Configuring Settings on the Cisco IP Phone

The Cisco IP Phone includes many configurable network and device settings that you may need to modify before the phone is functional for your users. You can access these settings, and change many of them, through menus on the phone.

This chapter includes the following topics:

Configuration Menus on the Cisco IP Phone 7970

The Cisco IP Phone 7970 includes the following configuration menus:

- Network Configuration menu—Provides options for viewing and making a variety of network settings. For more information, see the "Network Configuration Menu" section on page 4-4.
- Device Configuration menu—Provides options for viewing and making a variety of non network-related settings. For more information, see the "Device Configuration Menu" section on page 4-9.

Before you can change option settings on these menus, you must unlock options for editing. See the "Unlocking and Locking Options" section on page 4-2 for instructions.

For information about the keys you can use to edit or change option settings, see the "Editing Values" section on page 4-3.

You can control whether a phone user has access to phone settings by using the Settings Access field in the Cisco CallManager Administration Phone Configuration Settings page. For more information, see *Cisco CallManager Administration Guide*.

Displaying a Configuration Menu

To display a configuration menu, follow these steps:

Step 1 Press the **Settings** button to access the Settings menu.

Step 2 Perform one of these actions:

- Use the **Navigation** button to select the desired menu and then press the **Select** softkey.
- Use the keypad on the phone to enter the number that corresponds to the menu.
- Press the menu name on the touchscreen.

To exit a menu, press the **Exit** softkey.

Unlocking and Locking Options

Configuration options in the Network Configuration menu and the Device Configuration menu are locked by default to prevent users from making changes that could affect the operation of a phone. You must unlock these options before you can change them.

When options are inaccessible for modification, a *locked* padlock icon appears on the configuration menus. When options are unlocked and accessible for modification, an *unlocked* padlock icon appears on these menus, as shown below.

To unlock or lock options on the Network Configuration menu and the Device Configuration menu, press ****#**. This action either locks or unlocks the options, depending on the previous state.

Make sure to lock options after you have made your changes.

Editing Values

When you edit the value of an option setting, follow these guidelines:

- Use the keys on the keypad to enter numbers and letters.
- To enter letters using the keypad, use a corresponding number key. Press the key one or more times to display a particular letter. For example, press the 2 key once for "a," twice quickly for "b," and three times quickly for "c." After you pause, the cursor automatically advances to allow you to enter the next letter.
- To enter a period (for example, in an IP address), press the **.** (period) softkey or press ***** on the keypad.
- Press the << softkey if you make a mistake. This softkey deletes the character to the left of the cursor.
- Press the **Cancel** softkey before pressing the **Save** softkey to discard any changes that you have made.

Resetting Configuration Settings

You can use the following softkeys to reset various settings on a phone to their default values:

- **Factory**—Resets configurable options on the User Preferences Menu, the Network Configuration menu, and the Device Configuration menu to their default settings; resets volume to its default setting; deletes call histories from the call logs; then resets the phone.

- **Erase**—Resets configurable options on the Network Configuration menu to their default values and restarts DHCP.

To use the **Factory** softkey, follow these steps:

Step 1 Press the **Settings** button to access the Settings menu.

Step 2 Press the **Factory** softkey.

The phone resets itself.

To use the **Erase** softkey, follow these steps:

Step 1 Press the **Settings** button to access the Settings menu.

Step 2 Choose **Network Configuration** to display the Network Configuration menu.

Step 3 Press ****#** to unlock options.

Step 4 Press the **Erase** softkey.

The phone reconfigures and reregisters itself.

Note Make sure to lock options when the phone is ready for use.

Network Configuration Menu

The Network Configuration menu provides options for viewing and making a variety of network settings. Table 4-1 describes these options and, where applicable, explains how to change them.

For information about how to access the Network Configuration menu, see the "Displaying a Configuration Menu" section on page 4-2.

Before you can change an option on this menu, you must unlock options as described in the "Unlocking and Locking Options" section on page 4-2. The **Edit**, **Yes**, or **No** softkeys for changing network configuration options appear only if options are unlocked

For information about the keys you can use to edit options, see the "Editing Values" section on page 4-3.

