



target carrier-id through timeout tsmx

- [target carrier-id, page 3](#)
- [target trunk-group-label, page 4](#)
- [tbct clear call, page 5](#)
- [tbct max call-duration, page 7](#)
- [tbct max calls, page 9](#)
- [tdm-group, page 11](#)
- [tech-prefix, page 13](#)
- [tel-config to-hdr, page 15](#)
- [telephony-service, page 17](#)
- [telephony-service ccm-compatible \(H.323 voice-class\), page 23](#)
- [telephony-service ccm-compatible \(H.323 voice-service\), page 25](#)
- [text relay modulation, page 27](#)
- [text relay protocol, page 29](#)
- [text relay rtp, page 31](#)
- [tgrep address-family, page 33](#)
- [tgrep advertise \(dial peer\), page 35](#)
- [tgrep advertise \(trunk group\), page 37](#)
- [tgrep local-itad, page 39](#)
- [threshold noise, page 40](#)
- [timeout \(auto-config application\), page 42](#)
- [timeout leg3, page 43](#)
- [timeout ptt, page 44](#)
- [timeout tcrit, page 45](#)
- [timeout tdinit, page 47](#)

- [timeout tdmx, page 49](#)
- [timeout tdmn, page 51](#)
- [timeout thist, page 53](#)
- [timeout tone busy, page 55](#)
- [timeout tone cot1, page 57](#)
- [timeout tone cot2, page 59](#)
- [timeout tone dial, page 61](#)
- [timeout tone dial stutter, page 63](#)
- [timeout tone mwi, page 65](#)
- [timeout tone network, page 67](#)
- [timeout tone reorder, page 69](#)
- [timeout tone ringback, page 71](#)
- [timeout tone ringback connection, page 73](#)
- [timeout tone ringing, page 75](#)
- [timeout tone ringing distinctive, page 77](#)
- [timeout tpar, page 79](#)
- [timeout tsmx, page 81](#)

target carrier-id

To configure debug filtering for the target carrier ID, use the **target carrier-id** command in call filter match list configuration mode. To disable, use the **no** form of this command.

target carrier-id *string*

no target carrier-id *string*

Syntax Description

<i>string</i>	Alphanumeric identifier for the carrier ID.
---------------	---

Command Default

No default behavior or values

Command Modes

Call filter match list configuration

Command History

Release	Modification
12.3(4)T	This command was introduced.

Examples

The following example shows the voice call debug filter set to match target carrier ID 4321:

```
call filter match-list 1 voice
target carrier-id 4321
```

Related Commands

Command	Description
call filter match-list voice	Create a call filter match list for debugging voice calls.
debug condition match-list	Run a filtered debug on a voice call.
show call filter match-list	Display call filter match lists.
source carrier-id	Configure debug filtering for the source carrier ID.
source trunk-group-label	Configure debug filtering for a source trunk group.
target trunk-group-label	Configure debug filtering for a target trunk group.

target trunk-group-label

To configure debug filtering for a target trunk group, use the **target trunk-group-label** command in call filter match list configuration mode. To disable, use the **no** form of this command.

target trunk-group-label *group-number*

no target trunk-group-label *group-number*

Syntax Description

<i>group-number</i>	A value from 0 to 23 that identifies the trunk group.
---------------------	---

Command Default

No default behavior or values

Command Modes

Call filter match list configuration

Command History

Release	Modification
12.3(4)T	This command was introduced.

Examples

The following example shows the voice call debug filter set to match target trunk group 21:

```
call filter match-list 1 voice
target trunk-group-label 21
```

Related Commands

Command	Description
call filter match-list voice	Create a call filter match list for debugging voice calls.
debug condition match-list	Run a filtered debug on a voice call.
show call filter match-list	Display call filter match lists.
source carrier-id	Configure debug filtering for the source carrier ID.
source trunk-group-label	Configure debug filtering for a source trunk group.
target carrier-id	Configure debug filtering for the target carrier ID.

tbct clear call

To terminate billing statistics for one or more active Two B-Channel Transfer (TBCT) calls, use the **tbct clear call** command in privileged EXEC mode.

tbct clear call {**all**| *interface* [*call-tag*]}

Syntax Description

all	Active TBCT calls on all interfaces.
<i>interface</i>	Active TBCT calls on a specified interface. Range is platform-dependent.
<i>call -tag</i>	(Optional) A specific active TBCT call on the specified interface, as identified by the unique call tag number. Range is 1 to 4,294,967,295.

Command Default

No default behavior or values

Command Modes

Privileged EXEC

Command History

Release	Modification
12.3(1)	This command was introduced.

Usage Guidelines

- Use this command to manually clear a specific active call or a group of active calls, if, for instance, the ISDN switch goes down. You should not have to manually clear calls with this command unless there is a problem with the switch.
- This command terminates billing information that is being sent to the RADIUS server if, for some reason, the gateway did not receive a notify message from the switch that a call has cleared.
- To automatically clear calls after a specified duration, use the **tbct max call-duration** command.
- To determine the *interface* and *call -tag* arguments to use with this command, use the **show call active voice redirect** command.

Examples

The following example clears calls on T1 interface 6/0:

```
Router# tbct clear call T1-6/0
```

Related Commands

Command	Description
isdn supp -service tbct	Enables ISDN TBCT on PRI trunks.
show call active voice redirect	Displays information about active calls that are being redirected using RTPvt or TBCT.
tbct max call -duration	Sets the maximum duration allowed for a call that is redirected using TBCT.
tbct max calls	Sets the maximum number of active calls that can use TBCT.

tbct max call-duration

To set the maximum duration allowed for a call that is redirected using Two B-Channel Transfer (TBCT), use the **tbct max call-duration** command in global configuration mode. To reset to the default, use the **no** form of this command.

tbct max call-duration *minutes*

no tbct max call-duration

Syntax Description

<i>minutes</i>	Maximum duration, in minutes, allowed for a single TBCT call. Range is 1 to 9999, in recommended increments of 5 minutes. Default is no limit.
----------------	--

Command Default

No limit

Command Modes

Global configuration

Command History

Release	Modification
12.3(1)	This command was introduced.

Usage Guidelines

- Use this command to automatically clear stale calls, for instance if the PRI trunk goes down. To manually clear calls, use the **tbct clear call** command.
- Cisco recommends that you set the call duration in increments of 5 minutes.



Note

The call duration limit set by this command is not precisely enforced; calls may not be cleared after the exact number of minutes specified by this command.

Examples

The following example clears TBCT calls that last longer than 10 minutes:

```
tbct max call-duration 10
```

Related Commands

Command	Description
isdn supp -service tbct	Enables ISDN TBCT on PRI trunks.

Command	Description
show call active voice redirect	Displays information about active calls that are being redirected using RTPvt or TBCT.
tbct clear call	Terminates billing statistics for one or more active TBCT calls.
tbct max calls	Sets the maximum number of active calls that can use TBCT.

tbct max calls

To set the maximum number of active calls that can use Two B-Channel Transfer (TBCT), use the **tbct max calls** command in global configuration mode. To reset to the default, use the **no** form of this command.

tbct max calls *number*

no tbct max calls

Syntax Description

<i>number</i>	Maximum number of currently active calls that can invoke TBCT at any one time. Range is 1 to 1,000,00. Default is no limit.
---------------	---

Command Default

No limit, except as allowed by memory resources

Command Modes

Global configuration

Command History

Release	Modification
12.3(1)	This command was introduced.

Usage Guidelines

Use this command to control memory resources on the gateway by limiting the amount of memory consumed by TBCT calls.

Examples

The following example sets the maximum number of calls using TBCT to 500:

```
tbct max calls 500
```

Related Commands

Command	Description
isdn supp -service tbct	Enables ISDN TBCT on PRI trunks.
show call active voice redirect	Displays information about active calls that are being redirected using RTPvt or TBCT.
tbct clear call	Terminates billing statistics for one or more active TBCT calls.

Command	Description
tbct max call -duration	Sets the maximum duration allowed for a call that is redirected using TBCT.

tdm-group

To configure a list of time slots for creating clear channel groups (pass-through) for time-division multiplexing (TDM) cross-connect, use the **tdm-group** command in controller configuration mode. To delete a clear channel group, use the **no** form of this command.

tdm-group *tdm-group-no* **timeslot** *timeslot-list* [**type** {**em**| **fxs** [**loop-start**| **ground-start**]| **fxo** [**loop-start**| **ground-start**]| **fxs-melcas**| **fxo-melcas**| **e&m-melcas**}]

no tdm-group *tdm-group-no* **timeslot** *timeslot-list* [**type** {**em**| **fxs** [**loop-start**| **ground-start**]| **fxo** [**loop-start**| **ground-start**]| **fxs-melcas**| **fxo-melcas**| **e&m-melcas**}]

Syntax Description

<i>tdm -group-no</i>	TDM group number.
timeslot	Time-slot number.
<i>timeslot -list</i>	Time-slot list. T1 range is 1 to 24. E1 range is 1 to 15 and 17 to 31.
type	<p>(Optional) (Valid only when the mode cas command is enabled.) Voice signaling type of the voice port. If configuring a TDM group for data traffic only, do not specify the type keyword.</p> <p>Choose from one of the following options:</p> <ul style="list-style-type: none"> • e&m--E&M signaling • fxs--Foreign Exchange Station signaling (optionally, you can also specify loop-start or ground-start) • fxo--Foreign Exchange Office signaling (optionally, you can also specify loop-start or ground-start) • fxs-melcas--Foreign Exchange Station MEL CAS • fxo-melcas--Foreign Exchange Office MEL CAS • e&m-melcas--E&M Mercury Exchange Limited Channel-Associated signaling (MEL CAS) <p>The MELCAS options apply only to E1 lines and are used primarily in the United Kingdom.</p>

Command Default

No TDM group is configured.

