in a Picasa web album).

- 1 Touch a picture to view the controls and touch **Menu**.
- 2 Touch **More**.
- 3 Touch **Crop**.

The cropping rectangle appears on top of the picture.

- 4 Use the cropping tool to select the portion of the picture to crop.
Drag from the inside of the cropping tool to move it.
Drag an edge of the cropping tool to resize it to any proportion.
Drag a corner of the cropping tool to resize it with fixed proportions.



Drag from inside the cropping tool to move it.

Drag a corner or edge to resize the cropping tool and zoom in or out.

When you're finished, touch Save.

- 5 Touch **Save** to save a copy of the picture as you cropped it.
The original uncropped version is retained.

Get details about a picture

- 1 Touch the picture to view the controls and touch **Menu**.
- 2 Touch **More**.
- 3 Touch **Details**.

View the location of a picture in Google Maps

If you have configured Camera to save location data with your pictures (see “Changing Camera settings” on page 271), you can view the location where you took the picture in Google Maps.

- 1 Touch a picture to view the controls and touch **Menu**.
- 2 Touch **More**.
- 3 Touch **Show on map**.

Google Maps opens, centered on the location stored in the picture.

Share a picture

You can share a picture by sending it to friends or posting it in a Picasa web album.

You can also share albums of images or videos, as described in “Working with albums” on page 278.

- 1 Touch a picture to view the controls and touch **More**.
- 2 Touch **Share**.
- 3 In the menu that opens, touch the application to use to share the selected picture.

The application you selected opens with the picture (or a link) attached to a new message. For information about addressing and sending the message, see the section about that application.

Important If you are sharing a picture via Gmail, do not delete the original picture before the message is completely sent (that is, it has the Sent label, not the Outbox label), or the attached picture will not be sent.

Delete a picture

You can delete a picture from your SD card or USB storage.

- 1 Touch a picture to view the controls and touch **Menu**.
- 2 Touch **Delete**.
- 3 Touch **OK** in the dialog that opens.

Working with videos

Use Gallery to play videos that you've taken with Camera and to share them.

Play videos

- ▶ Open a Gallery album and touch a video.

The video plays, with the orientation (portrait or landscape) you shot it in.

Opening albums is described in “Opening Gallery and viewing your albums” on page 276.




Touch the video to view the playback controls for pausing, resuming, and skipping backward and forward.

- ▶ Touch the video to view the playback controls.

Share a video


You can share a video by sending it in an email or with a multimedia (MMS) message. MMS messages have size limits, typically 3MB, or approximately 1 minute of high-quality video or 2 minutes of low-quality video. See “Changing Camera settings” on page 271. You can also share a video by uploading it to the YouTube web site.

- 1 While viewing an album, press **Menu**  twice.
- 2 Check the videos or pictures to share.
- 3 Touch **Share**.
- 4 In the menu that opens, touch the application to use to share the selected videos.

The application you selected opens with the video attached to a new message. If you selected YouTube, you're prompted to enter details about the video to upload. For more information, see the section on that application.

Important If you are sharing one or more videos via Gmail, do not delete the originals before the message is completely sent (that is, it has the Sent label, not the Outbox label), or the attached videos will not be sent.

Delete a video

- 1 While viewing an album, press **Menu**  twice.
- 2 Check the videos or pictures to delete.
- 3 Touch **Delete**.
- 4 Touch **Confirm Delete**.

YouTube

YouTube is Google's online video streaming service for viewing, discovering, and sharing videos.

In this section

"Opening YouTube and watching videos" on page 290

"Discovering videos" on page 293

"Rating videos" on page 295

"Uploading and sharing videos" on page 296

"Working with playlists" on page 298


"Working with channels" on page 299

"Changing YouTube settings" on page 300


Opening YouTube and watching videos

You can browse, search for, view, upload, and rank YouTube videos on your phone with the YouTube application.


Open YouTube and the YouTube home screen


- ▶ Touch the YouTube icon  in the Launcher or on the Android Home screen. See “Opening and switching applications” on page 40.

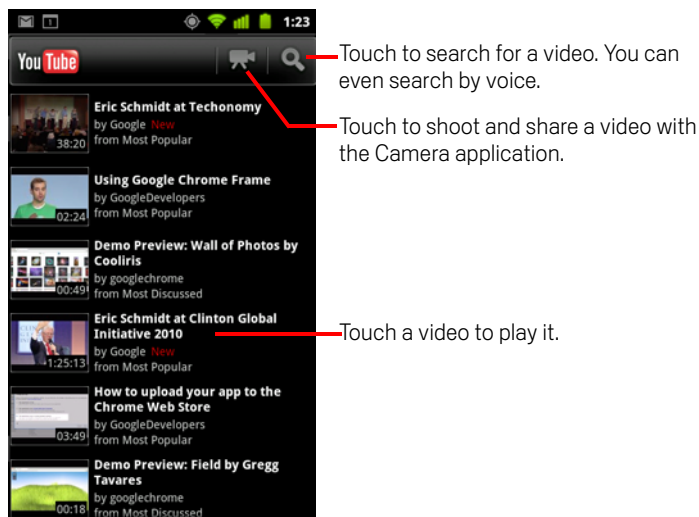
The YouTube home screen opens. If you’re signed in (see “Sign into YouTube” on page 292), it displays recent videos from the channels you subscribe to and other recommended videos. Otherwise, it displays popular videos from across YouTube.

- ▶ Press **Menu**  and touch **Home** on any YouTube screen to return to the YouTube home screen.

You can touch a video in the YouTube home screen to watch it: see “Watch videos” on page 291.

You can touch the movie camera icon  to open the Camera application, to shoot and share a video: see “Shoot a new video and upload it to YouTube” on page 296.

You can touch the search icon  to search for videos: see “Discovering videos” on page 293.



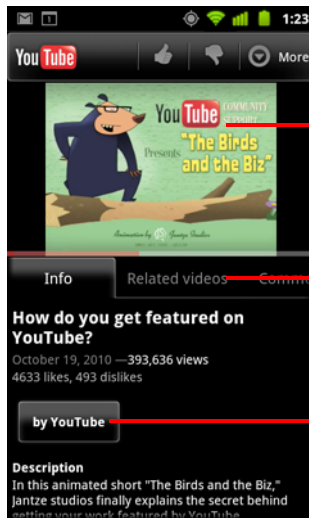
Watch videos

- ▶ On a YouTube screen, touch a video to start playing it.

The video starts playing in its watch screen.

The watch screen is where you interact with videos in many ways, in addition to watching them. See “Rating videos” on page 295, “Uploading and sharing videos” on page 296, and the other sections in this chapter.

- ▶ On the watch screen, touch the video to pause or continue playing.



Turn the phone on its side to switch to full-screen view.

Touch the video to pause it; touch again to resume play.

Touch a tab to learn more about the video (swipe to see more tabs).

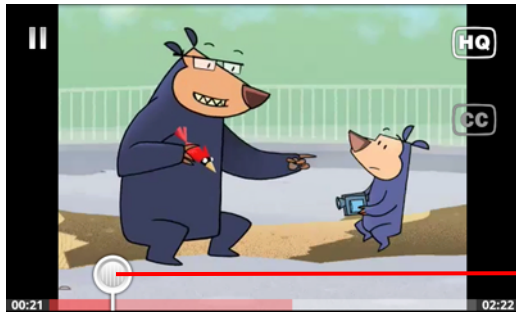
Touch the video's owner to open their channel

- ▶ Touch a tab to learn more about the video.

In addition to the scrolling information in the Info tab, the watch screen includes Related videos and Comments tabs. You can swipe left or right to bring hidden tabs into view. See “Discovering videos” on page 293.


- ▶ Turn your phone on its side to watch the video in full-screen view.

You can also double-tap the video to switch between full-screen view and the video's watch screen.



Touch the video to view the controls. Touch it again to pause or resume play.

Drag the scrubber to jump to a different part of the video

- ▶ In full-screen view, touch the video to view the controls; touch it again to pause or resume play.
- ▶ When the controls are showing, you can drag the scrubber to jump to a different part of the video.
- ▶ Touch the **HQ** icon to change whether you're viewing a high-quality or regular-quality version of the video.
You can set whether videos start in high or normal quality when you're connected to mobile data networks. See "Changing YouTube settings" on page 300.
- ▶ Touch the **CC** icon to show closed captions in the language you want, or to hide closed caption.
Closed captions are available for videos only if the video owner provided them.
You can change the caption size; see "Changing YouTube settings" on page 300.
- ▶ Press **Back**  to stop playback and return to the videos list.

Sign into YouTube

You can discover and watch YouTube videos without a YouTube account, but if you want to comment on videos, add them to your Favorites, upload videos, or take advantage of many other YouTube features, you must sign into your YouTube account.

- ▶ Press **Menu**  and touch **My Channel** to sign into YouTube.

If one of the Google Accounts on your phone is already a YouTube account, you're prompted to use it to sign in. Otherwise, you can add a YouTube account.

If you're not already signed in the first time you use a YouTube feature that requires an account, you're prompted to sign in.

You can sign out of YouTube (for example, so you can sign in using another account) by touching **Sign out** on My Channel (see "Working with channels" on page 299).





For more information about YouTube accounts, visit YouTube on the web.

Discovering videos

You can discover YouTube videos in many different ways, including browsing by category, searching, and by exploring information about a video on its watch screen.

Viewing the channels of people who have uploaded a video you like is also a great way to discover videos: see “Working with channels” on page 299.


Search for videos

- 1 Press the **Search** button  when YouTube is running.
You can also press the search icon  on the YouTube home screen or press **Menu**  and touch **Search**.
- 2 Enter the text you want to search for, or touch the Microphone icon to search by voice.
- 3 Touch a suggestion below the search box or touch the magnifying glass icon  to search for what you've entered.
- 4 Scroll through the search results and touch a video to watch it.

Initially, your search results include every matching video ever uploaded. But you can limit the results to a more recent period of time by touching **All time** (or the current time filter setting) at the top of the search results screen.

You can set whether you want to filter out potentially offensive videos with SafeSearch. You can also clear your search history, so it is not included in suggestions when you search YouTube. See “Changing YouTube settings” on page 300.

Browse for videos by category

- 1 Press **Menu**  and touch **Browse**.
- 2 Touch a category in the scrolling list of YouTube categories.
The category screen opens for the category you touched, with a list of videos you can touch to watch.
You can limit the videos on the category screen to a more or less recent period of time, by touching the current time filter setting at the top of the category screen.
Touch a tab to view the most viewed, top rated, most discussed, or most favorited videos in that category.

Explore related videos

Each video's watch screen includes information about that video that you can use to discover related videos.

- ▶ Touch the **Related videos** tab.

OR

- ▶ Touch the name of the uploader in the Info tab, to open their channel and view a list of other videos they've uploaded.

OR



- ▶ Use one or more of the tags in the Info tab in a YouTube search.
See "Search for videos" on page 293.

Rating videos

You can rate videos by giving them a thumbs up or down. You can also add a video to your favorites and even report videos you think are inappropriate.

Use the web version of YouTube to share your written comments about videos.

Give a video the thumbs-up or thumbs-down

- ▶ On a video's watch screen, touch the thumbs-up icon  or thumbs-down icon .

Your vote is added to the tally of viewers who liked or disliked the video, on the video's watch screen.

Add or remove a video to your Favorites

- ▶ On a video's watch screen, touch **More** and touch **Favorite** or **Unfavorite**.

The video is added (or removed) from your favorites.

Your favorites are available on your My Channel screen. See “Working with channels” on page 299.

Flag a video as inappropriate


- ▶ On a video's watch screen, touch **More** and touch **Flag**.

Browser opens and after you sign into YouTube on the web, you're asked to pick a reason why you think the video is inappropriate, before passing your comments onto Google.


Uploading and sharing videos

You can upload your own videos on YouTube, where they appear on your My Channel page. You can also share videos, by sending the web address (URL).

Shoot a new video and upload it to YouTube



- 1** Touch the movie camera icon  at the top of the YouTube home screen.
Camera opens in video mode.
- 2** Shoot a video with Camera.
See “Shoot a video” on page 270.
When you’re done, the Upload video screen opens.
- 3** Enter a title for the video and more details if you want, such as whether you want to make the vide public or private.
- 4** Touch **Upload**.
The video is added to your channel.

