ccs connect (controller) through clear vsp statistics

ccs connect (controller)

To configure a common channel signaling (CCS) connection on an interface configured to support CCS frame forwarding, use the **ccsconnect** command in controller configuration mode. To disable the CCS connection on the interface, use the**no**form of this command.

ccs connect{**serial**| **atm**}*number*[[*dlci*] | **pvc** *vpi/vci*| **pvc***name*][*cid-number*]

no ccs connect{**serial**| **atm**}*number*[[*dlci*] | **pvc** *vpi/vci*| **pvc***name*][*cid-number*]

Syntax Description

serial	Makes a serial CCS connection for Frame Relay.
atm	Makes an ATM CCS connection.
dlci	(Optional) Specifies the data-link connection identifier (DLCI) number.
pvc *vpi/vci*	(Optional) Specifies the permanent virtual circuit (PVC) virtual path identifier (VPI) or virtual channel identifier (VCI). Range is from 0 to 255; the slash is required.
pvc *name*	(Optional) Specifies the PVC string that names the PVC for recognition.
cid-number	(Optional) If you have executed the **ccsencapfrf11** command, the *cid-number* argument allows you to specify any channel identification (CID) number from 5 to 255.

Command Default

No CCS connection is made.

Command Modes

Controller configuration (config-controller)

Command History

Release	Modification
12.0(2)T	This command was introduced on the Cisco MC3810.
12.0(7)XK	The *cidnumber* argument was added; the **dlci** keyword and **vcd**options were removed.
12.1(2)T	The CID syntax addition and removal of the **dlci** keyword and **vcd** options were integrated into Cisco IOS Release 12.1(2)T.

Release	Modification
12.1(2)XH	This command was implemented on the Cisco 2600 series, Cisco 3600 series, Cisco 7200 series, and Cisco 7500 series.
12.1(3)T	This command was integrated into Cisco IOS Release 12.1(3)T.

Usage Guidelines

Use this command to configure a CCS connection. If the CCS connection is over Frame Relay, specify a serial interface and the DLCI. If the CCS connection is over ATM, specify **atm**, the slot number, and the PVC.

If you have executed the **ccsencapfrf11** command, the *cidnumber* option of the **ccsconnect** command allows you to specify any CID from 5 to 255. If you do not issue the **ccsencapfrf11** command, Cisco encapsulation is used, and any CID value other than 254 is ignored.

Note CDP and keepalives are disabled by default on a D-channel interface.

Examples

To configure a Frame Relay CCS frame-forwarding connection on DLCI 100 by using the default CID of 254, enter the following command:

```
ccs connect serial 1 100
```

or:

```
ccs connect serial 1 100 10
```

To configure a CCS frame-forwarding connection over an ATM PVC, enter the following command:

```
ccs connect atm 0 pvc 100/10
```

or:

```
ccs connect atm 0 pvc 10/100 21
```

or:

```
ccs connect atm 0 pvc mypvc 10 21
```

To configure a Frame Relay CCS frame-forwarding connection on DLCI 100 using a CID of 110, enter the following command:

```
ccs connect serial 1 100 110
```

Related Commands

Command	Description
ccs encap frf11	Allows the specification of the standard Annex-C FRF.11 format.

ccs connect (interface)

To configure a common channel signaling (CCS) connection on an interface configured to support CCS frame forwarding, use the **ccsconnect** command in interface configuration mode. To disable the CCS connection on the interface, use the**no**form of this command.

ccs connect{**serial**| **atm**}[*dlci* | **pvc** *vpi/vci* | **pvc** *name*][*cid-number*]

no ccs connect{**serial**| **atm**}[*dlci* | **pvc** *vpi/vci*| **pvc** *name*][*cid-number*]

Syntax Description

serial	Makes a serial CCS connection for Frame Relay.
atm	Makes an ATM CCS connection.
dlci	(Optional) Data-link connection identifier (DLCI) number.
pvc *vpi* / *vci*	(Optional) Permanent virtual circuit (PVC) virtual path identifier or virtual channel identifier (VCI). Range is from 0 to 255; the slash is required.
pvc *name*	(Optional) PVC string that names the PVC for recognition.
cid -number	(Optional) If you have executed the**ccsencapfrf11** command, the *cid-number*argument allows you to specify any channel identification (CID) number from 5 to 255.

Command Default

No CCS connection is made.

Command Modes

Interface configuration (config-if)

Command History

Release	Modification
12.0(2)T	This command was introduced on the Cisco MC3810.
12.0(7)XK	The *cid-number* argument was added; the **dlci** keyword and **vcd** options were removed.
12.1(2)T	This command was integrated into Cisco IOS Release 12.1(2)T.
12.2(2)T	This command was implemented on the Cisco 7200 series router and integrated into Cisco IOS Release 12.2(2)T.

Usage Guidelines

Use this command to configure a CCS connection. If the CCS connection is over Frame Relay, specify a serial interface and the DLCI. If the CCS connection is over ATM, specify **atm**, the interface number (0), and the PVC.

If you have executed the **ccsencapfrf11** command, the *cid-number* option of the **ccsconnnect** command allows you to specify any CID from 5 to 255. If you do not issue the **ccsencapfrf11** command, Cisco encapsulation is used, and any CID value other than 254 is ignored.

Note Cisco Discovery Protocol and keepalives are disabled by default on a D-channel interface.

Examples

To configure a Frame Relay CCS frame-forwarding connection on DLCI 100 by using the default CID of 254, enter the following command:

```
ccs connect serial 1 100
```
or

```
ccs connect serial 1 100 10
```
To configure a CCS frame-forwarding connection over an ATM PVC, enter the following command:

```
ccs connect atm 0 pvc 100/10
```
or

```
ccs connect atm 0 pvc 10/100 21
```
or

```
ccs connect atm 0 pvc mypvc 10 21
```
To configure a Frame Relay CCS frame-forwarding connection on DLCI 100 using a CID of 110, enter the following command:

```
ccs connect serial 1 100 110
```

Related Commands

Command	Description
ccs encap frf11	Allows the specification of the standard Annex-C FRF.11 format.

ccs encap frf11

To configure the common channel signaling (CCS) packet encapsulation format for FRF.11, use the **ccsencapfrf11** command in interface configuration mode. To disable CCS encapsulation for FRF11, use the **no** form of this command.

ccs encap frf11

no ccs encap frf11

Syntax Description

This command has no arguments or keywords.

Command Default

By default, the format is a Cisco packet format, using a channel ID (CID) of 254.

Command Modes

Interface configuration (config-if)

Command History

Release	Modification
12.0(7)XK	This command was introduced for the Cisco MC3810.
12.1(2)T	This command was integrated into Cisco IOS Release 12.1(2)T.
12.1(2)XH	This command was implemented on the Cisco 2600 series, Cisco 3600 series, Cisco 7200 series, and Cisco 7500 series.
12.1(3)T	This command was integrated into Cisco IOS Release 12.1(3)T.

Usage Guidelines

This command allows the specification of the standard Annex-C format. Use this command to define the packet format for the CCS packet; it places the FRF.11 Annex-C (Data Transfer Syntax) standard header on the CCS packets only.

Once the **ccsencapfrf11** command is executed, you can use the **ccsconnect** command to specify a CID other than 254.

Examples

The following example shows how to configure a serial interface for Frame Relay:

```
interface Serial1:15
 ccs encap frf11
 ccs connect Serial0 990 100
```

Related Commands

Command	Description
mode ccs frame-forwarding	Set to forward frames on the controller.

Command	Description
ccs connect	Configures a CCS connection on an interface configured to support CCS frame forwarding.

cdr-format

To select the format of the call detail records (CDRs) generated for file accounting, use the **cdr-format** command in gateway accounting configuration mode. To reset to the default, use the **no** form of this command.

cdr-format {**compact**| **detailed**}

no cdr-format

Syntax Description

compact	Compact set of voice attributes is generated in CDRs.
detailed	Full set of voice attributes is generated in CDRs. Default value.

Command Default

Detailed (full version of CDRs is generated).

Command Modes

Gateway accounting file configuration (config-gw-accounting-file)

Command History

Release	Modification
12.4(15)XY	This command was introduced.
12.4(20)T	This command was integrated into Cisco IOS Release 12.4(20)T.

Usage Guidelines

This command determines whether the CDRs generated by the file accounting process contain the complete set of voice attributes or a compact set of 17 voice attributes.

For a list of the complete set of voice attributes generated with the **detailed** keyword, see the "VSAs Supported by Cisco Voice Products" section in the *RADIUS VSA Voice Implementation Guide* .

The name and order of the attributes generated with the **compact** keyword are: CallLegType, ConnectionId, SetupTime, PeerAddress, PeerSubAddress, DisconnectCause, DisconnectText, ConnectTime, DisconnectTime, CallOrigin, ChargedUnits, InfoType, TransmitPackets, TransmitBytes, ReceivePackets, ReceiveBytes, feature_vsa.

Examples

The following example shows the CDR format set to compact:

```
gw-accounting file
 primary ftp server1/cdrtest1 username bob password temp
 maximum buffer-size 60
 maximum fileclose-timer 720
 cdr-format compact
```

Related Commands

Command	Description
acct-template	Selects a group of voice vendor-specific attributes to collect in accounting records.
maximum buffer-size	Sets the maximum size of the file accounting buffer.
maximum fileclose-timer	Sets the maximum time for saving records to an accounting file before closing the file and creating a new one.
primary	Sets the primary location for storing the CDRs generated for file accounting.

ces-clock

To configure the clock for the Circuit Emulation Services (CES) interface, use the **ces-clock** command in controller configuration mode. To disable the CES clock, use the no form of this command.

ces-clock {**adaptive**| **srts**| **synchronous**}

no ces-clock {**adaptive**| **srts**| **synchronous**}

Syntax Description

adaptive	Adjusts the output clock on a received ATM adaptation layer 1 (AAL1) on a first-in, first-out basis. Use in unstructured mode.
srts	Sets the clocking mode to synchronous residual time stamp.
synchronous	Configures the timing recovery to synchronous for structured mode.