Table 4-1 Network Configuration Menu Options

Option	Description	To Change
DHCP Server	IP address of the Dynamic Host Configuration Protocol (DHCP) server from which the phone obtains its IP address.	Display only—cannot configure.
BOOTP Server	Indicates whether the phone obtains its configuration from a Bootstrap Protocol (BootP) server instead of from a DHCP server.	Display only—cannot configure.
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.
Domain Name	Name of the Domain Name System (DNS) domain in which the phone resides. You can overwrite this value if the Alternate Domain option is set to Yes.	1. Unlock network configuration options. 2. Set the DHCP Enabled option to No. 3. Scroll to the Domain Name option, press the **Edit** softkey, and then enter a new domain name. 4. Press the **Validate** softkey and then press the **Save** softkey.
IP Address	Internet Protocol (IP) address of the phone. If you assign an IP address with this option, you must also assign a subnet mask and default router. See the Subnet Mask and Default Router options in this table.	1. Unlock network configuration options. 2. Set the DHCP Enabled option to No. 3. Scroll to the IP Address option, press the **Edit** softkey, and then enter a new IP Address. 4. Press the **Validate** softkey and then press the **Save** softkey.

Table 4-1 Network Configuration Menu Options (continued)

Option	Description	To Change
Subnet Mask	Subnet mask used by the phone.	1. Unlock network configuration options. 2. Set the DHCP Enabled option to No. 3. Scroll to the Subnet Mask option, press the **Edit** softkey, and then enter a new subnet mask. 4. Press the **Validate** softkey and then press the **Save** softkey.
TFTP Server 1	Primary Trivial File Transfer Protocol (TFTP) server used by the phone. By default this server is CiscoCM1. If you are not using DHCP in your network and you want to change this default server, you must use the TFTP Server 1 option. If you set the Alternate TFTP option to yes, you must enter a non-zero value for the TFTP Server 1 option.	1. Unlock network configuration options. 2. If DHCP is enabled, set the Alternate TFTP option to Yes. 3. Scroll to the TFTP Server 1 option, press the **Edit** softkey, and then enter a new TFTP server IP address. 4. Press the **Validate** softkey, and then press the **Save** softkey.
TFTP Server 2	Optional backup TFTP server that the phone uses if the primary TFTP server is unavailable.	1. Unlock network configuration options. 2. Enter an IP address for the TFTP Server 1 option. 3. Scroll to the TFTP Server 2 option, press the **Edit** softkey, and then enter a new backup TFTP server IP address. 4. Press the **Validate** softkey, and then press the **Save** softkey.

Table 4-1 Network Configuration Menu Options (continued)

Option	Description	To Change
Default Router 1 Default Router 2 Default Router 3 Default Router 4 Default Router 5	Default router used by the phone (Default Router 1) and optional backup routers (Default Router 2–5).	1. Unlock network configuration options. 2. Set the DHCP Enabled option to No. 3. Scroll to the appropriate Default Router option, press the **Edit** softkey, and then enter a new router IP address. 4. Press the **Validate** softkey. 5. Repeat Steps 3 and 4 as needed to assign backup routers. 6. Press the **Save** softkey.
DNS Server 1 DNS Server 2 DNS Server 3 DNS Server 4 DNS Server 5	Primary Domain Name System (DNS) server (DNS Server 1) and optional backup DNS servers (DNS Server 2–5) used by the phone.	1. Unlock network configuration options. 2. Scroll to the appropriate DNS Server option, press the **Edit** softkey, and then enter a new DNS server IP address. 3. Press the **Validate** softkey. 4. Repeat Steps 3 and 4 as needed to assign backup DNS servers. 5. Press the **Save** softkey.
Operational VLAN ID	Auxiliary Virtual Local Area Network (VLAN) configured on a Cisco Catalyst switch in which the phone is a member. If the phone has not received an auxiliary VLAN, this option indicates the Administrative VLAN. If neither the auxiliary VLAN nor the Administrative VLAN are configured, this option is blank.	The phone obtains its Operational VLAN ID via Cisco Discovery Protocol (CDP) from the switch to which the phone is attached. To assign a VLAN ID manually, use the Admin VLAN ID option.

