

Cisco Wireless IP Phone 8821 and 8821EX User Guide

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- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- · Consult the dealer or an experienced radio/TV technician for help.

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The Cisco Wireless IP Phone 8821 and 8821EX

The Cisco Wireless IP Phone 8821 and 8821EX are 802.11 dual-band wireless devices that provide comprehensive voice communications in conjunction with Cisco Unified Communications Manager and with Cisco Aironet 802.11b/g and Cisco Aironet 802.11a access points (APs) in a private business communications network.



The Cisco Wireless IP Phone 8821EX is not currently supported.

The phones are qualified Bluetooth wireless devices (Qualified Device ID [QDID] B014396). The phones provide voice communication over the same wireless LAN that your computer uses, allowing you to place and receive phone calls, put calls on hold, transfer calls, make conference calls, and so on. Both phones have Ingress Protection 67 (IP 67) level protection, which indicates dust-tight equipment that is protected against splashing water.

The Cisco Wireless IP Phone 8821EX is certified for Potentially Explosive Atmosphere ATEX Class I Zone 2, North America Class I Division 2/Zone 2. The phone is certified for use in potentially explosive environments where flammable gasses, vapors or liquids may be present. The phone has an industry-standard yellow styling that offers fast recognition in emergency situations.

The following figure shows the Cisco Wireless IP Phone 8821 on the left and the Cisco Wireless IP Phone 8821EX on the right.

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Figure 1: Cisco Wireless IP Phone 8821 and 8821EX



These phones, like other network devices, must be configured and managed. The phones support G.711, G.722, G.729a, G.729ab, MP3, WAV, iLBC, iSAC, OPUS, and AMR WB codecs. The phones also support uncompressed wideband (16 bits, 16 kHz) audio.

The phones are hearing aid compatible (HAC) but do not have any TTY features. They have a centered "dot" or "nib" on the 5 key that is a tactile identifier.

The physical characteristics include:

- · Resistance to damage from dropping the phone
- · Tolerance of antibacterial and alcohol-based wipes
- Latex- and lead-free
- · Shockproof and vibration-proof
- USB 1.1 interface
- IP 67 level protection, which indicates dust-tight equipment that is protected against splashing water
- Cisco Wireless IP Phone 8821EX only:
 - ATEX Zone 1/Class 2 certification prevents ignition of surrounding gas vapors by the phone.
 - °CSA Division 2/Zone 2 certification provides access to mobile collaborative communications.
 - Industry-standard yellow styling offers fast recognition in emergency situations.

In addition to basic call-handling features, your phone can provide enhanced productivity features that extend your call-handling capabilities.

Depending on the configuration, your phone supports:

- · Use of Bluetooth wireless headsets, including certain hands-free call features
- · Wireless access to your phone number and the corporate directory
- A local phone book that can store up to 200 contacts and speed-dial hot keys that can be assigned to phone book contacts
- Access to network data, XML applications, and web-based services
- Online customizing of phone features and services from your Self Care portal

Related Topics

Hazardous Environments, on page 88

Getting Started

Your phone is powered by a rechargeable Lithium ion battery. Before you can use your phone, you must install the battery in the phone and charge the battery.

Make sure you read the battery safety information in Product Safety and Security, on page 85.

Your phone needs to connect to the corporate wireless network and the IP telephony network. Your administrator might set up your new wireless phone, or you might have to set it up.

After the phone is set up, you can use the phone.

Related Topics

Phone Setup, on page 15 Phone Batteries, on page 12

Turn On Your Phone

Your phone automatically turns the power off when you are not using it to conserve battery power. You need to turn the phone back on in order to use it.

When you turn the phone on, you may need to enter a username and password to access the wireless network. After the phone authenticates and registers with the call control system, the main screen displays and you can make or receive calls.

Procedure

Press and hold **Power/End Call** for 4 seconds.

Sign In to Your Phone

You may need to enter your username and password to access the phone functions. You may also need to enter other information, as required by your wireless security requirements. Contact your administrator for assistance.

Procedure

- **Step 1** Enter your user ID.
- **Step 2** Enter your password.
- Step 3 Press <button name>.

Related Topics

Set the Username and Password, on page 22

Turn Off Your Phone

Your phone turns off automatically after a period of inactivity. But you can also turn it off manually.

Procedure

Step 1 Press and hold Power/End Call 6 for 4 seconds.

Step 2 Press Power off.

Related Topics

Change the Screen Display Timeout, on page 62

Lock the Phone Keypad

You can lock the keypad so that you don't press keys by mistake.

Before You Begin

You must be on the home screen.

Procedure

Press and hold **Zero (0) until** you see the message that the keypad is locked.

Related Topics

Automatically Lock the Keypad, on page 63

Unlock the Phone Keypad

If you lock the keypad, you need to unlock it to use the phone.

Procedure

- Step 1 Press Unlock.
- Step 2 Press Zero (0) 0____.

Self Care Portal

You can customize some phone settings with the Self Care portal web site, which you access from your computer. Your administrator gives you the Self Care portal URL, your user ID, and password.

In the Self Care portal, you can control features, line settings, and phone services for your phone.

- Phone features include speed dial, do not disturb, and your personal address book.
- Line settings affect a specific phone line (directory number) on your phone. Line settings can include call forwarding, visual and audio message indicators, ring patterns, and other line-specific settings.
- Phone services can include special phone features, network data, and web-based information (such as stock quotes and movie listings). You must subscribe to a phone service using the Self Care portal before you access it on your phone.

The following table describes some specific features that you configure using the Self Care portal. For more information, see the Self Care portal documentation for your call control system.

Features	Description
Call forward	You specify the number that will receive calls when call forward is enabled on the phone. You can use the Self Care portal to set up more complicated call forward functions, for example, when your line is busy.
Additional phones	You specify additional phones (your mobile and other phones) that you want to use to make and receive calls with the same directory numbers as your desk phone. You can also define blocked and preferred contacts to restrict or allow calls from certain numbers to be sent to your mobile phone. When you set up additional phones, you can also set up the following features:
	• Single number reach—You specify if the additional phone should ring when someone calls your desk phone.
	• Mobile calls—If the additional phone is a mobile phone, you can set it up to allow you to transfer mobile calls to your desk phone or desk phone calls to your mobile phone.
Speed dial	You assign phone numbers to speed-dial numbers so that you can quickly call that person.

Speed-Dial Numbers

When you dial a number on your phone, you enter a series of digits. When you set up a speed-dial number, the speed-dial number must contain all the digits you need to make the call. For example, if you need to dial 9 to get an outside line, you put the number 9 and then the number you want to dial.

You can also add other dialed digits to the number. Examples of additional digits include a meeting access code, an extension, a voicemail password, an authorization code, and a billing code.

The dial string can contain the following characters:

- 0 to 9
- pound (#)
- asterisk (*)
- comma (,)—This is the pause character, and gives a 2- second delay in the dialing. You can have several commas in a row. For example, two commas (,,) represent a pause of 4 seconds.

The rules for dial strings are:

- Use the comma to separate the parts of the dial string.
- An authorization code must always precede a billing code in the speed-dial string.
- One comma is required between the authorization code and the billing code in the string.
- A speed-dial label is required for speed dials with authorization codes and additional digits.

Before you configure the speed dial, try to dial the digits manually at least once to ensure that the digit sequence is correct.



Note

Your phone does not save the authorization code, billing code, or extra digits from the speed dial in the call history. If you press **Redial** after connecting to a destination using speed dial, the phone prompts you to enter any required authorization code, billing code, or additional digits manually.

Example

To set up a speed-dial number to call a person at a specific extension, and if you need an authorization code and billing code, consider the following requirements:

- You need to dial 9 for an outside line.
- You want to call 5556543.
- You need to input the authorization code 1234.
- You need to input the billing code 9876.
- You must wait for 4 seconds.
- After the call is connected, you must dial the extension 56789#.

In this scenario, the speed dial number is 95556543,1234,9876,,56789#.

Related Topics

Calls That Require a Billing Code or Authorization Code, on page 28

Buttons and Hardware

Your wireless phone has many buttons and hardware features that you will use regularly. Use the following figure and table to identify the important button and hardware features. The figure shows the Cisco Wireless IP Phone 8821, but the Cisco Wireless IP Phone 8821EX is similar in appearance. The table describes the functions of the keys on the phones.

Figure 2: Cisco Wireless IP Phone 8821 Buttons and Hardware



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ltem	Name or Grouping	Description		
1	Indicator light (LED)	Indicator light—Use the light to identify states:		
	Headset port	• Solid red—the phone is connected to the AC power source and battery is charging.		
		• Solid green—the phone is connected to the AC power source and battery is fully charged.		
		• Fast blinking red—There is an incoming call. Phone can be charging or fully charged.		
		• Slow blinking red—There is a voice message. When phone is connected to the AC power source, the red light displays longer than when using only the battery.		
		• Slow blinking green (every 2 seconds): The phone is using only battery power. The phone is registered with the wireless network and is within service coverage area.		
		Headset port with cover Remove the protective cover and plug in a headset or ear buds.		
2	Speaker button	Speaker I Toggle the speaker mode on or off for the phone.		

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ltem	Name or Grouping	Description
3	Softkey buttons	Softkeys 🗖
	Navigation cluster	• The More •••• softkey accesses a list of menus or functions.
	Call control buttons	• The softkey can activate the option displayed on the screen.
		Navigation cluster Navigation ring and Select button
		Navigation ring (outer ring):
		• Move up, down, left, or right for these home screen apps:
		° Recents 🗿
		° Contacts 🕗
		° Apps 🗊
		° Settings 🤨
		• Scroll up and down menus to highlight options and to move left and right through phone numbers and text entries.
		Select button (center of the cluster):
		• Make a call from the main screen
		• Select a menu item, a softkey, a call, or an action.
		Answer/Send Answer a ringing call or, after dialing a number, place the call.
		Power/End Call Turn the phone on or off, end a connected call, or silence the ring during an incoming call. When you use menus or when you are in an app, it acts as a shortcut to return to the main screen.

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ltem	Name or Grouping	Description
4	Keypad	Dial numbers, enter letters, and choose menu items by number.
		One (1) 1000
		• Enter "1" when you dial a number.
		Access voice mail.
		• Enter these special text characters: $! @ <> $ % ^ &
		Asterisk (*) * *
		• Before you enter an international phone number, press and hold for a few seconds to add the plus (+) symbol to the phone number.
		• Enter these special text characters: * + - / = \ : ;
		Zero (0) 0-2
		• Enter "0" when you dial a number.
		• Lock the kepad
		• Enter a space or these special text characters: , . ` " _~ '
		Pound (#) # #
		• Press to silence the phone ringer. If configured, the phone will vibrate instead.
		• Enter these special text characters: # ? () [] { }
5	Left Side Buttons	Application I Use with XML applications, such as Push to Talk.
		Volume -
		• When the phone is idle, change the ring volume, turn on the vibrate option, or turn off the ringer.
		• When you have an incoming (ringing) call, press the button once to silence the ringer.
		• During a call, control the speaker volume for the active handset, headset, or speaker.
		• When the phone is docked in the desktop charger, control the volume of the charger speaker.
		Mute ⁽²⁾ Toggle the mute feature on or off.

Navigation

You use the outer ring of the Navigation cluster to scroll through menus. You use the inner **Select** button of the Navigation cluster to select menu items.





Each item in a menu has an index number. You can enter the index number with the keypad to select the menu item.

Phone Screen Features

The phone screen shows information about your phone such as directory number, active call and line status, softkeys, speed dials, and placed calls. The screen is made up of three sections: the header row, the middle section, and the footer row.