Command Default

The default setting is synchronou.s

Command Modes

Controller configuration (config-controller)

Command History

Release	Modification
12.1(2)T	This command was introduced.

Usage Guidelines

This command is used on Cisco 3600 series routers that have OC-3/STM-1 ATM CES network modules.

Examples

The following example configures the CES clock mode for synchronous residual time stamp:

```
ces-clock srts
```

Related Commands

Command	Description
controller	Configures the T1 or E1 controller.

cgma-agent

To enable the Cisco Gateway Management Agent (CGMA) on the Cisco IOS gateway, use the **cgma-agent** command in global configuration mode. To disable the CGMA, use the **no** form of this command.

cgma-agent [**tcp-port** *number*| **time-period** *seconds*]

no cgma-agent

Syntax Description

tcp -port*number*	(Optional) Specifies the TCP port number for the CGMA to use in communication with a third-party management system. Range is from 5000 to 65535. The default is 5000.
time -period s*econds*	(Optional) Specifies the maximum time period, in seconds ,for maintaining the link between the CGMA and the third-party management system during a period of inactivity. If twice the timeout value is met or exceeded with no message received from the client, the TCP connection is closed. Additionally, a 60-second timer is maintained in the CGMA, which closes the connection if no handshake query message is received from the third-party management system for 60 seconds. Range is from 45 to 300. The default is 45.

Command Default

Default *number* value is 5000. Default *seconds* value is 45.

Command Modes

Global configuration (config)

Command History

Release	Modification
12.2(2)XB	This command was introduced on the Cisco 2600 series, Cisco 3600 series, Cisco AS5300, Cisco AS5350, and Cisco AS5400.
12.2(2)XB1	This command was implemented on the Cisco AS5800 for Cisco IOS release 12.2(2)XB1 release only.
12.2(8)T	This command was integrated into Cisco IOS Release 12.2(8)T and implemented on the Cisco 2600 series, Cisco 3600 series, and Cisco 7200 series. Support for the Cisco AS5300, Cisco AS5350, Cisco AS5400, and Cisco AS5800 is not included in this release.

Usage Guidelines

Use this command to enable the CGMA on the Cisco IOS gateway. The CGMA communicates with the third-party management system to provide real-time information for gateway management, including the following:

- Handshake query, status query, and response messages between the CGMA and the third-party management system.
- Call information such as start and end of call from call detail records (CDRs) sent using eXtensible Markup Language (XML) over TCP/IP.
- Shows if T1 or E1 controllers and analog ports are up or down, and are also generated at the removal or addition of a "pri-group" or "ds0-group" under the T1 or E1 controller.

Examples

The following example shows that the CGMA is enabled on TCP port 5300 and that the CGMA times out after 300 seconds and closes its connection to the third-party management system because of inactivity in the link:

```
Router(config)# cgma-agent tcp-port
 5300 time-period 300
Router# show running-config
Building configuration...
Current configuration : 1797 bytes
!
version 12.2
service config
no service single-slot-reload-enable
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname gw1
!
.
.
.
resource-pool disable
!
ip subnet-zero
no ip domain-lookup
!
no ip dhcp-client network-discovery
isdn switch-type primary-ni
!
!
!
!
!
!
cgma-agent tcp-port 5300 time-period 300
fax interface-type modem
mta receive maximum-recipients 2
!
!
controller T1 0
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
!
interface Ethernet0
 ip address 209.165.200.225 255.255.255.0
!
interface Serial0:23
```

```
 no ip address
 isdn switch-type primary-ni
 isdn protocol-emulate network
 isdn incoming-voice modem
 isdn T310 10000
 no cdp enable
!

voice-port 0:D
!
dial-peer voice 1213 voip
 destination-pattern 12135550100
 session target ipv4:209.165.200.229
!
dial-peer voice 1415 pots
 destination-pattern 14155550100
 direct-inward-dial
 port 0:D
!
dial-peer voice 12136 voip
 destination-pattern 12135550120
 session target ipv4:209.165.200.229
!
dial-peer voice 14156 pots
 incoming called-number .
 direct-inward-dial
!
gateway
!
end
```

channel-group

To configure serial WAN on a T1 or E1 interface, use the **channel-group** command in controller configuration mode. To clear a channel group, use the **no** form of this command.

Cisco 2600 Series

channel-group *channel-group-number* **timeslots** *range* [**speed** {**56**| **64**}] [**aim** *aim-slot-number*]

no channel-group *channel-group-number*

Cisco 2611 (Cisco Signaling Link Terminal [SLT])

channel-group *channel-number*

no channel-group *channel-number*

Cisco 2600XM Series, Cisco 2691, Cisco 3631, Cisco 3660, Cisco 3725, and Cisco 3745

channel-group *channel-group-number* {**timeslots** *range* [**speed** {**56**| **64**}]| **unframed**} [**aim** *aim-slot-number*]

no channel-group [*channel-group-number* **timeslots** *range*]

Cisco AS5350 and Cisco AS5400 Series

channel-group *channel-group-number*

no channel-group *channel-group-number*

Cisco MC3810

channel-group *channel-number* **timeslots** *range* [**speed** {**56**| **64**}]

no channel-group [*channel-number* **timeslots** *range*]

Syntax Description

channel-group-number	Channel-group number on the Cisco 2600 series, Cisco 2600XM, Cisco 2691, Cisco 3631, Cisco 3660, Cisco 3725, and Cisco 3745 routers. When a T1 data line is configured, channel-group numbers can be values from 0 to 23. When an E1 data line is configured, channel-group numbers can be values from 0 to 30. Valid values can be 0 or 1 on the Cisco AS5350 and Cisco AS5400.

timeslots *range*	Specifies one or more time slots separated by commas, and spaces or ranges of time slots belonging to the channel group separated by a dash. The first time slot is numbered 1. • For a T1 controller, the time slots range from 1 to 24. • For an E1 controller, the time slots range from 1 to 31. You can specify a time slot range (for example, 1-29), individual time slots separated by commas (for example 1, 3, 5), or a combination of the two (for example 1-14, 15, 17-31). See the "Examples" section for samples of different timeslot ranges.
speed {**56**|**64**}	(Optional) Specifies the speed of the underlying DS0s in kilobits per second. Valid values are 56 and 64. The default line speed when configuring a T1 controller is 56 kbps on the Cisco 2600 series, Cisco 2600XM series, Cisco 2691, Cisco 3631, Cisco 3660, Cisco 3725, Cisco 3745, and Cisco MC3810. The default line speed when configuring an E1 controller is 64 kbps on the Cisco 2600 series, Cisco 2600XM series, Cisco 2691, Cisco 3631, Cisco 3660, Cisco 3725, Cisco 3745, and Cisco MC3810. The line speed controls real-time (VBR-RT) traffic shaping, and the maximum burst size (MBS) is 255 cells.
aim *aim-slot-number*	(Optional) Directs HDLC traffic from the T1/E1 interface to the AIM-ATM-VOICE-30 digital signaling processor (DSP) card on the Cisco 2600 series, Cisco 2600XM series, Cisco 2691, Cisco 3631, Cisco 3660, Cisco 3725, and Cisco 3745.
channel-number	Number of the channel. Valid values can be 0 or 1 on the Cisco SLT (Cisco 2611).
unframed	Specifies the use of all 32 time slots for data. None of the 32 time slots is used for framing signals on the Cisco 2600XM series, Cisco 2691, Cisco 3631, Cisco 3660, Cisco 3725, and Cisco 3745. This keyword is applicable to E1 only.

Command Default

The T1/E1 line is connected to the Motorola MPC-860x processor serial communication controller (SCC) or network module with two voice or WAN interface card (VIC or WIC) slots and 0/1/2 FastEthernet ports

DSCC4 by default on Cisco 2600 series, Cisco 2600XM, Cisco 2691, Cisco 3631, Cisco 3660, Cisco 3725, and Cisco 3745 routers.

There is no default behavior or values on the Cisco SLT (Cisco 2611).

The serial interface object encapsulation is set to HDLC on a network access server (NAS) (Cisco AS5350 and Cisco AS5400 series routers).

The default line speed is 56 kbps when a T1 controller is configured on the Cisco 2600 series, Cisco 2600XM series, Cisco 2691, Cisco 3631, Cisco 3660, Cisco 3725, Cisco 3745, and the Cisco MC3810.

The default line speed is 64 kbps when an E1 controller is configured on the Cisco 2600 series, Cisco 2600XM series, Cisco 2691, Cisco 3631, Cisco 3660, Cisco 3725, Cisco 3745, and the Cisco MC3810.

Command Modes

Controller configuration (config-controller)

Command History

Release	Modification
11.3MA	This command was introduced on the Cisco MC3810.
12.0	This command was integrated into Cisco IOS Release 12.0 on the Cisco MC3810.
12.0(7)XE	This command was implemented on the Catalyst 6000 family switches.
12.1(1)E	This command was integrated into Cisco IOS Release 12.1(1)E.
12.1(1)T	This command was modified to accommodate two channel groups on a port on 1- and 2-port T1/E1 multiflex voice or WAN interface cards on the Cisco 2600 and Cisco 3600 series routers.
12.1(3a)E3	The number of valid values for the *kbps*argument was changed on the Cisco MC3810; see the "Usage Guidelines" section for valid values.
12.2(11)T	This command was implemented on the Cisco AS5350 and Cisco AS5400.
12.2(15)T	The **aim** keyword was added for use on the Cisco 2600 series (including the Cisco 2691), Cisco 2600XM, Cisco 3660, Cisco 3725, and Cisco 3745.
12.3(1)	The **unframed** keyword was added for use on the Cisco 2600XM series, Cisco 2691, Cisco 3631, Cisco 3660, Cisco 3725, and Cisco 3745.
12.2SX	This command is supported in the Cisco IOS Release 12.2SX train. Support in a specific 12.2SX release of this train depends on your feature set, platform, and platform hardware.