Command Modes

Controller configuration

Command History

Release	Modification
11.3(1)MA	This command was introduced on Cisco MC38310.
12.1(1)T	This command was modified to include voice WAN interface cards (VWICs) for Cisco 2600 series and Cisco 3600 series.
12.1(2)T	This command was modified for the OC-3/STM-1 ATM Circuit Emulation Service network module on Cisco 2600 series and Cisco 3600 series.

Usage Guidelines

The **tdm-group** command allows specific timeslots to switch from port 0 to port 1 and vice versa. This command is similar to the **channel-group** command, but it does not create a serial interface to terminate the specified channels.

**Note**

Channel groups, CAS voice groups, DS0 groups, and TDM groups all use group numbers. All group numbers configured for channel groups, CAS voice groups, DS0 groups, and TDM groups must be unique on the local router. For example, you cannot use the same group number for a channel group and for a TDM group.

Examples

The following example configures TDM group 1 to include timeslots 13 through 20:

```
controller T1 1
 tdm-group 1 timeslots 13-20
```

The following example configures TDM group number 20 on controller T1 1 to support Foreign Exchange Office (FXO) ground-start:

```
controller T1 1
 tdm-group 20 timeslot 20 type fxs ground-start
```

Related Commands

Command	Description
connect	Starts passage of data between ports for cross-connect TDM.

tech-prefix

To specify that a particular technology prefix be prepended to the destination pattern of a specific dial peer, use the **tech-prefix** command in dial peer configuration mode. To disable the defined technology prefix for this dial peer, use the **no** form of this command.

tech-prefix number

no tech-prefix

Syntax Description

<i>number</i>	Defines the numbers used as the technology prefix. Each technology prefix can contain up to 11 characters. Although not strictly necessary, a pound (#) symbol is frequently used as the last character in a technology prefix. Valid characters are 0 through 9, the pound (#) symbol, and the asterisk (*).
---------------	---

Command Default

No technology prefix is defined.

Command Modes

Dial peer configuration

Command History

Release	Modification
11.3(6)NA2	This command was introduced on Cisco 2600 series and Cisco 3600 series.
12.2(2)XB1	This command was implemented on the Cisco AS5850.
12.2(11)T	This command was integrated into Cisco IOS Release 12.2(11)T.

Usage Guidelines

Technology prefixes are used to distinguish between gateways that have specific capabilities within a given zone. In the exchange between the gateway and the gatekeeper, the technology prefix is used to select a gateway after the zone has been selected. Use the **tech-prefix** command to define technology prefixes.

Technology prefixes can be used as a discriminator so that the gateway can tell the gatekeeper that a certain technology is associated with a particular call (for example, 15# could mean a fax transmission), or a technology prefix can be used like an area code for more generic routing. No standard defines what the numbers in a technology prefix mean; by convention, technology prefixes are designated by a pound (#) symbol as the last character.

In most cases, there is a dynamic protocol exchange between the gateway and the gatekeeper that enables the gateway to inform the gatekeeper about technology prefixes and where to forward calls. If, for some reason, that dynamic registry feature is not in effect, you can statically configure the gatekeeper to query the gateway

for this information by configuring the **gw-type-prefix** command on the gatekeeper. Use the **show gatekeeper gw-type-prefix** command to display how the gatekeeper has mapped the technology prefixes to local gateways.

**Note**

Cisco gatekeepers use the asterisk (*) as a reserved character. If you are using Cisco gatekeepers, do not use the asterisk as part of the technology prefix.

Examples

The following example defines a technology prefix of 14# for the specified dial peer. In this example, the technology prefix means that the H.323 gateway asks the RAS gatekeeper to direct calls using the technology prefix of 14#.

```
dial-peer voice 10 voip
 destination-pattern 14...
 tech-prefix 14#
```

Related Commands

Command	Description
gw -type-prefix	Configures a technology prefix in the gatekeeper.
show gatekeeper gw -type-prefix	Displays the gateway technology prefix table.

tel-config to-hdr

To configure the To: Header (to hdr) Request URI to telephone (TEL) format for VoIP Session Initiation Protocol (SIP) calls, use the **tel-config to-hdr** command in SIP configuration mode. To reset to the default, use the **no** form of this command.

tel-config to-hdr [phone-context]

no tel-config to-hdr

Syntax Description

phone-context	(Optional) Appends the phone context parameter to the TEL URL.
----------------------	--

Command Default

The To: Header Request Line URIs are not configured to telephone format.

Command Modes

SIP configuration (conf-serv-sip)

Command History

Release	Modification
12.4(22)YB	This command was introduced.
15.0(1)M	This command was integrated into Cisco IOS Release 15.0(1)M.

Usage Guidelines

The **voice-class tel-config to-hdr** command takes precedence over the **tel-config to-hdr** command configured in SIP configuration mode. However, if the **voice-class tel-config to-hdr** command is configured with the **system** keyword, the gateway uses the global settings configured by the **tel-config to-hdr** command.

Enter SIP configuration mode after entering voice-service VoIP configuration mode, as shown in the "Examples" section.

Examples

The following example configures the To: header in TEL format, and appends the phone-context parameter to the header:

```
voice service voip
sip
tel-config to-hdr phone-context
```

Related Commands

Command	Description
sip	Enters SIP configuration mode from voice-service VoIP configuration mode.

Command	Description
voice -class tel-config to-hdr	Configures the To: Header request URI to telephone format for dial-peer VoIP SIP calls.

telephony-service

To enter telephony-service configuration mode for configuring Cisco Unified CME, use the **telephony-service** command in global configuration mode. To remove the entire Cisco Unified CME configuration for SCCP IP phones, use the **no** form of this command.

telephony-service [setup]

no telephony-service

Syntax Description

setup	<p>(Optional) Interactive setup tool for configuring Cisco Unified IP Phone 7910s, 7940s, and 7960s in Cisco Unified CME.</p> <p>Note This interactive Cisco CME setup tool is restricted to generating basic configuration files for Cisco Unified IP Phone 7910s, 7940s, and 7960s running SCCP protocol only.</p>
--------------	---

Command Default

No Cisco Unified CME configuration for SCCP IP phones is present.

Command Modes

Global configuration (config)

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.
12.2(15)ZJ	Cisco CME 3.0	The setup keyword was added.
12.3(4)T	Cisco CME 3.0	This command was integrated into Cisco IOS Release 12.3(4)T.

Usage Guidelines

This command enters the telephony-service configuration mode for configuring system wide parameters for SCCP IP phones in Cisco Unified CME.

**Note**

The voice-gateway system is tied to the telephony service. The **telephony-service** command must be configured before the voice-gateway system is configured; otherwise, the voice gateway is hidden from the user.

Use the **setup** keyword to start the interactive setup tool to automatically configure only Cisco Unified IP Phone 7910s, 7940s, and 7960s in Cisco Unified CME.

For alternate methods of automatically configuring Cisco Unified CME, including Cisco Unified IP Phone 7910s, 7940s, and 7960s and other Cisco Unified IP phones, see the Cisco Unified CME Administrator Guide.

The **setup** keyword is not stored in the router nonvolatile random-access memory (NVRAM).

If you attempt to use the **setup** option for a system that already has a telephony-service configuration, the command is rejected. To use the **setup** option after an existing telephony-service configuration has been created, first remove the existing configuration using the **no telephony-service** command.

The table below shows a sample dialog with the Cisco CME setup tool and explains possible responses to the Cisco CME setup tool prompts.

Table 1: Cisco CME Setup Tool Dialog Prompts

Cisco CME Setup Tool Prompt	Description
<p>Do you want to setup DHCP service for your IP phones? [yes/no]:</p> <p>If you respond yes, you see the following prompts:</p> <p>IP network for telephony-service DHCP Pool: Subnet mask for DHCP network : TFTP Server IP address (Option 150) : Default Router for DHCP Pool :</p>	<ul style="list-style-type: none"> • Yes--Configures the Cisco Unified CME router to act as a Dynamic Host Configuration Protocol (DHCP) server, automatically providing IP addresses to your IP phones and provisioning the default gateway and TFTP IP addresses to be used by the phones. This method creates a single pool of IP addresses. If you need a pool for non-IP phones or if the Cisco router cannot act as the DHCP router, answer no and manually define the DHCP server. • No--Indicates that you have already configured DHCP or static IP addresses for the IP phones.
<p>Do you want to start telephony-service setup? [yes/no]:</p>	<ul style="list-style-type: none"> • Yes-- Starts the interactive setup tool for configuring Cisco Unified IP Phone 7910s, 7940s, and 7960s. • No --Terminates the Cisco CME setup tool.
<p>Enter the IP source address for Cisco CallManager Express: Enter the Skinny Port for Cisco CallManager Express: [2000]:</p>	<p>IP address on which the router provides Cisco Unified CME services, usually the default gateway for the IP subnet that you are using for the IP phones, and the port for Skinny Client Control Protocol (SCCP) messages.</p>
<p>How many IP phones do you want to configure : [0]:</p>	<p>Enter the maximum number of IP phones that this Cisco Unified CME system will support. This number can be increased later, to the maximum allowed for this version and your router.</p> <p>Note The Cisco CME setup tool associates one number with each newly registering phone. You can manually add additional numbers on a phone at a later time.</p>
<p>Do you want dual-line extensions assigned to phones? [yes for dual-line / no for single-line]:</p>	

