



CHAPTER 5

Configuring Settings on the Cisco Unified Wireless IP Phone

The Settings menu on the Cisco Unified Wireless IP Phone 7921G provides access to view and change network profile settings and several phone settings for users. The Settings menu includes these configurable menus:

- Network Profiles
- Phone Settings
- Security Configuration
- USB Configuration

The Settings menu also provides view only access to network, device, and other phone status information. For information about these menus, see the [Chapter 8, “Viewing Security, Device, Model, and Status Information on the Phone.”](#)

These sections provide details about configuring network and phone settings on the phone:

- [Accessing Network and Phone Settings, page 5-2](#)
- [Configuring Network Profile Settings, page 5-3](#)
- [Changing Phone Settings, page 5-15](#)
- [Configuring the Security Certificate on the Phone, page 5-17](#)
- [Changing the USB Configuration, page 5-19](#)

Accessing Network and Phone Settings

You can view and change many network configuration options and phone settings for the Cisco Unified Wireless IP Phone 7921G by using the Settings menu.





Note

You can control whether a Cisco Unified Wireless IP Phone 7921G has access to the Settings menu from the Cisco Unified Communications Manager Administration Phone Configuration page. Use the Settings Access field in the Product Specific Configuration section of the phone configuration page. For more information, see the [“Specific Configuration Options for the Cisco Unified Wireless IP Phone 7921G”](#) section on page 7-22.

To access the Settings menu, follow these steps:

Procedure

Step 1 Press  on the Navigation button for  (Settings).

Step 2 Use these menu options to view or change settings:

- **Phone Settings**
- **Network Profiles**
- **Security Configuration**
- **USB Configuration**




Note These options are configurable; other options are display only.

Step 3 To select the item that you want to configure or view, do one of these actions:

- Use the Navigation button to scroll to the item and then press the **Select** button.
- Use the keypad to enter the number that corresponds to the item.

Step 4 If a menu option is locked , you must press ** # on the keypad.

When the menu is unlocked,  displays.

Related Topics

- [Configuring Network Profile Settings, page 5-3](#)
- [Changing Phone Settings, page 5-15](#)
- [Configuring the Security Certificate on the Phone, page 5-17](#)
- [Changing the USB Configuration, page 5-19](#)

Configuring Network Profile Settings

On the Cisco Unified Wireless IP Phone 7921G, you can configure a network profile for the wireless network settings for a specific WLAN.

Users with wireless IP phones, who travel between company locations, can have separate network profiles for each wireless LAN (WLAN) location. You can set up profiles with the local SSID, WLAN settings, and authentication information for each location.

These sections provide information about configuring network profiles:

- [Accessing a Network Profile, page 5-3](#)
- [Changing the Profile Name, page 5-4](#)
- [Changing Network Configuration Settings, page 5-6](#)
- [Configuring DHCP Settings, page 5-8](#)
- [Configuring Wireless Settings for the Network Profile, page 5-12](#)

Accessing a Network Profile




To view or configure the Network Profile menu on a Cisco Unified Wireless IP Phone 7921G, follow these steps:



Note

You can control whether a Cisco Unified Wireless IP Phone 7921G has access to the Network Profiles menu from the Cisco Unified Communications Manager Administration Phone Configuration page. Use the Settings Access field in the Product Specific Configuration section of the phone configuration page. For more information, see the [“Specific Configuration Options for the Cisco Unified Wireless IP Phone 7921G”](#) section on page 7-22.

Procedure

- Step 1** Choose **Settings > Network Profiles**.
- Step 2** To select the profile name that you want to configure, do one of these actions:
- Use the Navigation button to scroll to the item and then press the **Select** button.
 - Use the keypad to enter the number that corresponds to the item.
- The Network Config list is locked . To unlock the network settings in the profile, press * * # and  displays.
- Step 3** To display the profile settings, press **Change**.
- Step 4** Scroll to and select one of these menu options:
- **Profile Name**
 - **Network Configuration**
 - **WLAN Configuration**
- Step 5** Make changes to the settings. For more information, see [Table 5-1](#).
- Step 6** To save changes to settings in the Profile menu, press **Save**.
- Step 7** To use the modified profile, scroll to the profile name and press **Select**. The  appears by enabled profiles. You can enable from 1 to 4 profiles.
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Changing the Profile Name

You can change the default name of the network profile to one that is more meaningful to the user, such as, “Headquarters” or “Branch office.” You can change the name before or after you have made changes to the network profile.