Upload an existing video to YouTube

- 1** Press **Menu**  and touch **Upload**.
Gallery opens, with albums of your videos.
For more information about Gallery, including opening albums, selecting videos, and even starting an upload to YouTube, see “Gallery” on page 275.
- 2** Open an album and touch the video you want to upload.
- 3** Enter a title for the video and more details if you want, such as whether you want to make the vide public or private.
- 4** Touch **Upload**.
The video is added to your channel.

Delete a video you uploaded

You can delete a video you uploaded to your channel on YouTube, whether you originally uploaded it from your phone or with a web browser.

- 1 Press **Menu**  and touch **My channel**.
- 2 Touch the **Uploads** tab.
You may need to drag the tab into view.
- 3 Touch & hold the icon  next to the video you want to delete.
- 4 Touch **Delete**.

Share a video

- 1 When viewing a video's watch screen, touch **More** and then touch **Share**.
- 2 Touch the application you want to use to share the video.
See the documentation for the application you picked to learn how to finish sending information about the video to those you want to share it with.

Copy a video's web address

You can copy a video's web address (URL) on YouTube, to paste into a message or other document.

- ▶ When viewing a video's watch screen, touch **More** and then touch **Copy URL**.
You can now paste the URL into a text field in any application (see "Editing text" on page 37).

Working with playlists

A playlist is a collection of videos you can watch on YouTube. Your playlists are available on your My Channel screen (see “Working with channels” on page 299). You can add videos to your playlist. You can also watch other people’s playlists.


Visit YouTube on the web to learn how to create and edit playlists.

Add a video to a playlist

You create, edit, and delete playlists in YouTube on the web. But you can add videos to your existing playlists using YouTube on your phone.

- 1 On a video’s watch screen, touch **More** and touch **Save to**.
- 2 In the dialog that opens, touch the name of the playlist you want to add the video to.

View your own playlists

- 1 Press **Menu**  and touch **My Channel**.
- 2 Touch the **Playlists** tab.
You may need to drag the Playlist tab into view.
- 3 Touch a playlist in the scrolling list to view its videos.
You can touch one of the videos to view it. Or touch **Play all** at the top of the screen to play all the videos in the playlist without interruption.
When viewing all the videos in a playlist, you can swipe left or right to switch videos.

View other people’s playlists


- 1 Open another person’s channel.
See “Working with channels” on page 299.
- 2 Touch the **Playlists** tab.
You may need to drag the Playlist tab into view.
- 3 Touch a playlist in the scrolling list to view its videos.
You can touch one of the videos to view it. Or touch **Play all** at the top of the screen to play all the videos in the playlist without interruption.
When viewing all the videos in a playlist, you can swipe left or right to switch videos.

Working with channels

A channel is a collection of a person's videos, playlists, and other YouTube information. You can create your own channel and invite other people to subscribe to all or parts of it, so they can enjoy your contributions to YouTube. You can also view and subscribe to other people's channels.

On the phone, My Channel is where you find your uploads, playlists, favorites, and subscriptions. Visit YouTube on the web to learn more about configuring your channel.

Open My Channel

- ▶ Press **Menu**  and touch **My channel**.

The My Channel screen opens, with information about your channel and tabs you can touch to view a list of the videos you've uploaded, your favorite videos, your playlists, and a list of the channels you're subscribed to.

Open another person's channel

- ▶ On the watch screen of a video uploaded by another person, touch the person's name in the Info tab.

OR

- ▶ Touch a channel in the list of channels you're subscribed to, in the Subscriptions tab in My Channel.

The channel screen opens, with information about the channel.

You can touch a tab on the channel screen to view the channel's uploads, favorites, activities, or playlists.

Subscribe to a channel

- 1 Open another user's channel.
See "Open another person's channel" on page 299.
- 2 Touch **Subscribe** at the top of the channel screen.
- 3 Touch **All activity** or **Video uploads only** in the dialog.

The option you touch affects what tab opens when you open the channel screen.

You can view the list of channels you're subscribed to (and touch one to open it) in the Subscriptions tab in My Channel.

If you're already subscribed to a channel, **Subscribe** changes to **Unsubscribe** at the top of that channel's screen.

Changing YouTube settings

You can change the following settings for YouTube on your phone.

▶ To change YouTube settings, press **Menu** , and touch **Settings**.

High quality video on mobile Check if you prefer to watch videos in high-quality by default when connected to mobile networks, to reduce startup time and data use. This setting has no effect if you are connected to a Wi-Fi network, where videos always open in high-quality.

Caption font size Opens a dialog where you can set the size of text you prefer when viewing video captions with your videos.

Clear search history Touch to remove record of the results of video searches you've chosen in the past, so they aren't presented as suggestions in future searches for YouTube videos.

SafeSearch filtering Opens a dialog where you can set whether you want Google SafeSearch filtering to block some results when you search for videos: Block no search results (off), only explicit or offensive videos (moderate), or both explicit or offensive text and videos (strict).

Help Opens the YouTube Help Center in Browser.

Feedback Opens a YouTube feedback form in Browser.

Terms of service and mobile privacy policies Displays the YouTube and Google terms of service and privacy policies.

Application version The version of the YouTube application installed on your phone.

Music

You use Music to organize and listen to music and other audio files that you transfer to your SD card or USB storage (depending on your model of phone) from your computer.

In this section

“Transferring music files to your phone” on page 302

“Opening Music and working with your library” on page 303

“Playing music” on page 305

“Working with playlists” on page 308

Transferring music files to your phone

Music plays audio files that are stored on your phone's SD card or USB storage (depending on your model of phone), so before you open Music, you must copy audio files from your computer.

Music supports a wide variety of audio file formats, so it can play music that you purchase from online stores, music that you copy from your CD collection, and so on.

Music supports audio files in numerous formats, including MP3, M4A (iTunes application AAC, DRM-free), AMR, MIDI, and OGG Vorbis.

Copy music files from your computer

- 1 Connect the phone to your computer with a USB cable and mount the SD card or USB storage on your computer.

See "Connecting to a computer via USB" on page 67.

- 2 To organize your audio files, you can use the computer to create a music folder at the top level of the SD card or USB storage.

- 3 Use the computer to copy music and other audio files into the folder that you created.

You can use subfolders to organize your music files. Or you can simply copy the audio files to the top level of the SD card or USB storage.

If the music files have accompanying artwork in JPEG format, rename the art file `albumart.jpg` and include it in the same folder as the music files.

- 4 If you have created any playlists, create a subfolder for them in your music folder and copy the playlists into it.


- 5 Unmount the SD card or USB storage from the computer and disconnect the phone.

Warning! To prevent damage to your files, follow your computer's instructions for unmounting USB devices and the instructions in "Connecting to a computer via USB" on page 67.

Opening Music and working with your library

After you've copied some music onto your SD card or USB storage, as described in "Transferring music files to your phone" on page 302, or downloaded music from another source, you can open Music and see your library of music files, sorted in one of four ways.

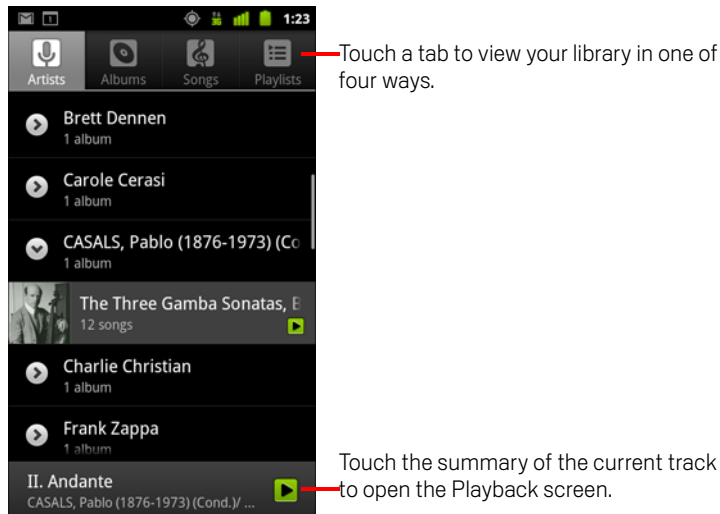
Open Music and view your music library


- ▶ Touch the Music icon  in the Launcher or on the Home screen.

See "Opening and switching applications" on page 40 to learn more about opening and switching applications.


When you copy music to your SD card or USB storage, Music searches it for music files and builds a catalog of your music, based on information about each file that is stored in the file itself. This can take from a few seconds to several minutes, depending on the number of files.

When the catalog is complete, the Music library screen opens, with tabs that you can touch to view your music library organized by Artists, Albums, Songs, or Playlists.



You can return to the main Library screen from most other screens in the Music application by pressing **Menu**  and touching **Library**.

Search for music in your library

- 1 Open the main Library screen and press the **Search** button .
- 2 Start typing the name of the artist, album, or track you're looking for. Matching songs are displayed in the list below the search box.
- 3 Touch a matching song to play it. Or touch a matching album or artist to view a list of associated songs.

Delete a song from the SD card or USB storage

- ▶ Touch & hold a song in a library list. In the menu that opens, touch **Delete**.

OR

- ▶ On the Playback screen, press **Menu**  and touch **Delete**.

When your phone is connected to a computer, you can also delete music files, as described in "Transferring music files to your phone" on page 302.

Playing music

You can listen to music by using the phone's built-in speaker, through a wired headset, or through a wireless Bluetooth stereo headset that supports the A2DP profile. See “Connecting to Bluetooth devices” on page 64 and refer to your phone's owner's guide for more information about the headset that comes with your phone.

Play music

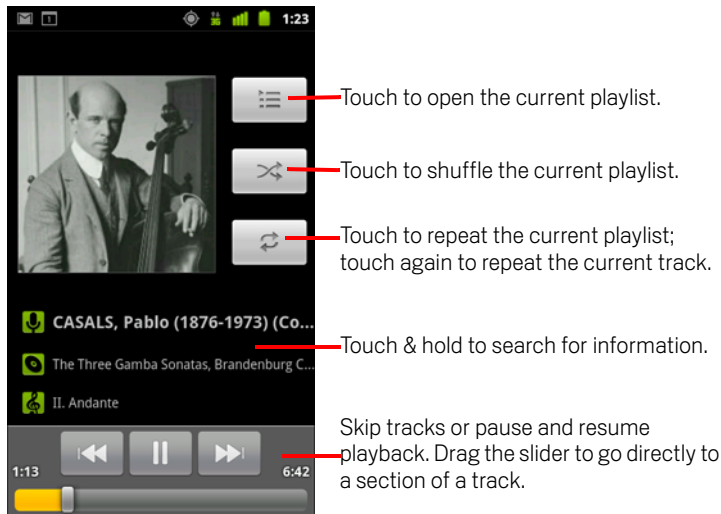
- ▶ Touch a song in your library to listen to it.

OR

- ▶ While viewing a list of tracks in an album, press **Menu** ☰ and touch **Play all**.

The Playback screen opens and the song you touched or the first song in the album or other playlist starts to play. The tracks in the current playlist play in order until you reach the end of the playlist (unless you choose a repeat option).

Otherwise, playback stops only if you stop it, even when you switch applications or receive a phone call.










You can return to the Playback screen from most other screens in the Music application by pressing **Menu** ☰ and touching **Playback**.

You can return to the Playback screen from any other application by opening the Notifications panel and touching the ongoing music notification. See “Managing notifications” on page 29.

Control playback

The Playback screen contains several icons that you can touch to control the playback of songs, albums, and playlists:

	Touch to pause playback.
	Touch to resume playback.
	Touch to skip to the next track in the album, playlist, or shuffle.
	Touch to skip to the previous track in the album, playlist, or shuffle.
	Touch to open the current playlist.
	Touch to play the current playlist in shuffle mode (tracks are played in random order).
	Touch to toggle repeat mode: Don't repeat, Repeat the playlist, or Repeat the current track.



Control playback volume

In addition to the techniques for setting media volume described in “Sound settings” on page 356, you can control the volume of music in the Music application.

- ▶ Press the phone's **Volume Up/Down** button.
 - A panel opens to show the current media volume; the indicator moves as you adjust the volume.
 - Some headsets include their own volume controls or ways to pause and resume playback or to switch tracks.


Play your tracks in a party shuffle

When you turn on Party Shuffle, Music plays tracks in random order, until you turn Party Shuffle off.