Usage Guidelines

Use this command to direct HDLC traffic from the T1/E1 interface to the AIM-ATM-VOICE-30 DSP card. A channel group is created using Advanced Integration Module (AIM) HDLC resources when a **channel-group** command with the **aim** keyword is parsed during system initialization or when the command is entered during configuration. You must specify the **aim** keyword under a T1/E1 controller port to direct HDLC traffic from

the T1/E1 interface to the AIM-ATM-VOICE-30 DSP card on the Cisco 2600 series, Cisco 2600XM series, Cisco 2691, Cisco 3631, Cisco 3660, Cisco 3725, and Cisco 3745.

Note Neither the Cisco AS5400 series NAS nor the Cisco MC3810 is supported with the integrated voice and data WAN on T1/E1 interfaces using the AIM-ATM-VOICE-30 module.

If previous **channel-group** commands are configured with the **aim** keyword, subsequent **channel-group** commands without the **aim** keyword are rejected. Similarly, if a regular **channel-group** command is followed by another **channel-group** command with the **aim** keyword implemented, the second command is rejected on the Cisco 2600 and Cisco 2600XM.

A channel group using AIM HDLC resources is deleted only when a **nochannel-group** command is entered.

By default, the**channel-group** command on a NAS sets the serial interface object encapsulation to HDLC. You must override the default by entering the **encapsulationss7** command for that serial interface object. Once you override the default, encapsulation cannot be changed again for that object. The SS7 encapsulation option is new to the Integrated Signaling Link Terminal feature and is available only for interface serial objects created by the**channel-group** command. The Integrated Signaling Link Terminal feature added SLT functionality on Cisco AS5350 and Cisco AS5400 platforms.

A digital SS7 link can be deleted by entering the **nochannel-group***channel-group-number* command on the associated T1/E1 controller. The link must first be stopped using the **noshutdown** command. It is not necessary to remove the channel ID association first.

Use the **channel-group** command in configurations where the router or access server must communicate with a T1 or E1 fractional data line. The channel group number may be arbitrarily assigned and must be unique for the controller. The time-slot range must match the time slots assigned to the channel group. The service provider defines the time slots that comprise a channel group.

Note Channel groups, channel-associated signaling (CAS) voice groups, DS0 groups, and time-division multiplexing (TDM) groups all use group numbers. All group numbers configured for channel groups, CAS voice groups, and TDM groups must be unique on the local Cisco MC3810 concentrator. For example, you cannot use the same group number for a channel group and for a TDM group. Furthermore, on the Cisco MC3810, only one channel group can be configured on a controller.

The channel group number can be 0 or 1 on the Cisco SLT (Cisco 2611).

The **channel-group** command also applies to Voice over Frame Relay, Voice over ATM, and Voice over HDLC on the Cisco MC3810.

Examples

The following example shows basic configuration directing HDLC traffic from the T1/E1 interface to the AIM-ATM-VOICE-30 DSP card, starting in global configuration mode:

```
Router(config)# controller e1 1/0
Router(config-controller)# clock source internal
Router(config-controller)# channel-group 0 timeslots 1-31 aim 0
```

The following example explicitly sets the encapsulation type to PPP to override the HDLC default:

```
Router# configure terminal
Router(config)# controller t1 6/0
Router(config-controller)# channel-group 2 timeslots 3 aim 0
Router(config-controller)# exit
```

```
Router(config)# interface serial 6/0:2
Router(config-if)# encapsulation ppp
Router(config-if)# ip address 10.0.0.1 255.0.0.0
Router(config-if)# no shutdown
Router(config-if)# end
```

The following example shows how to explicitly set the encapsulation type to SS7 to override the HDLC default using the Integrated Signaling Link Terminal feature. This example uses an 8PRI DFC card inserted into slot 7, and DS0-timeslot 3 on trunk 5 of that card is used as an SS7 link:

```
Router# configure terminal
Router(config)# controller t1 7/5
Router(config-controller)# channel-group 2 timeslots 3
Router(config-controller)# exit
Router(config)# interface serial 7/5:2
Router(config-if)# encapsulation ss7
Router(config-if)# channel-id 0
Router(config-if)# no shutdown
Router(config-if)# end
```

The following example defines three channel groups. Channel-group 0 consists of a single time slot, channel-group 8 consists of seven time slots and runs at a speed of 64 kbps per time slot, and channel-group 12 consists of two time slots.

```
Router(config-controller)# channel-group 0 timeslots 1
Router(config-controller)# channel-group 8 timeslots 5,7,12-15,20 speed 64
Router(config-controller)# channel-group 12 timeslots 2
```

The following example configures a channel group on controller T1 0 on a Cisco MC3810:

```
Router(config)# controller T1 0
Router(config-controller)# channel-group 10 timeslots 10-64
```

The following example configures a channel group on controller E1 1 and specifies that all time slots are used for data:

```
controller e1 1
channel-group 1 unframed
```

Note SS7 digital F-link support for the 8PRI line card requires use of a third onboard TDM stream to route trunk DS0 messages to the onboard MGCs.

Related Commands

Command	Description
framing	Specifies the frame type for the T1 or E1 data line.
invert data	Enables channel inversion.
linecode	Specifies the line code type for the T1 or E1 line.
voice-card	Configures a card with voice processing resources and enters voice card configuration mode.
encapsulation	Sets the encapsulation type.

channel-id

To assign a session channel ID to a SS7 serial link or assign an SS7 link to an SS7 session set on a Cisco AS5350 or Cisco AS5400, use the **channel-id** command in interface configuration mode. To disable a session channel ID link, use the **no** form of this command.

channel-id *channel-id* [**session-set** *session-set-id*]

no channel-id

Syntax Description

channel -id	A unique session channel ID. This session channel ID is needed when the link with a Reliable User Datagram Protocol (RUDP) session to the Media Gateway Controller (MGC) is associated.
session -set*session-set-id*	(Optional) Creates an SS7-link-to-SS7-session-set association on the Cisco AS5350- and Cisco AS5400-based Cisco Signaling Link Terminals (SLTs). The *session-set-id*argument represents the SS7 session ID. Valid values are 0 or 1. Default is 0.

Command Default

No default behavior or values

Command Modes

Interface configuration (config-if)

Command History

Release	Modification
12.2(11)T	This command was introduced on the Cisco AS5350 and Cisco AS5400.
12.2(15)T	The **session-set***session-set-id* keyword and argument were added.

Usage Guidelines

The **channel-id** command is visible only if the object's encapsulation type is changed to SS7.

Before an SS7 serial link can be enabled using the **noshutdown** command, you must enter the **channel-id** command in interface configuration mode to assign a session channel ID to the SS7 serial link. This ID is unique to the Cisco AS5350 and Cisco AS5400, and the command is visible only for provisioned objects whose encapsulation type is the new SS7 value.

The channel identifier is reserved when you explicitly assign an ID using the **channel-id** command for the associated serial interface object. This fails if the selected channel identifier is currently assigned to another link or if all channel identifiers are already assigned.

A channel identifier is released when the **nochannel-id** command is entered. The link must first be shut down to do this. If the **nochannel-id** command is used with the Mulitple OPC Support for the Cisco Signaling Link Terminal feature, the associated SS7 link has no channel ID. In this state the link is not fully configured and is incapable of supporting signaling traffic.

If the **session-set** keyword is omitted, the command is applied to SS7 session set 0, which is the default. Reissuing the **session-set** keyword with a different SS7 session ID is sufficient to remove the associated SS7 link from its existing SS7 session set and add it to the new one.

Examples

The following example shows a unique session channel ID zero being assigned to the Cisco AS5350 or Cisco AS5400:

```
Router(config-if)# channel-id 0
```

The following example assigns an SS7 link to an SS7 session set on a Cisco AS5350 or Cisco AS5400:

```
Router(config-if)# channel-id 0 session-set 1
```

Related Commands

Command	Description
channel-group	Assigns a channel group and selects the DS0 timeslot desired for SS7 links.
encapsulation ss7	Sets the encapsulation type to SS7.
no shutdown	Changes the administrative state of a port from out-of-service to in-service .
session-set	Creates an SS7-link-to-SS7-session-set association or to associate an SS7 link with an SS7 session set on the Cisco 2600-based SLT.
ss7 mtp2 variant bellcore	Configures the device for Telcordia (formerly Bellcore) standards.

clear backhaul-session-manager group stats

To reset the statistics or traffic counters for a specified session group, use the clear **backhaul-session-managergroupstats** command in privileged EXEC mode.

clear backhaul-session-manager group stats {**all**| **name** *group-name*}

Syntax Description

all	All available session groups.
name *group -name*	A specified session group.

Command Default

The statistical information accumulates.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.1(1)T	This command was introduced.
12.2(2)T	This command was implemented on the Cisco 7200.
12.2(4)T	This command was implemented on the Cisco 2600 series, Cisco 3600 series, and Cisco MC3810.
12.2(2)XB1	This command was implemented on the Cisco AS5850.
12.2(8)T	This command was integrated into Cisco IOS Release 12.2(8)T and implemented on the Cisco IAD2420 series.
12.2(11)T	This command was implemented on the Cisco AS5350, Cisco AS5400, and Cisco AS5850.

Usage Guidelines

A session is the connection between a client and a server, and a session group is a collection of sessions in a group to implement switchover in case of a session failure. This command clears all statistics that pertain to the backhaul session manager group.