At the top of the screen is the header row. The header row displays the phone number, current date and time, as well a number of icons. The icons display when features are active.

The middle of the phone screen displays the home screen with its application (app) icons. When you select an app, the information for the app displays on the screen.

The bottom row of the screen is the softkey labels. Each label indicates the action for the softkey button below the screen.

Clean the Phone Screen

Procedure

Wipe the screen with a soft, dry cloth.

Differences Between Phone Calls and Lines

We use the terms *lines* and *calls* in very specific ways to explain how to use your phone. Here is an explanation of the differences.

Lines

Each line corresponds to a directory number or intercom number that others can use to call you. Your phone supports up to six lines. To see your phone lines, press **Phone S** to open the line view. You have as many lines as you have directory numbers with phone line icons **S** in the line view list.

Calls

Each line can support multiple calls, typically up to four calls. Your phone can support up to 24 connected calls, but your system administrator can adjust this number according to your needs. Only one call can be active at any time; other calls are automatically placed on hold.

Here is an example: If you have two lines and each line supports four calls, then you could have up to eight connected calls at one time. Only one of those calls is active and the other seven are held calls.

Out-of-Range Alerts

Your system administrator can configure your phone to send you an audible alert (beep) when you are out of

range of the wireless network. When you hear the alert, the 🛜 (no signal) icon displays on the phone screen.

When you are out of range of the wireless network, you cannot use the phone for features requiring a wireless network connection, such as making and receiving calls.

If your system administrator enabled the out-of-range alert, depending on the configuration, you might hear a beep only once, or every 10, 30, or 60 seconds until you are back within range of the wireless network.

To reconnect to the wireless network after you hear the alert, move to another location until you see the signal icon so the phone screen again.

Phone Batteries

Your phone contains a Lithium ion battery. The fully charged battery provides the following hours of service:

- up to 13 hours of talk time.
- up to 200 hours of standby time



If you use a Bluetooth wireless headset, the headset reduces the talk time and standby time for the battery. In addition, how the administrator configures your phone can affect the battery life.

If you require longer talk times, you will find it useful to have a spare, charged battery.

Bluetooth and Your Phone

You can use a Bluetooth headset with your phone.

Bluetooth connections work best when you're within 3 to 6 feet (1 to 2 meters) from your phone, but you might be able to be as far away as 66 feet (20 meters). The Bluetooth connection can degrade if you have a barrier (wall, door, window), large metal object, or other electronic devices between your phone and the connected device.

To connect a headset to your phone with Bluetooth, you start by pairing the headset with your phone. You can pair up to x Bluetooth headsets with the phone. After the headset is paired, the phone connects to the headset when the headset is turned on. The last Bluetooth headset connected with the phone is the headset that the phone uses.

Related Topics

Bluetooth Headsets, on page 72 Access Bluetooth Settings, on page 67

Additional Help and Information

If you have questions about the functions available on your phone, you should contact your administrator.

The Cisco web site (http://www.cisco.com) contains more information about the phones and call control systems.

• For quick start guides, accessory guides, and end-user guides in English, follow this link:

http://www.cisco.com/c/en/us/support/collaboration-endpoints/unified-ip-phone-8800-series/products-user-guide-list.html

· For guides in languages other than English, follow this link:

http://www.cisco.com/c/en/us/support/collaboration-endpoints/unified-ip-phone-8800-series/tsd-products-support-translated-end-user-guides-list.html

• For licensing information, follow this link:

http://www.cisco.com/c/en/us/support/collaboration-endpoints/unified-ip-phone-8800-series/products-licensing-information-listing.html

Related Topics

Troubleshooting, on page 77

Cisco One-Year Limited Hardware Warranty Terms

Special terms apply to your hardware warranty and services that you can use during the warranty period.

This warranty does not apply to phone batteries.

Your formal Warranty Statement, including the warranties and license agreements applicable to Cisco software, is available on Cisco.com at the following URL: http://www.cisco.com/go/hwwarranty.

Battery Warranty

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Phone Setup

- Phone Hardware Installation, page 15
- Phone Configuration, page 20

Phone Hardware Installation

Before you can use your phone, you must install and charge the battery. The battery may already be installed in your phone, or you may have to install it yourself.

You must read the safety information in Product Safety and Security, on page 85 before you use, install, or charge the phone.

The battery may already be charged using one of the supported charging methods. If the battery isn't charged, you must charge the battery before you can set up the phone.

You can secure the phone with a cable lock.

Install the Phone Battery

Procedure

Step 1 Remove the cover from the battery compartment.



- a) Push the locking catch to the left to release the cover.
- b) Lift and remove the cover of the battery compartment.

Step 2 Install the battery.



- a) Align the battery to the bottom of the battery compartment. Make sure that the metal contacts on the phone and battery face each other.
- b) Press the battery into the battery compartment until it locks in place. Make sure that it is flat in the compartment.
- **Step 3** Replace the cover to the battery compartment.



- a) Align the tabs at the bottom of the cover into the notches on the phone.
- b) Press the cover firmly against the phone until it clicks in place.

Phone Battery Charging

You can charge the battery using any of the following options:

- USB cable—You can charge the phone with an AC power adapter or your computer.
- Desktop charger—You can use the phone and charge it at the same time.
- Multicharger-You can charge several phones at the same time.

Explosion Hazard: Do not charge the phone battery in a potentially explosive atmosphere. Statement xxx

Related Topics

Desktop Charger Multicharger

Spare Battery Charging

If you require longer talk times, you will find it useful to have a spare, charged battery. You can charge a spare battery in the desktop charger or multicharger.

Related Topics

Desktop Charger Multicharger

Prepare the Power Adapter

The power adapter for your phone is compact. Before you use the power adapter, you have to unfold the prongs. After you use the adapter, you can fold in the prongs.

The power adapter for your region may also require an additional clip to allow the adapter to be plugged into the electrical outlet.

Procedure

Step 1 Catch the edge of a prong with your finger and pull the prong up until it clicks into position.



- **Step 2** (Optional) Install the international power clip.
- **Step 3** (Optional) Before you close the adapter, remove the international power clip.
- Step 4 (Optional) Hold the lever on the top of the adapter down and press the prongs down to close the adapter.



Charge the Battery with the AC Power Supply

You can charge your phone using an AC power supply. When you use the power supply to charge your phone, the battery can take up to 3 hours to fully charge.

The wide connector on the USB cable connects to the phone using magnets to hold it secure. It has pins that you need to align correctly. If you hold the phone so that the screen is towards you, the battery icon on the connector is visible.



Before You Begin

You need the USB power cable supplied with your phone.

You need to prepare the power adapter for use as described in Prepare the Power Adapter, on page 18.

Procedure

- **Step 1** Plug USB cable into the bottom of the phone with the pins aligned.
- **Step 2** Plug the USB cable into the power adapter.
- **Step 3** Plug the power adapter into the electrical outlet.

Charge the Battery with the USB Cable and a USB Port on Your PC

You can charge your phone using your computer. When you use the computer to charge your phone, the battery can take up to 6 hours to fully charge.

The wide connector on the USB cable connects to the phone using magnets to hold it secure. It has pins that you need to align correctly. If you hold the phone so that the screen is towards you, the battery icon on the connector is visible.



Procedure

Step 1 Connect the long connecter of the USB cable to the bottom of the phone with the pins aligned.

Step 2 Plug the other end into the USB port in the computer.

Phone Configuration

Phone configuration uses one of these methods:

- Your administrator sets up the phone. When this happens, you don't need to do any configuration. Your administrator may lock your access to the configuration menus.
- You set up the phone for your Wi-Fi network and to connect to the call control system. When this happens, your administrator gives you the information you need to enter in the phone.

Add the Phone to the Wi-Fi Network

Before You Begin

You need the following information about the Wi-Fi network:

- SSID
- Security type (for example, WEM, WPA)

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• PIN or passkey for the selected security type

Procedure

- **Step 1** Access the **Settings** app.
- Step 2 Select Wi-Fi.
- **Step 3** Select a profile.
- Step 4 Select WLAN configuration.
- **Step 5** Select the **SSID** field.
- **Step 6** Enter the SSID for your wireless network.
- **Step 7** Press More and select Set.
- **Step 8** Select **Security Mode** and set the required security type.
- **Step 9** If security is set to WEP, do the following steps:
 - a) Select WEP key.
 - b) Enter the password.
 - c) Press More and select Set.
- Step 10 Click Save.
- **Step 11** Exit to the home screen.

What to Do Next

Set up the phone to connect to the call control system.

Connect the Phone to the Cisco Unified Communications Manager

Before You Begin

- You need the IP address of the Cisco Unified Communications Manager TFTP server.
- The phone must be configured in the Cisco Unified Communications Manager
- The phone must be connected to the Wi-Fi network.

Procedure

- **Step 1** Access the **Settings** app.
- Step 2 Select Wi-Fi.
- **Step 3** Select a profile.
- **Step 4** Select Network configuration > IPv4
- **Step 5** Select Alternate TFTP and set to **On**.
- Step 6 Select TFTP Server 1 and enter the TFTP IP address for the Cisco Unified Communications Manager.
- **Step 7** Press More and select Set.
- **Step 8** In the **Trust list** window, press **More** and select **Erase**.
- **Step 9** Exit to the home screen.

The phone connects to the Cisco Unified Communications Manager. After the connection is made, the phone downloads the configuration file and, if necessary, upgrades the firmware to a new firmware load.

Set the Username and Password

When you power on your phone for the first time in some networks, you may need to set your username and password to access the wireless network. Contact your administrator for assistance.

Procedure

- **Step 1** From the home screen, select **Settings**.
- Step 2 Select Wi-Fi.
- **Step 3** Select a profile.
- Step 4 Select WLAN configuration.
- Step 5 Select Username or Password.
- Step 6Enter your username or password in the New Username or New Password field.NoteYou can use up to 32 alphanumeric characters for the
password.
- **Step 7** Press **More ...** and select **Save**.
- Step 8 Press Power/End Call

Related Topics

Sign In to Your Phone, on page 3



Calls

- Access the Phone App, page 23
- Make Calls, page 24
- Answer Calls, page 28
- End a Call, page 32
- Mute Your Audio, page 32
- Hold Calls, page 32
- Forward Calls From Your Phone, page 34
- Transfer a Call to Another Person, page 35
- Conference Calls and Meetings, page 35
- Intercom Calls, page 37
- Supervise and Record Calls, page 38
- Prioritized Calls, page 39
- Multiple Lines, page 41

Access the Phone App

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We make it easy for you to make and receive calls with the Phone app.

Procedure

Use one of these ways to access the **Phone** app:

- From the home screen, press the **Select** button to select **Phone S**.
- Press Answer/Send **C** to make a call or to answer an incoming call.
- Enter a number using the keypad to make a call.

Make Calls

Your Cisco Wireless IP Phone works just like a regular phone. But we make it easier for you to make calls.

Make a Call

You can easily make a call from the home screen or from the Phone app.

Procedure

- **Step 1** Enter a phone number.
- Step 2 Press Answer/Send

Make an Emergency Call

You can make an emergency call from your phone, even if you are not signed in. When you start to dial the emergency number, the list of emergency numbers displays although you cannot select the number.

If you try to dial a number that is not in the list of emergency numbers, the phone does not dial the number.

Procedure

Step 1 If your phone is not turned on, press Power/End Call of for 4 seconds to power on the phone.

- **Step 2** Use the keypad to enter your emergency number.
- Step 3 Press Answer/Send

Make a Call with a Headset

You can make a call using a headset. If you disconnect the headset during a call, the phone continues the call on the speakerphone.