- ▶ In the Playback or a Library screen, press **Menu**  and touch **Party shuffle**.
 - Music creates a current playlist of a dozen tracks selected randomly and starts playing them. When it finishes playing the first dozen tracks, it adds another dozen and keeps playing.
- ▶ View the current playlist that Party Shuffle is playing by touching the Playlist icon  on the Playback screen.
 - For more information, see “Working with playlists” on page 308.

- ▶ Add a track to the end of the Party Shuffle playlist by touching & holding the name of a track in your library. In the menu that opens, touch **Add to playlist** and then **Current playlist**.

The track is added to the end of the Party Shuffle playlist.

- ▶ Stop Party Shuffle by pressing **Menu**  and touching **Party shuffle off**.

Use a song as a ringtone

You can use a song as your phone ringtone, in place of one of the ringtones that come with the phone.

- ▶ Touch & hold a song in a library list. In the menu that opens, touch **Use as phone ringtone**.

OR

- ▶ On the Playback screen, press **Menu**  and touch **Use as ringtone**.

For details about using the Settings application to view and set the phone's ringtone, see "Sound settings" on page 356.


Working with playlists

You can create playlists to organize your music files into sets of songs, which you can play in the order you set or in a shuffle.

Create a playlist

- 1 When viewing a list of songs in the library, touch & hold the first song you want to add to the new playlist.
- 2 Touch **Add to playlist**.
- 3 Touch **New**.
- 4 Enter a name and touch **Save**.


The new playlist is added to the Playlist library.

You can also add the song that is playing in the Playback screen as the first song in a playlist by pressing **Menu**  and touching **Add to playlist**. Or touch **Save as playlist** to save all the songs in an album that you're playing as a playlist.

Add a song to a playlist

- 1 While viewing a list of tracks in the Library, touch & hold a song to add it to a playlist.
- 2 Touch **Add to playlist**.
- 3 Touch the name of the playlist to add the song to.


The song is added to the playlist.

You can also add the song that is playing in the Playback screen to a playlist by pressing **Menu**  and touching **Add to playlist**.

Rearrange songs in a playlist

- 1 Open a playlist by touching it in the Playlist library.
You can also open the currently playing playlist by touching the Playlist icon in the Playback window.
- 2 Drag a song up or down to change its order in the playlist.

Remove a song from a playlist

- 1 Open a playlist.
- 2 Touch & hold a song and then touch **Remove from playlist**. Or press **Menu**  and touch **Clear playlist** to remove all the songs from the playlist.

The song isn't deleted from your phone or other playlists; it's removed only from the playlist you're working with.

Rename or delete a playlist

- 1 Open the Playlist library.
- 2 Touch & hold a playlist. In the menu that opens, touch **Rename** or **Delete**.

You can't delete or rename the Recently Added playlist.

No songs are harmed by deleting a playlist.

Create playlists on your computer

You can create playlists on your computer to use in Music. Music can work with playlists in the M3U, WPL, and PLS file formats. You copy playlists onto your SD card or USB storage in the same way as you copy music, as described in "Transferring music files to your phone" on page 302. The best practice is to create a subfolder within your music folder for playlists.

If you don't have a dedicated application on your computer that can create playlists, you can create a playlist in a text editor, using the following guidelines:

- Enter each music file name to include in the playlist on its own line.
- Use music file names as displayed on your computer. Music ignores all but the track names when displaying the playlist.
- Save the file with the .m3u extension

News & Weather

You can check the weather and top news stories with News & Weather, a widget for your desktop that is backed by a full-featured application.

In this section

“Checking the news and weather” on page 312


“Changing News & Weather settings” on page 315

Checking the news and weather

News & Weather offers weather forecasts and news stories about common topics. You can also customize the news topics that are displayed.

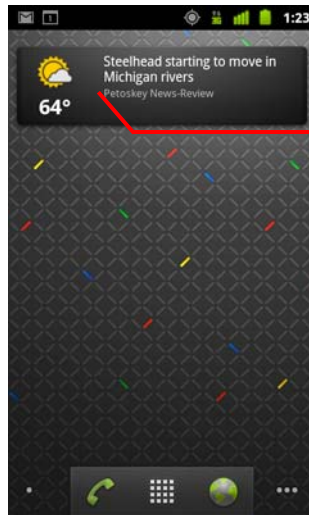
This information is summarized in the News & Weather widget, which you can place on your Home screen, and is presented in greater detail in the News & Weather application.

Open News & Weather

- ▶ Touch the news or weather section of the News & Weather widget on your Home screen, or touch its icon  in the Launcher.

For information about working with widgets, see “Customizing the Home screen” on page 43. You can add multiple News & Weather widgets to your home screen, each configured to show just news, just weather, or both.

See “Opening and switching applications” on page 40 to learn more about opening and switching applications.

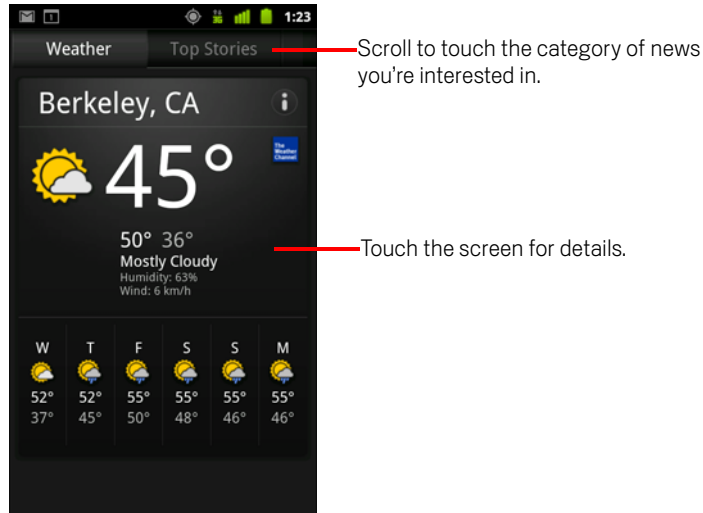


Touch the weather section of the News & Weather widget to open the News & Weather application with a summary of the weather. Touch the news section of the widget to open a list of the top stories in the news.

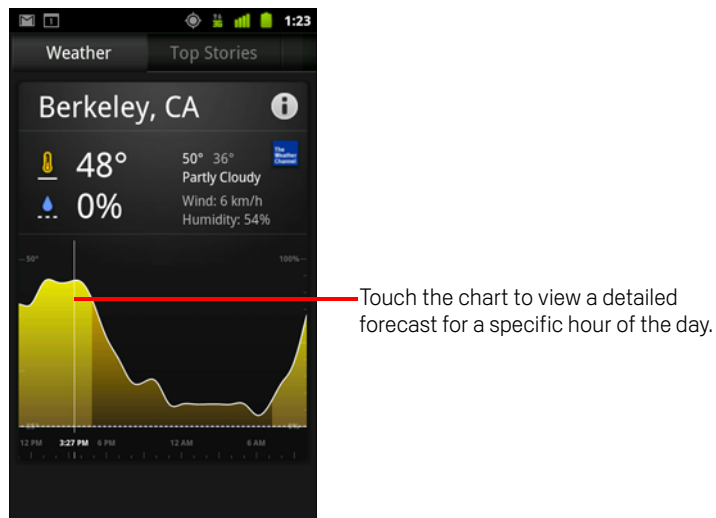
Get details about the news and weather

When you open News & Weather, you view a summary of the weather or headlines.

- ▶ Touch a tab in the scrolling list of tabs at the top of the screen to view the weather or top stories by category. Or just swipe left or right across the screen to switch news categories.

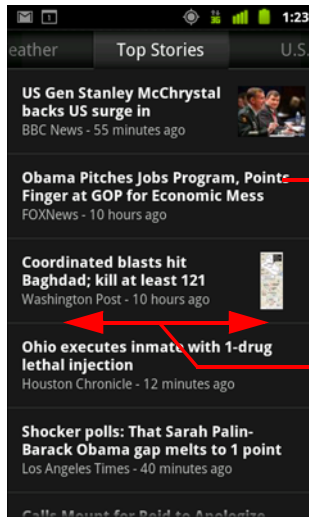


- ▶ Touch the weather summary for a more detailed forecast.



Touch a time on the weather graph for a detailed, hour-by-hour forecast.

- ▶ Touch a headline to read the full story.




- ▶ Touch a headline to read the full story.
- ▶ Swipe left or right to change news categories.
- ▶ Swipe left or right to change news categories.
- ▶ While viewing the weather or news headlines, press **Menu** ☰ and touch **Refresh** to get the latest information.

Changing News & Weather settings

You can configure a number of settings for News & Weather.

The location and related settings also affect the display of the News & Weather widget and the Clock application.

- ▶ To open the News & Weather settings screen, press Press **Menu**  and touch **Settings**.

News & Weather settings

Weather settings See “Weather settings” on page 315.

News settings See “News settings” on page 315.

Refresh settings See “Refresh settings” on page 316.

Application version Displays the version of the News & Weather application installed on your phone.

Weather settings

Use my location Check to use the phone’s location service to determine your location when displaying weather information. Uncheck to set the location manually, using **Set location**.

Set location When **Use my location** is unchecked, touch to specify the location for weather information by entering a city or postal code.

Use Celsius Check to use the Celsius temperature scale instead of Fahrenheit.

News settings

Select news topics Opens a screen where you can select the categories of news to include in the scrolling list of News & Weather tabs. You can also touch **Custom topic** to enter specific topics—for example, “solar power” or “Olympics”.

News terms of service Opens a screen with details about the terms of service for Google News.


Prefetch articles Check to download news articles so that they open more quickly and are available when you don’t have a data connection. Prefetching articles

improves performance at the expense of more data use and decreased battery life between charges.

Prefetch images Check to prefetch news images in addition to news text, when the headlines are downloaded. Prefetching images improves performance at the expense of more data use and decreased battery life between charges. This setting is only available when **Prefetch articles** is checked.

Refresh settings

These settings control how frequently the information on the News & Weather widget is updated. In addition to using these settings, adding or removing the News & Weather widget from the Home screen also turns **Auto-refresh** on or off. For more about working with widgets, see “Customizing the Home screen” on page 43.

Auto-refresh Check to have News & Weather update information automatically, at the frequency you set with **Refresh interval**. Uncheck to update the news and weather only when you press **Menu**  and touch **Refresh**. For automatic refresh to work, you must also have Background Data turned on in the Settings application. See “Accounts & sync settings” on page 363.

Refresh interval Opens a dialog where you can set how often to update the news and weather automatically, if **Auto-refresh** is checked. More frequent updates trade the convenience of current information for increased data use and decreased battery life between charges.

Refresh status Displays the date and time of the last refresh and the next scheduled refresh of news and weather.

Clock

In addition to displaying the date and time, the Clock application displays information about the weather and your phone. You can also use Clock to turn your phone into an alarm clock.

Clock is designed to work with a desktop dock, though you don't need a dock to use Clock.

In this section

"Viewing the date, time, and other information" on page 318

"Setting alarms" on page 320

"Changing Clock alarm settings" on page 322


Viewing the date, time, and other information

You use Clock to monitor several kinds of information at once, in addition to the current date and time.

Open the Clock application

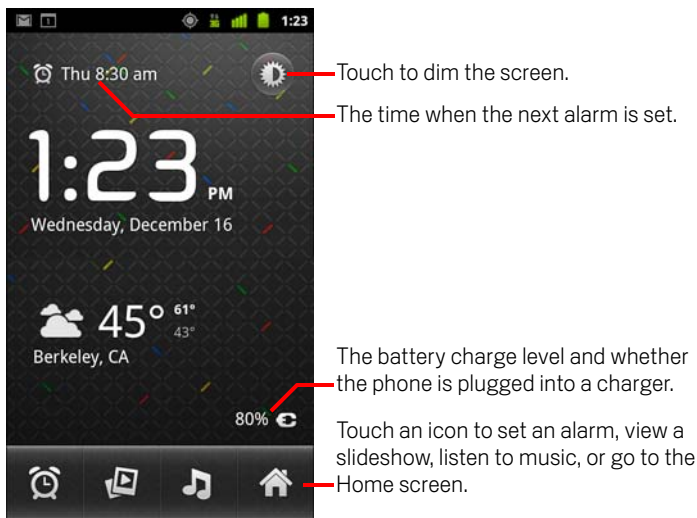
- ▶ Insert the phone into a desktop dock.

