Resetting and Restarting Phones

Last Updated: August 1, 2008

This chapter describes how to reset or restart Cisco Unified IP phones that are connected to Cisco Unified Communications Manager Express (Cisco Unified CME).

Contents

Information About Resetting and Restarting Phones

Before resetting and restarting IP phones in Cisco Unified CME, you should understand the following concept:

Differences between Resetting and Restarting IP Phones

Cisco Unified IP phones must be rebooted after configuration changes in order for the changes to be effective. Configurations for phones in Cisco Unified CME are downloaded when a phone is rebooted or reset. You can reboot a single phone or you can reboot all phones in a Cisco Unified CME system. The differences between reboot types are summarized in Table 29.

Note   When rebooting multiple IP phones, it is possible for a conflict to occur if too many phones attempt to access changed Cisco Unified CME configuration information via TFTP simultaneously.

Table 29 **reset and restart Command Differences**

	reset Command	restart Command
Type of Reboot	Similar to power-off, power-on reboot.	Quick restart.
Phone Configurations	Downloads configurations for IP phones.	Downloads configurations for IP phones.
DHCP and TFTP	Contacts DHCP and TFTP servers for updated configuration information. **Note** This command was introduced for SIP phones in Cisco CME 3.4.	Phones contact the TFTP server for updated configuration information and reregister without contacting the DHCP server. **Note** This command was introduced for SIP phones in Cisco Unified CME 4.1.
Processing Time	Takes longer to process when updating multiple phones.	Faster processing for multiple phones.
When Required	• Date and time settings • Network locale • Phone firmware • Source address • TFTP path • URL parameters • User locale • Voicemail access number Can be used when updating the following: • Directory numbers • Phone buttons • Speed-dial numbers	• Directory numbers • Phone buttons • Speed-dial numbers

Cisco Unified CME TAPI Enhancement

Before Cisco Unified CME 7.0(1), the only method to clear a session between a Microsoft Windows Workstation and an SCCP phone that was out-of-sync was to reboot the router. In Cisco Unified CME 7.0(1) and later versions, you can clear a Telephony Application Programming Interface (TAPI) session that is in a frozen state or out of synchronization by using a Cisco IOS software command. For configuration information, see the"SCCP: Resetting a Session Between a TAPI Application and an SCCP Phone" section on page 374.

This enhancement also automatically handles ephone-TAPI registration error conditions. No additional configuration is required for this new feature.

How to Reset and Restart Phones

> **Note** If phones are not yet plugged in, resetting or restarting phones is not necessary. Instead, connect your IP phones to your network to boot the phone and download the required configuration files.

This sections contains the following tasks:

- SCCP: Using the reset Command, page 371 (Required)
- SCCP: Using the restart Command, page 372 (Required)
- SCCP: Resetting a Session Between a TAPI Application and an SCCP Phone, page 374 (Required)
- SIP: Using the reset Command, page 375 (Required)
- SIP: Using the restart Command, page 376 (Required)
- Verifying Basic Calling, page 377 (Optional)

SCCP: Using the reset Command

To reboot and reregister one or more SCCP phones, including contacting the DHCP server for updated information, perform the following steps.

Prerequisites

- Phones to be rebooted are connected to the Cisco Unified CME router.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **telephony-service**
   or
   ephone *phone-tag*
4. **reset** {**all** [*time-interval*] | **cancel** | **mac-address** *mac-address* | **sequence-all**}
   or
   reset
5. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** Example: Router> enable	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** Example: Router# configure terminal	Enters global configuration mode.
Step 3	**telephony-service** or **ephone** *ephone-tag* Example: Router(config)# telephony-service or Router(config)# ephone 1	Enters telephony-service configuration mode. or Enters ephone configuration mode.
Step 4	**reset** {**all** [*time-interval*] | **cancel** | **mac-address** *mac-address* | **sequence-all**} or **reset** Example: Router(config-telephony)# reset all or Router(config-ephone)# reset	Performs a complete reboot of the specified or all phones running SCCP, including contacting the DHCP and TFTP servers for the latest configuration information. or Performs a complete reboot of the individual SCCP phone being configured.
Step 5	**end** Example: Router(config-telephony)# end or Router(config-ephone)# end	Returns to privileged EXEC mode.