Before You Begin

You have a wired or Bluetooth headset connected to the phone.

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Procedure

Step 1	Access	the	Phone	app.

- **Step 2** (Optional) Select a line.
- **Step 3** Enter a phone number.
- Step 4 Press Answer/Send

Related Topics

Headsets, on page 71

Make a Call with the Speakerphone

You can make a call with the speakerphone built into the phone. When your phone is in the desktop charger, you use the speakerphone built into the charger.

Procedure

Step 1	Press and hold 🚳 to activate the speaker.
Step 2	Dial the phone number.
Step 3	Press Answer/Send Construction to place your call.
Step 4	Press and hold @ again to turn off speaker mode.

Related Topics

Desktop Charger

Make a Call with a Phone or Video Address

Sometimes, instead of just having someone's phone number, you might also have a phone or video address that you can use to place the call instead.

These addresses might look like an email address, such as username1@example.com, or it might contain numbers like username2@209.165.200.224.

	Procedure
1	Access the Phone app.
2	(Optional) Select a line.
3	Press More •••• and select ABC, and you'll be able to enter text using the keypad.
4	Press a number on the keypad to see the available options, and then press the number again to move through the choices.
	For example, press the number 1 three times to enter the @ symbol.
5	Press Answer/Send

Redial a Number

You can call the most recently dialed phone number from the home screen or from the Phone app.

Procedure

- **Step 1** (Optional) Access the **Phone** app.
- **Step 2** (Optional) Select a line.
- Step 3 Press Redial.

Return a Recent Call

You can return a recent call with the Recents list in the Phone app.

Procedure

- **Step 1** Access the **Phone** app.
- **Step 2** Select a line.
- **Step 3** Select an entry from your Recents list.
- Step 4 Press Answer/Send

Make a Call from the Phone App with a Favorite

You can easily call a contact in your Favorites list.
Before You Begin

You must set up a favorite (a frequently-dialed number) in your Favorites list in the Contacts app.

Procedure

Step 1 Access the **Phone** app.

Step 2 (Optional) Select a line.

Step 3 Press **More and** select **Favorites**.

Step 4 Select an entry and press Call.

Related Topics

Favorites, on page 49

Speed Dial

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Dial an International Number

You can dial international calls when you prefix the phone number with a plus (+) sign.

Procedure

Step 1	Press and hold star (*) for at least 1 second. The plus (+) sign is displayed as the first digit in the phone number. If you are off-hook, you hear that the dial tone changes when the + signs is displayed.
Stop 2	Dial the number

Step 2 Dial the number.

Step 3 Press Answer/Send

Get Notified When a Contact is Available

If you call someone and their line is busy or they do not answer, you can be notified with a message and a special ringtone when they are available.

Procedure

Step 1 Press Call back.

Calls

Step 2 Press Exit.Step 3 When you see the message that the person is available or hear the special ring tone, press Call.

Calls That Require a Billing Code or Authorization Code

Your administrator may require that you enter a billing code or authorization code (or both codes) after you dial a phone number. The billing code, called a Client Matter Code, is used for accounting or billing purposes. The authorization code, called a Forced Authorization Code, controls access to certain phone numbers.

When a billing code is required, the phone displays Enter Client Matter Code, the dialed number changes to "*******", and you hear a special tone.

When an authorization code is required, the phone displays Enter Authorization Code, the dialed number changes to "*******", and you hear a special tone. For security reasons, the phone displays a "*" instead of the number entered.

When both a billing code and an authorization code are required, you are prompted for the authorization code first. Then you are prompted for the billing code.

Related Topics

Speed-Dial Numbers, on page 6

Secure Calls

Your administrator can take steps to protect your calls from tampering by people outside your company. When you see a lock icon displayed on your phone during a call, your phone call is secure. Depending upon how your phone is configured, you may have to sign in before you call somebody or hear a security tone played over your handset.

Answer Calls

Your Cisco Wireless IP Phone works just like a regular phone. But we make it easier for you to answer calls.

Answer a Call

Procedure

Press Answer or Answer/Send

Answer Call Waiting

When you have an incoming call while you are on an active call, you hear a single beep. You can answer the new call and automatically hold the active call.

	Procedure
Step 1	Press Answer or Answer/Send
Step 2	(Optional) If you have more than one call waiting, select an incoming call.

Decline a Call

When you get an incoming call that you don't want to answer, you can decline the call, which sends the call to voicemail.

Procedure

Press Decline or Power/End Call

Ignore a Call

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When you get an incoming call that you don't want to answer, you can ignore the call. The call shows up in your call list.

Procedure

Press the Up or Down arrow on the Navigation cluster or the Select button.

Silence Incoming Calls on Your Phone

If you're busy and don't want to be disturbed, you can silence incoming calls. If you do this, the phone won't ring, but you will see a visual alert. So, you can still choose to answer the call. If you don't answer the call, the call goes to your voicemail instead.

Procedure

Choose one of these options:

- From the My Cisco Spark Self Care portal, turn on Do Not Disturb.
- From your phone,
- 1 Access the **Phone** app.
- 2 (Optional) Select a line
- **3** Press More **and select Do not disturb**

Control the Phone Ringer for a Single Incoming Call, on page 31

Answer a Coworker's Phone (Call Pickup)

If you share call handling tasks with your coworkers, you can answer a call that is ringing on a coworker's phone. First, your administrator has to assign you to at least one call group.

Answer a Call Within Your Group (Pickup)

You can answer a call that rings on another phone within your call pickup group. If multiple calls are available for pickup, you'll answer the call that has been ringing for the longest time.

Procedure

- **Step 1** Access the **Phone** app.
- Step 2 Press More and select Pickup.
- Step 3 Press Answer.

Answer a Call From Another Group (Group Pickup)

Group Pickup allows you to answer a call on a phone that is outside your call pickup group. You can use the group pickup number to pick up the call, or you can use the number of the phone line that is ringing.

Procedure

- **Step 1** Access the **Phone** app.
- **Step 2** (Optional) Select a line.
- **Step 3** Press More and select Group pickup.
- **Step 4** Enter the group pickup number or enter the number of the phone line with the call that you want to pick up .
- **Step 5** Press More and select Call.
- Step 6 Press Answer.

Answer a Call from an Associated Group (Other Pickup)

You can pick up a call ringing on a phone in another call group.

Procedure

Step 1	Access the Phone app.
Step 2	(Optional) Select a line.
Step 3	Press More •••• and select Other pickup.
Step 4	Press Answer.

Trace a Suspicious Call

If you receive unwanted or harassing calls, use malicious call identification (MCID) to alert your administrator. Your phone sends a silent notification message to your administrator with information about the call.

Procedure

Step 1 Pr	ess More	und and a	select Re	port caller
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Step 2 End the call.

Control the Phone Ringer for a Single Incoming Call

You can silence the phone ringer for an individual call.

Procedure

Do one of the following actions:



• Press **Pound** (#) **#** for 2 seconds to turn the ringer off or on.

Related Topics

Adjust the Ringtone Volume Make the Phone Vibrate for an Incoming Call, on page 60 Select Where You Hear the Ringtone, on page 60 Silence Incoming Calls on Your Phone, on page 29

End a Call

Procedure

Do one of the following actions:

- From the Phone app, press More •••• and select End call.
- Press Power/End Call .

Mute Your Audio

You can mute the phone so that you can hear the other caller but they cannot hear you. The **Mute** button is located below the **Volume** key on the side of the phone.

Procedure

Step 1Press Mute .Step 2Press Mute again to turn mute off.

Hold Calls

You can put an active call on hold and then resume the call when you're ready.

Put a Call on Hold

Procedure

Step 1	Access	the	Phone	app

Step 2 Press Hold.

Answer a Call Left on Hold for Too Long

You can be notified when a call is left on hold. The notification is similar to an incoming call notification and includes these cues:

• Single ring, repeating at intervals

- · Flashing message indicator on the handset
- Visual notification on the phone screen

Procedure

Press Answer to resume the held call.

Swap Between Active and Held Calls

When you are on a call, you can access a held call. The phone places the original call on hold.

Procedure

- **Step 1** Access the **Phone** app.
- **Step 2** Press the right Navigation key.
- **Step 3** Select the held call.
- Step 4 Press Resume.

Call Park

You can use your phone to park (temporarily store) a call. You can then retrieve the call from another phone (such as a phone at a coworker's desk or in a conference room).

There are two ways you can park a call: call park and directed call park. You'll only have one type of call park available on your phone.

If the call remains parked for too long, you receive an alert tone. You can answer the call or retrieve it from another phone. If you do not answer the call within a certain length of time, it is routed to another destination (such as voicemail), as set by your administrator.

Place a Call on Hold with Call Park

You can park an active call that you answered on your phone and then use another phone in the call control system to retrieve the call.

You can park only one call at the call park number.

Before You Begin

Your call must be active.

Procedure

Step 1 Access the **Phone** app.

Step 2Press More and select Park.The phone displays the call park extension.

Retrieve a Call on Hold with Call Park

You can pick up a parked call from anywhere in your network.

Before You Begin

You need the call park extension.

Procedure

- **Step 1** Access the **Phone** app.
- **Step 2** (Optional) Select a line.
- **Step 3** Dial the call park extension.

Forward Calls From Your Phone

You can forward calls from any line on your phone to another number. Call forward is phone-line specific. If a call reaches you on a line where call forwarding is not enabled, the call rings as usual.

There are two ways of forwarding your calls:

- Forward all calls
- Forward calls in special situations, such as when the phone is busy or there is no answer.

Verify that your calls are forwarded by looking for the Forward all X icon in the line label.

- **Step 1** Access the **Phone** app.
- **Step 2** (Optional) Select a line.
- **Step 3** Press More **and select Forward all**.
- Step 4 Enter the number to receive the calls or select an entry from your Recents call list.

Turn Off Call Forward From Your Phone

Procedure

Step 1 Access the Phone app.
Step 2 (Optional) Select the forwarded line.
Step 3 Press More and select Forward off.

Transfer a Call to Another Person

When you transfer a call, you can stay on the original call until the other person answers. This gives you an opportunity to talk privately with the other person before removing yourself from the call. If you don't want to talk, then transfer the call without waiting for the other person to answer.

Procedure

- **Step 1** Access the **Phone** app.
- **Step 2** Press **More •••** and select **Transfer**.
- **Step 3** Enter the number to call or select an entry from your recent calls.
- Step 4 Press Transfer.

Conference Calls and Meetings

You can talk with several people in a single call. You can dial another person and add them to the call. If you have multiple phone lines, you can join two calls across two lines.

When you add more than one person to a conference call, wait a few seconds between adding participants.

As the conference host, you can remove individual participants from the conference. The conference ends when all participants hang up.

Add Another Person to a Call

You can add another person to an active call to create a conference.

Step 1	Access	the	Phone	app.
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Step 2 Press More and select Conference.

- **Step 3** Do one of these actions.
 - Dial a number and wait for the person to answer.
 - Select an entry from your Recents list or Favorites list and wait for the person to answer.
 - Select another held call on the same line.
 - Press the right Navigation key, select a line, and select a held call on that line.

Step 4 Press Merge.

View and Remove Conference Participants

When you are in a conference call, you can view the conference participants. If you are the conference owner, you can remove a participant from the conference. The screen displays a star (*) beside the conference owner.

Before You Begin

You are in an active conference call.

Procedure

Step 1	Press More and select Details .
Step 2	(Optional) Select Update to refresh the participant list.
Step 3	(Optional) Select a participant and press Remove.