Cisco CME Setup Tool Prompt	Description
	<ul style="list-style-type: none"> • Yes --Each newly registering IP phones is assigned a single number that is associated with a single phone button. The system generates a dual-line ephone-dn entry for each ephone-dn. • No --IP phones are linked directly to one or more PSTN trunk lines. Using keyswitch mode requires manual configuration in addition to using the Cisco CME setup tool. The system generates two ephone-dn entries for each ephone-dn, and they are both assigned to a single phone.
<pre> What language do you want on IP phones? 0 English 1 French 2 German 3 Russian 4 Spanish 5 Italian 6 Dutch 7 Norwegian 8 Portuguese 9 Danish 10 Swedish [0]: </pre>	<p>Language for IP phone displays, selected from the list.</p> <ul style="list-style-type: none"> • Default is 0, English.
<pre> Which Call Progress tone set do you want on IP phones : 0 United States 1 France 2 Germany 3 Russia 4 Spain 5 Italy 6 Netherlands 7 Norway 8 Portugal 9 UK 10 Denmark 11 Switzerland 12 Sweden 13 Austria 14 Canada [0]: </pre>	<p>Locale for the tone set used to indicate call status or progress, selected from the list.</p> <ul style="list-style-type: none"> • Default is 0, United States.
<pre> What is the first extension number you want to configure :[0]: </pre>	

Cisco CME Setup Tool Prompt	Description
	<p>First number in pool of extension numbers to be created for IP phones connected to the Cisco router to be configured.</p> <ul style="list-style-type: none"> • Starting with this number, remaining extension numbers are automatically configured in a contiguous manner. • This number must be compatible with your telephone number plan, and, if you use Direct Inward Dialing (DID) service, with public switched telephone network (PSTN) numbering requirements.
<p>Do you have Direct-Inward-Dial service for all your phones? [yes/no]:</p>	<ul style="list-style-type: none"> • Yes--If you have trunk access to public telephone service by ISDN or VoIP for all extension numbers. The system creates an appropriate dial plan. • No--If you have simple analog phone lines only (for example, foreign exchange office [FXO] interfaces) or if you have trunk access for some lines but not all lines.
<p>If you answer yes to the previous question, you see the following prompt:</p> <p>Enter the full E.164 number for the first phone:</p>	<p>Complete 10-digit telephone number, including area code, that corresponds to the first extension number.</p>
<p>Do you want to forward calls to a voice message service? [yes/no]:</p>	<ul style="list-style-type: none"> • Yes--To forward calls to a single voice message service number when an IP phone is busy or does not answer. All phone extensions forward their calls to the same voice message service pilot number. • No--Not to forward calls to a single voice message service number. Answer no if you do not have a voice message system or if you want to customize call-forwarding behavior for each extension.

Cisco CME Setup Tool Prompt	Description
<p>If you answer yes to the previous question, you see the following prompt:</p> <p>Enter the extension or pilot number of the voice message service:</p>	<p>Voice message service pilot number.</p> <ul style="list-style-type: none"> • This step can be ignored during the setup dialog and manually configured later.
<p>Call forward No Answer Timeout: [18]:</p>	<p>Timeout, in seconds, after which to forward calls to voice mail if they are not answered.</p> <ul style="list-style-type: none"> • Default is 18.
<p>Do you wish to change any of the above information? [yes/no]:</p>	<ul style="list-style-type: none"> • Yes --Starts the dialog over again without implementing any of the answers that you previously gave. • No --Uses specified values to automatically build basic configuration for Cisco Unified IP Phone 7910s, 7940s, and 7960s in Cisco Unified CME.

Examples

The following example shows how to enter telephony-service configuration mode for manually configuring Cisco Unified CME. This example also configures the maximum number of phones to 12:

```
Router(config)# telephony-service
Router(config-telephony)# max-ephones 12
```

The following example shows how to start the Cisco CME setup tool:

```
Router(config)# telephony-service setup
```

telephony-service ccm-compatible (H.323 voice-class)

To enable, for an individual dial peer, the detection of a Cisco CallManager system in the network and allow the exchange of calls, use the **telephony-service ccm-compatible** command in voice-class configuration mode. To disable the detection capability and the exchange of calls on an individual dial peer, use the **no** form of this command.

telephony-service ccm-compatible

no telephony-service ccm-compatible

Syntax Description This command has no arguments or keywords.

Command Default Detection of Cisco CallManager systems is enabled.

Command Modes Voice-class configuration

Command History	Release	Modification
	12.3(7)T	This command was introduced.

Usage Guidelines This command is used with Cisco CallManager Express (Cisco CME) 3.1 or a later version.

When a voice class that contains this command is applied to a dial peer, this command enables detection of and call exchange with Cisco CallManager for all calls from that dial peer. Use the **telephony-service ccm-compatible** command in H.323 voice-service configuration mode to create a voice class to apply this capability globally. If the capability is specified at both the global and dial-peer level, the dial-peer setting has precedence for that dial peer.

Examples The following example globally enables detection of Cisco CallManager systems in the network, creates voice class 4 to disable the capability on individual dial peers, and applies voice class 4 to dial peer 36. Although the **telephony-service ccm-compatible** command in H.323 voice-service configuration mode is not required because this condition is the default, the command is shown here for illustration purposes.

```
Router(config)# voice service voip
Router(config-voi-serv)# h323
Router(conf-serv-h323)# telephony-service ccm-compatible
Router(conf-serv-h323)# exit
Router(config-voi-serv)# exit
Router(config)# voice class h323 4
Router(config-class)# no
telephony-service ccm-compatible
Router(config-class)# exit
Router(config)# dial-peer voice 36 voip
Router(config-dial-peer)# destination-pattern 555....
Router(config-dial-peer)# session target ipv4:10.5.6.7
```

```
Router(config-dial-peer)# voice-class h323 4
```

Related Commands

Command	Description
telephony-service ccm-compatible (H.323 voice-service)	Globally enables detection of Cisco CallManager in a network for all dial peers.
voice class h323	Creates an H.323 voice class to apply to a dial peer.
voice-class h323	Applies an H.323 voice class to a dial peer.

telephony-service ccm-compatible (H.323 voice-service)

To globally enable the detection of a Cisco CallManager system in the network and allow the exchange of calls, use the **telephony-service ccm-compatible** command in H.323 voice-service configuration mode. To disable the detection capability and the exchange of calls globally, use the **no** form of this command.

telephony-service ccm-compatible

no telephony-service ccm-compatible

Syntax Description This command has no arguments or keywords.

Command Default Detection of Cisco CallManager systems is enabled.

Command Modes H.323 voice-service configuration

Command History	Release	Modification
	12.3(7)T	This command was introduced.

Usage Guidelines This command is used with Cisco CallManager Express (Cisco CME) 3.1 or a later version.

This command globally enables call exchange with Cisco CallManager for all calls from this router. Use the **telephony-service ccm-compatible** command in voice-class configuration mode to create a voice class in order to apply this capability to an individual dial peer. If the capability is specified at both the global and dial-peer level, the dial-peer setting has precedence for that dial peer.

Examples The following example globally enables detection of Cisco CallManager systems in the network, creates voice class 4 to disable the capability on individual dial peers, and applies voice class 4 to dial peer 36. Although the **telephony-service ccm-compatible** command in H.323 voice-service configuration mode is not required because this condition is the default, the command is shown here for illustration purposes.

```
Router(config)# voice service voip
Router(config-voi-serv)# h323
Router(conf-serv-h323)# telephony-service ccm-compatible
Router(conf-serv-h323)# exit
Router(config-voi-serv)# exit
Router(config)# voice class h323 4
Router(config-class)# no
    telephony-service ccm-compatible
Router(config-class)# exit
Router(config)# dial-peer voice 36 voip
Router(config-dial-peer)# destination-pattern 555....
Router(config-dial-peer)# session target ipv4:10.5.6.7

Router(config-dial-peer)# voice-class h323 4
```

Related Commands

Command	Description
h323	Enters H.323 voice-service configuration mode.
telephony-service ccm-compatible (H.323 voice-class)	Enables Cisco CallManager detection in a network by individual dial peers.
voice service voip	Enters voice-service configuration mode.

text relay modulation

To configure the teletype text phone (TTY) modulation used on the gateway for Cisco text relay for Baudot text phones, use the **text relay modulation** command in dial peer voice configuration mode or voice service configuration mode. To disable text relay modulation, use the **no** form of this command.

text relay modulation {**baudot45.45**| **baudot50**} {**autobaud-on**| **autobaud-off**}

no text relay modulation

Syntax Description

baudot45.45	Configures baudot 45.45 TTY modulation. This is the default baud rate.
baudot50	Configures baudot 50 TTY modulation.
autobaud-on	Enables the digital signal processors (DSPs) to autodetect the baud rate. This is the default autobaud setting.
autobaud-off	Disables the DSP capability to autodetect the baud rate.

Command Default

The TTY modulation is **baudot45.45 autobaud-on**.

Command Modes

Dial peer voice configuration Voice service configuration

Command History

Release	Modification
12.4(6)T	This command was introduced.

Usage Guidelines

You must select a baud rate and enable or disable the autobaud functionality on the DSP.

Use this command in voice service configuration mode to set the TTY modulation globally. A global configuration is the system-wide configuration that is applied to any VoIP call on the gateway.