To rename the profile, follow these steps:







Procedure

- Step 1** Choose **Settings > Network Profiles**.

- Step 2** To select the profile name that you want to change, use the Navigation button to scroll to the item and then press the Select button.
- Step 3** Enter ****#** to unlock the profile.
- Step 4** Select **Profile Name**.
- Step 5** Press **Edit** and enter a new name in the New Profile Name field.
See [Guidelines for Editing Settings in the Network Profile, page 5-5](#).
- Step 6** Press **Options > Save** to complete the name change.
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Guidelines for Editing Settings in the Network Profile

When you edit the value of an option on the Network Profile, you can enter characters, numbers, and special characters from the phone keypad. Use the numeric keys on the keypad to enter the number or the assigned characters. Each press moves to another character choice. Use the following guidelines when entering values:

- Enter characters—Press the numeric key to move to the desired character (lowercase, then upper case).
- Enter numbers—Press the numeric key to enter the number.
- Delete the last character—Press << to delete the last character or number in the string.
- Enter a space—Press  to enter a space between characters.
- Enter a dot—Press  to enter a dot between numbers.
- Enter special characters and symbols—Press one of the following keys to display and enter these characters:
 - Press  to enter * + - / = \ : ;
 - Press  to enter a space , . ‘ “ | _ ~ ’
 - Press  to enter # ? () [] { }
 - Press  to enter ! @ < > \$ % ^ &
- Save an entry—Press **Options > Save**.
- Cancel editing mode—Press **Options > Cancel** as needed to return to the menu option or main screen.

Related Topics

- [Accessing Network and Phone Settings, page 5-2](#)
- [Configuring DHCP Settings, page 5-8](#)
- [Configuring an Alternate TFTP Server, page 5-10](#)
- [Configuring Wireless Settings for the Network Profile, page 5-12](#)

Changing Network Configuration Settings

After accessing a network profile, you can use [Table 5-1](#) for descriptions and reference information for network profile settings.

Table 5-1 *Network Configuration Settings*

Network Setting	Description	For More Information, See...
DHCP Server	IP address of the Dynamic Host Configuration Protocol (DHCP) server from which the phone obtains its IP address	Configuring DHCP Settings, page 5-8
MAC Address	Unique Media Access Control (MAC) address of the phone	Display only, cannot configure
Host Name	Unique host name that the DHCP server assigned to the phone	Display only, cannot configure
DHCP Enabled	<p>Yes—Allows the Dynamic Host Configuration Protocol (DHCP) to obtain an IP address for the phone</p> <p>No—Disables the use of DHCP. You must configure the static settings for the phone</p>	Configuring DHCP Settings, page 5-8

Table 5-1 Network Configuration Settings (continued)

Network Setting	Description	For More Information, See...
IP Address	Internet Protocol (IP) address of the phone	Configuring DHCP Settings, page 5-8
Subnet Mask	Subnet mask used by the phone	
Default Router 1	Primary gateway used by the phone	
Domain Name	Name of the Domain Name System (DNS) domain in which the phone resides	
DNS Server 1	Primary DNS server used by the phone	
DNS Server 2	Optional backup DNS server used by the phone	
Alternate TFTP	Yes—This option assigns an alternative Trivial File Transfer Protocol (TFTP) server No—This option uses the TFTP server assigned by DHCP	Configuring an Alternate TFTP Server, page 5-10
TFTP Server 1	IP address for the primary TFTP server used by the phone. If you set Alternate TFTP option to Yes, you must enter a non-zero value for this option	
TFTP Server 2	Optional backup TFTP server the phone uses if the primary TFTP server is not available	
Load Server	IP address for the server where the phone receives firmware updates	<i>Cisco Unified Communications Manager Administration Guide.</i>
CDP Enabled	Enables or disables Cisco Discovery Protocol (CDP) for the phone	Changing the Cisco Discovery Protocol Settings, page 5-10
DHCP Address Released	Enables or disables the DHCP server to release the IP address	
Erase Configuration	Deletes the phone configuration and sets to factory defaults	