OR


- ▶ Touch the Clock icon  on the Home screen or in the Launcher.

See “Opening and switching applications” on page 40 to learn more about opening and switching applications.

Clock opens with the date and time displayed on your Home screen wallpaper, along with your local weather and other useful information.





When Clock is running, it switches to screen-saver mode after a few minutes, moving the date and time display on the phone screen. Simply touch the screen or a phone button to wake the phone up again.

To return to the Home screen, touch the Home icon  at the bottom of the Clock screen.


Watch a slideshow

You can play a slideshow of the pictures in your Gallery albums, in place of the date and time.

- ▶ Touch the Slideshow icon  at the bottom of the Clock screen.
- ▶ Press **Back**  to end the show.



Play music


You can play music while the Clock is displayed. If you have a desktop dock accessory, the music is transmitted out the dock's audio jack, so you can play music from the phone on a stereo, by using the stereo audio cable that is included with the dock.

- ▶ Touch the Music icon  at the bottom of the Clock screen.

The Music application opens, where you can select music to play. For more information, see “Music” on page 301. You can return to Clock or use another application while the music is playing.


Dim the Clock display

- ▶ If you want to use your phone as a bedside clock, you can set the screen brightness very low. Touch the Dimmer icon  to dim the clock.
- ▶ Touch the Dimmer  icon again to restore normal brightness.

If you can't see the Dimmer icon, press & hold the **Home** button  and touch the Clock icon to reopen Clock at normal brightness.

Change desktop dock audio settings

The first time you insert the phone into a desktop dock, a dialog asks whether you want music and other audio to play through the dock's audio line out port. Your setting applies only to the dock you are using—you can have different settings for different docks.


- ▶ Press **Menu**  and touch **Dock settings**.

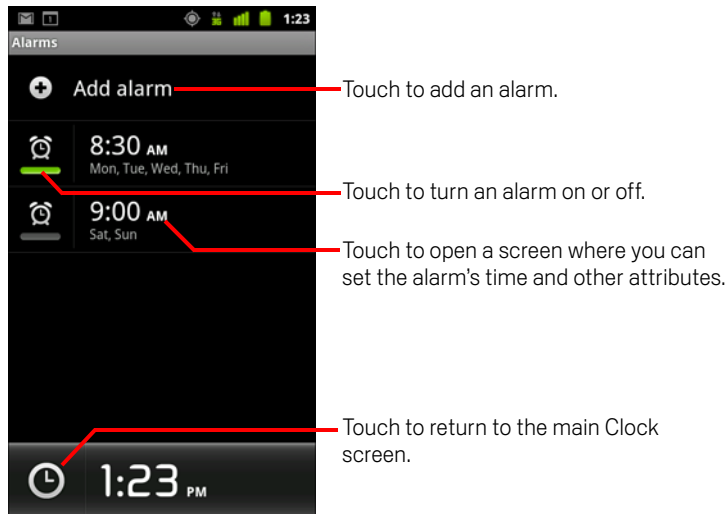
The Dock settings open, as described in “Sound settings” on page 356.



Setting alarms

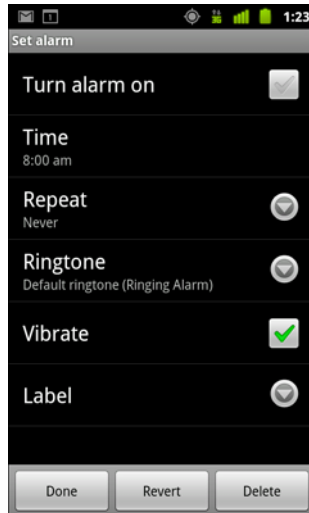
You can set an alarm by modifying an existing alarm or by adding a new one.


Set an alarm

- 1 Touch the Alarm icon  at the bottom of the Clock screen.



- 2 Touch the  icon next to an alarm to turn it on or off. Alarms that are set are underlined in green.
- 3 Touch an existing alarm to change its time and other attributes. Or touch **Add alarm** to add a new one. When viewing the main Clock screen, you can also press **Menu**  and touch **Add alarm** to add a new alarm.




- 4** Touch **Time** to set the time of the alarm.
In the dialog that opens, you change the time by touching the + or - buttons and the AM or PM buttons. Or touch a time to type the time you want.
- 5** Touch **Ringtone** to select a ringtone for the alarm.
You can select a ringtone that comes with the phone or one that you saved as a ringtone by using the Music application. See “Use a song as a ringtone” on page 307.
The ringtone plays briefly when you select it.
- 6** Touch **Vibrate** to have the phone vibrate, in addition to playing the ringtone.
- 7** Touch **Repeat** to set the days when you want the alarm to sound.
If you don't set a repeat, the alarm sounds only one time.
- 8** Touch **Label** to enter a name for the alarm.
- 9** When you're finished, touch **Done**.
At the time you set, the alarm sounds.
- 10** Press **Back**  to return to the main Clock screen.

Changing Clock alarm settings

You can change a number of settings for the alarms you set.

You can also change how times are displayed in Clock in the Settings applications. See “Date & time settings” on page 372.

- ▶ To change Clock alarm settings, touch the Alarm icon  at the bottom of the Clock screen. In the Alarms screen that opens, touch **Settings**.

Alarm in silent mode Check to play alarms even when the phone is in Silent mode.

Alarm volume Opens a dialog where you can set the volume of alarms.

Snooze duration Opens a dialog where you can set how long Clock waits before playing an alarm again.

Side button behavior Opens a dialog where you can set what happens if you press the **Volume Up / Down** button when an alarm sounds. You can set the button behavior to have no effect, to snooze the alarm, or to dismiss it.

Car Home

Car Home makes the applications that are most useful when you're driving accessible with the touch of a button.

Car Home is designed to work with a car dock, though you don't have to own a dock to use it.

In this section

"Opening Car Home" on page 324

"Customizing Car Home" on page 326

"Starting Car Home with a Bluetooth Device" on page 328

"Changing Car Home settings" on page 329


Opening Car Home

You can use Car Home whether or not you have a car dock.

Open Car Home

- ▶ Insert the phone into a car dock.
- OR**
- ▶ Bring your phone near a Bluetooth device you have configured to start Car Home. See “Starting Car Home with a Bluetooth Device” on page 328.

OR

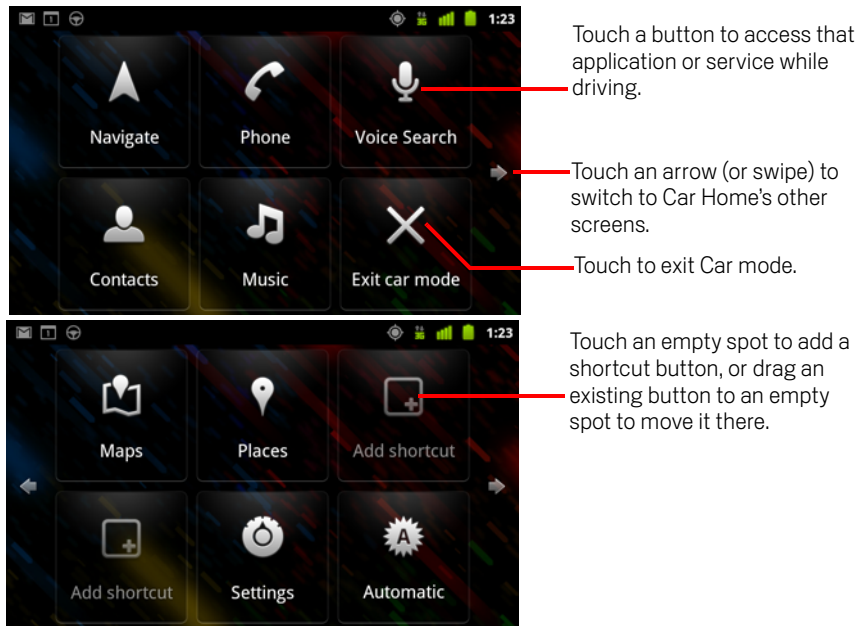
- ▶ Touch the Car Home icon  in the Launcher or on the Home screen. See “Opening and switching applications” on page 40.

Car Home opens with large buttons that you can touch to access Navigation, Voice Search, Contacts, and other features that are useful when driving.

Car home also places the phone in Car mode, which means that pressing the Home button returns you to Car Home, not the Home screen; use the **Exit car mode button** to access other applications.

The **Navigate** button is replaced with a **Directions** button if you don't have Google navigation available in your area, or if your phone can't access GPS satellites.

- ▶ Touch the small arrow (or swipe) to open Car Home's other screens.



You add or move shortcuts on Car Home screens, change the wallpaper, and configure a number of other Car Home settings. See “Customizing Car Home” on page 326 and “Changing Car Home settings” on page 329.

For information about Maps, including navigation, see “Maps, Navigation, Places, and Latitude” on page 249.

For information about searching by voice, see “Searching by text and voice” on page 93.

For information on working with your Contacts, see “Contacts” on page 109.

For more information about listening to Music, see “Music” on page 301.

Customizing Car Home

You can add your own shortcuts to the empty spots on Car Home screens and you can move shortcuts or delete them. You can also use the Brightness and Settings buttons (on the second Car Home screen by default) to customize Car Home in other ways, as described in this section and in “Changing Car Home settings” on page 329.

Add a shortcut

- 1 Touch an **Add shortcut** button.
- 2 Touch the kind of shortcut you want to add.
 - Touch **Car applications** to see a list of applications that are useful on the go.
 - Touch **Other applications** to see the rest of your applications.
 - Touch **Direct dial** to see a list of your contacts.
 - Touch **Directions & Navigation** to enter a destination address and your preferred travel method. For more information about Maps, including navigation, see “Maps, Navigation, Places, and Latitude” on page 249.


Move a shortcut

- ▶ Drag a shortcut to an open spot on the same or another screen.

Delete a shortcut


- 1 Touch & hold a shortcut.
- 2 Drag the shortcut to the trash can that appears at the bottom of the screen.
- 3 When the trash can turns red, release the shortcut.

Change the color of Car Home buttons


- 1 Touch the **Settings** button .
The settings button is on the second Car Home screen from the left by default.
- 2 Touch **Colorize icons**.
- 3 Touch a color you want. Or touch the **Customize your color** swatch to open a dialog where you can pick a custom color and saturation.
- 4 Touch **OK**.

Change Car Home wallpaper

Initially, Car Home uses the same wallpaper for its background as you set on the Home screen, but you can pick a different wallpaper for Car Home.

- 1 Touch the **Settings** button .
- 2 Touch **Wallpaper**.
- 3 Touch **Same as Home Screen** or **Select from Gallery**.
- 4 Touch a photo from Gallery and touch **Set wallpaper**.

Change Car Home brightness settings

- ▶ Touch **Automatic**, **Night**, or **Day** brightness button  to change the backlight setting.


The brightness button is on the second Car Home screen from the left by default.

You can cycle through these three modes, depending on whether you want to set the backlight mode manually or have the phone use its ambient light sensor to switch automatically.

Change car dock audio settings

The first time you insert the phone in a car dock, a dialog asks whether you want to use the dock as a speakerphone and whether you want to play music and other audio on the dock's speaker. Your setting applies only to the dock you are using—you can have different settings for different docks.

These settings are available only if your phone supports a car dock.


- 1 Touch the **Settings** button .
- 2 Touch **Android settings**.
- 3 Touch **Dock**.

Starting Car Home with a Bluetooth Device

If you have a Bluetooth device in your car, such as a speakerphone or integrated hands-free system, you can set Car Home to start when it detects that device.


You must first pair your phone with a device before you can configure it to start Car Home; see “Connecting to Bluetooth devices” on page 64.

Configure a Bluetooth device to start Car Home

- 1 Open Car Home and touch the **Settings** button .
- 2 Touch **Bluetooth starts Car Home**.
- 3 Check the paired Bluetooth devices you want to start Car Home, when detected.


Configure how quickly Car Home exits after disconnecting from a device

You can set how long Car Home waits after losing its connection with a Bluetooth device before exiting. If the devices you use have a weaker signal, setting a longer time can help prevent Car Home from disconnecting prematurely. Set a shorter time if your devices have a stronger signal and are preventing Car Home from exiting when you want it to.