Use this command in dial peer voice configuration mode to set the TTY modulation for calls that match a specific dial peer. The dial peer voice configuration takes precedence over the global configuration.

Examples

The following example shows how to globally set the text relay TTY modulation to Baudot 50:

```
Router(config)# voice service voip
Router(config-voi-serv)# text relay modulation baudot50 autobaud-off
```

The following example shows how to set the text relay TTY modulation to Baudot 50 for calls that match a specific dial peer:

```
Router(config)# dial-peer voice 2000 voip
Router(config-dial-peer)# text relay modulation baudot50 autobaud-off
```

Related Commands

Command	Description
text relay protocol	Configures the system-wide protocol type for text packets transmitted between gateways.
text relay rtp	Configures the RTP payload type and redundancy level.

text relay protocol

To enable Cisco text relay for Baudot text phones, use the **text relay protocol** command in dial peer voice configuration mode or voice service configuration mode. To disable text relay capabilities, use the **no** form of this command.

text relay protocol [**cisco**| **system**]

no text relay protocol

Syntax Description

cisco	(Optional) Uses the Cisco proprietary text relay protocol.
system	(Optional; dial peer voice configuration only) Uses the global configuration settings.

Command Default

The text relay protocol is disabled.

Command Modes

Dial-peer configuration Voice-service configuration

Command History

Release	Modification
12.4(6)T	This command was introduced.

Usage Guidelines

Use this command in voice-service configuration mode to enable text relay globally for H.323, Session Initiation Protocol (SIP), Skinny Client Control Protocol (SCCP), and Media Gateway Control Protocol (MGCP). A global configuration is the system-wide configuration that is applied to any VoIP call on the gateway.

Use this command in dial peer voice configuration mode to enable text relay for calls that match a specific dial peer. The dial peer voice configuration takes precedence over the global configuration.

Examples

The following example shows how to enable text relay for all VoIP calls on the gateway:

```
Router(config)# voice service voip
Router(config-voi-serv)# text relay protocol cisco
```

The following example shows how to enable text relay for calls that match a specific dial peer:

```
Router(config)# dial-peer voice 2000 voip
Router(config-dial-peer)# text relay protocol cisco
```

Related Commands

Command	Description
text relay modulation	Configures the TTY modulation on the gateway.
text relay rtp	Configures the RTP payload type and redundancy level.

text relay rtp

To configure the Real-Time Transport Protocol (RTP) payload type and redundancy level for Cisco text relay for Baudot text phones, use the **text relay rtp** command in dial peer voice configuration mode or voice service configuration mode. To disable the text relay RTP payload type and redundancy level, use the **no** form of this command.

text relay rtp {[**payload-type** {*value* | **default**}] [**redundancy level**] **redundancy level**}

no text relay rtp

Syntax Description

payload-type { <i>value</i> default }	<p>The RTP payload is the data transported by RTP in a packet.</p> <ul style="list-style-type: none"> • The <i>value</i> range is 98 to 117 for dynamic RTP payload types. • The default value is 119, which is a static payload type.
<i>redundancy level</i>	<p>Use the redundancy option to repeat data for redundancy and to lower the risk of packet loss. The redundancy level is the number of redundant text packets sent across the VoIP network. The range is 1 to 3. The default value is 2.</p>

Command Default

Text relay RTP is disabled.

Command Modes

Dial peer voice configuration Voice service configuration

Command History

Release	Modification
12.4(6)T	This command was introduced.

Usage Guidelines

When using the **text relay rtp** command, you can either configure the **payload-type**, or the redundancy level, or both.

- Use this command in voice service configuration mode to set the RTP payload type and redundancy level globally for H.323, Session Initiation Protocol (SIP), Skinny Client Control Protocol (SCCP), and Media Gateway Control Protocol (MGCP). A global configuration is the system-wide configuration that is applied to any VoIP call on the gateway.

- Use this command in dial-peer configuration mode to set the RTP payload type and redundancy level for calls that match a specific dial peer. The dial peer voice configuration takes precedence over the global configuration.

Examples

The following example shows how to globally configure text relay RTP payload type 117 and redundancy level 2:

```
Router(config)# voice service voip  
Router(config-voi-serv)# text relay rtp payload-type 117 redundancy 2
```

The following example shows how to configure the default text relay RTP payload type and redundancy level 1 for calls that match a specific dial peer:

```
Router(config)# dial-peer voice 2000 voip  
Router(config-dial-peer)# text relay rtp payload-type default redundancy 1
```

Related Commands

Command	Description
text relay modulation	Configures the TTY modulation on the gateway.
text relay protocol	Configures the system-wide protocol type for text packets transmitted between gateways.

tgrep address-family

To set the address family to be used on a local dial peer, use the `tgrep address-family` command in dial peer configuration mode. To return to the global setting, use the **no** form of this command.

tgrep address family {e164| decimal| penta-decimal}

no tgrep address family {e164| decimal| penta-decimal}

Syntax Description

e164	E.164 address family.
decimal	Decimal address family
penta-decimal	Penta-decimal address family

Command Default

No default behavior or values.

Command Modes

Dial peer configuration

Command History

Release	Modification
12.3(1)	This command was introduced.

Usage Guidelines

The E. 164 address family is used if the telephony network is a public telephony network. Decimal and pentadecimal options can be used to advertise private dial plans. For example if a company wants to use TRIP in within their enterprise telephony network using 5-digit extensions, then the gateway would advertise the beginning digits of their private numbers as a decimal address family. These calls cannot be sent out of the company's private telephony network because they are not E.164-compliant.

The pentadecimal family allows numbers 0 through 9 and alphabetic characters A through E and can be used in countries where letters are also carried in the called number.

Examples

The following example shows that POTS dial peer 10 has the address family set for E.164 addresses:

```
Router(config)# dial-peer voice pots 10
Router(config-dial-peer)# tgrep address family e164
```

Related Commands

Command	Description
dial-peer voice	Enters dial-peer configuration mode and specifies the method of voice-related encapsulation.

tgrep advertise (dial peer)

To set the attributes for advertisement of the prefix on this dial peer or to disable advertisement on this dial peer altogether, use the **tgrep advertise** command in dial peer configuration mode. To return to using the global setting, use the **no** form of this command.

tgrep advertise [csr] [ac] [tc] [carrier|trunk-group] [disable]

no tgrep advertise [csr] [ac] [tc] [carrier|trunk-group] [disable]

Syntax Description

csr	Call success rate.
ac	Available circuits.
tc	Total circuits.
carrier	Carrier-code address family.
trunk-group	Trunk-group address family.
disable	Disables advertisement of this dial peer.

Command Default

Prefix advertisement is not sent.

Command Modes

Dial peer configuration

Command History

Release	Modification
12.3(1)	This command was introduced.

Usage Guidelines

When only **tgrep advertise** is entered, the dial peer is advertised without any other attribute.

When no **tgrep advertise** is used on the dial peer, the dial peer inherits the attributes set in the global **advertise** command.

When the global **no advertise** command is used, it forbids advertisement of that particular address family altogether. The **tgrep advertise** command has no effect until the advertisement of the address family is enabled globally.

Examples

The following example shows a TGREP advertisement that sends call success rate, available circuits, total circuits, and carrier address family attribute information:

```
Router(config)# dial-peer voice pots 10
Router(config-dial-peer)# tgrep advertise csr ac tc carrier
```

Related Commands

Command	Description
dial-peer voice	Enters dial-peer configuration mode and specifies the method of voice-related encapsulation.

tgrep advertise (trunk group)

To turn on the advertisement of this trunk group for resource availability and other carrier information, use the `tgrep advertise` command in trunk group configuration mode. To turn off local trunk group advertisement and use the global setting, use the **no** form of this command.

tgrep advertise [csr] [ac] [tc] [disable]

no tgrep advertise [csr] [ac] [tc] [disable]

Syntax Description

csr	Call success rate.
ac	Available circuits.
tc	Total circuits.
disable	Disables advertisement on the trunk group.

Command Default

Trunk group advertisement is not sent

Command Modes

Trunk group configuration

Command History

Release	Modification
12.3(1)	This command was introduced.

Usage Guidelines

When only `tgrep advertise` is entered, the trunk group is advertised without any other attribute. When `no tgrep advertise` is used, the trunk group uses the global setting configured with the `advertise` command in TGREP configuration mode. To turn off advertisement of this trunk group, the `disable` keyword should be used.

There is a subtle difference between the `no` form of this command and the `no` form of the global `advertise` command. When `no tgrep advertise` is used on the trunk group, the trunk group inherits the attributes set in the global `advertise` command.

When the global `no advertise` command is used, it forbids advertisement of that particular address family altogether. The **tgrep advertise** command has no effect until the advertisement of the address family is enabled globally.

When the **carrier** keyword is used, the carrier defined under the trunk group assumes the configuration. Because multiple trunk groups can have the same carrier defined, the same configuration will show up under all trunk groups that have the same carrier defined. When the **no tgrep advertise carrier** command is used to revert to the global carrier configuration for the carrier under this trunk group, the same will happen to all the trunk groups who have the same carrier defined under them.

**Note**

This command overrides the attributes set for advertisement using the global advertise (tgrep) command.