Table 5-1 Network Configuration Settings (continued)

Network Setting	Description	For More Information, See...
Handset Only Mode	<p>Yes—Indicates that the speakerphone is disabled on the phone</p> <p>No—Indicates that the speakerphone is enabled on the phone</p>	Specific Configuration Options for the Cisco Unified Wireless IP Phone 7921G, page 7-22

Configuring DHCP Settings

The Cisco Unified IP Phones enable DHCP, by default, to automatically assign IP addresses to devices when you connect them to the network. If you do not use DHCP in your network, then you must disable DHCP and manually enter the network configuration information. For more information, see [“Interacting with the DHCP Server” section on page 2-26](#).

Use these guidelines when manually configuring the IP settings:

- Ensure the TFTP server has an IP address.
- Ensure the default router IP address is on the same subnet as the host IP address.



Note

When DHCP is enabled, you cannot configure IP settings, but you can configure and alternate TFTP server.

Disabling DHCP

To disable DHCP on the phone and manually configure IP settings, follow these steps:

Procedure

- Step 1** Choose **Settings >Network Profile**.
- Step 2** Scroll to the profile name that you want to configure and press **Select**.
- Step 3** Enter ****#** to unlock the profile and press **Edit**.

- Step 4** Select **Network Configuration**.
- Step 5** Scroll to **DHCP Enabled** and press **No**.
- Step 6** Scroll to **IP Address** and press **Select**.
- Step 7** In the New IP Address: field, enter the static IP address for the phone.
- Step 8** Press **Options > Validate** to save the entry or press **Cancel**.

You must enter the other required static fields. See [Table 5-2](#) for descriptions of these fields.

For information about entering values, see the “[Guidelines for Editing Settings in the Network Profile](#)” section on page 5-5.

Table 5-2 *Static Settings When DHCP is Disabled*

Static Setting	Description
IP Address	IP address, the unique identifier assigned by the system administrator for the phone.
Subnet Mask	Used to partition the IP address into a network identifier and host identifier so TCP/IP can distinguish between them.
Default Router 1	Identifies the gateway that provides connectivity to the IP network beyond the subnet to which the phone belongs.
Domain Name	Identifies the Domain Name System (DNS) domain in which the phone resides.
DNS Server 1 DNS Server 2	If the system is configured to use host names for servers instead of IP addresses, identify the primary and secondary DNS server to resolve host names.
Alternate TFTP server	Identifies whether you are using an alternate TFTP server. See Configuring an Alternate TFTP Server, page 5-10 .
TFTP Server 1	Identifies the TFTP server that the phone uses to obtain configuration files.

Configuring an Alternate TFTP Server

If you use DHCP to direct the Cisco Unified IP Phones to a TFTP server, you can also assign an alternative TFTP server to some phones instead of the one assigned by DHCP.

To assign an alternate TFTP server to a phone, follow these steps:

Procedure

- Step 1** Choose **Settings > Network Profile**.
 - Step 2** To select the profile name that you want to configure, scroll to the item and then press the **Select** button.
 - Step 3** Enter ****#** to unlock the profile and press **Edit**.
 - Step 4** Select **Network Configuration**.
 - Step 5** Scroll to **Alternate TFTP** and press **Yes**.
 - Step 6** Scroll to **TFTP Server 1** and press **Select**.
 - Step 7** In the **New TFTP Server 1:** field, enter the IP address for the server.
See [Table 5-2](#) for descriptions of these fields.
For information about entering values, see the “[Guidelines for Editing Settings in the Network Profile](#)” section on page 5-5.
 - Step 8** Press **Options > /Validate** to save the entry or press **Cancel**.
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Changing the Cisco Discovery Protocol Settings

Some network devices do not use Cisco Discovery Protocol (CDP).