- 1 Open Car Home and touch the **Settings** button .
- 2 Touch **Bluetooth starts Car Home**.
- 3 Touch **Timeout**.
- 4 Select how long to wait after disconnecting until Car Home exits.

Changing Car Home settings

You can configure a number of Car Home settings, including the color of Car Home buttons, the wallpaper, and the Bluetooth devices that start Car Home automatically. These and other ways to customize Car Home are described in this section and in “Customizing Car Home” on page 326 and in “Starting Car Home with a Bluetooth Device” on page 328.

▶ To open the Car Home settings screen, touch the **Settings** button .

The settings button is on the second Car Home screen from the left by default.

Always show disclaimer Check to open a safety and disclaimer message each time you start Car Home.

Hide status bar Check to hide the Status bar when using Car Home.

Colorize icons See “Change the color of Car Home buttons” on page 326.

Wallpaper See “Change Car Home wallpaper” on page 327.

Bluetooth starts Car Home See “Starting Car Home with a Bluetooth Device” on page 328.

Reset to defaults Opens a dialog where you can restore all default Car Home settings.

Android settings Opens the Android Settings application. For more information see “Settings” on page 347.

Calculator

Use Calculator to solve simple arithmetic problems or use its advanced operators to solve more complex equations.


In this section

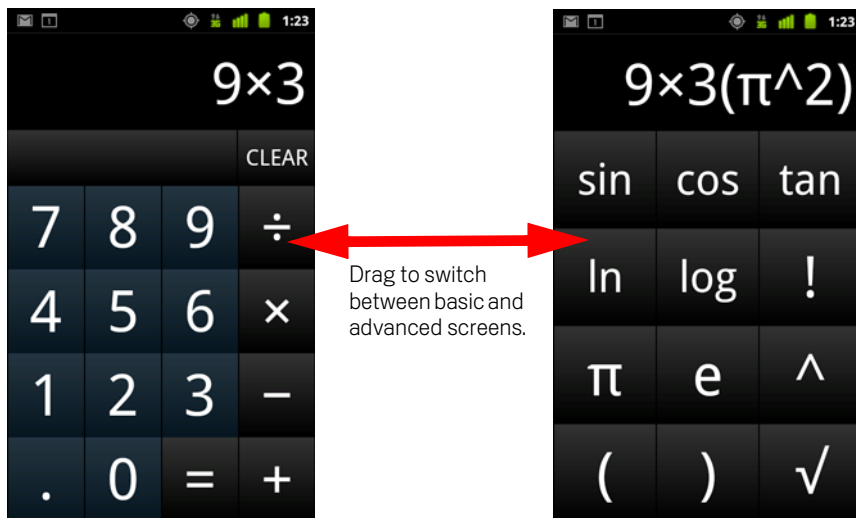
“Using the Calculator” on page 332

Using the Calculator

Use Calculator to solve math problems.


Open and use the Calculator

- ▶ Touch the Calculator icon  on the Home screen or in the Launcher. See “Opening and switching applications” on page 40.



- ▶ Enter numbers and arithmetic operators on the basic screen.
- ▶ Drag the basic screen to the left to open the advanced screen.
- ▶ Touch & hold the Calculator's display to open a menu where you can copy what you've entered and access other tools.
- ▶ Touch **Clear** to delete the last number or operator you entered. Touch & hold **Clear** to delete everything in the display.

Access your history of operations

- ▶ If your phone has a **Trackball** or similar device, roll the **Trackball** up or down to view your previous operations. Previous operations are entered in the display, where you can work with them.
- ▶ Clear the history by pressing **Menu**  and touching **Clear history**.

Tags

Near Field Communication (NFC) is a technology for storing a small amount of information in a sticker or other small device, which you can scan at close range with an NFC reader.

NFC tags can contain URLs, pictures, Maps locations, contacts, and many other kinds of information.

If your phone has the ability to scan NFC tags, you can use the Tags application to open, act on, and organize the tags you've scanned.

In this section

"Scanning tags" on page 334

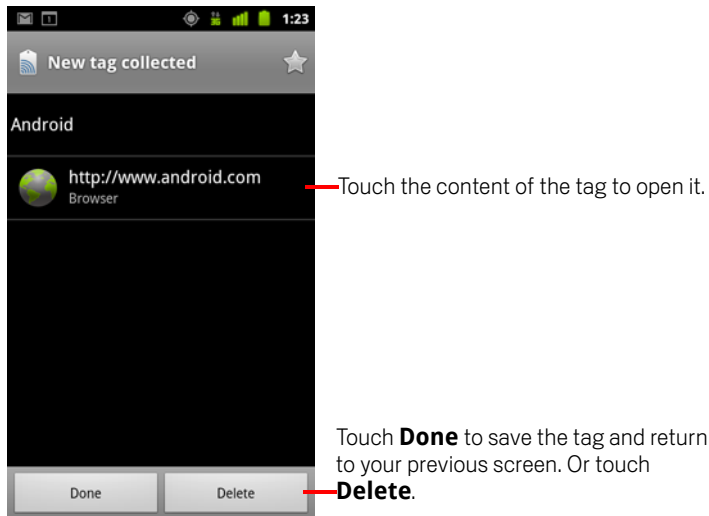
"Working with tags" on page 335

Scanning tags

If your phone has the ability to scan NFC tags, you can scan a tag any time your phone is turned on, and you have NFC turned on in Settings (see “Wireless & networks” on page 349).

Scan a tag

- 1 Unlock your phone's screen and place your phone right next to the tag. Your phone scans the tag and displays the contents it collected.




- 2 Touch one of the tag's content to open it (and save the tag on your phone). Or touch **Done** or **Delete** to save or delete the tag and return to the last screen you were working in.

If you touch one of the tag's contents, it opens in an application designed to work with it, such as Gallery, Browser, Maps, Messaging, and so on.

Working with tags

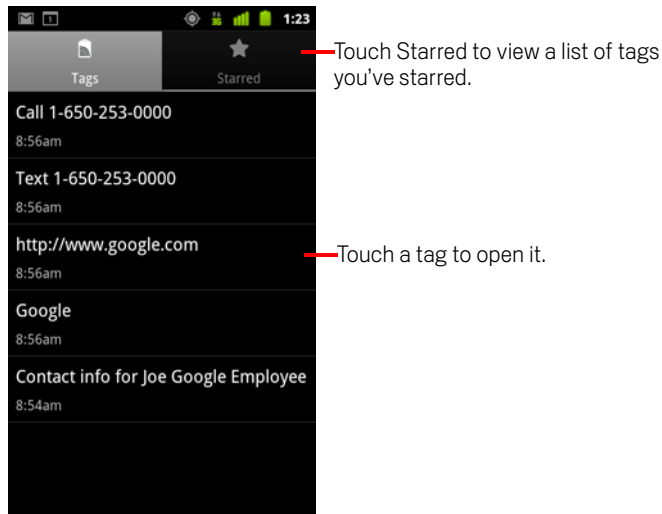
You use the Tags application to work with the tags you've scanned.

Open Tags and view your scanned tags

- ▶ Touch the Tags icon  on the Home screen or in the Launcher. See "Opening and switching applications" on page 40.

The Tags application opens, with a list of the tags you've scanned previously.

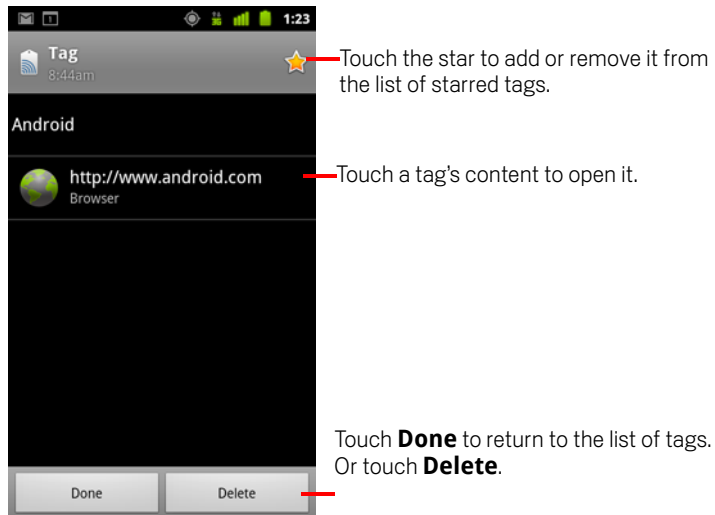
You can touch the Starred tab to view a list of just the tags you've starred. Or touch Tags to view a list of all tags.



Open and work with a scanned tag

- 1 Open Tags and touch a tag in the Tags or Starred list.

The tag opens in a screen with information about the tag and a list of its contents.



- 2 Touch the tag's star to add or remove it from the list of starred tags.
- 3 Touch a tag's content to open it.
- 4 Touch **Done** to return to the list of tags.

Delete a tag

- 1 Open Tags and touch a tag in the Tags or Starred list.
- 2 Touch **Delete**.

Market

Android Market provides direct access to applications and games to download and install on your phone.

In this section

“Opening Android Market and finding applications” on page 338


“Downloading and installing applications” on page 341

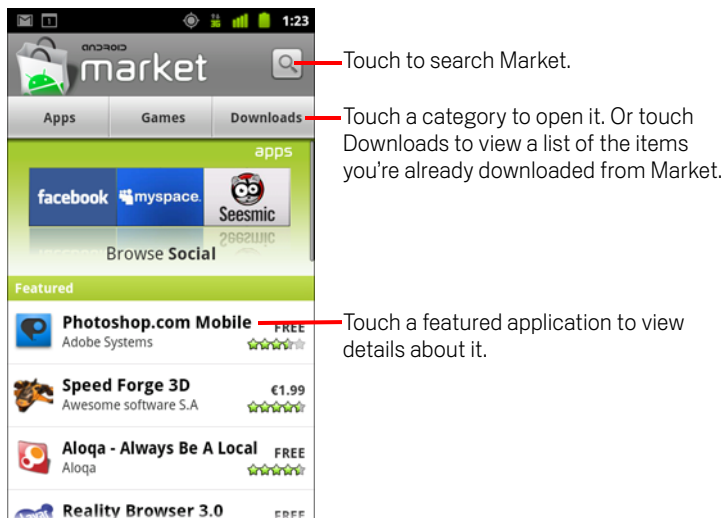
“Managing your downloads” on page 343

Opening Android Market and finding applications

Open Android Market to browse and search for free and paid applications.


Open Android Market

- ▶ Touch the Market icon  in the Launcher or on the Home screen. See “Opening and switching applications” on page 40 to learn more about opening and switching applications. You can also touch the Market widget to open Market, if you have it on your Home screen (see “Customizing the Home screen” on page 43).
- When you open Android Market for the first time, you must read and accept the terms of service to continue.



Get help with Android Market

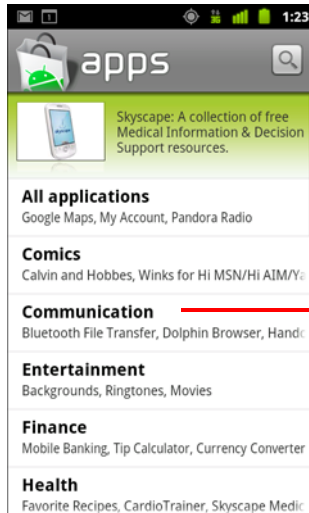
The Android Market Help webpages are available from all Android Market screens.

- ▶ Press **Menu**  and touch **Help**. The Browser opens to the Android Market Help page, with links to many help topics. For information about using the Browser, see “Browser” on page 233.

Browse for applications

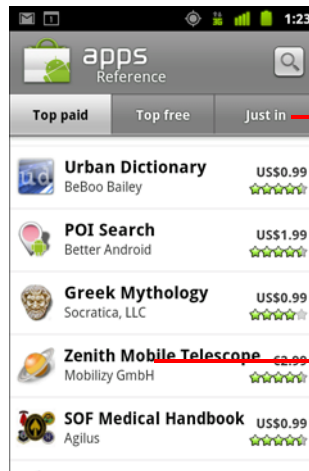
You can browse applications by category and sort them in different ways.

- 1 On the Android Market home page, touch a top-level category, such as **Apps** or **Games**.



Touch a subcategory to view its list of applications.