Examples

The following example shows that trunk group 101 has been configured to send a TGREP advertisement that sends call success rate, available circuits, total circuits, and prefix attribute information:

```
Router(config)# trunk group 101  
Router(config-dial-peer)# tgrep advertise csr ac tc carrier
```

Related Commands

Command	Description
advertise (tgrep)	Turns on reporting for a specified address family.
trunk group	Defines the trunk group and enters trunk group configuration mode.

tgrep local-itad

To enable Telephony Gateway Registration Protocol (TGREP) on the gateway and enter TGREP configuration mode, use the **tgrep local-itad** command in global configuration mode. To disable the configuration on the gateway, use the **no** form of this command.

tgrep local-itad [*itad-number*]

no tgrep local-itad [*itad-number*]

Syntax Description

<i>itad-number</i>	(Optional) IP Telephony Administrative Domain (ITAD) number associated with the gateway. The range is from 1 to 4294967295.
--------------------	---

Command Default

TGREP is disabled on the gateway.

Command Modes

Global configuration (config)

Command History

Release	Modification
12.3(1)	This command was introduced.

Examples

The following example shows how to enable TGREP for ITAD number 1234:

```
Router# enable
Router(config)# tgrep local-itad 1234
```

Related Commands

Command	Description
address-family	Sets the global address family to be used on all dial peers.
advertise (tgrep)	Turns on reporting for a specified address family.
neighbor	Creates a TGREP session with another device.

threshold noise

To configure a noise threshold for incoming calls, use the **threshold noise** command in voice-port configuration mode. To restore the default, use the no form of this command.

threshold noise *value*

no threshold noise *value*

Syntax Description

<i>value</i>	Number that establishes a noise threshold. Valid values are from -30 to -90 decibels (dBs). The default is -62 dB.
--------------	--

Command Default

-62 dB

Command Modes

Voice-port configuration

Command History

Release	Modification
12.2(13b)	This command was introduced on the following platforms: Cisco 1700 Cisco 1751, Cisco 2600 (with and without the NM-HDA), Cisco 3600 (with and without the NM-HDA), Cisco 7200 (with and without the NM-HDA), Cisco AS5300, Cisco AS5800, and Cisco MC3810.
12.2(16)	This command was integrated into Cisco IOS Release 12.2(16).

Usage Guidelines

Cisco voice activity detection (VAD) has two layers: application programming interface (API) layer and processing layer. There are 3 states that the processing layer classifies incoming signals: speech, unknown, and silence. The state of the incoming signals is determined by the noise threshold.

In earlier Cisco IOS releases, the noise threshold is fixed between -62 dB and -78 dB. If the voice level is below the noise threshold, then the signal is classified as silence. If the incoming signal cannot be classified, the variable thresholds that are computed with the statistics of speech and noise that VAD gathers is used to make a determination. If the signal still cannot be classified, then it is marked as unknown. The final decision is made by the API. For applications such as hoot-n-holler, you could have the noise create unwanted spurious packets (for example, a voice stream) taking up bandwidth.

With Cisco IOS Release 12.2(16), the noise threshold is configurable using the threshold noise command.

Examples

The following sample configuration shows a noise threshold level of -50 dB:

```
voice-port 1/0/0  
  threshold noise -50
```

timeout (auto-config application)

To configure the download timeout value for an auto-configuration application, use the **timeout** command in auto-config application configuration mode. To reset to the default, use the **no** form of this command.

timeout *time-in-seconds*

no timeout

Syntax Description

<i>time -in-seconds</i>	Specifies the download timeout value in seconds. The range is from 0 to 3600. The default is 180.
-------------------------	---

Command Default

The default value is 180 seconds.

Command Modes

Auto-config application configuration

Command History

Release	Modification
12.3(8)XY	This command was introduced on the Communication Media Module.
12.3(14)T	This command was integrated into Cisco IOS Release 12.3(14)T.

Usage Guidelines

A value of 0 specifies continuous download retry.

Examples

The following example shows the **timeout** command used to specify continuous retry for downloading an auto-configuration application:

```
Router(auto-config-app) # timeout 0
```

Related Commands

Command	Description
auto -config	Enables auto-configuration or enters auto-config application configuration mode for the SCCPapplication.
show auto -config	Displays the current status of auto-configuration applications.

timeout leg3

To set the timeout value for a leg 3 AAA preauthentication request, use the **timeout leg3** command in AAA preauthentication configuration mode. To return the timeout value to its default, use the **no** form of this command.

timeout leg3 *milliseconds*

no timeout leg3 *milliseconds*

Syntax Description

<i>milliseconds</i>	Timeout value for leg 3 preauthentication, in milliseconds. Range is from 100 to 1000. The default is 100.
---------------------	--

Command Default

100 milliseconds.

Command Modes

AAA preauthentication configuration

Command History

Release	Modification
12.2(11)T	This command was introduced.

Usage Guidelines

If the timeout timer expires before AAA has responded to a preauthentication request, the call is rejected.

The term leg 3 refers to a call segment from the IP network to a terminating (outgoing) gateway that takes traffic from an IP network to a PSTN network.

Examples

The following example sets the timeout for a leg 3 AAA preauthentication request to 250 milliseconds:

```
Router(config)# aaa preauth  
Router(config-preauth)# timeout leg3 250
```

Related Commands

Command	Description
aaa preauth	Enters AAA preauthentication configuration mode.

timeout ptt

To specify a maximum time for transmitting or receiving a voice packet, use the **timeout ptt** command in voice-port configuration mode. To return to the default, use the **no** form of this command.

timeout ptt {rcv| xmt} *minutes*

no timeout ptt {rcv| xmt} *minutes*

Syntax Description

rcv	Applies the specified time limit to the reception of voice packets.
xmt	Applies the specified time limit to the transmission of voice packets.
<i>minutes</i>	Maximum time, in minutes, allowed for transmitting or receiving a voice packet. Range is integers from 1 to 30.

Command Default

minutes : 0 minutes

Command Modes

Voice-port configuration

Command History

Release	Modification
12.3(4)XD	This command was introduced.
12.3(7)T	This command was integrated into Cisco IOS Release 12.3(7)T.

Usage Guidelines

The **timeout ptt** command is available on an ear and mouth (E&M) analog or digital voice port only if the signal type for that port is Land Mobile Radio (LMR). The purpose of this command is to limit extended radio transmission. When the time limit configured with this command expires, the radio transmitter unkeys, so that listeners on the channel cannot hear the speaker, even if the speaker continues to talk. When the speaker unkeys the radio, the timer is reactivated.

Examples

The following example specifies a maximum time of 10 minutes for transmitting a voice packet:

```
voice-port 1/0/0
 timeout ptt xmt 10
```

timeout tcrit

To configure the critical timeout value, T(critical), for the interdigit timer used in digit map matching, use the **timeout tcrit** command in MGCP profile configuration mode. To reset to the default, use the **no** form of this command.

timeout tcrit *tcrit-value*

no timeout tcrit

Syntax Description

<i>tcrit -value</i>	Critical timeout value, T(critical), in seconds. Range is from 1 to 600. Default is 4.
---------------------	--

Command Default

4 seconds

Command Modes

MGCP profile configuration

Command History

Release	Modification
12.2(2)XA	This command was introduced.
12.2(4)T	This command was integrated into Cisco IOS Release 12.2(4)T.
12.2(11)T	This command was implemented on the Cisco AS5300 and Cisco AS5850.

Usage Guidelines

This command is used when configuring values for a Media Gateway Control Protocol (MGCP) profile.

The interdigit timer is used when matching a digit map, which is a representation of the number and type of digits that a gateway can expect to collect in a buffer, based on the network dial plan. The interdigit timer is started when the first digit is entered and is restarted after each new digit is entered, until a digit map match or mismatch occurs.

The interdigit timer takes on one of two values, T(partial) or T(critical). When at least one more digit is required to make a match to any of the patterns in the digit map, the value of T(partial) is used for the timer. If a timer is all that is required to produce a match according to the digit map, T(critical) is used for the timer.

When the interdigit timer is used without a digit map, it takes on the value T(critical). It is started immediately and is simply canceled (but not restarted) as soon as a digit is entered.

Examples

The following example sets the T(critical) value to 15 seconds:

```
Router(config)# mgcp profile nyc-ca  
Router(config-mgcp-profile)# timeout tcrit 15
```

Related Commands

Command	Description
mgcp	Starts and allocates resources for the MGCP daemon.
mgcp profile	Initiates MGCP profile mode to create and configure a named MGCP profile associated with one or more endpoints or to configure the default profile.
timeout tpar	Configures the MGCP partial timeout value, T(partial), for the interdigit timer used in digit map matching.

timeout tdinit

To configure the initial waiting delay value (Tdinit) for the disconnected procedure, use the **timeout tdinit** command in MGCP profile configuration mode. To reset to the default, use the **no** form of this command.

timeout tdinit *tdinit-value*

no timeout tdinit

Syntax Description

<i>tdinit -value</i>	Initial waiting delay (Tdinit) for the disconnected procedure, in seconds. The disconnected timer is initialized to a randomly selected value between 0 and Tdinit. Range is from 1 to 30. Default is 15.
----------------------	---

Command Default

15 seconds

Command Modes

MGCP profile configuration

Command History

Release	Modification
12.2(2)XA	This command was introduced.
12.2(4)T	This command was integrated into Cisco IOS Release 12.2(4)T.
12.2(11)T	This command was implemented on the Cisco AS5300 and Cisco AS5850.

Usage Guidelines

This command is used when configuring values for a Media Gateway Control Protocol (MGCP) profile.