Table 4-1 Network Configuration Menu Options (continued)

Option	Description	To Change
Admin. VLAN ID	Auxiliary VLAN in which the phone is a member. Used only if the phone does not receive an auxiliary VLAN from the switch, ignored otherwise. Overrides the value specified by the Operation VLAN ID option.	1. Unlock network configuration options. 2. Scroll to the Admin. VLAN ID option, press the **Edit** softkey, and then enter a new Admin VLAN setting. 3. Press the **Validate** softkey and then press the **Save** softkey.
DHCP Enabled	Indicates whether DHCP is being used by the phone.	1. Unlock network configuration options. 2. Scroll to the DHCP Enabled option and press the **No** softkey to disable DHCP, or press the **Yes** softkey to enable DHCP. 3. Press the **Save** softkey.
DHCP Address Released	Releases the IP address assigned by DHCP.	1. Unlock network configuration options. 2. Scroll to the DHCP Address Released option and press the **Yes** softkey to release the IP address assigned by DHCP, or press the **No** softkey if you do not want to release this IP address. 3. Press the **Save** softkey.
Alternate TFTP	Indicates whether the phone is using an alternative TFTP server.	1. Unlock network configuration options. 2. Scroll to the Alternate TFTP option and press the **Yes** softkey if the phone should use an alternative TFTP server. Press the **No** softkey otherwise. 3. Press the **Save** softkey.

Device Configuration Menu

The Device Configuration menu provides options for viewing and making a variety of settings that are not network related. Table 4-2 describes these options and, where applicable, explains how to change them.

For information about how to access the Device Configuration menu, see the "Displaying a Configuration Menu" section on page 4-2.

Before you can change an option on this menu, you must unlock options as described in the "Unlocking and Locking Options" section on page 4-2. The **Edit**, **Yes**, or **No** softkeys for changing device configuration options appear only if options are unlocked

For information about the keys you can use to edit options, see the "Editing Values" section on page 4-3.

Table 4-2 Device Configuration Menu Options

Option	Description	To Change
CallManager 1 CallManager 2 CallManager 3 CallManager 4 CallManager 5	Cisco CallManager servers that are available for processing calls from this phone, in prioritized order. For an available server, an option will show the Cisco CallManager server IP address or name and one of the following states: • Active—Cisco CallManager server from which the phone is currently receiving call-processing services. • Standby—Cisco CallManager server to which the phone switches if the current server becomes unavailable. • Blank—No current connection to this Cisco CallManager server. An option may also include the SRST designation, which indicates a Survivable Remote Site Telephony router capable of providing Cisco CallManager functionality with a limited feature set. This router assumes control of call processing if all other Cisco CallManager servers become unreachable. The SRST Cisco CallManager always appears last in the list of servers, even if it is active. An option may also include the TFTP designation, which indicates that the phone was unable to register with a Cisco CallManager listed in its configuration file and it registered with the TFTP server instead.	Use Cisco CallManager Administration to modify. Configure the SRST router address in the Device Pool section in Cisco CallManager Administration.

Table 4-2 Device Configuration Menu Options (continued)

Option	Description	To Change
Directories URL	URL of the server from which the phone obtains directory information.	Use Cisco CallManager Administration to modify.
Services URL	URL of the server from which the phone obtains Cisco IP Phone services.	Use Cisco CallManager Administration to modify.
Messages URL	URL of the server from which the phone obtains message services.	Use Cisco CallManager Administration to modify.
Information URL	URL of the help text that appears on the phone.	Use Cisco CallManager Administration to modify.
Authentication URL	URL that the phone uses to validate requests made to the phone web server.	Use Cisco CallManager Administration to modify.
Proxy Server URL	URL of proxy server, which makes HTTP requests to non-local host addresses on behalf of the phone HTTP client and provides responses from the non-local host to the phone HTTP client.	Use Cisco CallManager Administration to modify.
Idle URL	URL of an XML service that the phone displays when the phone has not been used for the time specified in the Idle URL Time option. For example, you could use the Idle URL option and the Idle URL Timer option to display a stock quote or a calendar on the LCD screen when the phone has not been used for 5 minutes.	Use Cisco CallManager Administration to modify.
Idle URL Time	Number of seconds that the phone has not been used and no feature menu is open before the XML service specified in the Idle URL option is activated.	Use Cisco CallManager Administration to modify.