Examples

The following example clears all statistics for all available session groups:

```
Router(config)# clear backhaul-session-manager group stats all
```

Related Commands

Command	Description
show backhaul-session-manager group	Displays status, statistics, or configuration of a specified group or all session groups.

clear call application interface

To clear application interface statistics and event logs, use the **clearcallapplicationinterface**command in privileged EXEC mode.

clear call application interface [[{**aaa**| **asr**| **flash**| **http**| **ram**| **rtsp**| **smtp**| **tftp**| **tts**} [**server** *server*]] [**event-log**| **stats**]]

Syntax Description

aaa	Authentication, authorization, and accounting (AAA) interface type.
asr	Automatic speech recognition (ASR) interface type.
flash	Flash memory of the Cisco gateway.
http	HTTP interface type.
ram	Memory of the Cisco gateway.
rtsp	Real-Time Streaming Protocol (RTSP) interface type.
smtp	Simple Mail Transfer Protocol (SMTP) interface type.
tftp	TFTP interface type.
tts	Text-to-speech (TTS) interface type.
server *server*	(Optional) Clears statistics or event logs for the specified server.
event-log	(Optional) Clears event logs.
stats	(Optional) Clears statistic counters.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.3(8)T	This command was introduced.

Usage Guidelines

This command resets statistic counters to zero and clears event logs for application interfaces. If you do not use any keywords or arguments, this command clears statistics and event logs for all application interfaces.

Examples

The following example clears statistics and event logs for all application interfaces:

```
Router# clear call application interface
```

Related Commands

Command	Description
call application interface event-log	Enables event logging for external interfaces used by voice applications.
call application interface stats	Enables statistics collection for application interfaces.
clear call application stats	Clears application-level statistics in history and subtracts the statistics from the gateway-level statistics.
show call application interface	Displays event logs and statistics for application interfaces.

clear call application stats

To clear application-level statistics in history and subtract the statistics from the gateway-level statistics, use the **clearcallapplicationstats** command in privileged EXEC mode.

clear call application [**app-tag** *application-name*] **stats**

Syntax Description

app-tag *application-name*	(Optional) Clears statistics for the specified voice application.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.3(8)T	This command was introduced.

Usage Guidelines

This command resets application-level counters in history to zero and subtracts the counters from the gateway-level history. If you do not specify an application name, this command clears statistics for all applications at the application level and gateway level.

Note Statistic counters are automatically cleared for an application if the application is deleted with the **nocallapplicationvoice** command or the script is reloaded with the **callapplicationvoiceload** command.

Examples

The following example clears statistics for the application named sample_app:

```
Router# clear call application app-tag sample_app stats
```

Related Commands

Command	Description
call application stats	Enables statistics collection for voice applications.
call application voice load	Reloads the designated Tcl script.
clear call application interface	Clears application interface statistics and event logs.
call application voice	Reloads the designated Tcl script or VoiceXML document.

Command	Description
show call application app-level	Displays application-level statistics for voice applications.
show call application gateway-level	Displays gateway-level statistics for voice application instances.

clear call fallback cache

To clear the cache of the current Calculated Planning Impairment Factor (ICPIF) loss/delay busyout threshold estimates for all IP addresses or a specific IP address, use the **clearcallfallbackcache** command in privileged EXEC mode.

clear call fallback cache [*ip-address*] [**codec** *codec-type*]

Syntax Description

ip -address	(Optional) The target IP address. If no IP address is specified, all IP addresses are cleared.
codec *codec-type*	(Optional) Specifies the associated codec type.

Command Default

If no IP address is specified, all IP addresses are cleared.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.1(3)T	This command was introduced on the Cisco 2600 series, Cisco 3600 series, and Cisco MC3810 series routers.
12.2(2)XB1	This command was implemented on the Cisco AS5850.
12.2(4)T	This command was modified. The Public Switching Telephone Network (PSTN) Fallback feature and enhancements were implemented on the Cisco 7200 series routers and integrated into Cisco IOS Release 12.2(4)T.
12.2(4)T2	This command was implemented on the Cisco 7500 series routers.
12.2(11)T	This command was integrated into Cisco IOS Release 12.2(11)T.
15.0(1)M	This command was modified in a release earlier than Cisco IOS Release 15.0(1)M. The **codec** keyword and *codec-type* argument were added.

Usage Guidelines

If no IP address is specified, the **clearcallfallbackcache** command clears the cache of all CPIF estimates for all IP addresses. The available codec types are, g711alaw, g711ulaw, g723ar53, g723ar63, g723r53, g723r63, g726r16, g726r24, g726r32, g728, g729abr8, g729ar8, g729br8, g729r8, g729r8 pre-ietf, gsmamr-nb, gsmefr, gsmfr, and None.

Examples

The following example clears the cache of the ICPIF estimate for IP address 10.0.0.0:

```
Router#
clear call fallback cache 10.0.0.0
```

Related Commands

Command	Description
show call fallback cache	Displays the current ICPIF estimates for all IP addresses in the call fallback cache.

clear call fallback stats

To clear the call fallback statistics, use the **clearcallfallbackstats** command in privileged EXEC mode.

clear call fallback stats

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.1(3)T	This command was introduced on the Cisco 2600 series, Cisco 3600 series, and Cisco MC3810.
12.2(2)XB1	This command was implemented on the Cisco AS5850 platform.
12.2(4)T	The PSTN Fallback feature and enhancements were implemented on the Cisco 7200 series and integrated into Cisco IOS Release 12.2(4)T.
12.2(4)T2	This command was implemented on the Cisco 7500 series.
12.2(11)T	This command was integrated into Cisco IOS Release 12.2(11)T.

Examples

The following example clears the call fallback statistics:

```
Router# clear call fallback stats
```

Related Commands

Command	Description
show call fallback stats	Displays the call fallback statistics.

clear callmon

To clear call monitor logs, use the **clearcallmon** command in privileged EXEC mode.

clear callmon {**dead-memory**| **trace**}

Syntax Description

dead-memory	Clears unreleased Communication Media Module (CMM) line card memory.
trace	Clears CMM trace buffers.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
15.0(1)M	This command was introduced in a release earlier than Cisco IOS Release 15.0(1)M.

Examples

The following example shows how to clear unreleased CMM memory:

```
Router# clear callmon dead-memory
```

The following example shows how to clear CMM trace buffers:

```
Router# clear callmon trace
```

Related Commands

Command	Description
clear tgrep neighbor	Clears TGREP counters and sessions.

clear call threshold

To clear enabled call threshold statistics, use the **clear call threshold** command in privileged EXEC mode.

clear call threshold interface *type number* {**stats**| **total-calls** [*value*]| **int-calls** [*value*]}

Syntax Description

interface -	Specifies the interface through which calls arrive. Types of interfaces and their numbers depends upon the configured interfaces.
type	Interface type. Values include: • ethernet • fastethernet • GigabitEthernet • serial
number	Interface or subinterface number. For more information about the numbering syntax for your networking device, use the question mark (?) online help function.
stats	Resets all call threshold statistics.
total -calls *value*	Resets the counter when the call volume reaches the specified number. The *value* argument represents call volume. Range is from 0 to 10000 calls. The default is 0.
int-calls *value*	Number of calls transmitted through the interface. The *value*argument clears calls when they reach a specified volume through the interface. Range is from 0 to 10000 calls. The default is 0.

Command Default

The default setting of 0 for the **total-calls**and**int-calls** keywords reset all threshold statistics immediately. **stats** is the default keyword.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.2(2)XA	This command was introduced.
12.2(4)T	The command was integrated into Cisco IOS Release 12.2(4)T. Support for the Cisco AS5300, Cisco AS5350, and Cisco AS5400 is not included in this release.
12.2(2)XB1	This command was implemented on the Cisco AS5850.
12.2(4)XM	This command was implemented on the Cisco 1750 and Cisco 1751 routers. Support for other Cisco platforms is not included in this release.
12.2(8)T	This command was integrated into the Cisco IOS Release 12.2(8)T and implemented on the Cisco 7200 series routers. Support for the Cisco AS5300, Cisco AS5350, Cisco AS5400, and Cisco AS5850 is not included in this release.
12.2(11)T	This command was implemented on the Cisco AS5300, Cisco AS5350, Cisco AS5400, Cisco AS5800, and Cisco AS5850.

Examples

The following example resets all call threshold statistics:

```
clear call threshold stats
```

The following example resets the counter for all call volume in the gateway:

```
clear call threshold total-calls
```

The following example resets the counter when the call volume on Ethernet interface 0/1 reaches 5000 calls:

```
clear call threshold interface ethernet 0/1 int-calls 5000
```

The following example resets the counter for all call threshold statistics on a GigabitEthernet interface:

```
Device# clear call threshold interface GigabitEthernet stats
```

Related Commands

Command	Description
call threshold	Enables the global resources of a gateway.
call threshold poll-interval	Enables a polling interval threshold for CPU or memory.
show call treatment	Displays the call treatment configuration and statistics for handling the calls on the basis of resource availability.

clear call treatment stats

To clear call treatment statistics, use the **clearcalltreatmentstats** command in privileged EXEC mode.

clear call treatment stats

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.2(2)XA	This command was introduced.
12.2(4)T	The command was integrated into Cisco IOS Release 12.2(4)T. Support for the Cisco AS5300, Cisco AS5350, and Cisco AS5400 series is not included in this release.
12.2(2)XB1	This command was implemented on the Cisco AS5850.
12.2(4)XM	This command was implemented on the Cisco 1750 and Cisco 1751 routers. Support for other Cisco platforms is not included in this release.
12.2(8)T	This command was integrated into Cisco IOS Release 12.2(8)T and implemented on the Cisco 7200 series routers. Support for the Cisco AS5300, Cisco AS5350, Cisco AS5400, and Cisco AS5850 is not included in this release.
12.2(11)T	This feature was integrated into Cisco IOS Release 12.2(11)T and support was added for the Cisco AS5300, Cisco AS5350, Cisco AS5400, and Cisco AS5800.

