



## Cisco Unified CME Commands: K

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## keepalive (ephone and ephone-template)

To set the length of the time interval between successive keepalive messages from the Cisco Unified CME router to a particular IP phone, use the **keepalive** command in ephone or ephone-template configuration mode. To reset this length to the default value, use the **no** form of this command.

**keepalive** *seconds*

**no keepalive**

### Syntax Description

<i>seconds</i>	Interval time, in seconds. Range is from 10 to 65535. Default is 30.
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### Command Default

Default is 30 seconds

### Command Modes

Ephone configuration (config-ephone) Ephone-template configuration (config-ephone-template)

### Command History

Cisco IOS Release	Cisco Product	Modification
12.2(15)T	Cisco CME 2.1	This command was introduced.
12.4(4)XC	Cisco Unified CME 4.0	This command was made available in ephone-template configuration mode.
12.4(9)T	Cisco Unified CME 4.0	This command in ephone-template configuration mode was integrated into Cisco IOS Release 12.4(9)T.

### Usage Guidelines

This command allows the keepalive interval to be set for individual phones, typically so that wireless phone batteries are not run down too quickly by overly frequent keepalive signals.

If the router fails to receive three successive keepalive messages, it considers the phone to be out of service until the phone reregisters.

If the **keepalive (telephony-service)** command and this command are set to different time intervals, the value that you set in ephone configuration mode has priority for the particular phone only.

If you use an ephone template to apply a command to a phone and you also use the same command in ephone configuration mode for the same phone, the value that you set in ephone configuration mode has priority.

### Examples

The following example sets the keepalive interval to 300 seconds:

```
Router(config)# ephone 1
```

```
Router(config-ephone)# keepalive 300
```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>ephone-template (ephone)</b>	Applies template to ephone being configured.
<b>keepalive (telephony-service)</b>	Sets the time interval for keepalive messages between IP phones and the Cisco Unified CME router.

## keepalive (telephony-service)

To set the length of the time interval between successive keepalive messages from the Cisco CallManager Express router to IP phones, use the **keepalive** command in telephony-service configuration mode. To reset this length to the default value, use the **no** form of this command.

**keepalive** *seconds*

**no keepalive**

### Syntax Description

<i>seconds</i>	Interval time, in seconds. Range is from 10 to 65535. Default is 30.
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### Command Default

Default is 30 seconds.

### Command Modes

Telephony-service configuration (config-telephony)

### Command History

Cisco IOS Release	Cisco Product	Modification
12.1(5)YD	Cisco ITS 1.0	This command was introduced.
12.2(8)T	Cisco ITS 2.0	This command was integrated into Cisco IOS Release 12.2(8)T.

### Usage Guidelines

If the router fails to receive three successive keepalive messages, it considers the phone to be out of service until the phone reregisters.

If the **keepalive (telephony-service)** command and the **keepalive (ephone)** command are set to different time intervals, the value that you set in ephone configuration mode has priority for the particular phone only.

### Examples

The following example sets the keepalive time interval to 40 seconds:

```
Router(config)# telephony-service
Router(config-telephony)# keepalive 40
```

### Related Commands

Command	Description
<b>keepalive (ephone)</b>	Sets the time interval for keepalive messages between a particular IP phone and the Cisco CME router.

## keepalive (voice register global)

To set the length of time interval between successive keepalive messages from SIP phones to the Cisco Unified CME router, use the **keepalive** command in voice register global configuration mode. To reset this timer duration to the default value, use the **no** form of this command.

**keepalive** *seconds*

**no keepalive**

### Syntax Description

<i>seconds</i>	Sets the time interval, in seconds, between keepalive messages that are sent to the router by SIP Phones. If the interval is set to a larger value, it is possible for notification to be delayed when the primary router goes down. Range is from 120 to 65535. Default is 120 seconds.
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### Command Default

Default is 120 seconds.

### Command Modes

Voice register global configuration (config-register-global)

### Command History

Cisco IOS Release	Cisco Product	Modification
Cisco IOS XE Everest 16.4.1	Cisco Unified CME 11.6	This command was introduced.