To change whether the phone transmits CDP packets and settings associated with CDP, follow these steps:

Procedure

- Step 1** Choose **Settings >Network Profile**.
 - Step 2** To select the profile name that you want to configure, scroll to the item and then press the **Select** button.
 - Step 3** Enter ****#** to unlock the profile and press **Edit**.
 - Step 4** Select **Network Configuration**.
 - Step 5** Scroll to **CDP Enabled** and press **Yes** to enable or **No** to disable CDP.
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Erasing the Configuration

You can erase the network profile configuration and return to the default settings.

To erase the configuration, follow these steps:

Procedure

- Step 1** Choose **Settings >Network Profile**.
 - Step 2** To select the profile name that you want to configure, scroll to the item and then press the **Select** button.
 - Step 3** Enter ****#** to unlock the profile and press **Edit**.
 - Step 4** Select **Network Configuration**.
 - Step 5** Scroll to **Erase Configuration** and press **Yes** to erase or **No**.
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Related Topics

- [Changing the Profile Name, page 5-4](#)
- [Configuring Wireless Settings for the Network Profile, page 5-12](#)

Configuring Wireless Settings for the Network Profile

The WLAN Configuration menu contains settings that the phone uses to authenticate with an access point. These settings include the SSIDs, authentication type, and encryption data that the phone uses.

This section includes these topics for configuring wireless settings:

- [Accessing the WLAN Configuration Menu, page 5-12](#)
- [Changing WLAN Configuration Settings, page 5-12](#)

Accessing the WLAN Configuration Menu

To access the WLAN Configuration menu options on a Cisco Unified Wireless IP Phone 7921G, follow these steps:

Procedure

- Step 1** Choose **Settings > Network Profiles**.
- Step 2** To select the profile name that you want to configure, scroll to the item and then press the **Select** button.
- Step 3** Enter ****#** to unlock the profile and press **Edit**.
- Step 4** Scroll to and select **WLAN Configuration**.
- Step 5** To view or change the menu options, press **Edit**.
For descriptions of the settings, see [Table 5-3](#).
- Step 6** Press **Options > /Save** to save the entry or press **Cancel**.
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Changing WLAN Configuration Settings

After accessing the WLAN settings, use [Table 5-3](#) for descriptions and reference information for these settings.

Table 5-3 **WLAN Configuration Settings**

Network Setting	Description	For More Information, See...
SSID	Unique identifier for accessing wireless access points	Configuring Wireless Settings in a Network Profile, page 4-17
802.11 Mode	<p>The wireless signal standard used in the WLAN. Options are:</p> <ul style="list-style-type: none"> • 802.11b/g • 802.11a • Auto-b/g • Auto-a • Auto-RSSI 	The 802.11 Standards for Wireless LAN Communications, page 2-3
Single Access Point	Sets the phone to scan frequently for APs (Disabled) or to minimize scanning for APs (Enabled)	Roaming in a Wireless Network, page 2-14
Call Power Save Mode	<p>The type of power saving mode used in the WLAN. Options are:</p> <ul style="list-style-type: none"> • U-APSD/PS-Poll • None 	Networking Protocols Used with Cisco Unified Wireless IP Phones, page 2-8

Table 5-3 WLAN Configuration Settings (continued)

Network Setting	Description	For More Information, See...
Security Mode	<p>The type of authentication that the phone uses to access the WLAN. Options are:</p> <ul style="list-style-type: none"> • Open—Access to all APs without WEP key authentication/encryption • Open+WEP—Access to all APs and authentication through WEP keys at the local AP • Shared Key+WEP—Shared key authentication through WEP keys at the local AP • LEAP—Exchanges a username and cryptographically secure password with a RADIUS server in the network (Cisco proprietary version of EAP) • EAP-FAST—Exchanges a username and cryptographically secure password with a RADIUS server in the network • EAP-TLS—Uses a dynamic session-based key derived from the client adapter and RADIUS server to encrypt data. Uses a client certificate for authentication. • PEAP—This method uses name and password authentication based on Microsoft MSCHAP V2 authentication. • Auto (AKM)—Phone selects the AP and type of key management scheme, either WPA, WPA2, WPA-PSK, WPA2-PSK, or CCKM that must use a wireless domain server (WDS) 	Configuring Wireless LAN Security, page 4-18
UserName	User name for the wireless network (up to 32 characters)	Configuring the Username and Password, page 4-21