When a gateway recognizes that an endpoint has lost its communication with the call agent (has become *disconnected*), a timer known as the disconnected timer is initialized to a random value between 0 and the disconnected initial waiting delay (Tdinit), which is configured with the **timeout tdinit** command. The gateway then waits for one of three things: the end of this timer, the reception of a command from the call agent, or the detection of local user activity for the endpoint, such as an off-hook transition. When one of the first two cases occurs, the gateway initiates the *disconnected procedure* for that endpoint. In the third case, the detection of local user activity, a minimum waiting delay (Tdmin) also must have elapsed. This value is configured with the **timeout tdmin** command.

The disconnected procedure consists of the endpoint sending a RestartInProgress (RSIP) message to the call agent, stating that it was disconnected and is now trying to reestablish connectivity.

If the disconnected procedure is unsuccessful and the endpoint is still disconnected, the disconnected timer is doubled; this process is repeated until the timer value reaches the maximum waiting delay (Tdmax), which is configured with the **timeout tdmax** command.

Examples

The following example sets the initial waiting delay value (Tdinit) to 25 seconds:

```
Router(config)# mgcp profile nyc-ca
Router(config-mgcp-profile)# timeout tdinit 25
```

Related Commands

Command	Description
mgcp	Starts and allocates resources for the MGCP daemon.
mgcp profile	Initiates MGCP profile mode to create and configure a named MGCP profile associated with one or more endpoints or to configure the default profile.
timeout tdmax	Configures the maximum timeout for the MGCP disconnected procedure.
timeout tdmin	Configures the minimum timeout for the MGCP disconnected procedure.

timeout tdmx

To configure the maximum timeout value (Tdmx) for the disconnected procedure, use the **timeout tdmx** command in MGCP profile configuration mode. To reset to the default, use the **no** form of this command.

timeout tdmx *tdmx-value*

no timeout tdmx

Syntax Description

<i>tdmx -value</i>	Maximum timeout value (Tdmx) for the disconnected procedure, in seconds. Range is from 300 to 600. The default is 600.
--------------------	--

Command Default

600 seconds

Command Modes

MGCP profile configuration

Command History

Release	Modification
12.2(2)XA	This command was introduced.
12.2(4)T	This command was integrated into Cisco IOS Release 12.2(4)T.
12.2(11)T	This command was implemented on the Cisco AS5300 and Cisco AS5850.

Usage Guidelines

This command is used when configuring values for a Media Gateway Control Protocol (MGCP) profile.

When a gateway recognizes that an endpoint has lost its communication with the call agent (has become *disconnected*), a timer known as the disconnected timer is initialized to a random value between 0 and the disconnected initial waiting delay (Tdinit), which is configured with the **timeout tdinit** command. The gateway then waits for one of three things: the end of this timer, the reception of a command from the call agent, or the detection of local user activity for the endpoint, such as an off-hook transition. When one of the first two cases occurs, the gateway initiates the *disconnected procedure* for that endpoint. In the third case, the detection of local user activity, a minimum waiting delay (Tdmin) also must have elapsed. This value is configured with the **timeout tdmin** command.

The disconnected procedure consists of the endpoint sending a RestartInProgress (RSIP) message to the call agent, stating that it was disconnected and is now trying to reestablish connectivity.

If the disconnected procedure is unsuccessful and the endpoint is still disconnected, the disconnected timer is doubled; this process is repeated until the timer value reaches the maximum waiting delay (Tdmx), which is configured with the **timeout tdmx** command.

Examples

The following example sets the maximum timeout value (Tdmx) to 450 seconds:

```
Router(config)# mgcp profile nyc-ca  
Router(config-mgcp-profile)# timeout tdmx 450
```

Related Commands

Command	Description
mgcp	Starts and allocates resources for the MGCP daemon.
mgcp profile	Initiates MGCP profile mode to create and configure a named MGCP profile associated with one or more endpoints or to configure the default profile.
timeout tdinit	Configures the initial timeout for the MGCP disconnected procedure.
timeout tdmx	Configures the minimum timeout for the MGCP disconnected procedure.

timeout tadmin

To configure the minimum timeout value (Tdmin) for the disconnected procedure, use the **timeout tadmin** command in MGCP profile configuration mode. To reset to the default, use the **no** form of this command.

timeout tadmin *tdmin-value*

no timeout tadmin

Syntax Description

<i>tdmin -value</i>	Minimum timeout (Tdmin) for the disconnected procedure, in seconds. Range is from 1 to 30. The default is 15.
---------------------	---

Command Default

15 seconds

Command Modes

MGCP profile configuration

Command History

Release	Modification
12.2(2)XA	This command was introduced.
12.2(4)T	This command was integrated into Cisco IOS Release 12.2(4)T.
12.2(11)T	This command was implemented on the Cisco AS5300 and Cisco AS5850.

Usage Guidelines

This command is used when configuring values for a Media Gateway Control Protocol (MGCP) profile.

When a gateway recognizes that an endpoint has lost its communication with the call agent (has become *disconnected*), a timer known as the disconnected timer is initialized to a random value between 0 and the disconnected initial waiting delay (Tdinit), which is configured with the **timeout tdinit** command. The gateway then waits for one of three things: the end of this timer, the reception of a command from the call agent, or the detection of local user activity for the endpoint, such as an off-hook transition. When one of the first two cases occurs, the gateway initiates the *disconnected procedure* for that endpoint. In the third case, the detection of local user activity, a minimum waiting delay (Tdmin) also must have elapsed. This value is configured with the **timeout tadmin** command.

The disconnected procedure consists of the endpoint sending a RestartInProgress (RSIP) message to the call agent, stating that it was disconnected and is now trying to reestablish connectivity.

If the disconnected procedure is unsuccessful and the endpoint is still disconnected, the disconnected timer is doubled; this process is repeated until the timer value reaches the maximum waiting delay (Tdmax), which is configured with the **timeout tdmax** command.

Examples

The following example sets the minimum timeout value (Tdmin) to 20 seconds:

```
Router(config)# mgcp profile nyc-ca  
Router(config-mgcp-profile)# timeout tadmin 20
```

Related Commands

Command	Description
mgcp	Starts and allocates resources for the MGCP daemon.
mgcp profile	Initiates MGCP profile mode to create and configure a named MGCP profile associated with one or more endpoints or to configure the default profile.
timeout tdinit	Configures the initial timeout for the MGCP disconnected procedure.
timeout tdmx	Configures the maximum timeout for the MGCP disconnected procedure.

timeout thist

To configure the packet storage timeout value (Thist), use the **timeout thist** command in MGCP profile configuration mode. To reset to the default, use the **no** form of this command.

timeout thist *thist-value*

no timeout thist

Syntax Description

<i>thist -value</i>	Package storage timeout (Thist), in seconds. Range is from 1 to 60. The default is 30.
---------------------	--

Command Default

30 seconds

Command Modes

MGCP profile configuration

Command History

Release	Modification
12.2(2)XA	This command was introduced.
12.2(4)T	This command was integrated into Cisco IOS Release 12.2(4)T.
12.2(11)T	This command was implemented on the Cisco AS5300 and Cisco AS5850.

Usage Guidelines

This command is used when configuring values for a Media Gateway Control Protocol (MGCP) profile. MGCP messages are carried over User Datagram Protocol (UDP), and are therefore subject to packet loss. When a response to a message is not received promptly, the sender retransmits the message. The gateway keeps in memory a list of the responses it has sent for the number of seconds in the Thist timeout value. The gateway also keeps a list of the messages currently being processed, with their transaction identifiers, to prevent processing or acknowledging the same message more than once.

Examples

The following example sets the packet storage timeout value (Thist) to 15 seconds:

```
Router(config)# mgcp profile nyc-ca
Router(config-mgcp-profile)# timeout thist 15
```

Related Commands

Command	Description
mgcp	Starts and allocates resources for the MGCP daemon.
mgcp profile	Initiates MGCP profile mode to create and configure a named MGCP profile associated with one or more endpoints, or to configure the default profile.

timeout tone busy

To configure the busy-tone timeout value, use the **timeout tone busy** command in MGCP profile configuration mode. To reset to the default, use the **no** form of this command.

timeout tone busy *busy-tone-value*

no timeout tone busy

Syntax Description

<i>busy -tone-value</i>	Busy-tone timeout, in seconds. Range is from 1 to 600. The default is 30.
-------------------------	---

Command Default

30 seconds

Command Modes

MGCP profile configuration

Command History

Release	Modification
12.2(2)XA	This command was introduced.
12.2(4)T	This command was integrated into Cisco IOS Release 12.2(4)T.
12.2(11)T	This command was implemented on the Cisco AS5300 and Cisco AS5850.

Usage Guidelines

This command is used when configuring values for a Media Gateway Control Protocol (MGCP) profile.

The gateway uses the busy-tone timeout value when the call agent does not provide a timeout value associated with the request to generate a busy tone signal.

Examples

The following example sets the busy tone timeout value to 45 seconds:

```
Router(config)# mgcp profile nyc-ca
Router(config-mgcp-profile)# timeout tone busy 45
```

Related Commands

Command	Description
mgcp	Starts and allocates resources for the MGCP daemon.

Command	Description
mgcp profile	Initiates MGCP profile mode to create and configure a named MGCP profile associated with one or more endpoints or to configure the default profile.

timeout tone cot1

To configure the continuity1 (cot1) tone timeout value, use the **timeout tone cot1** command in MGCP profile configuration mode. To reset to the default, use the **no** form of this command.

timeout tone cot1 *cot1-tone-value*

no timeout tone cot1

Syntax Description

<i>cot1 -tone-value</i>	Continuity1 (cot1) tone timeout, in seconds. Range is from 1 to 600. The default is 3.
-------------------------	--

Command Default

3 seconds

Command Modes

MGCP profile configuration

Command History

Release	Modification
12.2(2)XA	This command was introduced.
12.2(4)T	This command was integrated into Cisco IOS Release 12.2(4)T.
12.2(11)T	This command was implemented on the Cisco AS5300 and Cisco AS5850.