### Usage Guidelines

If the primary router fails, a SIP phone will not receive an acknowledgment (200 OK) to its REGISTER message to the primary router, and it will immediately failover to the secondary Cisco Unified CME router.

### Examples

The following example sets the keepalive time interval to 200 seconds:

```
Router(config)# voice register global
Router(config-register-global)# keepalive 200
```

### Related Commands

Command	Description
<b>keepalive (telephony-service)</b>	Sets the length of the time interval between successive keepalive messages from the Cisco Unified CME router to SCCP phones.

## keepalive (voice register session-server)

To define the duration for registrations of external feature servers after which the registration expires, use the **keepalive** command in voice register session-server configuration mode. To return to the default, use the **no** form of this command.

**keepalive** *seconds*

**no keepalive**

### Syntax Description

<i>seconds</i>	Duration for registration, in seconds. Range: 60 to 3600. Default: 300.
----------------	---

### Command Default

Default is 300 seconds.

### Command Modes

Voice register session-server configuration (config-register-fs)

### Command History

Cisco IOS Release	Cisco Product	Modification
12.4(11)XW2	Cisco Unified CME 4.2	This command was introduced.
12.4(15)XY	Cisco Unified CME 4.2	This command was introduced.
12.4(15)XZ	Cisco Unified CME 4.3	This command was introduced.
12.4(20)T	Cisco Unified CME 7.0	This command was integrated into Cisco IOS Release 12.4(20)T.

### Usage Guidelines

This command defines the duration for registration, in seconds, after which the registration expires unless the feature server reregisters before the registration expiry.

### Examples

The following partial output shows the configuration for a session manager for an external feature server, including a keepalive expiry of 360 seconds:

```
router# show running-configuration
!
!
voice register session-server 1
  register-id CSR1
  keepalive 360
```

**Related Commands**

Command	Description
register id	Creates an ID for explicitly identifying an external feature server during Register requests.

## keepalive (vpn-profile)

To specify the duration of time required to generate a keepalive message to the VPN concentrator, use the **keepalive** command in vpn-profile configuration mode.

*keepalive seconds*

### Syntax Description

seconds	Duration for a vpn-profile session, in seconds. Range: 0 to 120. Default: 60.
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### Command Default

Default is 60 seconds.

### Command Modes

Vpn-profile configuration (conf-vpn-profile)

### Command History

Cisco IOS Release	Cisco Product	Modification
15.1(3)T	Cisco Unified CME 8.5	This command was introduced.

### Usage Guidelines

Use this command to specify the amount of time required to generate a keepalive message to the VPN concentrator. The keepalive session ranges from 0 to 120 seconds. The default keepalive session is 60 seconds.

### Examples

The following example shows the keepalive duration set to 50 seconds for vpn-profile 1.

```
Router#show run
!
!
voice service voip
 ip address trusted list
  ipv4 20.20.20.1
 vpn-group 1
  vpn-gateway 1 https://9.10.60.254/SSLVPNphone
  vpn-trustpoint 1 trustpoint cme_cert root
  vpn-hash-algorithm sha-1
 vpn-profile 1
  keepalive 50
  host-id-check disable
 vpn-profile 2
  mtu 1300
  password-persistent enable
  host-id-check enable
 sip
!
voice class media 10
 media flow-around
!
```

**Related Commands**

Command	Description
vpn-profile	Defines a VPN-profile.

# keep-conference

To allow conference initiators to exit from conference calls and to either end or maintain the conference for the remaining parties, use the **keep-conference** command in ephone or ephone-template configuration mode. To return to the default, use the **no** form of this command.

