




# Troubleshooting

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## 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	<div>One or more of the following factors might apply:</div> <ul style="list-style-type: none"><li>• Your phone is out of the wireless network access point service area.</li></ul> <div><b>Note</b> When roaming with your phone, a green blinking light indicates that the phone is still within the wireless service coverage area.</div> <ul style="list-style-type: none"><li>• You must log in to the Extension Mobility service.</li><li>• You must enter a client matter code or forced authorization code after you dial a number.</li><li>• Your phone has time-of-day restrictions that prevent you from using some features during certain hours of the day.</li></ul>

Symptom	Explanation
The main screen is not active	<p>One of these messages appears on the status line:</p> <ul style="list-style-type: none"> <li>• <b>Network busy:</b> Not enough available bandwidth exists in wireless network to complete this call. Try again later.</li> <li>• <b>Leaving service area:</b> Phone is out of range of its associated access point and wireless network.</li> <li>• <b>Locating network services:</b> Phone is searching for a wireless network access point.</li> <li>• <b>Authentication failed:</b> Authentication server did not accept the security credentials.</li> <li>• <b>Configuring IP:</b> Phone is waiting for DHCP to assign an IP address.</li> </ul>
The Settings menu is unresponsive	Your administrator might have disabled access to the <b>Settings</b> app on your phone.
<b>Conference</b> fails	<p><b>Conference</b> requires multiple selected calls. Be sure that you have selected at least one call in addition to the active call, which is selected automatically.</p> <p><b>Conference</b> also requires the selected calls to be on the same line. If necessary, transfer calls to one line before joining them.</p>
The softkey that you want to use does not appear	<p>One or more of the following factors might apply:</p> <ul style="list-style-type: none"> <li>• You must press <b>More</b>  to reveal additional functions.</li> <li>• You must change the line state (for example, place a call or have a connected call).</li> <li>• Your phone is not configured to support the feature associated with that softkey.</li> </ul>
<b>Call back</b> fails	The other party might have call forwarding enabled.
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 8821-EX Administration Guide for Cisco Unified Communications Manager*.

### Procedure

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|---------------|-----------------------------------|
| <b>Step 1</b> | Access the <b>Settings</b> app.   |
| <b>Step 2</b> | Select <b>Phone information</b> . |
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## 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

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|---------------|---|
| <b>Step 1</b> | Access the <b>Settings</b> app.   |
| <b>Step 2</b> | Select <b>Admin settings</b> > <b>Diagnostics</b> > <b>Audio</b> .            |
| <b>Step 3</b> | Listen to the tone on the handset speaker.                                    |
| <b>Step 4</b> | Press the <b>Speaker</b> button to turn on handsfree, and listen to the tone. |
| <b>Step 5</b> | Plug in a wired headset and listen to the tone.                               |
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### Perform Keypad Diagnostics

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

#### Procedure

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|---------------|---|
| <b>Step 1</b> | Access the <b>Settings</b> app.                                     |
| <b>Step 2</b> | Select <b>Admin settings</b> > <b>Diagnostics</b> > <b>Keypad</b> . |
| <b>Step 3</b> | Press any key to check if it works correctly.                       |
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## Perform WLAN Diagnostics

You can check the Wi-Fi connection for your phone. The phone lists the access points in order, from the strongest signal to the weakest or offline access point. You can then view details of the wireless access point.

### Procedure

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- Step 1** Access the **Settings** app.
  - Step 2** Select **Admin settings > Diagnostics > WLAN**.
  - Step 3** Press **Continue**.
  - Step 4** Scroll to an access point and press **Select** to see detailed information about the access point.
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## 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	The access point radio MAC address
SSID	The Service Set Identifier (SSID) that the phone uses
Frequency	The frequency that the phone uses
Current channel	The channel that the phone uses
Last RSSI	Last Received Signal Strength Indicator (RSSI) that the phone received.
Beacon interval	Number of time units between beacons. A time unit is 1.024 milliseconds.
Capability	802.11 capabilities
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	802.11n data rates
Supported VHT (rx) rates	802.11ac receive data rates
Supported VHT (tx) rates	802.11ac transmit data rates
DTIM period	Delivery Traffic Indication Map (DTIM) information

Field	Description
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	802.11h power constraint offset in dB
Power limit	Dynamic Transmit Power Control (DTCP) value advertised by the access point.
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.
CCX version	Version of CCX if the AP is CCX compliant.

Field	Description
AC: Best effort, AC: Background, AC: Video, and AC: Audio <ul style="list-style-type: none"> <li>• Admission control</li> <li>• AIFSN</li> <li>• ECWMin</li> <li>• ECWMax</li> <li>• TXOpLimit</li> </ul>	Information for each Access Category (AC). There is one set of data for best effort, background, video, and audio. <ul style="list-style-type: none"> <li>• Admission control—If yes, admission control must be used prior to transmission using the access parameters specific for this AC.</li> <li>• AIFSN—Number of slots after an SIFS duration a non-AP STA should defer before invoking a backoff or starting a transmission.</li> <li>• ECWMin—Encodes value of CWmin in an exponent form to provide the minimum amount of time in a random backoff.</li> <li>• ECWMax—Encodes value of CWmax in an exponent form to provide the maximum amount of time in a random backoff.</li> <li>• TXOpLimit—Interval of time in which a particular quality of service (QoS) station has the right to initiate</li> </ul>

## Create a Problem Report from the Phone

If you encounter a problem with your phone, you can generate a problem report from the phone.

### Procedure

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- Step 1** Access the **Settings** app.
  - Step 2** Select **Phone information > Report problem**.
  - Step 3** Press **Submit**.
  - Step 4** When the success message is displayed, notify your administrator that a problem report is available.
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