SCCP: Using the restart Command

To fast reboot and reregister one or more SCCP phones, perform the following steps.

Prerequisites

• Phones to be rebooted are connected to the Cisco Unified CME router.

SUMMARY STEPS

1. **enable**

2. **configure terminal**

3. **telephony-service**
   or
   ephone *ephone-tag*

4. **restart** {**all** [*time-interval*] | *mac-address*}
   or
   restart

5. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.

Step 3	**telephony-service**
	or
	ephone *ephone-tag*
	
	Example:
	`Router(config)# telephony-service`
	or
	`Router(config)# ephone 1`
		Enters telephony-service configuration mode.
		
		or
		
		Enters ephone configuration mode.

Step 4	**restart** {**all** [*time-interval*] | *mac-address*}
	or
	restart
	
	Example:
	`Router(config-telephony)# restart all`
	or
	`Router(config-ephone)# restart`
		Performs a fast reboot of the specified phone or all phones running SCCP associated with this Cisco Unified CME router. Does not contact the DHCP server for updated information.
		
		or
		
		Performs a fast reboot of the individual SCCP phone being configured.

Step 5	**end** **Example:** `Router(config-ephone)# end`	Returns to privileged EXEC mode.

SCCP: Resetting a Session Between a TAPI Application and an SCCP Phone

To clear a TAPI session that is in a frozen state or out of synchronization, perform the following steps.

Prerequisites

- Cisco Unified CME 7.0(1) or a later version

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **ephone** *phone-tag*
4. **reset tapi**
5. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. - Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**ephone** *phone-tag* **Example:** `Router(config)# ephone 36`	Enters ephone configuration mode. - *phone-tag*—Unique sequence number that identifies this ephone during configuration tasks.
Step 4	**reset tapi** **Example:** `Router(config-ephone)# reset tapi`	Resets the connection between a Telephony Application Programmer's Interface (TAPI) application and the SCCP phone.
Step 5	**end** **Example:** `Router(config-ephone)# end`	Returns to privileged EXEC mode.

SIP: Using the reset Command

To reboot and reregister one or more SIP phones, including contacting the DHCP server for updated information, perform the following steps.

Prerequisites

- Cisco Unified CME 3.4 or later.
- The **mode** cme command must be enabled in Cisco Unified CME.
- Phones to be rebooted are connected to the Cisco Unified CME router.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **voice register global**
   or
   voice register pool *pool-tag*
4. **reset**
5. **end**

DETAILED STEPS

	Command or Action	Purpose

Step 1	`enable`
	
	Example:
	`Router> enable`
		Enables privileged EXEC mode.
		
		• Enter your password if prompted.

Step 2	`configure terminal`
	
	Example:
	`Router# configure terminal`
		Enters global configuration mode.

	Command or Action	Purpose
Step 3	**voice register global** or **voice register pool** *pool-tag* **Example:** Router(config)# voice register global or Router(config)# voice register pool 1	Enters voice register global configuration mode to set parameters for all supported SIP phones in Cisco Unified CME. or Enters voice register pool configuration mode to set phone-specific parameters for SIP phones
Step 4	**reset** **Example:** Router(config-register-global)# reset or Router(config-register-pool)# reset	Performs a complete reboot of all phones connected to this router that are running SIP, including contacting the DHCP and TFTP servers for the latest configuration information. or Performs a complete reboot of the individual SIP phone being configured.
Step 5	**end** **Example:** Router(config-register-global)# end or Router(config-register-pool)# end	Exits to privileged EXEC mode.

SIP: Using the restart Command

To fast reboot and reregister one or more SIP phones, perform the following steps.