Examples

The following example clears the call treatment statistics:

```
clear call treatment stats
```

Related Commands

Command	Description
call treatment on	Enables call treatment to process calls when local resources are unavailable.
call treatment action	Configures the action that the router takes when local resources are unavailable.

Command	Description
call treatment cause-code	Specifies the reason for the disconnection to the caller when local resources are unavailable.
call treatment isdn-reject	Specifies the rejection cause-code for ISDN calls when local resources are unavailable.
show call treatment	Displays the call treatment configuration and statistics for handling calls on the basis of resource availability.

clear call voice

To clear one or more voice calls detected as inactive because there is no RTP or RTCP activity, use the **clearcallvoice** command in User EXEC or privileged EXEC mode.

clear call voice causecode *identifier* {**id** *identifier*| **media-inactive**| **calling-number** *number*| **called-number** *number*}

Syntax Description

causecode	Specifies a Q.850 disconnect cause code.
identifier	Numeric cause code identifier; a number 1 through 127.
id *identifier*	Clears one specific call with the ID specified. The identifuier argument is the call identifier as shown in brief format.
media -inactive	Clears calls wherever a status of media inactive is detected and notified.
calling-number *number*	Clears a call with a specific calling number pattern. The *number* argument is the specific call number pattern of the calling number.
called-number *number*	Clears a call with a specific called number pattern.The *number* argument is the specific call number pattern of a called number.

Command Default

This command is disabled, and no calls are cleared.

Command Modes

User EXEC (>) Privileged EXEC (#)

Command History

Release	Modification
12.1(3)T	This command was introduced.
12.2	This command was integrated into Cisco IOS Release 12.2.
12.3(4)T	The **voice**keyword was added.
12.4(4)T	The **calling-number**and **called-number**keywords were added.

Usage Guidelines

This command can be used to clear all voice calls detected as media inactive or it can be used to clear individual voice calls. There is no no form of this command.

Examples

The following example clears inactive voice calls with the cause code ID of 112B:

```
Router# clear call voice causecode 1 id 112B
```

Related Commands

Command	Description
show call active voice	Displays active voice calls, based on specified parameters.

clear call-router routes

To remove the dynamic routes cached in the border element (BE), use the **clearcall-routerroutes** command in privileged EXEC mode.

clear call-router routes

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC (#)

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. Support for the Cisco AS5300, Cisco AS5350, and Cisco AS5400 is not included in this release.
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. and implemented on the Cisco AS5300, Cisco AS5350, Cisco AS5400, and Cisco AS5850.

Examples

The following example shows how to remove dynamic routes cached in the BE:

```
Router# clear call-router routes
```

Related Commands

Command	Description
call-router	Enables the Annex G BE configuration commands.
show call history	Displays the fax history table for a fax transmission.

clear controller call-counters

To clear the system DS0 high water marks (HWMs) and all individual controller statistics, use the **clearcontrollercall-counters** command in privileged EXEC mode.

clear controller call-counters {**system-hwm**| **all**}

Syntax Description

system -hwm	Clears the system HWMs only.
all	Clears all controller call counters including the individual controller time slots in use and the number of calls on those time slots since the last reset was done. The HWMs are set to 0.

Command Default

No default behavior or values

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.0(1)T	This command was introduced.
12.1(1)T	This command was implemented on the voice/WAN interface cards (VWICs) for the Cisco 2600 series and Cisco 3600 series.
12.1(2)T	This command was implemented on the Cisco AS5300, Cisco AS5400, and Cisco AS5800.

Usage Guidelines

The **clearcontrollercall-countersall**command clears the system DS0 HWMs and all individual controller statistics, including TotalCalls and Total Duration. The**clearcontrollercall-counterssystem-hwm** command clears the system DS0 HWMs and leaves all other call-counter statistics untouched.

Refer to the following comments for the meaning of call counters displayed before and after executing the **clearcontrollercall-counters** and **clearcontrollert1call-counters** related commands:

- The numbers displayed under TotalCalls for each time slot represent total calls that were connected successfully. If a call comes into time slot 10, then the **showcontrollerst1call-counters** command displays 1 under the TotalCalls column for time slot 10. A value of 20 displayed under TotalCalls for time slot 10 indicates a total of 20 calls connected on time slot 10 since the last time call counters were cleared.
- The DS0s Active field indicates the number of active calls on the specified controller. This number indicates the current number of calls on the controller at any given time.

- The DS0s Active High Water Mark field indicates the peak number of calls on the controller since the last time HWMs or calls were cleared. If the number of active calls "DS0s Active" is less than the DS0s HWM, then the HWM remains untouched. If new calls come in and the active DS0s are more than the HWM, then the HWM is incremented to reflect the new peak number of calls on that controller.

This value is reset to the current and active DS0s when call counters are cleared. For example, initially the HWM is 0. When a new call comes in, the HWM is 1. When the next call comes in, the HWM is 2.

If 20 calls come in, the HWM is 20 and the active DS0s are 20. If 5 calls get disconnected, the DS0 active is 15, but the HWM is 20. When a **clearcontroller** command is input for the specified controller, the HWM is reset to 15, which is the current and active DS0s also. If 10 calls get disconnected, the Active DS0s is set to 5 and the HWM remains at 15 until another **clearcontroller** command is input. If Active DS0s exceed 15, then the HWM is updated.

- The System DS0s High Water Mark field reflects the HWM at a system level including all DS0s controllers.

Examples

The following sample output shows what happens after the HWMs are cleared:

```
Router# clear controller call-counters system-hwm
!
Router# show controllers t1 call-counters
T1 1/3/0:3:
  DS0's Active: 2
  DS0's Active High Water Mark: 2
  TimeSlot   Type   TotalCalls   TotalDuration
      1       pri           0       00:00:00
      2       pri           0       00:00:00
      3       pri           0       00:00:00
      4       pri           0       00:00:00
      5       pri           0       00:00:00
      6       pri           0       00:00:00
      7       pri           0       00:00:00
      8       pri           0       00:00:00
      9       pri           0       00:00:00
     10       pri           0       00:00:00
     11       pri           0       00:00:00
     12       pri           0       00:00:00
     13       pri           0       00:00:00
     14       pri           0       00:00:00
     15       pri           0       00:00:00
     16       pri           0       00:00:00
     17       pri           0       00:00:00
     18       pri           0       00:00:00
     19       pri           0       00:00:00
     20       pri           0       00:00:00
     21       pri           0       00:00:00
     22       pri           1       00:08:51
     23       pri           1       00:09:21
T1 1/3/0:8:
  DS0's Active: 1
  DS0's Active High Water Mark: 1
  TimeSlot   Type   TotalCalls   TotalDuration
      1       pri           0       00:00:00
      2       pri           0       00:00:00
      3       pri           0       00:00:00
      4       pri           0       00:00:00
      5       pri           0       00:00:00
      6       pri           0       00:00:00
      7       pri           0       00:00:00
      8       pri           0       00:00:00
      9       pri           0       00:00:00
     10       pri           0       00:00:00
     11       pri           0       00:00:00
```

```
     12       pri           0       00:00:00
     13       pri           0       00:00:00
     14       pri           0       00:00:00
     15       pri           0       00:00:00
     16       pri           0       00:00:00
     17       pri           0       00:00:00
     18       pri           0       00:00:00
     19       pri           0       00:00:00
     20       pri           0       00:00:00
     21       pri           0       00:00:00
     22       pri           0       00:01:39
     23       pri           0       00:00:00
System's DS0's Active High Water Mark: 3
```

In the example above, the system HWM is reset to the total number of active calls in the system, which is 3. The number was 4. When a call goes down, HWM values are untouched. Only the DS0 Active value changes. Above, there is only one call on 1/3/0:3. Observe the HWM for individual controllers. Total number of active calls is 1.

The following is sample output when the **clearcontrollercall-counterssystem-hwm** command is used:

```
Router# clear controller call-counters system-hwm
!
Router# show controllers t1 call-counters
T1 1/3/0:3:
  DS0's Active: 1
  DS0's Active High Water Mark: 2
  TimeSlot   Type   TotalCalls   TotalDuration
      1       pri           0       00:00:00
      2       pri           0       00:00:00
      3       pri           0       00:00:00
      4       pri           0       00:00:00
      5       pri           0       00:00:00
      6       pri           0       00:00:00
      7       pri           0       00:00:00
      8       pri           0       00:00:00
      9       pri           0       00:00:00
     10       pri           0       00:00:00
     11       pri           0       00:00:00
     12       pri           0       00:00:00
     13       pri           0       00:00:00
     14       pri           0       00:00:00
     15       pri           0       00:00:00
     16       pri           0       00:00:00
     17       pri           0       00:00:00
     18       pri           0       00:00:00
     19       pri           0       00:00:00
     20       pri           0       00:00:00
     21       pri           0       00:00:00
     22       pri           1       00:12:16
     23       pri           1       00:10:20
T1 1/3/0:8:
  DS0's Active: 0
  DS0's Active High Water Mark: 1
  TimeSlot   Type   TotalCalls   TotalDuration
      1       pri           0       00:00:00
      2       pri           0       00:00:00
      3       pri           0       00:00:00
      4       pri           0       00:00:00
      5       pri           0       00:00:00
      6       pri           0       00:00:00
      7       pri           0       00:00:00
      8       pri           0       00:00:00
      9       pri           0       00:00:00
     10       pri           0       00:00:00
     11       pri           0       00:00:00
     12       pri           0       00:00:00
     13       pri           0       00:00:00
     14       pri           0       00:00:00
     15       pri           0       00:00:00
     16       pri           0       00:00:00
     17       pri           0       00:00:00
```

```
     18       pri           0       00:00:00
     19       pri           0       00:00:00
     20       pri           0       00:00:00
     21       pri           0       00:00:00
     22       pri           0       00:02:50
     23       pri           0       00:00:00
System's DS0's Active High Water Mark: 1
```

In the preceding example, only the system HWM is reset to active. For controllers 1/3/0:3 and 1/3/0:8, the HWMs are untouched.