Usage Guidelines

This command is used when configuring values for a Media Gateway Control Protocol (MGCP) profile.

The gateway uses the continuity1 (cot1) tone timeout value when the call agent does not provide a timeout value associated with the request to generate a cot1 tone signal.

Continuity1 and continuity2 tone signals are used in Integrated Services Digital Networks User Part (ISUP) calls to determine that a call path has been established before connecting a call. The call agent is provisioned to know which test to apply to a given endpoint.

Examples

The following example sets the continuity1 tone timeout value to 25 seconds:

```
Router(config)# mgcp profile nyc-ca
Router(config-mgcp-profile)# timeout tone cot1 25
```

Related Commands

Command	Description
mgcp	Starts and allocates resources for the MGCP daemon.
mgcp profile	Initiates MGCP profile mode to create and configure a named MGCP profile associated with one or more endpoints or to configure the default profile.
timeout tone cot2	Sets the continuity2 tone timeout value for MGCP.

timeout tone cot2

To configure the continuity2 (cot2) tone timeout value, use the **timeout tone cot2** command in MGCP profile configuration mode. To reset to the default, use the **no** form of this command.

timeout tone cot2 *cot2-tone-value*

no timeout tone cot2

Syntax Description

<i>cot2 -tone-value</i>	Continuity2 (cot2) tone timeout, in seconds. Range is from 1 to 600. The default is 3.
-------------------------	--

Command Default

3 seconds

Command Modes

MGCP profile configuration

Command History

Release	Modification
12.2(2)XA	This command was introduced.
12.2(4)T	This command was integrated into Cisco IOS Release 12.2(4)T.
12.2(11)T	This command was implemented on the Cisco AS5300 and Cisco AS5850.

Usage Guidelines

This command is used when configuring values for a Media Gateway Control Protocol (MGCP) profile.

The gateway uses the continuity2 (cot2) tone timeout value when the call agent does not provide a timeout value associated with the request to generate a cot2 tone signal.

Continuity1 and continuity2 tone signals are used in Integrated Services Digital Networks User Part (ISUP) calls to determine that a call path has been established before connecting a call. The call agent is provisioned to know which test to apply to a given endpoint.

Examples

The following example sets the continuity2 tone timeout value to 50 seconds:

```
Router(config)# mgcp profile nyc-ca
Router(config-mgcp-profile)# timeout tone cot2 50
```

Related Commands

Command	Description
mgcp	Starts and allocates resources for the MGCP daemon.
mgcp profile	Initiates MGCP profile mode to create and configure a named MGCP profile associated with one or more endpoints or to configure the default profile.
timeout tone cot1	Sets the continuity1 tone timeout value for MGCP.

timeout tone dial

To configure the dial tone timeout value, use the **timeout tone dial** command in MGCP profile configuration mode. To reset to the default, use the **no** form of this command.

timeout tone dial *dial-tone-value*

no timeout tone dial

Syntax Description

<i>dial -tone-value</i>	Dial tone timeout value, in seconds. Range is from 1 to 600. The default is 16.
-------------------------	---

Command Default

16 seconds

Command Modes

MGCP profile configuration

Command History

Release	Modification
12.2(2)XA	This command was introduced.
12.2(4)T	This command was integrated into Cisco IOS Release 12.2(4)T.
12.2(11)T	This command implemented on the Cisco AS5300 and Cisco AS5850.

Usage Guidelines

This command is used when configuring values for a Media Gateway Control Protocol (MGCP) profile.

The gateway uses the dial tone timeout value when the call agent does not provide a timeout value associated with the request to generate a dial tone signal.

Examples

The following example sets the dial tone timeout value to 25 seconds:

```
Router(config)# mgcp profile nyc-ca
Router(config-mgcp-profile)# timeout tone dial 25
```

Related Commands

Command	Description
mgcp	Starts and allocates resources for the MGCP daemon.

Command	Description
mgcp profile	Initiates MGCP profile mode to create and configure a named MGCP profile associated with one or more endpoints or to configure the default profile.

timeout tone dial stutter

To configure the stutter dial tone timeout value, use the **timeout tone dial stutter** command in MGCP profile configuration mode. To reset to the default, use the **no** form of this command.

timeout tone dial stutter *stutter-value*

no timeout tone dial stutter

Syntax Description

<i>stutter -value</i>	Timeout value for the stutter dial tone, in seconds. Range is from 1 to 600. The default is 16.
-----------------------	---

Command Default

16 seconds

Command Modes

MGCP profile configuration

Command History

Release	Modification
12.2(2)XA	This command was introduced.
12.2(4)T	This command was integrated into Cisco IOS Release 12.2(4)T.
12.2(11)T	This command was implemented on the Cisco AS5300 and Cisco AS5850.

Usage Guidelines

This command is used when configuring values for a Media Gateway Control Protocol (MGCP) profile. The gateway uses the stutter dial tone timeout value when the call agent does not provide a timeout value associated with the request to generate a stutter dial tone signal.

Examples

The following example sets the stutter dial tone timeout value to 25 seconds:

```
Router(config)# mgcp profile nyc-ca
Router(config-mgcp-profile)# timeout tone dial stutter 25
```

Related Commands

Command	Description
mgcp	Starts and allocates resources for the MGCP daemon.

Command	Description
mgcp profile	Initiates MGCP profile mode to create and configure a named MGCP profile associated with one or more endpoints or to configure the default profile.

timeout tone mwi

To configure the timeout value for the message-waiting indicator tone, use the **timeout tone mwi** command in MGCP profile configuration mode. To reset to the default, use the **no** form of this command.

timeout tone mwi *mwi-tone-value*

no timeout tone mwi

Syntax Description

<i>mwi -tone-value</i>	Message-waiting-indicator (MWI) tone timeout value, in seconds. Range is from 1 to 600. The default is 16.
------------------------	--

Command Default

16 seconds

Command Modes

MGCP profile configuration

Command History

Release	Modification
12.2(2)XA	This command was introduced.
12.2(4)T	This command was integrated into Cisco IOS Release 12.2(4)T.
12.2(11)T	This command was implemented on the Cisco AS5300 and Cisco AS5850.

Usage Guidelines

This command is used when configuring values for a Media Gateway Control Protocol (MGCP) profile.

The gateway uses the *mwi-tone-value* when the call agent does not provide a timeout value for a request to generate the message-waiting indicator tone signal.

Examples

The following example sets the timeout value for the message-waiting indicator tone to 100 seconds:

```
Router(config)# mgcp profile nyc-ca
Router(config-mgcp-profile)# timeout tone mwi 100
```

Related Commands

Command	Description
mgcp	Starts and allocates resources for the MGCP daemon.

Command	Description
mgcp profile	Initiates MGCP profile mode to create and configure a named MGCP profile associated with one or more endpoints or to configure the default profile.

timeout tone network

To configure the network congestion tone timeout value, use the **timeout tone network** command in MGCP profile configuration mode. To reset to the default, use the **no** form of this command.

timeout tone network {congestion| busy} *tone-value*

no timeout tone network

Syntax Description

congestion	Timeout for network congestion.
busy	Timeout for network busy.
<i>tone -value</i>	Tone timeout value, in seconds. Range is from 1 to 600. The default is 180.

Command Default

180 seconds

Command Modes

MGCP profile configuration

Command History

Release	Modification
12.2(2)XA	This command was introduced.
12.2(4)T	This command was integrated into Cisco IOS Release 12.2(4)T.
12.2(11)T	This command was implemented on the Cisco AS5300 and Cisco AS5850.
12.4(9)T	The busy keyword was introduced.

Usage Guidelines

This command is used when configuring values for a Media Gateway Control Protocol (MGCP) profile.

The gateway uses the tone timeout value when the call agent does not provide a timeout value associated with the request to generate a network congestion or network busy tone signal.

Examples

The following example sets the network congestion tone timeout value to 240 seconds:

```
Router(config)# mgcp profile nyc-ca
Router(config-mgcp-profile)# timeout tone network congestion 240
```

The following example shows the network busy timeout value being set to 300 seconds.

Router(config)# **mgcp profile sample**

Router(config-mgcp-profile)# **timeout tone network busy 300**

Related Commands

Command	Description
mgcp	Starts and allocates resources for the MGCP daemon.
mgcp profile	Initiates MGCP profile mode to create and configure a named MGCP profile associated with one or more endpoints or to configure the default profile.

timeout tone reorder

To configure the reorder tone timeout value, use the **timeout tone reorder** command in MGCP profile configuration mode. To reset to the default, use the **no** form of this command.

timeout tone reorder *reorder-tone-value*

no timeout tone reorder

Syntax Description

<i>reorder -tone-value</i>	Reorder-tone timeout value, in seconds. Range is from 1 to 600. The default is 30.
----------------------------	--

Command Default

30 seconds

Command Modes

MGCP profile configuration

Command History

Release	Modification
12.2(2)XA	This command was introduced.
12.2(4)T	This command was integrated into Cisco IOS Release 12.2(4)T.
12.2(11)T	This command was implemented on the Cisco AS5300 and Cisco AS5850.

