CHAPTER 4

Configuring Settings on the Cisco Unified IP Phone

The Cisco Unified IP Phone includes many configurable 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 the menu on the phone.

This chapter includes the following topics:

Editing Values

When you edit the value of an option setting on a configuration menu or enter a password, follow these guidelines:

- Use the keys on the telephone keypad to enter numbers and letters.
- Press the # key to switch between the following different text entry modes.
  - ABC—uppercase characters
  - abc—lowercase characters
  - 123—numerals

- 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 * (asterisk) key.
- To delete the last character, press the **Cancel** key  .
- Once you have completed your entry, press the **OK** button  .

Note The Cisco Unified IP Phone provides several methods that you can use to reset or restore option settings, if necessary. For more information, see the “Resetting or Restoring the Cisco Unified IP Phone” section on page 7-15.

Related Topics

- Editing Values, page 4-1
- Configuring Network Settings, page 4-3
- SIP Configuration Menu, page 4-8

Unlocking and Locking Options

Administrative configuration options that can be changed from a phone 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.

To unlock or lock options, perform these steps:

Procedure

Step 1 Press the **OK** button.

Step 2 Choose Lock or Unlock.

Step 3 Enter Password. The default password is cisco.

Configuration Menus on the Cisco Unified IP Phone

The Cisco Unified SIP Phone 3911 includes these configuration menus:

- Configuring User Preference, page 4-3—Includes user configurable settings.
- Configuring Network Settings, page 4-3—Includes network settings for the phone.
- SIP Configuration Menu, page 4-8—Includes configurable SIP parameters for the line on the phone.

Configuring User Preference

Once the Cisco Unified IP Phone has registered with Cisco Unified Communications Manager, users can configure their phone settings in the User Preferences menu. For more information, see the *Cisco Unified SIP Phone 3911 Phone Guide for Cisco Unified Communications Manager 6.0 and 5.1*.

Configuring Network Settings

To display or modify current configuration settings, perform these steps:

Procedure

Step 1 Press the **OK** button.

Step 2 Choose Settings.

Step 3 Choose Network Configuration.

Use the navigation key to scroll through the network settings. See Table 4-1 for detail information on each setting. Choose the network setting that you wish to change.

Step 4 If you have not unlocked the phone, the password prompt displays. Enter the password.

Step 5 Enter new network setting. For information about the keys you can use to edit options, see the "Editing Values" section. Press the OK button to accept changes. Press the Cancel button if you do not want to accept the changes.

Step 6 The Reset-Restart prompt display. Press the **Ok** button to restart the phone.

Related Topics

- Editing Values, page 4-1
- Unlocking and Locking Options, page 4-2

Table 4-1 Network Configuration Menu Options

Option	Description	Usage Notes
MAC Address	Unique Media Access Control (MAC) address of the phone.	Display only—cannot configure.
Host Name	Unique host name assigned to the phone.	Display only—cannot configure. Obtained from the DHCP server.
Domain Name	Name of the Domain Name System (DNS) domain in which the phone resides.	When DNS is enabled, the Domain name is assigned by the DHCP server.
IP Address	Unique Internet Protocol (IP) Address for the phone.	When DHCP is enabled, the IP Address is assigned by the DHCP server. When DHCP is disabled, you must configure the IP address. 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.
Subnet Mask	Subnet mask used by the phone.	You must assign a subnet mask if you disabled DHCP.
TFTP Server	Primary Trivial File Transfer Protocol (TFTP) server used by the phone. By default this server is CiscoCM1.	
Dynamic TFTP Server1 Dynamic TFTP Server2	Dynamic TFTP servers that are used by the phone.	Display only—cannot configure.

Table 4-1 Network Configuration Menu Options (continued)

Option	Description	Usage Notes
Default Router 1	Default router used by the phone (Default Router 1).	
DNS Server 1 DNS Server 2	Primary Domain Name System (DNS) server (DNS Server 1) and secondary DNS server (DNS Server 2) used by the phone.	
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 parameter indicates the Administrative VLAN. If neither the auxiliary VLAN nor the Administrative VLAN are configured, this parameter 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
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 Operational VLAN ID option.	Press the **OK** button to choose whether you wish to enter an auxiliary VLAN.