Prerequisites

- Cisco Unified CME 4.1 or later.
- The **mode** cme command must be enabled in Cisco Unified CME.
- Phones to be rebooted are connected to the Cisco Unified CME router.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **voice register global**
   or
   voice register pool *pool-tag*
4. **restart**
5. **end**

DETAILED STEPS

	Command or Action	Purpose

Step 1	`enable`
	
	Example:
	`Router> enable`
		Enables privileged EXEC mode.
		
		• Enter your password if prompted.

Step 2	`configure terminal`
	
	Example:
	`Router# configure terminal`
		Enters global configuration mode.

Step 3	`voice register global`
	or
	`voice register pool` *pool-tag*
	
	Example:
	`Router(config)# voice register global`
	or
	`Router(config)# voice register pool 1`
		Enters voice register global configuration mode to set parameters for all supported SIP phones in Cisco Unified CME.
		
		or
		
		Enters voice register pool configuration mode to set phone-specific parameters for SIP phones

Step 4	`restart`
	
	Example:
	`Router(config-register-global)# restart`
	or
	`Router(config-register-pool)# restart`
		Performs a fast reboot all SIP phones associated with this Cisco Unified CME router. Does not contact the DHCP server for updated information.
		
		or
		
		Performs a fast reboot of the individual SIP phone being configured.

Step 5	`end`
	
	Example:
	`Router(config-register-global)# end`
	or
	`Router(config-register-pool)# end`
		Exits configuration mode and enters privileged EXEC mode.

Verifying Basic Calling

To verify that Cisco IP phones in Cisco Unified CME can place and receive calls through the voice ports, perform the following steps.

SUNNARY STEPS

1. Test local operation.

2. Test local calling area.

3. Test incoming calls.

DETAILED STEPS

Step 1	Test local phone operation. Make calls between phones on the Cisco Unified CME router.
Step 2	Place a call *from* a phone in Cisco Unified CME to a number in the local calling area.
Step 3	Place a call *to* a phone in Cisco Unified CME from a phone outside this Cisco Unified CME system.

Additional References

The following sections provide references related to Cisco Unified CME features.

Related Documents

Related Topic	Document Title
Cisco Unified CME configuration	• *Cisco Unified CME Command Reference* • Cisco Unified CME Documentation Roadmap
Cisco IOS commands	• *Cisco IOS Voice Command Reference* • Cisco IOS Software Releases 12.4T Command References
Cisco IOS configuration	• *Cisco IOS Voice Configuration Library* • Cisco IOS Software Releases 12.4T Configuration Guides
Phone documentation for Cisco Unified CME	• User Documentation for Cisco Unified IP Phones

Technical Assistance

Description	Link
The Cisco Support website provides extensive online resources, including documentation and tools for troubleshooting and resolving technical issues with Cisco products and technologies. To receive security and technical information about your products, you can subscribe to various services, such as the Product Alert Tool (accessed from Field Notices), the Cisco Technical Services Newsletter, and Really Simple Syndication (RSS) Feeds. Access to most tools on the Cisco Support website requires a Cisco.com user ID and password.	http://www.cisco.com/techsupport

Feature Information for Cisco Unified CME 7.0(1) New Features

Table 30 lists the features in this document and provides links to specific configuration information.

Not all commands may be available in your Cisco IOS software release. For release information about a specific command, see the command reference documentation.

Use Cisco Feature Navigator to find information about platform support and software image support. Cisco Feature Navigator enables you to determine which Cisco IOS software images support a specific software release, feature set, or platform. To access Cisco Feature Navigator, go to http://www.cisco.com/go/cfn. An account on Cisco.com is not required.

Note Table 30 lists only the Cisco IOS software release that introduced support for a given feature in a given Cisco IOS software release train. Unless noted otherwise, subsequent releases of that Cisco IOS software release train also support that feature.

Table 30   Feature Information for Cisco Unified CME 7.0(1) New Features

Feature Name	Cisco Unified CME Version	Feature Information
Cisco Unified CME TAPI Enhancement	7.0(1)	Disassociates and reestablishes a TAPI session that is in a frozen state or out of synchronization by using a Cisco IOS command. This enhancement also automatically handles ephone-TAPI registration error conditions.