Scheduled Conference Calls (Meet Me)

You can host or join a conference call at a scheduled time.

The conference call does not start until the host dials in and ends when all participants hang up. The conference does not automatically end when the host hangs up.

Host a Meet Me Conference

Before You Begin

Get a meet me phone number from your administrator, and distribute the number to the conference participants.

Procedure

- **Step 1** Access the **Phone** app.
- **Step 2** Press **More ...** and select **Meet me**.
- **Step 3** Enter the meet me number.
- **Step 4** Enter the host password for the meeting.

Join a Meet Me Conference

You cannot join a meet me conference until the conference hosts dials in. If you hear a busy tone, the host has not dialed into the conference. Hang up and try your call again.

Procedure

- **Step 1** Access the **Phone** app.
- Step 2 Press More •••• and select Meet me.
- **Step 3** Enter the meet me number.

Intercom Calls

You can place and receive one-way calls using an intercom line.

When you place an intercom call, the recipient's phone answers the call automatically with mute activated (whisper mode). Your message is broadcast through the recipient's speakerphone, headset, or handset, if one of these devices is active.

After receiving the intercom call, the recipient can start two-way audio (connected mode) to allow for further conversation.

Make an Intercom Call

When you place an intercom call, your phone enters whisper mode until the recipient accepts the intercom call. In whisper mode, the other person can hear you, but you can't hear them. If you are on an active call, that call is placed on hold.

	Procedure
Step 1	Access the Phone app.
Step 2	Select Intercom 🗐 line.
Step 3	Dial the target intercom number.

Answer an Intercom Call

You can answer an intercom call to talk to the other person.

Before You Begin

You receive a message on your phone screen, and an audible alert. Your phone answers the intercom call in whisper mode.

Procedure

- **Step 1** Access the **Phone** app.
- **Step 2** Select the intercom call.

Supervise and Record Calls

You can supervise and record a call. But you must have a minimum of three people on a line: the person calling, the chaperone, and the person called.

The chaperone answers a call, creates a conference call, and monitors and records the conversation.

The chaperone performs the following tasks:

- Record the call.
- Conference in the first participant only; Other participants add people as needed.
- End the call.

The conference ends when the chaperone hangs up the call.

Set up a Supervised Call

When you have a call to chaperone, the incoming call indicates that the call requires supervision.

Before You Begin

You must be part of the chaperone hunt group.

Procedure

- **Step 1** Press More **and select Conference**.
- **Step 2** Dial the person to add to the call.
- **Step 3** After the person answers, press **Merge**.

Record a Call

You can record a call. You might hear a notification tone as you record the call. The recording stops when you press the **Stop recording** softkey or end the call.

Procedure

Step 1 Press Record.

Step 2 Press **Stop recording** when the recording can be stopped.

Prioritized Calls

In your job, you might need to handle urgent or critical situations using your phone. You can identify calls as being very important, and thus have a higher priority than normal calls. The priorities range from level 1 (low) to level 5 (high). This system of priorities is called Multilevel Precedence and Preemption (MLPP).

Your administrator sets up the priorities that you can use and determines if you need special sign-in information.

When a high-priority call rings on your phone, you see the priority level on the phone screen. If you are on a call when a high-priority call comes to your phone, the high-priority call preempts the current call and you hear a special preemption ringtone. You should hang up from your current call to answer the high-priority call.

When you are on a high-priority call, the priority of the call does not change when you:

- Put the call on hold
- Transfer the call
- Add the call to a three-way conference
- Answer the call using call pickup

Table 1: Multilevel Precedence and Preemption Priority Levels

MLPP icon	Priority Level
Δ	Level 1—Priority call

MLPP icon	Priority Level
	Level 2—Medium priority (Immediate) call
3	Level 3—High priority (Flash) call
4	Level 4—Flash Override
5	Level 5—Executive Override

Make a Priority Call

To make a priority call, you might need to sign in with your special credentials. You have three chances to enter these credentials, and you're notified if you've entered them incorrectly.

Procedure

- Step 1Access the Phone app.Step 2Press More •••• and select Prec level.
- **Step 3** Select a priority level.
- **Step 4** Enter the phone number.
- Step 5 Press Answer/Send

Answer a Priority Call

If you hear a special ring that's faster than usual, you are receiving a priority call.

Procedure

Press Answer.

Answer a Priority Call While on Another Call

If you hear a continuous tone that interrupts your call, you or your coworker are receiving a priority call. Hang up immediately and let the higher priority call go to the intended person.

	Procedure
Step 1	Press End call.

Step 2 Press Answer.

Multiple Lines

If you share phone numbers with other people, you could have multiple lines on your phone. When you have multiple lines, you have more calling features available to you.

Shared Lines

You can share the same phone number with one or more of your coworkers. For example, as an administrative assistant, you might be responsible for screening calls for the person that you support.

When you share a phone number, you can use that phone line just like you would any other line, but you should be aware of a few special characteristics about shared lines:

- The shared phone number appears on all phones that share the number.
- If your coworker answers a call on the shared line, the shared line icon displays in red on your phone.
- If you put a call on hold, your shared line icon is white. But your coworker sees the line in red.

Add Yourself to a Call on a Shared Line (Barge)

You or your coworker can join a call on the shared line.

Procedure

- **Step 1** Select a shared line that is in use.
- **Step 2** Press **More** and select **Barge**.

Add Yourself to a Call on a Shared Line (cBarge)

You or your coworker can join a call on the shared line.

1

Procedure

- **Step 1** Select a shared line that is in use.
- **Step 2** Press **More ••••** and select **cBarge**.
- Step 3 Press Yes.

Get Notified Before You Join a Call on a Shared Line

You can set up your phone to alert you when you barge into a call. By default, the alert prompt is turned Off.

- **Step 1** Access the **Settings** app.
- Step 2 Select Barge alert.
- **Step 3** Press **On** to turn on the alert.



Contacts

- Access the Contacts App, page 43
- Corporate Directory, page 43
- Personal Directory, page 44
- Local Contacts, page 47
- Favorites, page 49

Access the Contacts App

You can access the **Contacts** app from the home screen. The **Contacts** app gives you access to the following directories and lists:

- Corporate directory—a directory of the people in your company
- Personal directory—a directory of your personal contacts. The directory is stored in the call control system and you can access your personal directory from other phones in your phone network.
- Local contacts—a directory of your personal contacts that is stored in the phone memory.
- Favorites-a list of contacts that you regularly dial

Procedure

From the home screen, press the left arrow of the navigation cluster to select Contacts.

Corporate Directory

You can look up a coworker's number from your phone, which makes it easier to give them a call. Your administrator sets up and maintains the directory.

Search and Dial a Contact from the Corporate Directory

Procedure

Step 1Access the Contacts app.Step 2Select Corporate directory.Step 3Enter the search criteriaStep 4Press More and select Submit.

Step 5 Press More and select Call.

Find Contact Information for a Coworker from Your Phone

Procedure

- **Step 1** Access the **Contacts** app.
- **Step 2** Select Corporate directory.
- **Step 3** Enter the search criteria
- Step 4 Press More and select Submit.
- Step 5 Press More and select Details.

Personal Directory

Use the personal directory to store the contact information for friends, family, or coworkers. You can add your own contacts to the personal directory.

You can set up your personal directory from your phone or from the Self Care portal.

Sign In and Out of a Personal Directory

Before You Begin

Before you can sign in to your personal directory, you need your user ID and PIN. Contact your administrator if you don't know this information.

Procedure

Step 1	Access the Contacts app.
Step 2	Select Personal directory.
Step 3	Enter your user ID and PIN.
Step 4	Press More •••• and select Log in.
Step 5	Press More and select Log out to sign out of your personal directory.

Search for a Contact in Your Personal Directory

Procedure

- **Step 1** Access the **Contacts** app.
- **Step 2** Select **Personal directory**.
- **Step 3** Enter the search criteria.
- **Step 4** (Optional) Select an entry and press **Details**.

Add a New Contact to Your Personal Directory

You can add a contact to your Personal Directory.

Procedure

- **Step 1** Access the **Contacts** app.
- Step 2 Select Personal Directory.
- **Step 3** Press **More ••••** and select **Add new**.
- **Step 4** Enter the contact information.
- **Step 5** Press More and select Save.

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Find Contact Information for a Personal Directory Contact from Your Phone

Procedure

Step 1 Access the Contacts app.
Step 2 Select Personal Directory.
Step 3 Select a contact.
Step 4 Press Details.
Step 5 Press More •••• and select Details.

Edit a Contact in Your Personal Directory

Procedure

- **Step 1** Access the **Contacts** app.
- **Step 2** Select **Personal Directory**.
- **Step 3** Select a contact.
- Step 4 Press Details.
- **Step 5** Press **More •••** and select **Edit contact**.

Call a Contact from Your Personal Directory

Procedure

- **Step 1** Access the **Contacts** app.
- **Step 2** Select **Personal Directory**.
- **Step 3** Select a contact.
- Step 4 Press Details.
- Step 5 Press More •••• and select Call.

Remove a Contact from Your Personal Directory

Procedure	e
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Step 1 Access the Contacts app.
Step 2 Select Personal directory.
Step 3 Search for a contact.
Step 4 Press More and select Delete.

Local Contacts

You can create a list of local contacts. The local contacts list is stored in the phone memory.

Search for a Contact in Your Local Contacts List

Procedure

- **Step 1** Access the **Contacts** app.
- Step 2 Select Local contacts.
- **Step 3** Enter the search criteria.
- **Step 4** (Optional) Select an entry and press **Details**.

Add a New Contact to Your Local Contacts List

You can add a contact to your Local Contacts list.

Procedure

- **Step 1** Access the **Contacts** app.
- Step 2 Select Local contacts.

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- **Step 3** Press **More ••••** and select **Add new**.
- **Step 4** Enter the contact information.
- **Step 5** Press More and select Save.

Find Contact Information for a Local Contact from Your Phone

Procedure

Step 1 Access the Contacts app.
Step 2 Select Local contacts.
Step 3 Search for a contact.
Step 4 Press More •••• and select Deatils.

Edit a Contact in Your Local Contacts List

Procedure

- **Step 1** Access the **Contacts** app.
- **Step 2** Select Local contacts.
- **Step 3** Search for a contact.
- **Step 4** Press **More ••••** and select **Edit contact**.

Call a Contact from Your Local Contacts List

- **Step 1** Access the **Contacts** app.
- Step 2 Select Local contacts.
- **Step 3** Select a contact.
- Step 4 Press Details.
- **Step 5** Press **More** and select **Call**.

Remove a Contact from Your Local Contacts List

Procedure

Step 1Access the Contacts app.Step 2Select Local contacts.Step 3Search for a contact.

Step 4 Press More and select Delete.

Remove all Local Contacts

Procedure

Step 1	Access the Contacts app.
Step 2	Select Local contacts.

Step 3 Press More **...** and select **Delete all**.

Favorites

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You can add frequently-called numbers to your favorites list, and assign a speed-dial code to the number.

Add a Contact to Your Favorites List

Before You Begin

The contact must exist in your local contacts list.

- **Step 1** Access the **Contacts** app.
- Step 2 Select Favorites.
- **Step 3** Select an unassigned entry.
- Step 4 Press Assign.
- **Step 5** Select a local contact.
- Step 6 Press Assign.

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Delete a Contact from Your Favorites List

Step 1	Access t	he Contacts	app
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- **Step 2** Select Favorites.
- **Step 3** Select an assigned entry.
- Step 4 Press More and select Unassign.