The following is sample output when the **all**keyword is used, clearing at the system level:

```
Router# clear controller call-counters all
!
Router# show controllers t1 call-counters
T1 1/3/0:3:
  DS0's Active: 0
  DS0's Active High Water Mark: 0
  TimeSlot   Type   TotalCalls   TotalDuration
      1       pri           0       00:00:00
      2       pri           0       00:00:00
      3       pri           0       00:00:00
      4       pri           0       00:00:00
      5       pri           0       00:00:00
      6       pri           0       00:00:00
      7       pri           0       00:00:00
      8       pri           0       00:00:00
      9       pri           0       00:00:00
     10       pri           0       00:00:00
     11       pri           0       00:00:00
     12       pri           0       00:00:00
     13       pri           0       00:00:00
     14       pri           0       00:00:00
     15       pri           0       00:00:00
     16       pri           0       00:00:00
     17       pri           0       00:00:00
     18       pri           0       00:00:00
     19       pri           0       00:00:00
     20       pri           0       00:00:00
     21       pri           0       00:00:00
     22       pri           0       00:00:00
     23       pri           0       00:00:00
T1 1/3/0:8:
  DS0's Active: 0
  DS0's Active High Water Mark: 0
  TimeSlot   Type   TotalCalls   TotalDuration
      1       pri           0       00:00:00
      2       pri           0       00:00:00
      3       pri           0       00:00:00
      4       pri           0       00:00:00
      5       pri           0       00:00:00
      6       pri           0       00:00:00
      7       pri           0       00:00:00
      8       pri           0       00:00:00
      9       pri           0       00:00:00
     10       pri           0       00:00:00
     11       pri           0       00:00:00
     12       pri           0       00:00:00
     13       pri           0       00:00:00
     14       pri           0       00:00:00
     15       pri           0       00:00:00
     16       pri           0       00:00:00
     17       pri           0       00:00:00
     18       pri           0       00:00:00
     19       pri           0       00:00:00
     20       pri           0       00:00:00
     21       pri           0       00:00:00
     22       pri           0       00:00:00
     23       pri           0       00:00:00
System's DS0's Active High Water Mark: 0
```

In the preceding example, clearing at the system level using the **clearcontrollercall-counters**command clears all DS0 controllers in the system and also clears the system HWMs.

Related Commands

Command	Description
clear controller t1 call-counters	Clears call statistics on a specific T1 controller.
controller	Enters controller configuration mode.
show controllers t1 call-counters	Displays the total number of calls and call durations on a T1 controller.

clear controller t1

To clear the system DS0 high water marks (HWM) and all individual controller statistics, use the **clearcontrollert1** command in privileged EXEC mode.

clear controller t1 [*slot*] **call-counters** *timeslots* **firmware-status**

Syntax Description

slot	(Optional) Clears an individual T1 controller.
call -counters*timeslots*	Clears the call counters in the specified T1 time slots.
firmware -status	Clears the Neat crash history.

Command Default

No default behavior or values

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.0(1)T	This command was introduced.
12.1(1)T	This command was implemented on the voice and WAN interface cards (VWICs) for the Cisco 2600 series and Cisco 3600 series.
12.1(2)T	This command was implemented on the Cisco AS5300, Cisco AS5400, and Cisco AS5800.

Usage Guidelines

Refer to the following comments for the meaning of call counters displayed before and after executing **clearcontrollert1** related commands:

- The numbers displayed under TotalCalls for each time slot represent total calls that were connected successfully. If a call comes into time slot 10, then the **showcontrollerst1call-counters** command displays 1 under the TotalCalls column for time slot 10. A value of 20 displayed under TotalCalls for time slot 10 indicates a total of 20 calls connected on time slot 10 since the last time call counters were cleared.

If a time slot or time slot range is specified, only the counters for those channels are cleared. The TotalCalls field shows the time slots that have calls connected since the last clear was done and does not show the number of active calls in the controller. The TotalDuration field shows the same information as the TotalCalls field.

- The DS0's Active field indicates the number of active calls on the specified controller. This number indicates the current number of calls on the controller at any given time.

- The DS0's Active High Water Mark field indicates the peak number of calls on the controller since the last **clearcontrollert11/0/0call-counters** command was entered. If the number of active calls "DS0's Active" is less than DS0s HWM, then HWM remains untouched. If new calls come in and the active DS0s are more than the HWM, then the HWM is incremented to reflect the new peak number of calls on that controller.

This value is reset to the current and active DS0s when the **clearcontrollert11/3/0call-counters**command is entered. For example, initially the HWM is 0. When a new call comes in, the HWM is 1. When the next call comes in, the HWM is 2.

If 20 calls come in, the HWM is 20 and the active DS0s are 20. If 5 calls get disconnected, the DS0 active is 15, but the HWM is 20. When a **clearcontroller** command is input for the specified controller, the HWM is reset to 15, which is the current and active DS0s also. If 10 calls get disconnected, the Active DS0s value is set to 5 and the HWM remains at 15 until another **clearcontroller**command is input. If Active DS0s exceed 15, then the HWM is updated.

- The System DS0s High Water Mark field reflects the HWM at a system level including all DS0s controllers.

Examples

The following is sample output that shows two controllers numbered 1/3/0:3 and 1/3/0:8. Note the differences in the output shown by the **showcontrollerst1call-counters** command and how the **clearcontrollert1call-counters** command affects the output:

```
Router#  show controllers t1 call-counters
T1 1/3/0:3:
  DS0's Active: 0
  DS0's Active High Water Mark: 0
  TimeSlot   Type   TotalCalls   TotalDuration
      1       pri           0       00:00:00
      2       pri           0       00:00:00
      3       pri           0       00:00:00
      4       pri           0       00:00:00
      5       pri           0       00:00:00
      6       pri           0       00:00:00
      7       pri           0       00:00:00
      8       pri           0       00:00:00
      9       pri           0       00:00:00
     10       pri           0       00:00:00
     11       pri           0       00:00:00
     12       pri           0       00:00:00
     13       pri           0       00:00:00
     14       pri           0       00:00:00
     15       pri           0       00:00:00
     16       pri           0       00:00:00
     17       pri           0       00:00:00
     18       pri           0       00:00:00
     19       pri           0       00:00:00
     20       pri           0       00:00:00
     21       pri           0       00:00:00
     22       pri           0       00:00:00
     23       pri           0       00:00:00
T1 1/3/0:8:
  DS0's Active: 0
  DS0's Active High Water Mark: 0
  TimeSlot   Type   TotalCalls   TotalDuration
      1       pri           0       00:00:00
      2       pri           0       00:00:00
      3       pri           0       00:00:00
      4       pri           0       00:00:00
      5       pri           0       00:00:00
      6       pri           0       00:00:00
      7       pri           0       00:00:00
```

```
      8       pri           0       00:00:00
      9       pri           0       00:00:00
     10       pri           0       00:00:00
     11       pri           0       00:00:00
     12       pri           0       00:00:00
     13       pri           0       00:00:00
     14       pri           0       00:00:00
     15       pri           0       00:00:00
     16       pri           0       00:00:00
     17       pri           0       00:00:00
     18       pri           0       00:00:00
     19       pri           0       00:00:00
     20       pri           0       00:00:00
     21       pri           0       00:00:00
     22       pri           0       00:00:00
     23       pri           0       00:00:00
System's DS0's Active High Water Mark: 0
```

Note In the preceding example, all the fields are zero, indicating that no calls have come in since system startup or since the last clear was made by the **clearcontroller**command.

The following is sample output that shows that four calls have been initiated on the 1/5/12, 1/5/13, 1/5/14, and 1/5/15 controllers:

```
Router# show users
    Line       User       Host(s)              Idle       Location
*  0 con 0                 idle                 00:00:00
  tty 1/5/12   Router Async interface      00:01:05   PPP: 55.61.1.1
  tty 1/5/13   Router Async interface      00:00:48   PPP: 55.62.1.1
  tty 1/5/14   Router Async interface      00:00:33   PPP: 55.54.1.1
  tty 1/5/15   Router Async interface      00:00:19   PPP: 55.52.1.1
  Interface  User      Mode                     Idle Peer Address
Router# show controllers t1 call-counters
T1 1/3/0:3:
  DS0's Active: 2
  DS0's Active High Water Mark: 2
  TimeSlot   Type   TotalCalls   TotalDuration
      1       pri           0       00:00:00
      2       pri           0       00:00:00
      3       pri           0       00:00:00
      4       pri           0       00:00:00
      5       pri           0       00:00:00
      6       pri           0       00:00:00
      7       pri           0       00:00:00
      8       pri           0       00:00:00
      9       pri           0       00:00:00
     10       pri           0       00:00:00
     11       pri           0       00:00:00
     12       pri           0       00:00:00
     13       pri           0       00:00:00
     14       pri           0       00:00:00
     15       pri           0       00:00:00
     16       pri           0       00:00:00
     17       pri           0       00:00:00
     18       pri           0       00:00:00
     19       pri           0       00:00:00
     20       pri           0       00:00:00
     21       pri           0       00:00:00
     22       pri           1       00:01:58
     23       pri           1       00:02:27
T1 1/3/0:8:
  DS0's Active: 2
  DS0's Active High Water Mark: 2
  TimeSlot   Type   TotalCalls   TotalDuration
      1       pri           0       00:00:00
      2       pri           0       00:00:00
      3       pri           0       00:00:00
      4       pri           0       00:00:00
```

```
      5       pri           0       00:00:00
      6       pri           0       00:00:00
      7       pri           0       00:00:00
      8       pri           0       00:00:00
      9       pri           0       00:00:00
     10       pri           0       00:00:00
     11       pri           0       00:00:00
     12       pri           0       00:00:00
     13       pri           0       00:00:00
     14       pri           0       00:00:00
     15       pri           0       00:00:00
     16       pri           0       00:00:00
     17       pri           0       00:00:00
     18       pri           0       00:00:00
     19       pri           0       00:00:00
     20       pri           0       00:00:00
     21       pri           0       00:00:00
     22       pri           1       00:02:14
     23       pri           1       00:02:46
System's DS0's Active High Water Mark: 4
```

In the preceding example , if a**clearcontroller** command is entered for a controller that has active calls, which have been connected during the last 30 minutes, the TotalCalls and TotalDuration fields are reset to zero.