Table 5-3 WLAN Configuration Settings (continued)

Network Setting	Description	For More Information, See...
Password	Password for the wireless network (up to 32 characters)	Configuring the Username and Password, page 4-21

Related Topics

- [Accessing Network and Phone Settings, page 5-2](#)
- [Configuring Network Profile Settings, page 5-3](#)
- [Configuring the Security Certificate on the Phone, page 5-17](#)
- [Changing Phone Settings, page 5-15](#)

Changing Phone Settings

The Phone Settings menu contains settings to customize individual phones with different ring tones or volume levels, display, and keypad settings.

**Note**

You can control whether a Cisco Unified Wireless IP Phone 7921G has access to the Phone Settings menu from the Cisco Unified Communications Manager Administration Phone Configuration page. Use the Settings Access field in the Product Specific Configuration section of the phone configuration page. For more information, see the [“Specific Configuration Options for the Cisco Unified Wireless IP Phone 7921G”](#) section on page 7-22.

To access the Phone Settings menu options on a Cisco Unified Wireless IP Phone 7921G, follow these steps:

Procedure

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- Step 1** Choose **Settings > Phone Settings**.
 - Step 2** Press the number for the setting that you want to configure (or you can scroll to the setting and press the **Select** button).
 - Step 3** Press the number for the setting category.

Step 4 Press the number for the setting that you want to change.

For descriptions of the settings, see [Table 5-4](#). For specific instructions to change these settings, refer to “Using Phone Settings,” in the *Cisco Unified Wireless IP Phone 7921G Guide*.

Table 5-4 Configurable Settings for the Phone Sounds, Display, and Keypad

Phone Setting	Description
Sound Settings	
Ring Tone	Assigns the ring tone for each line on the phone.
Volumes	
Ring	Sets the ring volume level for the phone.
Speaker	Sets the volume for the speaker.
Handset	Sets the volume for the handset.
Headset	Sets the volume for the headset.
Docking Speaker	Sets the volume for the desktop charger speakerphone.
Docking Ring	Sets the ring volume level for the desktop charger.
Alert Pattern	Sets the ring, vibrate, or combination to alert the user of an incoming call.
Ring Output	Sets the phone to ring through speaker, headset, or both speaker and headset.
Display Settings	
Display Brightness	Sets the brightness for the phone screen.
Display Timeout	Sets the length of time for the phone screen to display before turning off or disables the timer so screen always displays.
LED Coverage Indicator	Enables or disables the LED blink to indicate that the phone is in service and within the coverage area.

Table 5-4 Configurable Settings for the Phone Sounds, Display, and Keypad (continued)

Phone Setting	Description
Keypad Settings	
Any Key Answer	Enables or disables using any key or button on the phone to answer a ringing call.
Keypad Auto Lock	Sets the length of time for the keypad to lock automatically after no keypad activity or disables auto lock.
Keypad Tone	Enables or disables tones for keypad presses.

Related Topics

- [Accessing Network and Phone Settings, page 5-2](#)
- [Configuring Network Profile Settings, page 5-3](#)
- [Configuring the Security Certificate on the Phone, page 5-17](#)
- [Changing the USB Configuration, page 5-19](#)

Configuring the Security Certificate on the Phone

Security features establish and maintain authenticated communication streams between the phone and the Cisco Unified Communications Manager server, and digitally sign files before they are delivered.

For more information about the security features, see the “[Understanding Security Features for Cisco Unified IP Phones](#)” section on page 1-9. Also, refer to *Cisco Unified Communications Manager Security Guide*.