- 2 Scroll to view subcategories and touch the one you want to explore.



Touch a tab to view top paid, top free, or recent applications in this subcategory.

Touch an application to open its details screen.




- 3 Touch **Top paid**, **Top free**, or **Just in** to further sort the subcategory.

Open a screen with details about an application

- ▶ At any time while browsing Android Market, touch an application to open a screen with details about it.



Application details screens include a description, ratings, and related information about the application. The Comments tab includes comments from people who have tried the application. You can download and install the application from this screen. See “Downloading and installing applications” on page 341. You can also rate, uninstall, and perform other actions; see “Managing your downloads” on page 343.

Search for applications

- 1 Touch the Search icon  at the top right of the screen or press **Search** button .
- 2 Enter what you want to search for and press Search  again.
Enter all or part of an application's name or description, or the developer's name you want to search for.
- 3 Touch a search result to open that application's details screen.
The details screen describes the application and contains buttons for downloading the application and performing other tasks. See “Downloading and installing applications” on page 341 and “Managing your downloads” on page 343.

Return to the Android Market home screen

You can return to the Home screen from most other screens in Android Market.

- ▶ Touch the Market icon  at the top left of the screen.
OR
- ▶ Press **Menu**  and touch **Home**.

Downloading and installing applications

When you find an application you want, you can install it on your phone.

Download and install an application

Before you can download a paid application, you must set up a billing arrangement, as described in “Create a Google Checkout account” on page 342.

- 1 Find an application you want and open its details screen.

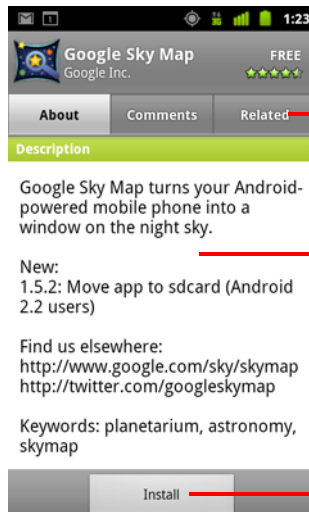
See “Opening Android Market and finding applications” on page 338.

In the application’s details screen, you can read more about the application including its cost, and overall rating.

Touch the **About** tab for a description of the application from the developer; scroll down to the **About the developer** section to view more applications by this developer, visit the developer’s web site, or send the developer an email message.

Touch the **Comments** tab to read comments by users.

Touch the **Related** tab to view a list of similar applications.



Touch the Comments tab to see what others thin of this app. Touch Related to view a list of similar apps.

Scroll an application’s details screen to learn more about the application and the developer.

Touch to download and install the application. (If it’s a paid application, the button is labeled **Buy.**)

- 2 Press **Menu** and touch **Security** to preview the functions and data the application can access on your phone if you install it.

If you’re not comfortable with the access the application requires, don’t continue.

- 3 Touch **Install** (for free applications) or **Buy** (for paid applications).

Paid applications are not offered in all areas by all carriers.

If the application requires access to your data or control of any functions on your phone, you are asked to review and grant permission before downloading.

Warning! Read this screen carefully. Be especially cautious with applications that have access to many functions or to a significant amount of your data. Once you touch **OK** on this screen, you are responsible for the results of using this application on your phone.

- 4 If you agree to the application's permissions requirements, touch **OK**.

If you selected a paid application, you're redirected to a screen to pay for the application before it's downloaded to your phone.

If you selected a free application (or after touching **Buy now**), you receive a series of notifications as the application is downloaded and then installed on your phone.

When the application is installed, you can touch the notification to open the application, or open it by touching its icon in the Launcher. See "Opening and switching applications" on page 40.

You typically have a short while to try out an application and, if you decide you don't want it, to uninstall it for a refund. See "Request a refund for an application" on page 345.

If you have another Android phone, you can download a paid application to that phone using the same Android Market account, at no additional charge.

Create a Google Checkout account

You can pay for the items you purchase from Android Market with a Google Checkout account.

- ▶ In a web browser, go to <http://checkout.google.com> to establish a Google Checkout account.

OR

- ▶ The first time you use your phone to buy an item from Android Market, when you're prompted to enter your billing information, you can set up a Google Checkout account.


Warning! When you've used Google Checkout once to purchase an application from Android Market, the phone remembers your password, so you don't need to enter it the next time. For this reason, you should secure your phone to prevent others from using it without your permission. See "Locking your screen" on page 42.

Managing your downloads

After you've downloaded and installed an application, you can rate it, view it in a list with your other downloaded applications, and so on.

View your downloaded applications


You can view a list of the applications you've downloaded from Android Market, and use the list for a number of purposes.

- ▶ On the Android Market home screen, press **Menu**  and touch **Downloads**.

In the list of the free and paid applications that opens, you can touch one to rate it, uninstall it, request a refund, and so on.

Set whether an application is updated automatically

Applications you download from Market are not set to update automatically by default; applications that came with your phone are. But you can change that setting for either kind of application, to change what happens when you receive notification that one or more applications have updates available (see “Respond to a notification that application updates are available” on page 343).

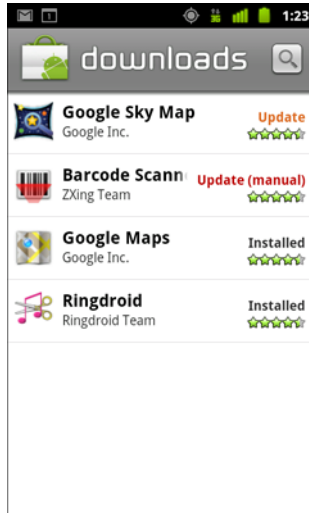
- 1 On the Android Market home screen, press **Menu**  and touch **Downloads**.
- 2 Touch an application.
- 3 Check or uncheck **Allow automatic updating**.

Respond to a notification that application updates are available

You receive notification whenever a new version of an application is available (unless you disable update notifications; see “Set whether you're notified about updated applications” on page 344). Responding to notifications in general is described in “Managing notifications” on page 29.

If an application is set to update automatically, and the application has not changed the permissions it requires, the notification informs you after the update is downloaded and installed (see “Set whether an application is updated automatically” on page 343).



If the application is not set to update automatically, or if the update changes the permissions it requires, you're notified you have updates available. Touching the notification opens the Downloads screen in Market. Each application you've downloaded that has an update available has an **Update** or **Update (manual)** label.



- ▶ Touch an application with an **Update** or **Update (manual)** label to update it, after reviewing changes to its permissions if necessary.
- ▶ Touch **Update all** to update all the applications with updates that don't have permissions changes.

The **Update all** button is available only if you have more than one update that doesn't require you to approve changes to permissions.


Set whether you're notified about updated applications

- 1 On the Android Market home screen, press **Menu**  and touch **Downloads**.
- 2 Press **Menu**  and touch **Notifications**.
- 3 Select whether or not to be notified of updates to the applications you've downloaded.
- 4 Touch **OK**.

Uninstall an application

You can uninstall applications you downloaded from Market using Market. You can also uninstall applications you downloaded from Market and from other locations in


the Settings application's Manage Applications screen (see "Uninstall an application" on page 52).

- 1 On the Android Market home screen, press **Menu**  and touch **Downloads**.
- 2 Touch the application to uninstall.
The details screen for the application opens.
- 3 Touch **Uninstall**.
- 4 Touch **OK** in the confirmation dialog.
- 5 Touch the explanation that best matches why you're uninstalling and touch **OK**.
The application is uninstalled. You can install the application again at any time, without charge if it was a paid application.

Request a refund for an application

If you are not satisfied with an application, you can typically ask for a refund within a short time after your purchase. The actual amount of time you have to request a refund is stated in the receipt you received by email, and you can also contact the developer as detailed in the application's details screen (see "Open a screen with details about an application" on page 340). Your credit card is not charged and the application is uninstalled from your phone.

If you change your mind, you can install the application again, but you can't request a refund a second time.

- 1 On the Android Market home screen, press **Menu**  and touch **Downloads**.
- 2 Touch the application to uninstall for a refund.
The details screen for the application opens.
- 3 Touch **Uninstall & refund**.
Your application is uninstalled and the charge is cancelled.
- 4 Touch the explanation that best matches why you're uninstalling and touch **OK**.

Rate an application

You can award an application from one to five stars and share what you think about the application with other shoppers.

- 1** Open the details screen for an application.
You can do this by browsing or searching for the application and then touching it; or if you've downloaded the application, by touching it in the list of your downloaded applications.
- 2** Touch the stars under **My review**.
- 3** Touch the number of stars to award the application and touch **OK**.
- 4** If you want to share a comment about the application, back on the details screen, touch **Post a comment**.

Flag inappropriate applications

If you discover an application with graphically violent, sexual, or otherwise hateful or offensive content, you can report it to the Android Market team.

- 1** Open the details screen for an application.
You can do this by browsing or searching for the application and then touching it; or if you've downloaded the application, by touching it in the list of your downloaded applications.
- 2** Scroll to the bottom of the details screen and touch **Flag as inappropriate**.
- 3** Touch the reason you find the application objectionable.
- 4** Touch **Submit**.
Your comments are sent to the Android Market team.

Settings

You use the Settings application to configure how your phone looks, sounds, communicates, protects your privacy, and operates in many other ways.

Many applications also have their own settings; for details, see the documentation for those applications.

In this section

- “Opening Settings” on page 348
- “Wireless & networks” on page 349
- “Call settings” on page 354
- “Sound settings” on page 356
- “Display settings” on page 358
- “Location & security settings” on page 359
- “Applications settings” on page 361
- “Accounts & sync settings” on page 363
- “Privacy settings” on page 364
- “Storage settings” on page 365
- “Language & keyboard settings” on page 366
- “Voice input & output settings” on page 368
- “Accessibility settings” on page 370
- “Dock settings” on page 371
- “Date & time settings” on page 372
- “About phone” on page 373


Opening Settings

The Settings application contains most of the tools for customizing and configuring your phone.

Open Settings

- ▶ Press **Home** , press **Menu** , and touch **Settings**.

OR

- ▶ Touch the Settings icon  on the Home screen or in the Launcher.
See “Opening and switching applications” on page 40.

All of the settings in the Settings application are described in this section.

Wireless & networks

Use Wireless & Network settings to configure and manage connections to networks and devices via Wi-Fi, Bluetooth, and mobile networks. You also use Wireless & Network settings to configure connections between your phone and virtual private networks (VPNs), to connect your computer to the Internet using your phone's mobile data connection, and to turn off all radios with Airplane mode.

Wireless & Network settings screen

Airplane mode Check to turn off all the phone's radios that transmit voice or data. When checked, also disables the Call settings (see "Call settings" on page 354).

Wi-Fi Check to turn on Wi-Fi so you can connect to Wi-Fi networks.

Wi-Fi settings See "Wi-Fi settings screen" on page 349.

Bluetooth Check to turn on Bluetooth so you can connect to Bluetooth devices.

Bluetooth settings See "Bluetooth settings screen" on page 351.

Tethering & portable hotspot See "Tethering & portable hotspot settings screen" on page 352


VPN settings See "VPN settings screen" on page 352.

NFC If your phone supports Near-Field Communication, check to allow applications to use NFC to read NFC tags and to make NFC tags on your phone readable by other NFC devices. Uncheck this setting to disable NFC on your phone. You work with NFC tags with the Tags application; see "Tags" on page 333.

Mobile networks See "Mobile networks settings screen" on page 352.

Wi-Fi settings screen

For details about working with these settings, see "Connecting to Wi-Fi networks" on page 61.

In addition to the settings described in this section, you can press **Menu**  on this screen and touch **Advanced** to configure the settings described in "Advanced Wi-Fi settings screen" on page 351.

Wi-Fi Check to turn on Wi-Fi so you can connect to Wi-Fi networks. When connected to a network, displays the network's name.

Network notification Check to receive a notification when an open Wi-Fi network becomes available.

Wi-Fi networks Displays a list of Wi-Fi networks you've previously configured and those detected when the phone last scanned for Wi-Fi networks. See "Connecting to Wi-Fi networks" on page 61.

Add Wi-Fi network Opens a dialog where you can add a Wi-Fi network by entering its SSID (the name it broadcasts) and security type. See "Connecting to Wi-Fi networks" on page 61.