Recent Calls

- Access the Recents App, page 51
- New Voicemail Message and Missed Calls Indicators, page 51
- Voicemail List, page 51
- Missed Calls List, page 52
- Recents Calls List, page 54

Access the Recents App

You can access the Recents app from the home screen. From the Recents app, you can see your voicemail messages, missed calls, and recent calls.

Procedure

From the home screen, press the up arrow of the navigation cluster to select **Recents O**.

New Voicemail Message and Missed Calls Indicators

In the home screen, you can see that you have new voicemail or missed calls. The red box on the **Recents** icon on the home screen shows the number of unheard voicemail messages and missed calls.

In the Recents list, you can see the number of unheard voicemail messages and the number of missed calls.

When you have an unheard voicemail message, you could also hear a stutter tone played when you access a phone line. This stutter tone is line-specific. You only hear it when using a line that has voice messages.

Voicemail List

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Access Your Voicemail Service

You can access the Voicemail service to hear your voicemail messages.

Procedure

Step 1 Access the **Recents** app.

Step 2 Select Voicemail.

Missed Calls List

You use the Missed Calls lists to see the 150 most recent individual calls and call groups. If your phone has multiple lines, your administrator can set up the Missed Calls list so that calls on all lines are in one list.

Calls in the Missed Calls list are grouped together if they are from the same number and are consecutive.

View Your Missed Calls

Procedure

Step 1	Access the Recents app.
Step 2	Select Missed Calls.
Step 3	Select a phone line or All missed.

Find Details About a Missed Call

- **Step 1** Access the **Recents** app.
- Step 2 Select Missed Calls.
- Step 3 Select a line or All missed.
- **Step 4** Select a missed call entry.
- **Step 5** Press **More ••••** and select **Details**.

Return a Missed Call

Procedure

Step 1Access the Recents app.Step 2Select Missed Calls.Step 3Select a line or All missed.

- **Step 4** Select a missed call entry.
- Step 5 Press More and select Call.

Create a New Local Contact from a Missed Call Record

You can add the person associated with a missed call record to your local contacts list.

Procedure

Step 1	Access the Recents app.
Step 2	Select Missed Calls.
Step 3	Select a line or All missed.
Step 4	Select a missed call entry.
Step 5	Press More •••• and select Create new local contact.

Delete a Missed Call Entry

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You can delete an entry from your Missed Call list.

Step 1 Access the Recents a	ıpp
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- Step 2 Select Missed Calls.
- Step 3 Select a line or All missed.
- **Step 4** Select a missed call entry.
- **Step 5** Press **More and** select **Delete**.
- Step 6 Press Yes to confirm the deletion.

Clear the Missed Calls List

You can delete all entries from your Missed Call list.

Procedure

- **Step 1** Access the **Recents** app.
- Step 2 Select Missed Calls.
- Step 3 Select a line or All missed.
- Step 4 Press More and select Clear list.
- **Step 5** Press **Yes** to confirm the deletion.

Recents Calls List

You use the Recents lists to see the 150 most recent individual calls and call groups. If your phone has multiple lines, your administrator can set up the Recents list so that calls on all lines are in one list.

Calls in the Recents list are grouped together if they are to and from the same number and are consecutive.

View Your Recent Calls

- **Step 1** Access the **Recents** app.
- Step 2 Select Recents.
- Step 3 Select a line or All recents.

Find Details About a Recent Call

Procedure

Step 1Access the Recents app.Step 2Select Recents.Step 3Select a line or All recents.Step 4Select a call entry.

Step 5 Press **More •••** and select **Details**.

Return a Recent Call from Recents

Procedure

Step 1	Access the Recents app.
Step 2	Select Recents.
Step 3	Select a line or All recents.
Step 4	Select a call entry.

Step 5 Press More •••• and select Call.

Create a New Local Contact from a Recents Call Record

You can add the person associated with a Recents call record to your local contacts list.

Procedure

- Step 1 Access the Recents app.
- Step 2 Select Recents.

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- Step 3 Select a line or All recents.
- **Step 4** Select a missed call entry.
- **Step 5** Press **More** and select **Create new local contact**.

Delete a Call Record

You can delete an individual call from your Recent Calls list.

Procedure

- **Step 1** Access the **Recents** app.
- Step 2 Select Recents.
- **Step 3** Select a line or **All recents**.
- Step 4 Select an entry.
- **Step 5** Press **More ...** and select **Delete**.
- **Step 6** Press **Yes** to confirm the deletion.

Clear the Recent Calls List

You can clear all the entries from your Recent Calls list.

- **Step 1** Access the **Recents** app.
- Step 2 Select Recents.
- Step 3 Select a line or All recents.
- Step 4 Press More •••• and select Clear List.
- **Step 5** Press **Yes** to confirm the deletion.



Applications

- Apps and the Application Button, page 57
- Use the Push to Talk Application, page 57

Apps and the Application Button

You can use the **Apps** (app to access special services on the phone.

You can use the Application I button to start applications such as Push to Talk or other services on your phone. The Application button is located on the left side of the phone.

Depending on how your system administrator sets up the button, you may be able to use it from the main screen only, or you may use it from any menu or service, or even when the phone is locked.

The button can also be configured to start an application immediately after you press it or only after you hold it for several seconds.

For more information, contact your system administrator.

Use the Push to Talk Application

You can use the Push to Talk service to communicate (similar to a two-way radio) with members of your organization. Your administrator must set up the Push to Talk service, and then you must subscribe to the service in the Self Care portal.

Note

Your system administrator provides detailed information about how to use your Push to Talk service.

Procedure

Step 1 From the home screen, select **Apps**

Step 2 Select Push to Talk.

• Use Application I to start and end a transmission depending on how your service is configured.

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• Use Talk and Stop to send and receive audio.



Settings

- Access the Settings App, page 59
- Adjust the Volume in a Call, page 70
- Adjust the Ringtone Volume, page 70

Access the Settings App

You use the **Settings** app to set up, manage, and customize your phone.

Menu entries that are gray mean that your administrator has restricted access to the menu.

Procedure

From the home screen, press the down arrow of the navigation cluster to select Settings 😕.

Related Topics

Find Information About Your Phone, on page 79 Get Notified Before You Join a Call on a Shared Line, on page 42

Access Phone Settings

You can customize your phone from the Phone settings menu.

Procedure

Step 1 Access the **Settings** app.

Step 2 Select Phone settings.

Make the Phone Vibrate for an Incoming Call

You can set your phone to vibrate when you have an incoming call. The vibration can be set differently based on whether you have the phone ringer turned off or on.

Procedure

- **Step 1** Access the **Settings** app.
- **Step 2** Select Phone settings > Sounds > Vibrate
- **Step 3** Select **Vibrate on ring** and press **On** to set the phone to vibrate when the phone rings. Or, press **Off** so that the phone does not vibrate when the phone rings.
- **Step 4** Select **Vibrate on silent** and press **On** to set the phone to vibrate when the ringer is turned on. Or, press **Off** so that the phone does not vibrate when the ringer is turned on.

Select Where You Hear the Ringtone

You can adjust where you hear the ringtone: in the headset only, in the speaker only, or in both the Headset and the speaker.

Procedure

Step 1	Access the Settings app.
Step 2	Select Phone settings > Sounds > Ringer output
Step 3	Select the setting required.
Step 4	Press Set.

Change the Ringtone

You can change the sound that you hear for incoming calls and you can set a different ringtone for each phone line.

- **Step 1** Access the **Settings** app.
- **Step 2** Select **Phone settings** > **Sounds** > **Ringtone**
- **Step 3** (Optional) Select a line.
- **Step 4** Select a ringtone.
- **Step 5** Press **Play** to hear the ringtone.
- Step 6 Press Set.

Adjust the Headset Feedback

When you use a headset, you can hear your own voice in the earpiece, which is called headset sidetone or headset feedback. You can control the amount of headset sidetone on your phone.

Procedure

- **Step 1** Access the **Settings** app.
- **Step 2** Select Phone settings > Sounds > Headset sidetone
- **Step 3** Select one of the options.

Turn Off the Keypad Sounds

You can turn off the sounds on the keypad so that you don't hear sounds when you press a button.

Procedure

Step 1	Access	the	Settings	app
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Step 2 Select Phone settings > Sounds > Keypad tone

Step 3 Press **On** to turn the tones on.

Adjust the Screen Brightness

You can adjust the brightness of the phone display.

Procedure

Step 1	Access t	he Sett	ings app
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Step 2 Select Phone settings > Display > Brightness

- **Step 3** Use the arrow keys of the Navigation cluster to adjust the brightness.
- Step 4 Press Save.

Change the Font Size

You can adjust the font size used on the phone screen. If you set the font size smaller, more text displays on the screen. If you set the font size larger, less text displays on the screen.

Procedure

JIED I ACCESS the Settings ap	Step 1	Access	the	Settings	app
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- **Step 2** Select Phone settings > Display > Font size
- **Step 3** Select the setting required.

Control the LED Indicator Light

Procedure

Step 1	Access the Settings app.
Step 2	Select Phone settings > LED coverage indicator
Step 3	Press Off to turn off the indicator.

Change the Screen Display Timeout

You can set up your phone to turn off the screen after a specific period of inactivity. When you turn off the screen, the phone uses less battery power.

Procedure

Step 1 Access the **Settings** app.

Step 2 Select Phone settings > Display > Sleep.

Step 3 Choose the setting required.

Related Topics

Turn Off Your Phone, on page 4

Change the Wallpaper

You can change the wallpaper (background) for your phone. But, you must be careful that the wallpaper you select. You should avoid wallpapers that will not clearly show white text.

The following wallpapers are not suitable for the phone:

- Whale tail
- Green leaves
- · Beach scene
• Wheat field

Procedure

```
Step 1Access the Settings app.Step 2Select Phone settings > Display > WallpaperStep 3Select a wallpaper.
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Step 4 Press **Preview** to view the wallpaper.

Step 5 Press Save.

Automatically Lock the Keypad

You can set the keypad to automatically lock. If you set the phone to automatically lock the keypad, the keypad locks when the phone screen turns off.

Procedure

Step 1 Access the **Settings** app.

Step 2 Select **Phone settings** > **Keypad** > **Auto lock**

Step 3 Press On.

Related Topics

Lock the Phone Keypad, on page 4

Date and Time Settings

You can manage some of the date and time settings on your phone. Typically, the phone automatically sets the date, time, and time zone using the information from the call control system. But, you may need to override the automatic settings.

Control the Date and Time Manually

When the phone date and time is controlled manually, you can change the following settings:

- Automatic time zone
- Time
- Date
- Time zone
- 12- or 24-hour date format

• Date format

Procedure

Step 1Access the Settings app.Step 2Select Phone settings > Date and TimeStep 3Select Automatic date and time.Step 4Press Off.

Control the Date and Time Automatically

When the phone date and time is controlled automatically, you can change the following settings:

• Automatic time zone

Procedure

- **Step 1** Access the **Settings** app.
- **Step 2** Select Phone settings > Date and Time
- **Step 3** Select Automatic date and time.
- Step 4 Press On.

Set the Time Zone Automatically

You can set up your phone to automatically or manually set the time zone. When the Automatic time zone field is set to On, you cannot change the time zone that your phone uses. When the Automatic time zone field is set to Off, you can set the time zone that your phone uses.

- **Step 1** Access the **Settings** app.
- **Step 2** Select Phone settings > Date and Time > Automatic time zone
- **Step 3** Press **Off** to enable you to set the time zone manually.
- Step 4 Press Set.

Set the Time

Procedure

Step 1	Access the Settings app.
Step 2	Select Phone settings > Date and Time > Time
Step 3	Enter the time using the keypad. Use the right and left navigation keys to move between the fields.
Step 4	Press Set.

Set the Date

You can set the date

Procedure

Step 1	Access the Settings app.
Step 2	Select Phone settings > Date and Time > Date
Step 3	Enter the date using the keypad. Use the right and left navigation keys to move between the fields.
Step 4	Press Set.

Set Time Zone

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You can set the time zone.

- **Step 1** Access the **Settings** app.
- **Step 2** Select Phone settings > Date and Time > Time zone
- **Step 3** Select the correct time zone.
- Step 4 Press Set.

Use a 12-Hour or 24-Hour Clock

Procedure

Step 1	Access the Settings app.	
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Step 2 Select **Phone settings** > **Date and Time**

- Step 3 Select Use 24-hour format.
- Step 4 Press Off for 12-hour format or press On for 24-hour format.

Set the Date Format

You can set your phone to display the date in one of the preset formats.

Procedure

- **Step 1** Access the **Settings** app.
- **Step 2** Select Phone settings > Date and Time > Date format
- **Step 3** Select the required format.
- Step 4 Press Set.

Access Wi-Fi Settings

You access the Wi-Fi menu to set up wireless connections to your phone. Your administrator may restrict access to this menu.

- **Step 1** Access the **Settings** app.
- Step 2 Select Wi-Fi.

Access Bluetooth Settings

Procedure

Step 1 Access the **Settings** app.

Step 2 Select Bluetooth.

Related Topics

Bluetooth Headsets, on page 72 Bluetooth and Your Phone, on page 12

Turn On Bluetooth

Before you can use Bluetooth, you must turn on the ability for the phone to use Bluetooth.



When you use Bluetooth, your phone battery has less talk time.

Procedure

Step 1	Access the Settings app.	
Step 2	Select Bluetooth > Bluetooth .	
Step 3	Press On .	

Add a New Bluetooth Device

You can add up to x Bluetooth devices.

Before You Begin

Bluetooth must be turned on.

Procedure

- **Step 1** Make sure that the Bluetooth device is discoverable.
- **Step 2** Access the **Settings** app.
- Step 3 Select Bluetooth.

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Step 4 Select Add Bluetooth device.

The phone searches for any Bluetooth devices in range. This scan can take a couple of minutes.

- **Step 5** Select a device from the list and press **Pair**.
- **Step 6** (Optional) Enter the passkey for the device.

Connect a Bluetooth Device

After you pair and connect a Bluetooth device to your phone, the device automatically connects when it is turned on and close to your phone. Only one Bluetooth device can be connected to the phone. But, if you have two Bluetooth devices turned on, the phone uses the most recently connected device. You can change which device the phone uses.

Before You Begin

Bluetooth must be turned on and the device needs to be already added to the Bluetooth device list.

Procedure

- **Step 1** Access the **Settings** app.
- Step 2 Select Bluetooth.
- **Step 3** Select a device from the list.
- **Step 4** Press **More ••••** and select **Connect**.

Rename a Bluetooth Device

- **Step 1** Access the **Settings** app.
- Step 2 Select Bluetooth.
- **Step 3** Select a device from the list.
- **Step 4** Press **More ...** and select **Rename**.

Disconnect Bluetooth Device

Procedure

- **Step 1** Access the **Settings** app.
- **Step 2** Select **Bluetooth**.
- **Step 3** Select a device from the list.
- **Step 4** Press **More ...** and select **Disconnect**.

Delete a Bluetooth Device

Procedure

- Step 1Access the Settings app.Step 2Select Bluetooth.
- **Step 3** Select a device from the list.
- **Step 4** Press More and select Delete.

Access Admin Settings

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Your administrator may restrict access to this menu. For information about this menu, see the *Cisco Wireless IP Phone 8821 and 8821EX Administration Guide*.

- **Step 1** Access the **Settings** app.
- Step 2 Select Admin Settings.

Adjust the Volume in a Call

Procedure



Press Volume up and down to adjust the phone, headset, or speakerphone volume when the phone is in use.

Adjust the Ringtone Volume

Procedure



Press Volume up and down to adjust the ringer volume when the phone is not in use.



Accessories

- Supported Accessories, page 71
- Headsets, page 71
- Cisco Wireless IP Phone 8821 Desktop Charger, page 72
- Cisco Wireless IP Phone 8821 Multicharger, page 74
- Secure the Charger with a Cable Lock, page 75

Supported Accessories

The phones support the following accessories:

- Headsets:
 - ° Standard headsets that use a 2.5 mm jack
 - ° Bluetooth headsets
- · Desktop charger
- Multicharger

For more information on other accessories, see the Cisco Wireless IP Phone 882x Series Accessory Guide.

Headsets

You can use wired and Bluetooth headsets with your phone. For information about the supported headsets, see the *Cisco Wireless IP Phone 8821 Series Accessory Guide*.

Although Cisco performs some internal testing of third-party wired and Bluetooth wireless headsets for use with the Cisco Wireless IP Phone 8821 and 8821EX, Cisco does not certify or support products from headset or handset vendors. Because of the inherent environmental and hardware inconsistencies in the locations where phones are deployed, there is not a single "best" solution that is optimal for all environments. We recommend that customers test the headsets that work best in their environment before deploying a large number of units in their network.

We recommend the use of good quality external devices, like headsets that are screened against unwanted radio frequency (RF) and audio frequency (AF) signals. Depending on the quality of these devices and their proximity to other devices such as cell phones and two-way radios, some audio noise may still occur.

The primary reason that a particular headset would be inappropriate for the phone is the potential for an audible hum. This hum can be heard by either the remote party or by both the remote party and you, the phone user. Some potential humming or buzzing sounds can be caused by a range of outside sources, for example, electric lights, electric motors, or large PC monitors. In some instances, the mechanics or electronics of various headsets can cause remote parties to hear an echo of their own voice when they speak to phone users.

Related Topics

Make a Call with a Headset, on page 24

Standard Headsets

You can use a wired headset with your phone. The headset requires a 2.5 mm, 3-band, 4-connector plug.

If you plug a headset into the phone during an active call, the audio path automatically changes to the headset.

Bluetooth Headsets

You can use a Bluetooth headset with your phone.

Using Bluetooth wireless headsets likely increases battery power consumption on your phone and may result in reducing battery life.

For a Bluetooth wireless headset to work, it does not need to be within direct line-of-sight of the phone, but some barriers, such as walls or doors, and interference from other electronic devices, can affect the connection.

Related Topics

Access Bluetooth Settings, on page 67 Bluetooth and Your Phone, on page 12

Cisco Wireless IP Phone 8821 Desktop Charger

You can use the Cisco Wireless IP Phone 8821 Desktop Charger to charge your phone and spare phone battery. The charger has these features:

- Works on line power or from a charged spare phone battery.
- Contains a speakerphone that the docked phone can use.
 - The phone volume buttons control the volume of the speakerphone
 - The charger has a **Mute** button built into it on the lower right corner. When the speakerphone is muted, the **Mute** button lights red.
- Charges the docked phone battery.
 - If the phone is turned on when you put it into the charger, the LED on the top of the phone lights red and you see a message on the screen.

- If the phone is turned off or the battery is too weak when you put the phone into the charger, the LED on the top of the phone lights red and you see a power plug displayed on the screen.
- You do not need to remove the phone from its case.
- Charges a spare battery in the additional charging port behind the main phone charging port.
 - To the right of the phone is the Battery LED.
 - The Battery LED lights red while the charger recharges the spare battery.
 - The Battery LED lights green when the spare battery is fully charged.
- Can be secured with a standard laptop cable lock.
- Provides a USB port to connect your phone to the Ethernet to install certificates. For more information on using the USB port, see *Cisco Wireless IP Phone 8821 and 8821EX Administration Guide*.



Do not attempt to use the USB port to provide power to the desktop charger.

Set Up the Desktop Charger

You should place the desktop charger on a stable work surface.

Before You Begin

You need the cable that is provided with the charger. This cable has a plug on one end and a USB connector on the other end.

You need the power adapter that comes with the phone.

Procedure

- **Step 1** Plug the plug end of the cable into the desktop charger.
- **Step 2** Plug the USB end of the cable into the power adapter and plug the power adapter into the electrical outlet.

Charge Your Phone with the Desktop Charger

When the phone is charging, the LED on the top of the phone lights red, and a message or icon displays on the phone screen. When the battery is fully charged, the LED turns off.

If your phone has a protective case, you don't need to remove the case before you charge the phone in the desktop charger. You adapt the charger to fit the phone.

The bottom of the phone has charging pins that need to be aligned with the connector in the bottom of the charger cradle. When the phone is correctly placed in the charger, it is held in place with magnets.

	Procedure
Step 1 Sten 2	(Optional) Use a thin screwdriver to pry out the charging cup if your phone is in a protective case. Place your phone in the charging slot with the screen facing towards you
	Make sure that the LED on the phone lights red. If the LED does not light up, remove the phone and reinsert it into the charger.
Step 3	When you remove the phone from the charger, lift the phone forward and up to disconnect the connecter from the magnets.
Step 4	(Optional) Slide the charging cup into the charger so that the cup is flush with the charger.

Charge Your Spare Battery with the Desktop Charger

You can charge a spare battery in the desktop charger.

When the battery is charging, the spare battery LED on the charger lights red. When the battery is charged, the spare battery LED on the charger lights green.

Procedure

- **Step 1** Hold the battery so that the Cisco label faces you, and the arrows on the battery point down.
- Step 2 Place the spare battery in the slot behind the phone cradle and press down firmly.

Cisco Wireless IP Phone 8821 Multicharger

The Cisco Wireless IP Phone 8821 Multicharger can charge up to six phones and six spare batteries at the same time.

The multicharger can be placed on a work surface or mounted on a wall with the wall mount kit. You can also secure the multicharger with a standard laptop cable lock.

Set Up the Multicharger

Step 1	Plug the jack end of the power cord into the multicharger.
Step 2	Plug the other end of the power cord into the electrical outlet.
Step 3	Place the multicharger on a stable work surface.

Charge Your Phone with the Multicharger

When the phone is charging, the LED beside the phone lights red. When the battery is fully charged, the LED turns off.

If your phone has a protective case, you don't need to remove the case before you charge the phone in the multicharger. You adapt the multicharger to fit the phone.

The bottom of the phone has charging pins that need to be aligned with the connector in the bottom of the multicharger cradle.

Procedure

Step 1	(Optional)	Use a thin screwdriver to pry out	the charging cup if your p	hone is in a protective case.
