Reset and Restart Cisco Unified IP Phones

Information About Resetting and Restarting Phones

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 1: reset and restart Command Differences, on page 1.

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 1: 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.

	reset Command	restart Command
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 Reset a Session Between a TAPI Application and an SCCP Phone, on page 5.

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

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.

Use the reset Command on SCCP Phones

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

Before you begin

- 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. **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.

Use the restart Command on SCCP Phones

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

Before you begin

- 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.

Reset 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.

Before you begin

- 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.

Use the reset Command on SIP Phones

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

Before you begin

- 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.

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.

Use the restart Command on SIP Phones

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

Before you begin

- 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`	Exits configuration mode and enters privileged EXEC mode.

	Command or Action	Purpose
	or `Router(config-register-pool)# end`	

Verify Basic Call

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

Feature Information for Reset and Restart Phones

The following table provides release information about the feature or features described in this module. This table lists only the software release that introduced support for a given feature in a given software release train. Unless noted otherwise, subsequent releases of that software release train also support that feature.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to https://cfnng.cisco.com/. An account on Cisco.com is not required.

Table 2: Feature Information for Reset and Restart Phones

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.