The following is sample output that shows controller 1/3/0:3, with time slots 22 and 23 connected and active. When the**clearcontrollert11/3/0:3call-counters**command is entered, the corresponding fields are set to zero.

```
Router# clear controller t1 1/3/0:3 call-counters
!
Router# show controllers t1 call-counters
T1 1/3/0:3:
  DS0's Active: 2
  DS0's Active High Water Mark: 2
  TimeSlot   Type   TotalCalls   TotalDuration
      1       pri           0       00:00:00
      2       pri           0       00:00:00
      3       pri           0       00:00:00
      4       pri           0       00:00:00
      5       pri           0       00:00:00
      6       pri           0       00:00:00
      7       pri           0       00:00:00
      8       pri           0       00:00:00
      9       pri           0       00:00:00
     10       pri           0       00:00:00
     11       pri           0       00:00:00
     12       pri           0       00:00:00
     13       pri           0       00:00:00
     14       pri           0       00:00:00
     15       pri           0       00:00:00
     16       pri           0       00:00:00
     17       pri           0       00:00:00
     18       pri           0       00:00:00
     19       pri           0       00:00:00
     20       pri           0       00:00:00
     21       pri           0       00:00:00
     22       pri           1       00:29:14
     23       pri           1       00:29:47
Router# clear controller t1 1/3/0:3 call-counters
Router# show controllers t1 call-counters
T1 1/3/0:3:
  DS0's Active: 2
  DS0's Active High Water Mark: 2
  TimeSlot   Type   TotalCalls   TotalDuration
      1       pri           0       00:00:00
      2       pri           0       00:00:00
      3       pri           0       00:00:00
      4       pri           0       00:00:00
      5       pri           0       00:00:00
      6       pri           0       00:00:00
      7       pri           0       00:00:00
      8       pri           0       00:00:00
```

```
      9       pri           0       00:00:00
     10       pri           0       00:00:00
     11       pri           0       00:00:00
     12       pri           0       00:00:00
     13       pri           0       00:00:00
     14       pri           0       00:00:00
     15       pri           0       00:00:00
     16       pri           0       00:00:00
     17       pri           0       00:00:00
     18       pri           0       00:00:00
     19       pri           0       00:00:00
     20       pri           0       00:00:00
     21       pri           0       00:00:00
     22       pri           0       00:00:10   <<<<<<
     23       pri           0       00:00:10   <<<<<<
```

The following is sample output when a call is cleared on 1/5/12:

```
Router# clear line 1/5/12
[confirm]
 [OK]
!
Router# show users
    Line       User       Host(s)              Idle       Location
*  0 con 0                 idle                 00:00:00
  tty 1/5/13   Router Async interface      00:03:04   PPP: 55.62.1.1
  tty 1/5/14   Router Async interface      00:02:49   PPP: 55.54.1.1
  tty 1/5/15   Router Async interface      00:02:35   PPP: 55.52.1.1
  Interface  User      Mode                      Idle Peer Address
Router# show controllers t1 call-counters
T1 1/3/0:3:
  DS0's Active: 2
  DS0's Active High Water Mark: 2
  TimeSlot   Type   TotalCalls   TotalDuration
      1       pri           0       00:00:00
      2       pri           0       00:00:00
      3       pri           0       00:00:00
      4       pri           0       00:00:00
      5       pri           0       00:00:00
      6       pri           0       00:00:00
      7       pri           0       00:00:00
      8       pri           0       00:00:00
      9       pri           0       00:00:00
     10       pri           0       00:00:00
     11       pri           0       00:00:00
     12       pri           0       00:00:00
     13       pri           0       00:00:00
     14       pri           0       00:00:00
     15       pri           0       00:00:00
     16       pri           0       00:00:00
     17       pri           0       00:00:00
     18       pri           0       00:00:00
     19       pri           0       00:00:00
     20       pri           0       00:00:00
     21       pri           0       00:00:00
     22       pri           1       00:03:44
     23       pri           1       00:04:14
T1 1/3/0:8:
  DS0's Active: 1
  DS0's Active High Water Mark: 2
  TimeSlot   Type   TotalCalls   TotalDuration
      1       pri           0       00:00:00
      2       pri           0       00:00:00
      3       pri           0       00:00:00
      4       pri           0       00:00:00
      5       pri           0       00:00:00
      6       pri           0       00:00:00
      7       pri           0       00:00:00
      8       pri           0       00:00:00
      9       pri           0       00:00:00
     10       pri           0       00:00:00
     11       pri           0       00:00:00
     12       pri           0       00:00:00
```

```
     13       pri           0       00:00:00
     14       pri           0       00:00:00
     15       pri           0       00:00:00
     16       pri           0       00:00:00
     17       pri           0       00:00:00
     18       pri           0       00:00:00
     19       pri           0       00:00:00
     20       pri           0       00:00:00
     21       pri           0       00:00:00
     22       pri           1       00:04:00
     23       pri           1       00:03:34
System's DS0's Active High Water Mark: 4
```

After a call gets disconnected, only the DS0 Active field changes to reflect the current active call on the controller. In the above example, 1/3/0:8 DS0 Active is changed to 1.

The following is sample output that shows call counters are cleared for an individual controller on 1/3/0:8:

```
Router# clear controller t1 1/3/0:8 call-counters
!
Router# show controllers t1 call-counters
T1 1/3/0:3:
  DS0's Active: 2
  DS0's Active High Water Mark: 2
  TimeSlot   Type   TotalCalls   TotalDuration
      1       pri           0       00:00:00
      2       pri           0       00:00:00
      3       pri           0       00:00:00
      4       pri           0       00:00:00
      5       pri           0       00:00:00
      6       pri           0       00:00:00
      7       pri           0       00:00:00
      8       pri           0       00:00:00
      9       pri           0       00:00:00
     10       pri           0       00:00:00
     11       pri           0       00:00:00
     12       pri           0       00:00:00
     13       pri           0       00:00:00
     14       pri           0       00:00:00
     15       pri           0       00:00:00
     16       pri           0       00:00:00
     17       pri           0       00:00:00
     18       pri           0       00:00:00
     19       pri           0       00:00:00
     20       pri           0       00:00:00
     21       pri           0       00:00:00
     22       pri           1       00:07:46
     23       pri           1       00:08:15
T1 1/3/0:8:
  DS0's Active: 1
  DS0's Active High Water Mark: 1
  TimeSlot   Type   TotalCalls   TotalDuration
      1       pri           0       00:00:00
      2       pri           0       00:00:00
      3       pri           0       00:00:00
      4       pri           0       00:00:00
      5       pri           0       00:00:00
      6       pri           0       00:00:00
      7       pri           0       00:00:00
      8       pri           0       00:00:00
      9       pri           0       00:00:00
     10       pri           0       00:00:00
     11       pri           0       00:00:00
     12       pri           0       00:00:00
     13       pri           0       00:00:00
     14       pri           0       00:00:00
     15       pri           0       00:00:00
     16       pri           0       00:00:00
     17       pri           0       00:00:00
     18       pri           0       00:00:00
     19       pri           0       00:00:00
     20       pri           0       00:00:00
```

```
     21       pri           0       00:00:00
     22       pri           0       00:00:35
     23       pri           0       00:00:00
System's DS0's Active High Water Mark: 4
```

In the previous example, after clearing call counters for controller 1/3/0:8, TotalCalls and TotalDuration reset. In addition the DS0 HWM is also cleared to the number of active DS0s. Whenever the DS0 HWM is cleared, it does not reset to zero, but rather it is set to Active DS0s. For 1/3/0:8, the HWM is 1 after clearing because DS0 Active is 1 (1 active call). TotalDuration is 35 seconds for time slot 22, and TotalCall is 0 because they got reset when the **clearcontrollercall-counters** command was entered. Total calls on this time slot is incremented when a new call comes in on this time slot.

The following is sample output when controller 1/5/15 is cleared:

```
Router# clear line 1/5/15
[confirm]
 [OK]
Router# show controllers t1 call-counters
T1 1/3/0:3:
  DS0's Active: 0
  DS0's Active High Water Mark: 2
  TimeSlot   Type   TotalCalls   TotalDuration
      1       pri           0       00:00:00
      2       pri           0       00:00:00
      3       pri           0       00:00:00
      4       pri           0       00:00:00
      5       pri           0       00:00:00
      6       pri           0       00:00:00
      7       pri           0       00:00:00
      8       pri           0       00:00:00
      9       pri           0       00:00:00
     10       pri           0       00:00:00
     11       pri           0       00:00:00
     12       pri           0       00:00:00
     13       pri           0       00:00:00
     14       pri           0       00:00:00
     15       pri           0       00:00:00
     16       pri           0       00:00:00
     17       pri           0       00:00:00
     18       pri           0       00:00:00
     19       pri           0       00:00:00
     20       pri           0       00:00:00
     21       pri           0       00:00:00
     22       pri           1       00:12:40
     23       pri           1       00:10:20
T1 1/3/0:8:
  DS0's Active: 0
  DS0's Active High Water Mark: 1
  TimeSlot   Type   TotalCalls   TotalDuration
      1       pri           0       00:00:00
      2       pri           0       00:00:00
      3       pri           0       00:00:00
      4       pri           0       00:00:00
      5       pri           0       00:00:00
      6       pri           0       00:00:00
      7       pri           0       00:00:00
      8       pri           0       00:00:00
      9       pri           0       00:00:00
     10       pri           0       00:00:00
     11       pri           0       00:00:00
     12       pri           0       00:00:00
     13       pri           0       00:00:00
     14       pri           0       00:00:00
     15       pri           0       00:00:00
     16       pri           0       00:00:00
     17       pri           0       00:00:00
     18       pri           0       00:00:00
     19       pri           0       00:00:00
     20       pri           0       00:00:00
     21       pri           0       00:00:00
     22       pri           0       00:02:50
```

```
     23       pri           0       00:00:00
System's DS0's Active High Water Mark: 1
```