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- Step 2 Place your phone in the empty charging slot.Make sure that the LED on the phone lights red. If the LED does not light up, remove the phone and reinsert it into the multicharger.
- **Step 3** When you remove the phone from the multicharger, lift the phone forward and up to disconnect the connecter from the magnets.
- Step 4 (Optional) Slide the charging cup into the multicharger so that the cup is flush with the multicharger.

Charge Your Spare Battery with the Multicharger

You can charge a spare battery in the multicharger.

When the battery is charging, the Battery LED beside the battery lights red. When the battery is charged, the Battery LED lights green.

Procedure

Place the battery in an empty spare battery slot, aligning the battery contacts with the charger connecter. If the Battery LED does not light red, remove the battery and reinsert it into the battery slot.

Secure the Charger with a Cable Lock

You can secure your desktop charger with a laptop cable lock up to 20 mm wide.

- Step 1 Take the looped end of the cable lock and wrap it around the object to which you want to secure your phone.
- **Step 2** Pass the lock through the looped end of the cable.
- **Step 3** Unlock the cable lock.
- **Step 4** Press and hold the locking button to align the locking teeth.
- Step 5 Insert the cable lock into the lock slot of your desktop charger and release the locking button.
- **Step 6** Lock the cable lock.



Troubleshooting

- General Troubleshooting, page 77
- Find Information About Your Phone, page 79
- Hardware Diagnostics, page 79
- Get a List of Neighbors, page 82

General Troubleshooting

You can troubleshoot some general problems with your phone. If your problem is not discussed below, contact your administrator.

Symptom	Explanation	
You cannot complete a call	One or more of the following factors might apply:	
	 Your phone is out of the wireless network access point service area. Note When roaming with your phone, a green blinking 	
	light indicates that the phone is still within the wireless service coverage area.	
	• You must log in to the Extension Mobility service.	
	• You must enter a client matter code or forced authorization code after you dial a number.	
	• Your phone has time-of-day restrictions that prevent you from using some features during certain hours of the day.	

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Symptom	Explanation
The main screen is not active	One of these messages appears on the status line:
	• Network busy: Not enough available bandwidth exists in wireless network to complete this call. Try again later.
	• Leaving service area: Phone is out of range of its associated access point and wireless network.
	• Locating network services: Phone is searching for a wireless network access point.
	• Authentication failed: Authentication server did not accept the security credentials.
	• Configuring IP: Phone is waiting for DHCP to assign an IP address.
The Settings menu is unresponsive	Your administrator might have disabled access to the Settings app on your phone.
Conference fails	Conference requires multiple selected calls. Be sure that you have selected at least one call in addition to the active call, which is selected automatically. Conference also requires the selected calls to be on the same line. If necessary, transfer calls to one line before joining them.
The softkey that you want to use does	One or more of the following factors might apply:
not appear	• You must press More •••• to reveal additional functions.
	• You must change the line state (for example, place a call or have a connected call).
	• Your phone is not configured to support the feature associated with that softkey.
Barge fails and results in a fast busy	One or more of the following factors might apply:
tone	• You cannot barge an encrypted call if the phone you are using is not configured for encryption. When your barge attempt fails for this reason, your phone plays a fast busy tone.
	• You cannot barge a call on another Cisco Wireless IP Phone.
You are disconnected from a call that you joined using Barge	You are disconnected from a call that you joined using Barge if the call is put on hold, transferred, or turned into a conference call.
Call back fails	The other party might have call forwarding enabled.

Symptom	Explanation
The phone shows an error message when you attempt to set up Call Forward All	Your phone may reject your attempt to set up Call Forward All directly on the phone if the target number that you enter would create a Call Forward All loop or would exceed the maximum number of links permitted in a Call Forward All chain (also known as a maximum hop count).

Find Information About Your Phone

Your administrator may ask for information about your phone. This information uniquely identifies the phone for troubleshooting purposes. The information in the menu is read-only. For more information about the menu, see the *Cisco Wireless IP Phone 8821 and 8821EX Administration Guide*.

Procedure

Step 1	Access the Settings app.
Step 2	Select Phone information.

Hardware Diagnostics

You can run some diagnostic tests on your phone.

Perform Audio Diagnostics

You can check that the audio on your phone is working correctly.

Procedure

- **Step 1** Access the **Settings** app.
- **Step 2** Select Admin settings > Diagnostics > Audio.
- **Step 3** now what?

Perform Keypad Diagnostics

You can check that the keypad on your phone is working correctly.

Procedure

Step 1 Access the Setting	s app.
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- **Step 2** Select Admin settings > Diagnostics > Keypad.
- **Step 3** Press any key to check if it works correctly.

Perform WLAN Diagnostics

You can check the Wi-Fi connection for your phone.

Procedure

 Step 1
 Access the Settings app.

 Step 2
 Select Admin settings > Diagnostics > WLAN.

 Step 3
 Select an access point.

 The phone lists the access points in order, from the strongest signal to the weakest or offline access point.

WLAN Diagnostics Fields

The following table describes the fields in the WLAN Diagnostics screen.

Field	Description
AP name	Name of the access point (AP) to which the phone is associated
BSSID	
SSID	The Service Set Identifier (SSID) that the phone is using.
Frequency	The frequency that the phone is using.
Current channel	The channel that the phone is using.
Last RSSI	Last Received Signal Strength Indicator (RSSI) that the phone received.
Beacon interval	Number of time units between beasona. A time unit is 1.024 milliseconds.
Capability	

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Field	Description
Basic rates	Data rates required by the AP at which the station must be capable of operating.
Optional rates	Data rates supported by the AP that are optional for the station to operate at.
Supported HT MCS	
Supported VHT (rx) rates	
Supported VHT (tx) rates	
DTIM period	
Country code	A two-digit country code. Country information might not be displayed if the country information element (IE) is not present in the beacon.
Channels	List of supported channels (from the country IE).
Power constraint	
Power limit	
Channel utilization	Percentage of time, normalized to 255, in which the AP sensed the medium was busy, as indicated by the physical or virtual carrier sense (CS) mechanism.
Station count	Total number of spanning tree algorithms (STAs) currently associated with this BSS.
Admission capacity	An unsigned integer that specifies the remaining amount of medium time available through explicit admission control, in units of 32 microseconds per second.
WMM supported	Support for Wi-Fi Multimedia Extensions.
UAPSD supported	Unscheduled Automatic Power Save Delivery (UAPSD) is supported by the AP. May only be available if WMM is supported. This feature is critical to talk time and achieving maximum call density on the wireless IP phone.
Proxy ARP	CCX-compliant AP supports responding to IP ARP requests on behalf of the associated station. This feature is critical to standby time on the wireless IP phone.

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Field	Description
CCX version	Version of CCX if the AP is CCX compliant.
AC: Best effort, AC: Background, AC: Video, and AC: Audio	Access Category information for each AC (one set for best effort, background, video, and audio):
Admission control	 Admission control—If yes, admission control must be used prior to transmission using the access parameters specific for this AC. AIFSN—Number of slots after an SIFS duration
• AIFSN	
• ECWMin	
• ECWMax	a non-AP STA should defer before invoking a
• TXOpLimit	backon or starting a transmission.
	• ECWMin—Encodes value of CWmin in an exponent form to provide the minimum amount of time in a random backoff.
	• ECWMax—Encodes value of CWmax in an exponent form to provide the maximum amount of time in a random backoff.
	• TXOpLimit—Interval of time in which a particular quality of service (QoS) station has the right to initiate

Get a List of Neighbors

You can see a list of all available access points (neighbors). The phone shows the active access point as the first in the list of neighbors.

Procedure

- Step 1Access the Settings app.Step 2Select Admin settings > Neighbor list.
- **Step 3** (Optional) Select an entry to see the details of the neighbor.

Neighbor List Fields

The following table describes the fields in the Neighbor list screen.

Field	Description
AP name	Name of the access point

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Field	Description
BSSID	
SSID	Service Set Identifier (SSID) for the access point
Channel	Access point channel
RSSI	Received Signal Strength Indicator (RSSI) for the access point
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Product Safety and Security

- Safety and Performance Information, page 85
- Compliance Statements, page 90
- Cisco Product Security Overview, page 95
- Important Online Information, page 95

Safety and Performance Information

Read the following safety notices before installing or using your wireless IP phone.



IMPORTANT SAFETY INSTRUCTIONS

This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. Use the statement number provided at the end of each warning to locate its translation in the translated safety warnings that accompanied this device. Statement 1071

SAVE THESE INSTRUCTIONS

To see translations of the warnings that appear in this publication, refer to the statement number in the *Regulatory Compliance and Safety Information for the Cisco Wireless IP Phone 8821 Series and Peripheral Devices* at the following URL: http://www.cisco.com/c/dam/en/us/td/docs/voice_ip_comm/cuipph/882x/english/RCSI/RCSI-0266-book.pdf



Read the installation instructions before connecting the system to the power source. Statement 1004



Voice over IP (VoIP) service and the emergency calling service do not function if power fails or is disrupted. After power is restored, you might have to reset or reconfigure equipment to regain access to VoIP and the emergency calling service. In the USA, this emergency number is 911. You need to be aware of the emergency number in your country. Statement 361



Ultimate disposal of this product should be handled according to all national laws and regulations. Statement 1040



The plug-socket combination must be accessible at all times because it serves as the main disconnecting device. Statement 1019

Safety Guidelines

The following are safety guidelines for using the Cisco Wireless IP Phone 882x Series in specific environments:

- Do not use this product as the primary communications tool in healthcare environments, as it may use an unregulated frequency band that is susceptible to interference from other devices or equipment.
- The use of wireless devices in hospitals is restricted to the limits set forth by each hospital.
- The use of wireless devices in hazardous locations is limited to the constraints posed by the safety directors of such environments.
- The use of wireless devices on airplanes is governed by the Federal Aviation Administration (FAA).

Battery Safety Notices

These battery safety notices apply to the batteries that are approved by the Cisco Wireless IP Phone manufacturer.

A Warning

There is the danger of explosion if the battery is replaced incorrectly. Replace the battery only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions. Statement 1015



Do not touch or bridge the metal contacts on the battery. Unintentional discharge of the batteries can cause serious burns. Statement 341



Explosion Hazard: Do not charge the phone battery in a potentially explosive environment.

Caution • Do not dispose of the battery pack in fire or water. The battery may explode if placed in a fire.

- Do not disassemble, crush, puncture, or incinerate the battery pack.
- Handle a damaged or leaking battery with extreme care. If you come in contact with the electrolyte, wash the exposed area with soap and water. If the electrolyte has come in contact with the eye, flush the eye with water for 15 minutes and seek medical attention.
- Do not charge the battery pack if the ambient temperature exceeds 104 degrees Fahrenheit (40 degrees Celsius).
- Do not expose the battery pack to high storage temperatures (above 140 degrees Fahrenheit, 60 degrees Celsius).
- When discarding a battery pack, contact your local waste disposal provider regarding local restrictions on the disposal or recycling of batteries.

To obtain a battery, contact your local dealer. Use only the batteries that have a Cisco part number.

Battery

CP-BATT-8821=

Use only the Cisco power supply that is compatible with your phone. To order your power supply, contact your local dealer and refer to the list of Cisco part numbers.

Argentina

CP-PWR-8821-AR=

Australia

CP-PWR-8821-AU=

Brazil

CP-PWR-8821-BZ=

Europe

CP-PWR-8821-CE=

Korea

CP-PWR-8821-KR=

Japan

CP-PWR-8821-JP=

Switzerland

CP-PWR-8821-SW=

North America

CP-PWR-8821-NA=

United Kingdom

CP-PWR-8821-UK=

Note

The battery and power supply are not provided with your phone. To order the battery and power supply, contact your local dealer.

Hazardous Environments



