



CHAPTER 13

Phone Hardening

To tighten security on the phone, you can perform phone hardening tasks in the Phone Configuration window in Cisco Unified Communications Manager Administration. This chapter contains information on the following topics:

- [Disabling Gratuitous ARP, page 13-1](#)
- [Disabling Web Access, page 13-1](#)
- [Disabling the PC Voice VLAN Access Setting, page 13-2](#)
- [Disabling the Setting Access Setting, page 13-2](#)
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Disabling Gratuitous ARP

By default, Cisco Unified IP Phones accept Gratuitous ARP packets. Gratuitous ARP packets, which devices use, announce the presence of the device on the network. However, attackers can use these packets to spoof a valid network device; for example, an attacker could send out a packet that claims to be the default router. If you choose to do so, you can disable Gratuitous ARP in the Phone Configuration window.



Note

Disabling this functionality does not prevent the phone from identifying its default router.

Disabling Web Access

Disabling the web server functionality for the phone blocks access to the phone internal web pages, which provide statistics and configuration information. Features, such as Cisco Quality Report Tool, do not function properly without access to the phone web pages. Disabling the web server also affects any serviceability application, such as CiscoWorks, that relies on web access.

To determine whether the web services are disabled, the phone parses a parameter in the configuration file that indicates whether the services are disabled or enabled. If the web services are disabled, the phone does not open the HTTP port 80 for monitoring purposes and blocks access to the phone internal web pages.

Disabling the PC Voice VLAN Access Setting

By default, Cisco Unified IP Phones forward all packets that are received on the switch port (the one that faces the upstream switch) to the PC port. If you choose to disable the PC Voice VLAN Access setting in the Phone Configuration window, packets that are received from the PC port that use voice VLAN functionality will drop. Various Cisco Unified IP Phones use this functionality differently.

- Cisco Unified IP Phones 7940G and 7960G drop any packets that are tagged with the voice VLAN, in or out of the PC port.
- Cisco Unified IP Phone 7970G drops any packet that contains an 802.1Q tag on any VLAN, in or out of the PC port.
- Cisco Unified IP Phone 7912G cannot perform this functionality.

Disabling the Setting Access Setting

By default, pressing the Settings button on a Cisco Unified IP Phone provides access to a variety of information, including phone configuration information. Disabling the Setting Access setting in the Phone Configuration window prohibits access to all options that normally display when you press the Settings button on the phone; for example, the Contrast, Ring Type, Network Configuration, Model Information, and Status settings.

The preceding settings do not display on the phone if you disable the setting in Cisco Unified Communications Manager Administration. If you disable this setting, the phone user cannot save the settings that are associated with the Volume button; for example, the user cannot save the volume.

Disabling this setting automatically saves the current Contrast, Ring Type, Network Configuration, Model Information, Status, and Volume settings that exist on the phone. To change these phone settings, you must enable the Setting Access setting in Cisco Unified Communications Manager Administration.

Disabling the PC Port Setting

By default, Cisco Unified Communications Manager enables the PC port on all Cisco Unified IP Phones that have a PC port. If you choose to do so, you can disable the PC Port setting in the Phone Configuration window. Disabling the PC port proves useful for lobby or conference room phones.

Configuring Phone Hardening



Caution

The following procedure disables functionality for the phone.

To disable functionality for the phone, perform the following procedure:

Procedure

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- Step 1** In Cisco Unified Communications Manager Administration, choose **Device > Phone**.
 - Step 2** Specify the criteria to find the phone and click **Find** or click **Find** to display a list of all phones.

Step 3 To open the Phone Configuration window for the device, click the device name.

Step 4 Locate the following product-specific parameters:

- PC Port
- Settings Access
- Gratuitous ARP
- PC Voice VLAN Access
- Web Access



Tip To review information on these settings, click the question mark that displays next to the parameters in the Phone Configuration window.

Step 5 From the drop-down list box for each parameter that you want to disable, choose **Disabled**. To disable the speakerphone or speakerphone and headset, check the corresponding check boxes.

Step 6 Click **Save**.

Step 7 Click **Reset**.

Additional Information

See the [“Related Topics”](#) section on page 13-3.

Where to Find More Information

Related Topics

- [Disabling Gratuitous ARP, page 13-1](#)
- [Disabling Web Access, page 13-1](#)
- [Disabling the PC Voice VLAN Access Setting, page 13-2](#)
- [Disabling the Setting Access Setting, page 13-2](#)
- [Disabling the PC Port Setting, page 13-2](#)
- [Configuring Phone Hardening, page 13-2](#)

Related Cisco Documentation

Cisco Unified IP Phone Administration Guide for Cisco Unified Communications Manager