Table 4-2 Device Configuration Menu Options (continued)

Option	Description	To Change
Forwarding Delay	Indicates whether the internal switch begins forwarding packets between the PC port and the switch port on the phone when the phone becomes active. When this option is set to No, the internal switch begins forwarding packets immediately. When this option is set to Yes, the internal switch waits 8 seconds before forwarding packets between the PC port and the SW port. Set this option to Yes if you connect both ports to switches for redundant uplinks or if you daisy chain phones.	Use Cisco CallManager Administration to modify.
PC Port Disabled	Indicates whether the access port labeled on the phone (10/100 PC) is enabled (“No”) or disabled (“Yes”).	Use Cisco CallManager Administration to modify.
User Locale	User locale associated with the phone user. The user locale identifies a set of detailed information to support users, including language, font, date and time formatting, and alphanumeric keyboard text information.	Use Cisco CallManager Administration to modify.
Network Locale	Network locale associated with the phone user. The network locale identifies a set of detailed information that supports the phone in a specific location, including definitions of the tones and cadences used by the phone.	Use Cisco CallManager Administration to modify.
User Locale Version	Version of the user locale loaded on the phone.	Display only—cannot configure.
Network Locale Version	Version of the network locale loaded on the phone.	Display only—cannot configure.
User Locale Char Set	Character set that the phone uses for the user locale.	Display only—cannot configure.

Table 4-2 Device Configuration Menu Options (continued)

Option	Description	To Change
SW Port Configuration	Speed and duplex of the network port (labeled 10/100 SW). Valid values: • Auto Negotiate • 10 Half—10-BaseT/half duplex • 10 Full—10-BaseT/full duplex • 100 Half—100-BaseT/half duplex • 100 Full—100-BaseT/full duplex If the phone is connected to a switch, configure the port on the switch to the same speed/duplex as the phone, or configure both to auto-negotiate. If you change the setting of this option, you must change the PC Port Configuration option to the same setting.	1. Unlock network configuration options. 2. Scroll to the SW Port Configuration option and then press the **Edit** softkey. 3. Scroll to the setting that you want and then press the **Select** softkey. 4. Press press the **Save** softkey.
PC Port Configuration	Speed and duplex of the access port (10/100 PC). Valid values: • Auto Negotiate • 10 Half—10-BaseT/half duplex • 10 Full—10-BaseT/full duplex • 100 Half—100-BaseT/half duplex • 100 Full—100-BaseT/full duplex If the phone is connected to a switch, configure the port on the switch to the same speed/duplex as the phone, or configure both to auto-negotiate. If you change the setting of this option, you must change the SW Port Configuration option to the same setting.	1. Unlock network configuration options. 2. Scroll to the PC Port Configuration option and then press the **Edit** softkey. 3. Scroll to the setting that you want and then press the **Select** softkey. 4. Press press the **Save** softkey.

Table 4-2 Device Configuration Menu Options (continued)

Option	Description	To Change
Headset Enabled	Indicates whether the **Headset** button is enabled on the phone.	1. Unlock network configuration options. 2. Scroll to the Headset Enabled option and press the **No** softkey to disable the **Headset** button, or press the **Yes** softkey to enable this button. 3. Press the **Save** softkey.
Speaker Enabled	Indicates whether the speakerphone is enabled on the phone.	1. Unlock network configuration options. 2. Scroll to the Speaker Enabled option and press the **No** softkey to disable the speakerphone, or press the **Yes** softkey to enable it. 3. Press the **Save** softkey.
GARP Enabled	Indicates whether the phone learns MAC addresses from Gratuitous ARP responses. Disabling the phone's ability to accept Gratuitous ARP will prevent applications that use this mechanism to monitor and record voice streams from working. If voice monitoring is not desired, set this option to No (disabled).	Use Cisco CallManager Administration to modify.
Video Capability Enabled	Indicates whether the phone can participate in video calls when connected to an appropriately equipped PC.	Use Cisco CallManager Administration to modify.

Table 4-2 Device Configuration Menu Options (continued)

Option	Description	To Change
Voice VLAN Enabled	Indicates whether the phone allows a device attached to the PC port to access the Voice VLAN. Setting this option to No (disabled) prevents the attached PC from sending and receiving data on the Voice VLAN. This setting also prevents the PC from receiving data sent and received by the phone. Set this setting to Yes (enabled) if an application that requires monitoring of the phone's traffic is running on the PC. These applications include monitoring and recording applications and network monitoring software.	Use Cisco CallManager Administration to modify.
Auto Line Select Enabled	Indicates whether the phone shifts the call focus to incoming calls on all lines. When this option is set to No (disabled), the phone will only shift the call focus to incoming calls on the line that is in use. When this option is set to Yes, the phone will shift the call focus to the line with the most recent incoming call.	Use Cisco CallManager Administration to modify.