A Locally Significant Certificate (LSC) installs on phones after you perform the necessary tasks that are associated with the Certificate Authority Proxy Function (CAPF). You can use Cisco Unified Communications Manager Administration to configure an LSC, as described in *Cisco Unified Communications Manager Security Guide*.

Alternatively, you can initiate the installation of an LSC from the Security Configuration menu on the phone. This menu also lets you update or remove an LSC.

Before you do so, make sure that the appropriate Cisco Unified Communications Manager and the CAPF security configurations are complete:

- The CTL file should have a CAPF certificate.
- The CAPF certificate must exist in the `/usr/local/cm/.security/certs` folder in every server in the cluster.
- The CAPF is running and configured.

Refer to *Cisco Unified Communications Manager Security Guide* for more information.

Depending on how you have configured the CAPF, this procedure installs an LSC, updates an existing LSC, or removes an existing LSC.

To configure an LSC on the phone, follow these steps:

Procedure

Step 1 Obtain the CAPF authentication string that was set when the CAPF was configured.

Step 2 Choose **Settings > System Configuration > Security Configuration**.

Step 3 To open the menu, press the **Select** button.

Step 4 Scroll to LSC and press * * # to unlock the option.

Step 5 Press the **Update** softkey.

The phone prompts for an authentication string.

Step 6 Enter the authentication string and press the **Submit** softkey.

The phone begins to install, update, or remove the LSC, depending on how the CAPF was configured. During the procedure, a series of messages appears in the LSC option field in the Security Configuration menu so that you can monitor progress. When the procedure completes successfully, the phone will display Installed or Not Installed.

The LSC install, update, or removal process can take a long time to complete. You can stop the process at any time by pressing the **Stop** softkey from the Security Configuration menu. (Settings must be unlocked before you can press this softkey.)

When the phone successfully completes the installation procedure, it displays “Success.” If the phone displays, “Failed,” the authorization string may be incorrect or the phone may not be enabled for upgrading. Refer to error messages generated by the CAPF and take appropriate actions.

You can verify that an LSC is installed on the phone by choosing **Settings > System Configuration > Security Configuration** and ensuring that the LSC setting shows Installed.

Related Topic

[Understanding Security Features for Cisco Unified IP Phones, page 1-9](#)

Changing the USB Configuration

When using the USB cable to configure a phone, you might need to change the USB configuration. The phone has a default USB IP address of 192.168.1.100 that you can use with the USB connection to the PC. If you need to change the USB port configuration, these options are available:

- Obtain the IP address automatically, by getting an IP address from the PC with DHCP set up.
- Use the IP address and subnet mask assigned in this area.

To view or configure the USB port configuration on a Cisco Unified Wireless IP Phone 7921G, follow these steps:

Procedure

- Step 1** Choose **Settings > System Configuration > USB Configuration**.
- Step 2** To open the menu, press the **Select** button.
- Step 3** Press * * # to unlock the menu.
- Step 4** To configure **DHCP**, press **Select** button and choose one of these options:
 - To obtain an IP address automatically from the PC, choose **Enable**, then press **Save**. You have completed the USB configuration.
 - To use a static IP address, choose **Disable**, then press **Save**.



Note If you disabled DHCP, you must enter an IP address and a subnet mask by performing Step 5 through 12.

Do not perform the following steps if DHCP is enabled.

- Step 5** To change the static IP address, scroll to **IP Address**, and press **Select** button.
- Step 6** Enter a new IP address that is not assigned on the subnet.
- Step 7** Press **Options > Validate** to verify the entry.
- Step 8** To save the changes, press **Save**.
- Step 9** To change the subnet for the new IP address, scroll to **Subnet Mask** and press **Select** button.
- Step 10** Enter the appropriate subnet address.
- Step 11** Press **Options > Validate** to verify the entry.
- Step 12** To save the changes, press **Save**.
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Related Topics

- [Accessing Network and Phone Settings, page 5-2](#)
- [Configuring Network Profile Settings, page 5-3](#)
- [Changing Phone Settings, page 5-15](#)