Usage Guidelines

This command is used when configuring values for a Media Gateway Control Protocol (MGCP) profile.

The gateway uses the reorder tone timeout value when the call agent does not provide a timeout value associated with the request to generate a reorder tone signal.

Examples

The following example sets the reorder tone timeout value to 60 seconds:

```
Router(config)# mgcp profile nyc-ca
Router(config-mgcp-profile)# timeout tone reorder 60
```

Related Commands

Command	Description
mgcp	Starts and allocates resources for the MGCP daemon.

Command	Description
mgcp profile	Initiates MGCP profile mode to create and configure a named MGCP profile associated with one or more endpoints or to configure the default profile.

timeout tone ringback

To configure the ringback tone timeout value, use the **timeout tone ringback** command in MGCP profile configuration mode. To reset to the default, use the **no** form of this command.

timeout tone ringback *ringback-tone-value*

no timeout tone ringback

Syntax Description

<i>ringback -tone-value</i>	Ringback-tone timeout value, in seconds. Range is from 1 to 600. The default is 180.
-----------------------------	--

Command Default

180 seconds

Command Modes

MGCP profile configuration

Command History

Release	Modification
12.2(2)XA	This command was introduced.
12.2(4)T	This command was integrated into Cisco IOS Release 12.2(4)T.
12.2(11)T	This command was implemented on the Cisco AS5300 and Cisco AS5850.

Usage Guidelines

This command is used when configuring values for a Media Gateway Control Protocol (MGCP) profile. The gateway uses the ringback tone timeout value when the call agent does not provide a timeout value associated with the request to generate a ringback tone signal.

Examples

The following example sets the ringback tone timeout value to 120 seconds:

```
Router(config)# mgcp profile nyc-ca
Router(config-mgcp-profile)# timeout tone ringback 120
```

Related Commands

Command	Description
mgcp	Starts and allocates resources for the MGCP daemon.

Command	Description
mgcp profile	Initiates MGCP profile mode to create and configure a named MGCP profile associated with one or more endpoints or to configure the default profile.

timeout tone ringback connection

To configure the timeout value for the ringback tone on connection, use the **timeout tone ringback connection** command in MGCP profile configuration mode. To reset to the default, use the **no** form of this command.

timeout tone ringback connection *connect-tone-value*

no timeout tone ringback connection

Syntax Description

<i>connect -tone-value</i>	Timeout value for the ringback tone on connection, in seconds. Range is from 1 to 600. The default is 180.
----------------------------	--

Command Default

180 seconds

Command Modes

MGCP profile configuration

Command History

Release	Modification
12.2(2)XA	This command was introduced.
12.2(4)T	This command was integrated into Cisco IOS Release 12.2(4)T.
12.2(11)T	This command was implemented on the Cisco AS5300 and Cisco AS5850.

Usage Guidelines

This command is used when configuring values for a Media Gateway Control Protocol (MGCP) profile. The gateway uses this value when the call agent does not provide a timeout value associated with the request to generate the ringback tone signal on connection.

Examples

The following example sets the timeout value for the ringback tone on connection to 120 seconds:

```
Router(config)# mgcp profile nyc-ca
Router(config-mgcp-profile)# timeout tone ringback connection 120
```

Related Commands

Command	Description
mgcp	Starts and allocates resources for the MGCP daemon.

Command	Description
mgcp profile	Initiates MGCP profile mode to create and configure a named MGCP profile associated with one or more endpoints or to configure the default profile.

timeout tone ringing

To configure the ringing tone timeout value, use the **timeout tone ringing** command in MGCP profile configuration mode. To reset to the default, use the **no** form of this command.

timeout tone ringing *ringing-tone-value*

no timeout tone ringing

Syntax Description

<i>ringing -tone-value</i>	Ringing tone timeout value, in seconds. Range is from 1 to 600. The default is 180.
----------------------------	---

Command Default

180 seconds

Command Modes

MGCP profile configuration

Command History

Release	Modification
12.2(2)XA	This command was introduced.
12.2(4)T	This command was integrated into Cisco IOS Release 12.2(4)T.
12.2(11)T	This command was implemented on the Cisco AS5300 and Cisco AS5850.

Usage Guidelines

This command is used when configuring values for a Media Gateway Control Protocol (MGCP) profile.

The gateway uses the ringing tone timeout value when the call agent does not provide a timeout value associated with the request to generate a ringing tone signal.

Examples

The following example sets the ringing tone timeout value to 240 seconds:

```
Router(config)# mgcp profile nyc-ca
Router(config-mgcp-profile)# timeout tone ringing 240
```

Related Commands

Command	Description
mgcp	Starts and allocates resources for the MGCP daemon.

Command	Description
mgcp profile	Initiates MGCP profile mode to create and configure a named MGCP profile associated with one or more endpoints or to configure the default profile.

timeout tone ringing distinctive

To configure the distinctive ringing tone timeout value, use the **timeout tone ringing distinctive** command in MGCP profile configuration mode. To reset to the default, use the **no** form of this command.

timeout tone ringing distinctive *distinct-tone-value*

no timeout tone ringing distinctive

Syntax Description

<i>distinct -tone-value</i>	Distinctive-ringing tone timeout value, in seconds. Range is from 1 to 600. the default is 180.
-----------------------------	---

Command Default

180 seconds

Command Modes

MGCP profile configuration

Command History

Release	Modification
12.2(2)XA	This command was introduced.
12.2(4)T	This command was integrated into Cisco IOS Release 12.2(4)T.
12.2(11)T	This command was implemented on the Cisco AS5300 and Cisco AS5850.

Usage Guidelines

This command is used when configuring values for a Media Gateway Control Protocol (MGCP) profile.

The gateway uses the distinctive ringing tone timeout value when the call agent does not provide a timeout value associated with the request to generate a signal for distinctive ringing.

Examples

The following example sets the distinctive ringing tone timeout value to 240 seconds:

```
Router(config)# mgcp profile nyc-ca
Router(config-mgcp-profile)# timeout tone ringing distinctive 240
```

Related Commands

Command	Description
mgcp	Starts and allocates resources for the MGCP daemon.

Command	Description
mgcp profile	Initiates MGCP profile mode to create and configure a named MGCP profile associated with one or more endpoints or to configure the default profile.

timeout tpar

To configure the partial timeout value, T(partial), for the interdigit timer used in digit map matching, use the **timeout tpar** command in MGCP profile configuration mode. To reset to the default, use the **no** form of this command.

timeout tpar *tpar-value*

no timeout tpar

Syntax Description

<i>tpar -value</i>	Partial timeout value, T(partial), in seconds. Range is from 1 to 60. The default is 16.
--------------------	--

Command Default

16 seconds

Command Modes

MGCP profile configuration

Command History

Release	Modification
12.2(2)XA	This command was introduced.
12.2(4)T	This command was integrated into Cisco IOS Release 12.2(4)T.
12.2(11)T	This command was implemented on the Cisco AS5300 and Cisco AS5850.

Usage Guidelines

This command is used when configuring values for a Media Gateway Control Protocol (MGCP) profile.

The interdigit timer is used when matching digit maps. It is started when the first digit is entered, and is restarted after each new digit is entered, until a digit map match or mismatch occurs.

The interdigit timer takes on one of two values, T(partial) or T(critical). When at least one more digit is required to make a match to any of the patterns in the digit map, the value of T(partial) is used for the timer. If a timer is all that is required to produce a match according to the digit map, T(critical) is used for the timer.

When the interdigit timer is used without a digit map, it takes on the value T(critical). It is started immediately and is simply canceled (but not restarted) as soon as a digit is entered.

Examples

The following example sets the partial timeout value to 15 seconds:

```
Router(config)# mgcp profile nyc-ca
Router(config-mgcp-profile)# timeout tpar 15
```

Related Commands

Command	Description
mgcp	Starts and allocates resources for the MGCP daemon.
mgcp profile	Initiates MGCP profile mode to create and configure a named MGCP profile associated with one or more endpoints or to configure the default profile.
timeout tcrit	Configures the MGCP critical timeout value, T(critical), for the interdigit timer used in digit map matching.

timeout tsmax

To configure the maximum timeout value after which MGCP messages are removed from the retransmission queue, use the **timeout tsmax** command in MGCP profile configuration mode. To reset to the default, use the **no** form of this command.

timeout tsmax *tsmax-value*

no timeout tsmax

Syntax Description

<i>tsmax -value</i>	Timeout value for MGCP messages to be removed from the retransmission queue, in seconds. Range is from 1 to 100. The default is 20.
---------------------	---

Command Default

20 seconds

Command Modes

MGCP profile configuration

Command History

Release	Modification
12.2(2)XA	This command was introduced.
12.2(4)T	This command was integrated into Cisco IOS Release 12.2(4)T.
12.2(11)T	This command was implemented on the Cisco AS5300 and Cisco AS5850.

Usage Guidelines

This command is used when configuring values for a Media Gateway Control Protocol (MGCP) profile.

The gateway uses the *tsmax-value* argument to determine how long to store MGCP messages before they are removed from the retransmission queue.

Examples

The following example sets the timeout value for the maximum retransmission of MGCP messages to 45 seconds:

```
Router(config)# mgcp profile nyc-ca
Router(config-mgcp-profile)# timeout tsmax 45
```

Related Commands

Command	Description
mgcp	Starts and allocates resources for the MGCP daemon.
mgcp profile	Initiates MGCP profile mode to create and configure a named MGCP profile associated with one or more endpoints or to configure the default profile.