Advanced Wi-Fi settings screen

Wi-Fi sleep policy Opens a dialog where you can set whether and when the Wi-Fi radio disconnects. Disabling sleep uses more battery power.

MAC address The Media Access Control (MAC) address of your phone when connecting to Wi-Fi networks.

IP address The Internet Protocol (IP) address assigned to the phone by the Wi-Fi network you are connected to (unless you used the IP settings to assign it a static IP address).

IP settings If you check **Use static IP**, you can use the IP settings to enter an IP address and other network settings for you phone manually, rather than using the DHCP protocol to obtain network settings from the Wi-Fi network itself.

Bluetooth settings screen

For details about working with these settings, see "Connecting to Bluetooth devices" on page 64.

Bluetooth Check to turn on Bluetooth so you can connect to Bluetooth devices.

Device name Opens a dialog where you can give your phone a name that is visible on some Bluetooth devices when you pair them. The current name is displayed.

Discoverable Check to make your phone discoverable by other Bluetooth devices for 120 seconds.

Scan for devices Touch to search for and display information about nearby Bluetooth devices.

Bluetooth devices Displays a list of Bluetooth devices that you've previously configured and those detected when the phone last scanned for Bluetooth devices.

Tethering & portable hotspot settings screen

For details about these settings, see “Sharing your phone's mobile data connection” on page 69.

USB tethering Check to share your phone's mobile network data connection with your computer, via a USB connection.

Portable Wi-Fi hotspot Check to share your phone's mobile network data connection as a portable Wi-Fi hotspot.

Portable Wi-Fi hotspot settings Opens a screen with settings to turn the hotspot on and off and to set the its SSID (its broadcast name) and security.

Help Opens a dialog with information about USB tethering and portable Wi-Fi hotspots as well as information about where to learn more.

VPN settings screen

For details about these settings, see “Connecting to virtual private networks” on page 72.

Add VPN Opens a screen that prompts you to select the type of VPN to add. You are then prompted for VPN configuration details.

VPNs The list of VPNs that you've previously configured.


Mobile networks settings screen

Data enabled Uncheck to prevent your phone from transmitting data on any mobile network. This is useful if you are traveling in an area where you do not have a mobile data plan and want to avoid charges for data use on local carriers' mobile networks. Unchecking this setting does not prevent your phone from transmitting data on other wireless networks, such as Wi-Fi or Bluetooth.

Data roaming Uncheck to prevent your phone from transmitting data on other carriers' mobile networks when you can't access your own carrier's mobile networks. See “Disable data when roaming” on page 59.

Data usage Only available if your carrier enforces a mobile network data use policy. Displays the amount of data you've transmitted over the mobile network in the current period, the data threshold (the amount of data you can transmit before the policy is enforced), and the time when the next period starts. If you touch this setting, the Data Usage screen opens, with more details about your mobile network data use, the period in which it's measured, and the way in which the carrier will enforce the

policy if you exceed the data threshold for the period. Contact your carrier for more information about its mobile network data use policy.

Access Point Names Opens the APNs screen, where you can select mobile access point configurations; or press **Menu**  to add a new APN. Consult your carrier about how to use the tools on this screen.

Use only 2G networks Check to obtain slightly better battery life, by preventing your phone from connecting to higher-speed networks. See “Limit your data connection to 2G networks” on page 59.

Network operators Opens a screen that searches for and displays mobile networks that are compatible with your phone. Consult your carrier to understand the billing implications of selecting another carrier.

Call settings

Use Call settings to configure phone call settings, such as call forwarding, call waiting, and other special features offered by your carrier. You can also use Call settings to configure the phone so that it can place outgoing calls only to a fixed set of phone numbers.

Call settings screen

Fixed Dialing Numbers GSM phones only. See “Fixed Dialing Numbers screen” on page 355.

Voicemail service Opens a dialog where you can select your carrier's voicemail service or another service, such as Google Voice. See “Configuring Google Voice” on page 185.

Voicemail settings If you are using your carrier's voicemail service, opens a dialog where you can enter the phone number to use for listening to and managing your voicemail. You can enter a comma (,) to insert a pause into the number—for example, to add a password after the phone number. If you are using Google Voice, this setting opens a screen where you can view the Google Voice number or sign out of Google Voice. See “Google Voice” on page 177.

Call forwarding Opens a screen where you can configure how your calls are forwarded when you're on the phone, when you don't answer, and so on.

Additional settings See “Additional settings” on page 355.

Accounts See “Internet calling (SIP) accounts screen” on page 355.



Use Internet calling Opens a dialog where you can configure your phone to use Internet calling for all calls, only for calls to Internet calling addresses (the default setting), or to ask for each call. You must be connected to a Wi-Fi network and have added an Internet calling account to your phone to use Internet calling. See “Configuring Internet (SIP) calling” on page 75

Fixed Dialing Numbers screen

Use the settings on this screen to configure your phone so it can place outgoing calls only to the fixed dialing numbers (FDN) that you save on the phone's SIM card.

Enable FDN Opens a dialog that prompts you to enter your PIN2 and then places the phone in FDN mode. When FDN is enabled, this setting changes to **Disable FDN**.

Change PIN2 Opens a series of dialogs that prompt you to enter your current PIN2 and then enter and confirm a new PIN2.

FDN list Opens a screen that lists any FDNs saved on your SIM card. Press **Menu**  and touch **Add contact** to add an FDN number to your SIM. Press **Menu**  on that screen to import a number from your Contacts to the FDN list, or to delete a number from the FDN list.

Additional settings

Caller ID Opens a dialog where you can set whether your phone number is displayed to the people you call.

Call waiting Check to see and respond to new calls when you're already on a call, as described in "Placing and receiving calls" on page 77.

Internet calling (SIP) accounts screen

For details about these settings, see "Configuring Internet (SIP) calling" on page 75.

Receive incoming calls Check this setting to configure your phone to maintain a connection with your Internet calling service provider, so your phone will ring if someone calls an Internet calling address for an account you've added to your phone. Checking this setting will reduce the life of your battery between charges.

SIP accounts The list of Internet calling accounts that you've previously configured. Touch one to view or change its settings, as described in "Configuring Internet (SIP) calling" on page 75.

Add account button Opens a screen where you can add an Internet calling account by entering the details about the account, as provided by your Internet calling service provider and described in "Configuring Internet (SIP) calling" on page 75.

Sound settings

Use the Sound settings to configure how and at what volume the phone rings, vibrates, or alerts you in other ways when you receive a call, you receive a notification, or an alarm sounds. You also use these settings to set the volume for music or other media with audio, and some related settings.

Silent mode Check to silence all sounds (including call and notification ringtones) except the audio from music, videos, and other media and any alarms you have set. (You must silence media and alarms in their own applications.)

Vibrate Opens a dialog where you can configure when you want the phone to vibrate when you receive a phone call or notification: Always, never, only when the phone is in Silent mode, or only when the phone is not in Silent mode.

Volume Opens a dialog where you can set the volume of ringtones that sound when you receive a phone call or notification, media (music, videos, and so on), and alarms. If you uncheck the option to use the same volume for both calls and notifications, you can set the notification ringtone volume independently.

Phone ringtone Opens a dialog where you can select the ringtone to sound when you receive a phone call. Touch a ringtone to listen to it. You can use some media applications to add a song to this list. See “Use a song as a ringtone” on page 307 to learn how to do that with the Music application.

Phone vibrate Opens a dialog where you can set the phone to vibrate whenever you receive an incoming call, only when the phone is in Silent mode, or never.

Notification ringtone Opens a dialog where you can select the ringtone to sound when you receive a notification. Touch a ringtone to listen to it.

Pulse notification light On phones that pulse their Trackball light or other notification light when you receive a notification, check to pulse the light every few seconds when you have new notifications. Uncheck to pulse the light just once for each new notification when it arrives.

Audible touch tones Check to hear tones when you use Phone to dial a number.

Audible selection Check to play a sound when you touch buttons, icons, and other onscreen items that react to your touch.

Screen lock sounds Check to play a sound when the screen is locked or unlocked.

Haptic feedback Check to have the phone vibrate briefly when you touch soft buttons and perform other actions.

Emergency tone On some phones, opens a dialog where you can configure how the phone reacts when you place an emergency call.

Display settings

Use the Display settings to configure brightness and other screen settings.

Brightness Opens a dialog for adjusting the brightness of the screen. You can check **Automatic brightness** to set the phone to adjust the brightness automatically, using the phone's built-in light sensor. Or uncheck that option to use the slider to set a brightness level you want at all times when using the phone. For the longest battery life between charges, use the dimmest comfortable brightness.

Auto-rotate screen Check to automatically switch the orientation of the screen as you turn the phone sideways or upright.

Animation Opens a dialog where you can set whether you want to enjoy animated transitions for some effects (such as opening menus), for all supported effects (including when navigating from screen to screen), or to enjoy a phone without any optional animation effects (this setting does not control animation in all applications).

Screen timeout Opens a dialog where you can set how long to wait after you touch the screen or press a button before the screen darkens. For the longest battery life between charges, use the shortest convenient timeout.

Location & security settings

Use the Location & Security settings to set your preferences for using and sharing your location when you search for information and use location-aware applications, such as Maps. You can also configure settings that help secure your phone and its data.

Use wireless networks Check to use information from Wi-Fi and mobile networks to determine your approximate location, for use in Maps, when you search, and so on. When you check this option, you're asked whether you consent to sharing your location anonymously with Google's location service.

Use GPS satellites Check to use your phone's global positioning system (GPS) satellite receiver to pinpoint your location to within an accuracy as close as several meters ("street level"). Actual GPS accuracy depends on a clear view of the sky and other factors.

Set up screen lock Touch to configure your phone to require a pattern, PIN, or password to unlock your screen. This setting is replaced with some of the other settings described in this section once you set a screen lock.

Set unlock pattern Opens a set of screens that guide you through drawing a screen unlock pattern, as described in "Locking your screen" on page 42.

Change unlock pattern When an unlock pattern is set, opens a set of screens you can use to change the unlock pattern.

Use visible pattern When an unlock pattern is set, check to draw lines between points in the unlock pattern you draw.

Use tactile feedback When you have configured a screen lock, check to have the phone vibrate briefly as you touch each dot when you draw an unlock pattern or as you enter the unlock PIN or password.

Set unlock PIN Opens a set of screens for setting a numeric PIN you must enter to unlock your screen, as described in "Locking your screen" on page 42.

Change unlock PIN When a screen lock PIN is set, opens a set of screens you can use to change PIN.

Set unlock password Opens a set of screens for setting a password you must enter to unlock your screen, as described in "Locking your screen" on page 42.

Change unlock password When a screen lock password is set, opens a set of screens you can use to change password.

Turn off screen lock Touch to stop requiring a pattern, PIN, or password to unlock your screen. This setting is not visible unless you have configured a screen unlock pattern, PIN, or password.

Set up SIM card lock Opens a screen where you can configure the phone to require entering the SIM PIN to use the phone, and where you can change the SIM PIN.

Visible passwords Check to briefly show each character of passwords as you enter them, so that you can see what you enter.

Select device administrators Opens a screen with a list of the applications you have authorized to be device administrators for your phone. This is typically an email, calendar, or other enterprise application that you granted this authority to, when you added an account hosted by an enterprise service that requires the ability to implement security policies on the devices that connect to it. Touch an application in this list to disable its authority to be a device administrator; if you do, the account you added will typically lose some functionality in its applications, such as the ability to sync new email or calendar events to your phone, until you restore the application's authority as a device administrator. Applications whose device administration authority you disable in this way, but that have accounts that require them to be a device administrators, typically notify you how to restore their authority when you try to use them, unless you delete those accounts.

Use secure credentials Check to allow applications to access your phone's encrypted store of secure certificates and related passwords and other credentials. You use credential storage to establish some kinds of VPN and Wi-Fi connections, as described in "Connecting to networks and devices" on page 57. If you have not set a password for the credential storage, this setting is dimmed.

Install from SD card If your phone uses a removable SD card to store user files, touch to install a secure certificate from an SD card, as described in "Working with secure certificates" on page 74.

Install from USB storage If your phone uses internal USB storage for user files, touch to install a secure certificate from USB storage, as described in "Working with secure certificates" on page 74.

Set password Opens a dialog where you can set or change the password for your secure credential storage. Your password must have at least 8 characters. See "Working with secure certificates" on page 74.