Table 4-1 Network Configuration Menu Options (continued)

Option	Description	Usage Notes
DHCP Enabled	Indicates whether DHCP is being used by the phone.	Press the **OK** button to choose whether you wish to use DHCP or manually assign IP Address, subnet mask, default router, and DNS server. • Fix(ed) IP – IP Address – Subnet Mask – Default Router 1 – DNS server1 – DNS Server 2 – Domain Name – TFTP Server • DHCP
DHCP Address Released	Releases the IP address assigned by DHCP.	Press the **Yes** button to release the IP address assigned by the DHCP server.
CallManager 1 CallManager 2 CallManager 3 CallManager 4 CallManager 5	Cisco Unified Communications Manager servers that are available for processing calls from this phone, in prioritized order.	For more information, see the "Cisco Unified Communications Manager Options" section on page 4-7.
Erase	Erases current configurations. Changes Network Configuration settings to their default values.	

Cisco Unified Communications Manager Options

The CallManager 1 through CallManager 5 options on the Network configuration menu show the host names or IP addresses, in prioritized order, of the Cisco Unified Communications Manager servers that the phone can register to. These options show Cisco Unified Communications Manager servers that are available for processing calls from the phone, in prioritized order.

For an available server, an option will show the Cisco Unified Communications Manager server IP address and one of the following states:

- Active—Cisco Unified Communications Manager server from which the phone is currently receiving call-processing services.
- Standby—Cisco Unified Communications Manager server to which the phone switches if the current server becomes unavailable.
- Blank—No current connection to this Cisco Unified Communications Manager server.

An option may also include using CallManager 4 and CallManager 5 as one of these designations:

- SRST—Indicates Survivable Remote Site Telephony (SRST) designation, which indicates an SRST router capable of providing Cisco Unified Communications Manager functionality with a limited feature set. This router assumes control of call processing if all other Cisco Unified Communications Manager servers become unreachable. The SRST Cisco Unified Communications Manager always appears last in the list of servers, even if it is active.

Note After a failover to a SRST router, the phone will monitor the links to the Cisco Unified Communications Manager servers that the phone can register to. When a server has been available for two minutes, by default, the phone will fall back from the router to that server. You can change this default time by specifying another value for the Connection Monitor Duration parameter in Cisco Unified Communications Manager Administration. For more information, refer to *Cisco Unified Communications Manager Administration Guide*.

- TFTP designation—Indicates that the phone was unable to register with a Cisco Unified Communications Manager listed in its configuration file and it registered with the TFTP server instead.

Related Topics

- Editing Values, page 4-1
- Unlocking and Locking Options, page 4-2

SIP Configuration Menu

The SIP Configuration menu displays information that relates to the configurable parameters for the line and SIP parameters on the phone.

Note These are read-only parameters and cannot be edited on the phone.

Table 4-2 SIP Configuration Menu Options

Parameters	Description
Number	Displays the directory number that is assigned to the line when the phone registered.
Name	Displays the user name that is assigned to the line when the phone registered.
Authentication Name	The name that the user can use for authentication when registration is challenged by the call control server during initialization.
Password	The corresponding password that is used to authenticate the user.

Additional Configurations for the Cisco Unified SIP Phone 3911

Depending on your network configuration and topology, you may need configure the Cisco Unified SIP Phone 3911 on the Cisco Unified Communications Manager to include the following:

- Configuring a SIP Phone Dial Plan, page 4-9
- Enabling the Cisco Unified SIP Phone 3911 to Use DTMF, page 4-9

Configuring a SIP Phone Dial Plan

Key Press Markup Language (KPML) allows for the digits to be sent to Cisco Unified Communications Manager digit by digit. Cisco Unified Communications Manager defaults to the use (KPML) when SIP dial rules are not configured. SIP Dial Rules allow for a pattern of digits to be collected locally on the phone prior to sending to Cisco Unified Communications Manager. Cisco Unified SIP Phone 3911 does not support KPML. To ensure successful call completion, you must use the 7940_7960_OTHER dial rules pattern to configure a SIP phone dial plan and to associate the plan with the Cisco Unified SIP Phone 3911.

Enabling the Cisco Unified SIP Phone 3911 to Use DTMF

To access voice-messaging systems or to navigate interactive voice response (IVR) applications from Cisco Unified SIP Phone 3911, you must have one of the following configurations on your system:

- Verify that you have a transcoding device that supports RFC 2833 on your system and that the trunk that is going to the transcoder is configured for MTP by using Cisco Unified Communications Manager Administration.
- On Cisco Unified Communications Manager Administration, check the Require DTMF Reception checkbox for each registered Cisco Unified SIP Phone 3911. Cisco Unified Communications Manager will verify transcoder support for RFC 2833 and allocate its own MTP resource as necessary.

Tip You can monitor MTP resources by using the alert window in RTMT.

Tip Use Cisco Unified Communications Manager Bulk Administration (BAT) when you have a large number of phones to configure.