The Cisco Wireless IP Phone 8821EX is ATEX Class 1 Zone 2 and CSA Class 1 Division 2 certified equipment. This means the phone can be operated in an area in which an explosive gas atmosphere is not likely to occur in normal operation and if it does occur, is likely to do so only infrequently and will exist for a short period only.

Explosion Hazard: Do not charge the phone battery in a potentially explosive atmosphere.

Power Outage

The ability to access emergency service through the phone depends on the wireless access point being powered. If there is an interruption in the power supply, Service and Emergency Calling Service dialing will not function until power is restored. In the case of a power failure or disruption, you may need to reset or reconfigure equipment before using the Service or Emergency Calling Service dialing.

Regulatory Domains

The radio frequency (RF) for this phone is configured for a specific regulatory domain. If you use this phone outside of the specific regulatory domain, the phone will not function properly, and you might violate local regulations.

Health-Care Environments

This product is not a medical device and uses an unlicensed frequency band that is susceptible to interference from other devices or equipment.

External Devices Usage

The following information applies when you use external devices with the wireless phone.

Cisco recommends the use of good quality external devices (such as headsets) that are shielded against unwanted radio frequency (RF) and audio frequency (AF) signals.

Depending on the quality of these devices and their proximity to other devices such as mobile phones or two-way radios, some audio noise may still occur. In these cases, Cisco recommends that you take one or more of the following actions:

- Move the external device away from the source of the RF or AF signals.
- Route the external device cables away from the source of the RF or AF signals.
- Use shielded cables for the external device, or use cables with a better shield and connector.
- Shorten the length of the external device cable.
- Apply ferrites or other such devices on the cables for the external device.

Cisco cannot guarantee the performance of the system because Cisco has no control over the quality of external devices, cables, and connectors. The system will perform adequately when suitable devices are attached using good quality cables and connectors.



In European Union countries, use only external headsets that are fully compliant with the EMC Directive [89/336/EC].

Phone Behavior During Times of Network Congestion

Anything that degrades network performance can affect Cisco IP Phone voice and video quality, and in some cases, can cause a call to drop. Sources of network degradation can include, but are not limited to, the following activities:

- Administrative tasks, such as an internal port scan or security scan
- Attacks that occur on your network, such as a Denial of Service attack

SAR

SAR	This product's SAR value meets applicable national SAR limits of 1.6W/kg. The specific values can be found in the product datasheet. When carrying the product or using it while worn on your body, either use an approved accessory such as a holster or otherwise maintain a distance of 5 cm from the body to ensure compliance with RF exposure requirements. Note that the product may be transmitting even if you are not making a phone call.
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Compliance Statements

Compliance Statements for the European Union

CE Marking

For the Cisco Wireless IP Phone 882x Series, the following CE mark and class-2 identifier are affixed to the equipment and packaging:



RF Exposure Statement for the European Union

This device has been evaluated and found compliant in accordance with EU EMF Directive 1999/519/EC.

30062

Compliance Statements for the USA

SAR Statement

The Cisco Wireless IP Phone 782x Series handsets have been tested for body-worn Specific Absorption Rate (SAR) compliance using the specific belt-clip/holster configuration provided with the handset. The FCC has established the detailed body-worn SAR requirements and has established that these requirements have been met with the specific belt-clip/holster provided with the handset. Other belt-clip/holsters or similar accessories that have not been tested may not comply and therefore should be avoided.

RF Exposure Information

The radio module has been evaluated under FCC Bulletin OET 65C (01-01) and found to be compliant to the requirements as set forth in 47 CFR Sections 2.1091, 2.1093, and 15.247 (b) (4) addressing RF Exposure from radio frequency devices. This model meets the applicable government requirements for exposure to radio frequency waves.

This wireless phone contains a radio transceiver. The radio transceiver and antenna have been designed to meet the RF emission requirements for human exposure as specified by the FCC as well as by other agencies from other countries. These guidelines were developed by the industry based on guidance from the World Health Organization (WHO). These industry standards have been developed to include additional safety margins to ensure that the user is exposed to the least amount of RF radiation.

The radio transceiver uses a non ionization type of radiation as opposed to an ionized radiation such as an X-Ray wave.

The exposure standard for these devices references a unit of measure known as SAR. The limit as set by the FCC is 1.6W/kg. The tests for this emission level is done in an independent laboratory who employs test methods and operating positions reviewed by the FCC and other agencies.

Before the phone was placed on the market, the product was tested and certified in accordance with the FCC regulations to verify that the product did not exceed the FCC SAR requirements.

Additional information on SAR and RF Exposure can be obtained off the FCC website at: http://www.fcc.gov/ oet/rfsafety

There is no conclusive proof that these mobile phones are or are not a health risk. The FDA and numerous researchers are continuing studies of RF radiation and health issues. Additional information on this subject can be obtained from the FDA web site at: http://www.fda.gov

A recent Swedish study concluded that there is no link between the RF energy emitted from mobile phones and cancer. For more information, refer to the article written by John Boice and Joseph McLaughlin entitled "Epidemiological Studies of Cellular Telephones and Cancer Risk."

The Cisco Wireless IP Phone 882x Series operates at power levels that are 5 to 6 times lower than most standard cellular, Personal Communications Service (PCS), or Global System for Mobile Communication (GSM) phones. This lower power coupled with a lower transmitter duty cycle reduces the user's exposure to the RF fields.

There are several suggested methods to reduce exposure for the user. Among those include:

- 1 Using a hands-free handset to increase the distance between the antenna and the head of the user.
- **2** Orienting the antenna away from the user.

Additional information can be obtained from the following documentation:

- Cisco Systems Spread Spectrum Radios and RF Safety white paper at the following location: http:// www.cisco.com/warp/public/cc/pd/witc/ao340ap/prodlit/rfhr wi.htm
- FCC Bulletin 56: Questions and Answers about Biological Effects and Potential Hazards of Radio Frequency Electromagnetic Fields
- FCC Bulletin 65: Evaluating Compliance with the FCC guidelines for Human Exposure to Radio Frequency Electromagnetic Fields
- FCC Bulletin 65C (01-01): Evaluating Compliance with the FCC guidelines for Human Exposure to Radio Frequency Electromagnetic Fields: Additional Information for Evaluating Compliance for Mobile and Portable Devices with FCC limits for Human Exposure to Radio Frequency Emission

Additional information can also be obtained from the following organizations:

- World Health Organization Internal Commission on Non-Ionizing Radiation Protection at www.who.int/emf
- United Kingdom, National Radiological Protection Board at www.nrpb.org.uk
- Cellular Telecommunications Association at www.wow-com.com

General RF Exposure Compliance

This device has been evaluated and found compliant to the ICNIRP (International Committee on Non-Ionizing Radiation Protection) limits for Human Exposure of RF Exposure.

Part 15 Radio Device



The Part 15 radio device operates on a non-interference basis with other devices operating at this frequency. Any changes or modification to said product not expressly approved by Cisco, including the use of non-Cisco antennas, could void the user's authority to operate this device.

Canadian Compliance for Cisco Wireless IP Phone 882x Series

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Avis de Conformité Canadien

Ce dispositif est conforme aux normes CNR exemptes de licence d'Industrie Canada. Le fonctionnement de ce dispositif est autorisé sous réserve des deux conditions suivantes : (1) il ne doit pas produire de brouillage et (2) l'utilisateur du dispositif doit être prêt à accepter tout brouillage radioélectrique reçu même si ce brouillage est susceptible de compromettre le fonctionnement du dispositif.

Canadian RF Exposure Statement

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance.

Déclaration d'exposition aux RF canadienne

Cet équipement est conforme aux limites IC d'exposition aux radiations définies pour un environnement non contrôlé. Les utilisateurs finaux suivent bien les instructions de fonctionnement spécifiques pour satisfaire aux normes d'exposition aux RF.

IC: "For Indoor Use Only"

IC: "pour un usage intérieur"

Compliance Statements for New Zealand

Permit to Connect (PTC) General Warning

The grant of a Telepermit for any item of terminal equipment indicates only that Telecom has accepted that the item complies with minimum conditions for connection to its network. It indicates no endorsement of the product by Telecom, nor does it provide any sort of warranty. Above all, it provides no assurance that any item will work correctly in all respects with another item of Telepermitted equipment of a different make or model, nor does it imply that any product is compatible with all of Telecom's network services.

Use of IP Networks with the PSTN

Internet Protocol (IP) by its nature introduces delay into speech signals as each data packet is formulated and addressed. Telecom Access Standards recommends that suppliers, designers and installers using this technology for calls to or from the PSTN refer to ITU E Model requirements in the design of their networks. The overall aim is to minimise delay, distortion and other transmission impairments, particularly for those calls involving cellular and international networks, which already suffer extensive delay.

The Use of Voice Compression Through the PSTN

Because of the extensive delay already experienced when calling cellular and international networks, some of which is already caused by their use of voice compression technologies. Telecom Access Standards will only approve G711 voice technology for use on the PSTN. G711 is an 'instantaneous speech-encoding technique' whereas G729 and all its variants are considered 'near instantaneous' introducing additional delay into the speech signal.

Echo Cancellation

Echo cancellers are not normally required in the Telecom PSTN because geographic delays are acceptable where CPE return loss is maintained within Telepermit limits. However, those private networks making use of Voice-over-IP (VoIP) technology are required to provide echo cancellation for all voice calls. The combined effect of audio/VoIP conversion delay and IP routing delay can cause the echo cancellation time of 64 mS to be required.

Canadian High-Power Radars Statement

Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Devraient également être informés des utilisateurs que les radars à haute puissance sont désignés comme utilisateurs principaux (à savoir des utilisateurs prioritaires) des bandes 5250-5350 MHz et 5650 à 5.850 MHz et que ces radars pourraient provoquer des interférences et / ou endommager les périphériques LE-LAN.

Compliance Statements for Taiwan

DGT Warning Statement for Cisco Wireless IP Phone 882x Series

避免電波干擾,本器材禁止於室外使用5.25-5.35 秭赫頻帶

低功率電波輻射性電機管理辨法

- 第十二條 經型式認證合格之低功率射頻電機,非經許可,公司、 商號或使用者均不得擅自變更頻率、加大功率或變更原 設計之特性及功能。
- 第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信; 經發現有干擾現象時,應立即停用,並改善至無干擾時方得 繼續使用。

前項合法通信,指依電信法規定作業之無線電信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波 輻射性電機設備之干擾。

低功率射頻電機技術規範

- 4.7 無線資訊傳輸設備
- 4.7.5 在5.25-5.35秭赫頻帶內操作之無線資訊傳輸設備,限於室內使用。
- 4.7.6 無線資訊傳輸設備須忍受合法通信之干擾且不得干擾合法通信;如 造成干擾,應立即停用,俟無干擾之虞,始得繼續使用。
- 4.7.7 無線資訊傳輸設備的製造廠商應確保頻率穩定性,如依製造廠商使 gp 665 用手冊上所述正常操作,發射的信號應維持於操作頻帶中。

Compliance Statement for Argentina

Advertencia

No utilizar una fuente de alimentación con caracteristícas distintas a las expresadas ya que podría ser peligroso.

Compliance Statement for Brazil

This equipment is a secondary type device, that is, it is not protected against harmful interference, even if the interference is caused by a device of the same type, and it also cannot cause any interference to primary type devices.

Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário.

For more information, go to this URL: http://www.anatel.gov.br

Cisco Product Security Overview

This product contains cryptographic features and is subject to U.S. and local country laws that govern import, export, transfer, and use. Delivery of Cisco cryptographic products does not imply third-party authority to import, export, distribute, or use encryption. Importers, exporters, distributors, and users are responsible for compliance with U.S. and local country laws. By using this product, you agree to comply with applicable laws and regulations. If you are unable to comply with U.S. and local laws, return this product immediately.

Further information regarding U.S. export regulations can be found at http://www.bis.doc.gov/policiesandregulations/ear/index.htm.

Important Online Information

End User License Agreement

The End User License Agreement (EULA) is located here: http://www.cisco.com/go/eula

Regulatory Compliance and Safety Information

Regulatory Compliance and Safety Information (RCSI) is located here: http://www.cisco.com/c/dam/en/us/td/docs/voice_ip_comm/cuipph/882x/english/RCSI/RCSI-0266-book.pdf



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