Clear storage Deletes all secure certificates and related credentials and erases the secure storage's own password, after prompting you to confirm that you want to do this.

Applications settings

You use the Applications settings to view details about the applications installed on your phone, to manage their data, to force them to stop if they misbehave, and to set whether you want to permit installation of applications that you obtain from web sites and email.

Applications settings screen

Unknown sources Check to permit installation of applications that you obtain from web sites, email, or other locations other than Android Market.

Warning! To protect your phone and personal data, download applications only from trusted sources, such as Android Market.

Manage applications Opens a list of all the applications and other software installed on your phone, along with their sizes and tools for managing them. See “Managing how applications use memory” on page 48.

Running services Opens a list of applications, processes, and services, services that are currently running or are cached. See “Managing how applications use memory” on page 48. Storage use

Storage use Opens a list of all applications on your phone with information about the storage they use. See “Managing how applications use memory” on page 48.

Battery use Opens a list of the applications that have used battery power since you last charged your phone. See “Optimizing battery life” on page 46.

Development See “Development screen” on page 361.

Development screen

The Development screen contains settings that are useful for developing Android applications. For full information, including documentation of the Android APIs and development tools, see the Android developer web site (<http://developer.android.com>).

USB debugging Check to permit debugging tools on a computer to communicate with your phone via a USB connection.

Stay awake Check to prevent the screen from dimming and locking when the phone is connected to a charger or to a USB device that provides power. Don't use this setting with a static image on the phone for long periods of time, or the screen may be marked with that image.

Allow mock locations Check to permit a development tool on a computer to control where the phone believes it is located, rather than using the phone's own internal tools for this purpose.


Accounts & sync settings

Use the Accounts & Sync settings to add, remove, and manage your Google Accounts and other accounts. You also use these settings to control how and whether applications send, receive, and sync data on their own schedules, and whether applications can synchronize user data automatically.

Gmail, Calendar, and other applications may also have their own settings to control how they synchronize data; see the documentation for those applications for details.

Accounts & sync settings screen

Background data Check to permit applications to synchronize data in the background, whether or not you are actively working in them. Unchecking this setting can save battery power and lowers (but does not eliminate) data use.


Auto-sync Check to permit applications to synchronize data on their own schedule. If you uncheck this setting, you must touch an account in the list on this screen, press **Menu** , and touch **Sync now** to synchronize data for that account. Synchronizing data automatically is disabled if **Background data** is unchecked. In that case, the **Auto-sync** checkbox is dimmed.

Manage accounts The rest of this screen lists the Google Accounts and other accounts you've added to the phone. Adding accounts is described in "Accounts" on page 127.

If you touch an account in this screen, its account screen opens.

Account screen

This screen contains different options, depending on the kind of account.

For Google Accounts, it lists the kinds of data you can synchronize to the phone, with checkboxes so you can turn synchronizing on and off for each kind. You can also press **Menu**  and touch **Sync now** to synchronize data. Touch the **Remove account** button to remove the account along with all its data (contacts, mail, settings, and so on). You can't remove the first Google Account you added to your phone except by resetting your phone to the factory defaults and erasing all of your user data. See "Privacy settings" on page 364.

Privacy settings

You use the Privacy settings to manage your personal information.

Back up my data Check to back up some of your personal data to Google servers, with your Google Account. If you replace your phone, you can restore the data you've backed up, the first time you sign in with your Google Account. If you check this option, a wide variety of your personal data is backed up, including your Wi-Fi passwords, Browser bookmarks, a list of the applications you've installed, the words you've added to the dictionary used by the onscreen keyboard, and most of the settings that you configure with the Settings application. Some third-party applications may also take advantage of this feature, so you can restore your data if you reinstall an application. If you uncheck this option, you stop backing up your data to your account, and any existing backups are deleted from Google servers.

Automatic restore Check this option to restore your settings and other data when you install an application, if you installed and used it previously on this phone or on another phone, where you signed in with the same Google Account and were backing up your settings.

Factory data reset Opens a dialog where you can erase all of your personal data from internal phone storage, including information about your Google Account, any other accounts, your system and application settings, and any downloaded applications. Resetting the phone does not erase any system software updates you've downloaded. Also includes a checkbox to erase your phone's USB storage or SD card (depending on your model of phone), which can contain files you've downloaded or copied there, such as music or photos. If you reset the phone in this way, the next time you turn on your phone you're prompted to reenter the same kind of information as when you first started Android. See "Starting Android for the first time" on page 16.

Storage settings

Use the Storage settings to monitor the used and available space on your phone's internal storage and on your phone's USB storage or SD card (depending on your model of phone).

You can also view and manage the storage used by applications and where they are stored; see “Managing how applications use memory” on page 48. You can view, reopen, and delete files you've downloaded with Browser, Gmail, or Email with the Downloads application; see “Managing downloads” on page 54.

SD card or USB storage Lists the amount of space on your phone's USB storage or SD card and the amount you have used to store photos, videos, music, downloads, and other files. For more information, see “Managing how applications use memory” on page 48 as well as the sections for the applications that store media and other files on the USB storage or SD card.

Unmount SD card Unmounts the SD card from your phone so that you can safely remove it when the phone is on. This setting is dimmed if there is no SD card installed, if you have already unmounted it, or if you have mounted the SD card on your computer. There is no equivalent setting for phones with USB storage. See “Connecting to a computer via USB” on page 67.

Erase USB storage or Erase SD card Permanently erases everything on your phone's USB storage or SD card and prepares it for use with your phone.


Internal storage The amount of internal phone storage used by the operating system, its components, applications (including those you downloaded there), and their permanent and temporary data.

Language & keyboard settings

Use the Language & Keyboard settings to select the language for the text on your phone and for configuring the onscreen keyboard, including words that you've added to its dictionary.

Language & Keyboard screen

Select language Opens the Language screen, where you can select the language to use for the text on your phone.

User dictionary Opens a list of the words you've added to the dictionary, as described in "Using the onscreen keyboard" on page 31. Touch a word to edit or delete it. Press **Menu**  and touch **Add** to add a word.

Android keyboard See "Android Keyboard settings screen" on page 366.

Android keyboard checkbox For phones with physical keyboards, uncheck to disable the onscreen keyboard. See "Android Keyboard settings screen" on page 366.

Device keyboard See "Device Keyboard settings screen" on page 367. This setting is available only if your phone has a physical keyboard.

Android Keyboard settings screen

The Android Keyboard settings apply to the onscreen keyboard that is included with your phone. The correction and capitalization features affect only the English version of the keyboard.

Vibrate on keypress Check to have the phone vibrate briefly each time you touch a key on the onscreen keyboard.


Sound on keypress Check to play a brief sound each time you touch a key on the onscreen keyboard.

Popup on keypress Uncheck to prevent a larger image of each key from displaying above the key (out from under your finger) when you touch it.

Touch to correct words Uncheck to turn off the feature that underlines a word in a text field if you touch the word and the keyboard has suggestions for other words you may have intended.

Auto-capitalization Check to have the onscreen keyboard automatically capitalize the first letter of the first word after a period, the first word in a text field, and each word in name fields.

Show settings key Opens a dialog where you can set whether you want the keyboard to decide automatically whether to include the Settings key on the keyboard (it does this only if you have more than one keyboard or other input method installed), or whether you want always to show the Settings key or always to hide it.

Voice input Opens a dialog where you can turn voice input off or set on which onscreen keyboard you want the voice-input Microphone key . See “Entering text by speaking” on page 35.

Input languages Opens the Input Languages screen, where you can check the languages you want to have available when using the onscreen keyboard. Changing the keyboard language is described in “Using the onscreen keyboard” on page 31.

Quick fixes Check to automatically correct some common misspellings as you type.

Show suggestions Check to show suggested words in a strip above the onscreen keyboard as you type. See “Using the onscreen keyboard” on page 31.

Auto-complete Check to automatically enter a suggested word, highlighted in the strip above the keyboard, when you enter a space or punctuation. See “Using the onscreen keyboard” on page 31.

Device Keyboard settings screen

This settings screen is available only if your phone has a physical keyboard.

Auto-replace Check to correct misspelled words as you type.

Auto-cap Check to capitalize the first letter of the first word in sentences.

Auto-punctuate Check to insert a period (.) when you press the Space key twice in a row.

Voice input & output settings

You use the Voice Input & Output settings to configure the Android voice input feature, described in “Entering text by speaking” on page 35, and the text-to-speech synthesizer, for applications that can take advantage of it, such as TalkBack, which is described in “Accessibility settings” on page 370.

Google Voice Recognition settings screen

Language Opens a screen where you can set the language you use when entering text by speaking.

SafeSearch Opens a dialog where you can set whether you want Google SafeSearch filtering to block some results when you use Google search by voice: Block no search results (off), only explicit or offensive images (moderate), or both explicit or offensive text and images (strict).

Block offensive words When unchecked, Google voice recognition will recognize and transcribe words many people consider offensive, when you enter text by speaking. When checked, Google voice recognition replaces those words in transcriptions with a placeholder comprised of hash symbols (#).

Text-to-Speech settings screen

If you don't have speech synthesizer data installed, only the **Install voice data** setting is available.

Listen to an example Plays a brief sample of the speech synthesizer, using your current settings.

Always use my settings Check to use the settings on this screen in place of speech synthesizer settings available in other applications.

Default engine Opens a dialog where you can set the text-to-speech application you want to use, if you have more than one installed.

Install voice data If your phone does not have speech synthesizer data installed, connects to Android Market and guides you through the process of downloading and installing the data. This setting is not available if the data is already installed.

Speech rate Opens a dialog where you can select how quickly you want the synthesizer to speak.

Language Opens a dialog where you can select the language of the text you want the synthesizer to read. This is particularly useful in combination with the Always Use My Settings setting, to ensure that text is spoken correctly in a variety of applications.

Engines Lists the text-to-speech engines installed on your phone. Touch one to view or change its settings.

Accessibility settings

You use the Accessibility settings to configure any accessibility plug-ins you have installed on your phone.

Accessibility Check to enable all installed accessibility plug-ins.

KickBack Check to have the phone vibrate briefly as feedback as you navigate the user interface, press buttons, and so on.

TalkBack Check to have an installed speech synthesizer speak the labels or names of items as you navigate the phone's user interface.

SoundBack Check to play a sound as you navigate the phone's user interface.

Power button ends call Check to cause pressing the power button to end a phone call, rather than turning the screen on and off.

Dock settings

If your phone supports a car dock or desktop dock that you own, you can use the Dock settings, to set your preferences for how the phone and the dock interact.

For more information about the applications that open when you insert the phone in a dock, see “Car Home” on page 323, “Clock” on page 317, and the documentation that came with your dock.

Audio Available when the phone is inserted in a car dock or desktop dock. For a car dock, opens a dialog where you can set whether music and other media audio play through the dock speaker and whether to use the dock as a speakerphone. For a desktop dock, opens a dialog where you can set whether music and other audio play via the audio line out port. Your settings apply only to the dock you are using; you can have different settings for different docks.

Dock insertion sound Check to play a sound when inserting or removing the phone from a dock.

Date & time settings

Use Date & Time settings to set your preferences for how dates are displayed. You can also use these settings to set your own time and time zone, rather than obtaining the current time from the mobile network.

Automatic Uncheck to set the date, time, and time zone on the phone manually, rather than obtaining the current time from the mobile network.

Set date If **Automatic** is unchecked, opens a dialog where you can manually set the phone's date.

Select time zone If **Automatic** is unchecked, opens a dialog where you can set the phone's time zone.

Set time If **Automatic** is unchecked, opens a dialog where you can set the phone's time.

Use 24-hour format Check to display the time using 24-hour time format—for example, 13:00 rather than 1:00 pm.

Select date format Opens a dialog where you can select the format for displaying dates.

About phone

About Phone includes information about your phone.

About Phone screen

System updates Opens a screen that reports on the availability of Android system software updates.

Status Opens the Status screen with a long list of information about your battery, mobile network connection, and other details.

Battery use Opens a list of the applications and operating system components you have used since you last charged the phone, sorted by the amount of power they have used. See “Optimizing battery life” on page 46.

Legal information Opens a screen where you can obtain legal information about the software included with your phone.

Version information Lists details about the model numbers and versions of your phone’s hardware and operating system software. This information is useful if you need to work with your carrier’s support team.