**keep-conference** [**drop-last**] [**endcall**] [**local-only**]

**no keep-conference**

## Syntax Description

<b>drop-last</b>	(Optional) The action of the Confrn soft key is changed; the conference initiator can press the Confrn soft key (IP phone) or hookflash (analog phone) to drop the last party.  <b>Note</b> Analog phones connected to the Cisco Unified CME system through a Cisco VG 224 require Cisco IOS Release 12.3(11)YL1 or a later release to use this feature.
<b>endcall</b>	(Optional) The action of the EndCall soft key is changed; the conference initiator can hang up or press the EndCall soft key to leave the conference and keep the other two parties connected.  <b>Note</b> If this option is not enabled, pressing the EndCall soft key terminates the conference and disconnects all parties.
<b>local-only</b>	(Optional) The conference initiator can hang up to end the conference and leave the other two parties connected only if one of the remaining parties is local to the Cisco Unified CME system (an internal extension).

## Command Default

A conference initiator can hang up or press the EndCall soft key to end a conference and disconnect all parties or press the Confrn soft key to drop only the last party that was connected to the conference.

## Command Modes

Ephone configuration (config-ephone) Ephone-template configuration (config-ephone-template)

## Command History

Cisco IOS Release	Cisco Product	Modification
12.3(11)T	Cisco CME 3.2	This command was introduced.
12.4(4)XC	Cisco Unified CME 4.0	The <b>drop-last</b> and <b>local-only</b> keywords were added, and this command was made available in ephone-template configuration mode.

Cisco IOS Release	Cisco Product	Modification
12.4(9)T	Cisco Unified CME 4.0	The <b>drop-last</b> and <b>local-only</b> keywords, and this command in ephone-template configuration mode were integrated into Cisco IOS Release 12.4(9)T.

### Usage Guidelines

#### Note

This feature uses call transfer to connect the two remaining parties of a conference when a conference initiator leaves the conference. To use this feature, you must configure the **transfer-system** command using the **full-blind**, **full-consult**, or **full-consult dss** keywords.

If you use an ephone template to apply a command to a phone and you also use the same command in ephone configuration mode for the same phone, the value that you set in ephone configuration mode has priority.

If the **keep-conference** command is configured with no keywords, a conference initiator can hang up to leave the conference and the other two parties will remain connected. Alternatively, the conference initiator can use the EndCall soft key to terminate the conference and disconnect all parties.

If the **keep-conference** command is configured with no keywords, a conference initiator can use the Confrn soft key (IP phone) or hookflash (analog phone) to break up the conference but stay connected to both parties. The oldest call will be put on hold, and the most recent call will be actively connected to the initiator. The conference initiator can navigate between the two parties by pressing the Hold soft key or the appropriate line button on the phone.

If the **endcall** keyword is used, the conference initiator can hang up or press the EndCall soft key to leave the conference with the other two parties remaining connected.

In Cisco CME 3.2.3 and later versions, if the **keep-conference** command is not configured (the default) or if the **no keep-conference** command is used, a conference initiator can drop the last party that was added to the conference by pressing the Confrn soft key (IP phone) or hookflash (analog phone).



#### Note

Analog phones connected to the Cisco Unified CME system through a Cisco VG 224 require Cisco IOS Release 12.3(11)YL1 or a later release to use this feature.

### Examples

In the following example, extension 3555 initiates a three-way conference. After the conference is established, extension 3555 can press the Confrn soft key to disconnect the last party that was connected and remain connected to the first party that was connected. If extension 3555 hangs up from the conference, the other two parties remain connected if one of them is local to the Cisco Unified CME system.

```
ephone-dn 35
  number 3555
ephone 24
  button 1:35
  keep-conference drop-last local-only
```

In the following example, extension 3666 initiates a three-way conference. After the conference is established, extension 3666 can press the Confrn soft key to disconnect the last party that was connected and remain connected to the first party that was connected. Also, extension 3666 can hang up from a three-way conference

to terminate the conference and disconnect all parties or can press the EndCall soft key to leave the conference and keep the other two parties connected.

```
ephone-dn 36
  number 3666
ephone 25
  button 1:36
  keep-conference drop-last endcall
```

In the following example, extension 3777 initiates a three-way conference. After the conference is established, extension 3777 can press the Confm soft key to disconnect the last party that was connected and remain connected to the first party that was connected. Also, extension 3777 can hang up from a three-way conference to terminate the conference and disconnect all parties or press the EndCall soft key to leave the conference and keep the other two parties connected only if one of the two parties is local to the Cisco Unified CME system.

```
ephone-dn 38
  number 3777
ephone 27
  button 1:38
  keep-conference drop-last endcall local-only
```

In the following example, extension 3999 initiates a three-way conference. After the conference is established, extension 3999 can hang up to terminate the conference and disconnect all parties or press the EndCall soft key to leave the conference and keep the other two parties connected only if one of the two parties is local to the Cisco Unified CME system.

```
ephone-dn 39
  number 3999
ephone 29
  button 1:39
  keep-conference endcall local-only
```

## Related Commands

Command	Description
ephone-template (ephone)	Applies template to ephone being configured.
<b>max-conferences</b>	Sets the maximum number of three-party conferences simultaneously supported by the Cisco Unified CME router.
<b>transfer-system</b>	Specifies the call transfer method for IP phone extensions that use the ITU-T H.450.2 standard.

## keep-conference (voice register)

To allow IP phone conference initiators to exit from conference calls and keep the remaining parties connected, use the **keep-conference** command in voice register pool configuration mode or voice register template configuration mode. To disable the keep-conference feature, use the **no** form of this command.

**keep-conference**  
**no keep-conference**

**Syntax Description** This command has no arguments or keywords.

**Command Default** Default is enabled.

**Command Modes** Voice register pool configuration (config-register-pool)  
 Voice register template configuration (config-register-temp)

Command History	Cisco IOS Release	Version	Modification
	12.4(4)T	Cisco CME 3.4	This command was introduced.
	Cisco IOS XE Everest 16.5.1b	Unified CME 11.7	This command was supported in voice register template configuration mode.

**Usage Guidelines** When the conference initiator hangs up, Cisco Unified Communications Manager Express (Cisco Unified CME) executes a call transfer to connect the two remaining lines. The remaining calls are transferred without consultation. To facilitate call transfer, the **transfer-attended** command or **transfer-blind** command must be enabled.

Conference initiators can disconnect from their conference calls by pressing the Confm (conference) soft key. When an initiator uses the Confm soft key to disconnect from the conference call, the oldest call leg is put on hold, leaving the initiator connected to the most recent call leg. The conference initiator can then navigate between the two separate parties by pressing either the Hold soft key or the line buttons to select the desired call.

**Examples** The following example shows how to configure this command, if it was previously disabled, to keep remaining conference legs after the conference initiator hangs up.

```
Router(config)# voice register pool 1
Router(config-register-pool)# keep-conference
```

The following example shows how to configure this command under voice register template configuration mode.

```
Router(config)# voice register template 1
Router(config-register-template)# keep-conference
```

### Related Commands

Command	Description
<b>conference (voice register template)</b>	Enables a soft key for conference in a SIP phone template.
<b>max-conferences</b>	Sets the maximum number of three-party conferences simultaneously supported by the Cisco CME router.
<b>transfer-attended (voice register template)</b>	Enables a soft key for attended transfer in a SIP phone template.
<b>transfer-blind (voice register template)</b>	Enables a soft key for blind transfer in a SIP phone template.
<b>voice register template</b>	Enters voice register template configuration mode and defines a template of common parameters for SIP phones.

# keygen-retry

To specify the number of times that a CAPF server sends a key-generation request, use the **keygen-retry** command in CAPF-server configuration mode. To return to the default, use the **no** form of this command.

**keygen-retry** *number*

**no keygen-retry**

## Syntax Description

<i>number</i>	Number of retries. Range is from 0 to 100. Default is 3.
---------------	--

## Command Default

Number of retries is 3.

## Command Modes

CAPF-server configuration (config-capf-server)

## Command History

Cisco IOS Release	Cisco Product	Modification
12.4(4)XC	Cisco Unified CME 4.0	This command was introduced.
12.4(9)T	Cisco Unified CME 4.0	This command was integrated into Cisco IOS Release 12.4(9)T.

## Usage Guidelines

This command is used with Cisco Unified CME phone authentication.

## Examples

The following example specifies that the key generation process should be tried 5 times.

```
Router(config)# capf-server
Router(config-capf-server)# source address 10.10.10.1
Router(config-capf-server)# trustpoint-label server25
Router(config-capf-server)# cert-oper upgrade all
Router(config-capf-server)# cert-enroll-trustpoint server12 password 0 x8oWiet
Router(config-capf-server)# auth-mode auth-string
Router(config-capf-server)# auth-string generate all
Router(config-capf-server)# port 3000
Router(config-capf-server)# keygen-retry 5
Router(config-capf-server)# keygen-timeout 45
Router(config-capf-server)# phone-key-size 2048
```

**Related Commands**

Command	Description
keygen-timeout	Specifies the number of minutes that the CAPF server waits for a key-generation response from a phone.

# keypad-normalize

To impose a 200-millisecond delay before each keypad message from an IP phone, use the **keypad-normalize** command in ephone or ephone-template configuration mode. To return to the default, use the **no** form of this command.

**keypad-normalize**

**no keypad-normalize**

**Syntax Description** This command has no keywords or arguments.

**Command Default** Keypad messages are handled as fast as the system can handle them, without an imposed delay.

**Command Modes** Ephone configuration (config-ephone) Ephone-template configuration (config-ephone-template)

Command History	Cisco IOS Release	Cisco Product	Modification
	12.4(4)XC	Cisco Unified CME 4.0	This command was introduced.
	12.4(9)T	Cisco Unified CME 4.0	This command was integrated into Cisco IOS Release 12.4(9)T.

**Usage Guidelines** This command normalizes the processing of incoming keypad messages from an IP phone so that one message is processed every 200 milliseconds. This is useful for handling the personal speed dial (fastdial) feature when the destination of the call tends to be slower in accepting the digits, or when converting keypad messages into appropriate digit events on the network side, such as RFC 2833 digits.

If you use an ephone template to apply a command to a phone and you also use the same command in ephone configuration mode for the same phone, the value that you set in ephone configuration mode has priority.

**Examples** The following example normalizes the sending of digits from ephone 43.

```
ephone 43
  button 1:29
  keypad-normalize
```

## Related Commands

Command	Description
<b>ephone-template (ephone)</b>	Applies template to ephone being configured.

# keyphone

To designate a Cisco Unified IP phone as a marked or “key” phone when using the Cisco Unified CME eXtensible Markup Language (XML) application program interface (API), use the **keyphone** command in ephone or ephone-template configuration mode. To remove the keyphone designation, use the **no** form of this command.

**keyphone**

**no keyphone**

**Syntax Description** This command has no arguments or keywords.

**Command Default** The phone that is being configured is not a “key” phone.

**Command Modes** Ephone configuration (config-ephone) Ephone-template configuration (config-ephone-template)

## Command History

Cisco IOS Release	Cisco Product	Modification
12.2(15)ZJ	Cisco CME 3.0	This command was introduced.
12.3(4)T	Cisco CME 3.0	This command was integrated into Cisco IOS Release 12.3(4)T.
12.4(4)XC	Cisco Unified CME 4.0	This command was made available in ephone-template configuration mode.
12.4(9)T	Cisco Unified CME 4.0	This command in ephone-template configuration mode was integrated into Cisco IOS Release 12.4(9)T.

## Usage Guidelines

This command is used with the XML API to mark a Cisco Unified IP phone as a “key” phone to be tracked while using the XML API. The XML API can be instructed to report the status of only the “key” phones in the system for network management purposes, for example.

If you use an ephone template to apply a command to a phone and you also use the same command in ephone configuration mode for the same phone, the value that you set in ephone configuration mode has priority.

## Examples

The following example sets the phone with the phone tag of 1 as a “key” phone for the XML API:

```
Router(config)# ephone 1
Router(config-ephone)# keyphone
```

**Related Commands**

Command	Description
ephone-template (ephone)	Applies template to ephone being configured.