The following is sample output showing four active calls:

```
Router# show users
Line       User       Host(s)              Idle       Location
*  0 con 0                 idle                 00:00:00
  tty 1/5/16   Router Async interface      00:01:01   PPP: 55.1.1.1
  tty 1/5/17   Router Async interface      00:00:47   PPP: 55.2.1.1
  tty 1/5/18   Router Async interface      00:00:28   PPP: 55.3.1.1
  tty 1/5/19   Router Async interface      00:00:14   PPP: 55.4.1.1
  Interface  User      Mode                     Idle Peer Address
Router# show controllers t1 call-counters
T1 1/3/0:3:
  DS0's Active: 2
  DS0's Active High Water Mark: 2
  TimeSlot   Type   TotalCalls   TotalDuration
      1       pri           0       00:00:00
      2       pri           0       00:00:00
      3       pri           0       00:00:00
      4       pri           0       00:00:00
      5       pri           0       00:00:00
      6       pri           0       00:00:00
      7       pri           0       00:00:00
      8       pri           0       00:00:00
      9       pri           0       00:00:00
     10       pri           0       00:00:00
     11       pri           0       00:00:00
     12       pri           0       00:00:00
     13       pri           0       00:00:00
     14       pri           0       00:00:00
     15       pri           0       00:00:00
     16       pri           0       00:00:00
     17       pri           0       00:00:00
     18       pri           0       00:00:00
     19       pri           0       00:00:00
     20       pri           0       00:00:00
     21       pri           0       00:00:00
     22       pri           1       00:00:57
     23       pri           1       00:01:30
T1 1/3/0:8:
  DS0's Active: 2
  DS0's Active High Water Mark: 2
  TimeSlot   Type   TotalCalls   TotalDuration
      1       pri           0       00:00:00
      2       pri           0       00:00:00
      3       pri           0       00:00:00
      4       pri           0       00:00:00
      5       pri           0       00:00:00
      6       pri           0       00:00:00
      7       pri           0       00:00:00
      8       pri           0       00:00:00
      9       pri           0       00:00:00
     10       pri           0       00:00:00
     11       pri           0       00:00:00
     12       pri           0       00:00:00
     13       pri           0       00:00:00
     14       pri           0       00:00:00
     15       pri           0       00:00:00
     16       pri           0       00:00:00
     17       pri           0       00:00:00
     18       pri           0       00:00:00
     19       pri           0       00:00:00
     20       pri           0       00:00:00
     21       pri           0       00:00:00
     22       pri           1       00:01:12
     23       pri           1       00:01:45
System's DS0's Active High Water Mark: 4
```

Related Commands

Command	Description
clear controller call-counters	Clears all call statistics or system HWMs on a router.
controller	Enters controller configuration mode.
show controllers t1 call-counters	Displays the total number of calls and call durations on a T1 controller.

clear csm-statistics modem

To clear the call switching module (CSM) statistics for a modem or group of modems, use the **clearcsm-statisticsmodem** command in privileged EXEC mode.

clear csm-statistics modem[*slot/port*| *modem-group-number*]

Syntax Description

slot /port	(Optional) Identifies the location (and thereby the identity) of a specific modem.
modem -group-number	(Optional) Designates a defined modem group.

Command Default

No default behaviors or values

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
11.3NA	This command was introduced.

Usage Guidelines

Use the **clearcsm-statisticsmodem**command to clear CSM statistics for a particular modem or group of modems. If the *slot*/*port* argument is specified, the CSM call statistics for calls using the identified modem is cleared. If a modem group number is specified, then the CSM call statistics for calls using the modems associated with that group are cleared. If no argument is specified, all CSM call statistics for all modems are cleared.

Examples

The following example clears CSM call statistics for calls coming in on modems associated with modem group 2:

```
Router# clear csm-statistics modem 2
```

Related Commands

Command	Description
clear csm-statistics voice	Clears the CSM statistics for a particular or for all DSP channels.

clear csm-statistics voice

To clear the call switching module (CSM) statistics for a particular channel or for all digital signal processor (DSP) channels, use the **clearcsm-statisticsvoice** command in privileged EXEC mode.

clear csm-statistics voice[*slot/dspm/dsp/dsp-channel*]

Syntax Description

slot / *dspm* / *dsp* / *dsp -channel*	(Optional) Identifies the location of a particular DSP channel.

Command Default

No default behaviors or values

Command Modes

Privileged EXEC

Command History

Release	Modification
11.3NA	This command was introduced.

Usage Guidelines

Use the **clearcsm-statisticsvoice**command to clear CSM statistics for a particular DSP channel. If the *slot*/*dspm*/*dsp*/*dsp-channel* argument is specified, the CSM call statistics for calls using the identified DSP channel are cleared. If no argument is specified, all CSM call statistics for all DSP channels are cleared.

Examples

The following example clears CSM call statistics for calls coming in on all DSP channels:

```
Router#
clear csm-statistics voice
```

Related Commands

Command	Description
clear csm -statisticsmodem	Clears the CSM statistics for a modem or group of modems.

clear h323 gatekeeper call

To force the disconnection of a specific call or of all calls active on a particular gatekeeper, use the **clearh323gatekeepercall** command in privileged EXEC mode.

clear h323 gatekeeper call {**all**| **local-callID** *local-callID*}

Syntax Description

all	Forces all active calls currently associated with this gatekeeper to be disconnected.
local -callID	Forces a single active call associated with this gatekeeper to be disconnected.
local-callID	Specifies the local call identification number (CallID) that identifies the call to be disconnected.

Command Default

No default behaviors or values

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.0(5)T	This command was introduced on the Cisco 2600 series, the Cisco 3600 series, and on the Cisco MC3810.
12.1(5)XM2	The command was implemented on the Cisco AS5350 and Cisco AS5400.
12.2(4)T	This command was integrated into Cisco IOS Release 12.2(4)T and implemented on the Cisco AS5300. Support for the Cisco AS5350 and Cisco AS5400 is not included in this release.
12.2(2)XB1	This command was implemented on the Cisco AS5850.

Usage Guidelines

If you want to force a particular call to be disconnected (as opposed to all active calls on the gatekeeper), use the CallID number to identify that specific call. You can find the local CallID number for a specific call by using the **showgatekeepercalls** command; the ID number is displayed in the LocalCallID column.

Examples

The following example shows that an active call on the gatekeeper is being forced to disconnect. The local ID number of the active call is 12-3339.

```
Router# clear h323 gatekeeper call local-callID 12-3339
```

The following example shows that all active calls on the gatekeeper are being forced to disconnect:

```
Router# clear h323 gatekeeper call all
```

The following sample output from the **showgatekeepercalls** command displays information about a specific active call having a call ID of 12-3339:

```
Router# show gatekeeper calls
Total number of active calls =1
                   Gatekeeper Call Info
                   ====================
LocalCallID                    Age (secs)      BW
12-3339                        94              768 (Kbps)
 Endpt(s): Alias    E.164Addr      CallSignalAddr   Port   RASSignalAddr    Port
   src EP: epA                     10.0.0.11        1720   10.0.0.11        1700
   dst EP: epB2zoneB.com
   src PX: pxA                     10.0.0.1         1720   10.0.0.11        24999
   dst PX: pxB                     172.21.139.90    1720   172.21.139.90    24999
```

Related Commands

Command	Description
show gatekeeper calls	Displays the status of each ongoing call of which a gatekeeper is aware.

clear h323 gatekeeper endpoint

To unregister endpoints, use the **clearh323gatekeeperendpoint** command in privileged EXEC mode.

clear h323 gatekeeper endpoint {**alias e164** *digits*| **alias h323id** *name*| **all**| **id** *number*| **ipaddr** *address* [*port*]}

Syntax Description

alias e164 *digits*	E.164 alphanumeric address that is specified in the local alias table.
alias h323id *name*	H.323 ID name that is specified in the local alias table and is an alternate way to reach an endpoint.
all	All endpoints.
id *number*	ID of the endpoint.
ipaddr *address* [*port*]	Call signaling address and port (optional) of the endpoint. If a value for the *port* argument is not specified, the default is 1720.

Command Default

No default behavior or values.

Command Modes

Privileged EXEC

Command History

Release	Modification
12.2(11)T	This command was introduced 12.2(11)T on the Cisco 3660 and Cisco MC3810.

Usage Guidelines

Using this command forces the gatekeeper to send an unregistration request (URQ) message to the specified endpoint or all endpoints and removes the endpoint from the gatekeeper registration database.

For gatekeeper cluster configurations, this command must be entered on the gatekeeper where the endpoint is registered. Use the **showgatekeeperendpoints** command to locate the endpoint in a gatekeeper cluster.

Note The endpoint that was unregistered using this command can come back if it sends the registration request (RRQ) back to the gatekeeper after the unregistration.

Examples

The following example shows how to unregister all endpoints:

```
Router# clear h323 gatekeeper endpoint all
Router# show gatekeeper endpoints
                    GATEKEEPER ENDPOINT REGISTRATION
                    ================================
CallSignalAddr  Port  RASSignalAddr   Port  Zone Name         Type    Flags
--------------- ----- --------------- ----- ---------         ----    -----
Total number of active registrations = 0
```

Related Commands

Command	Description
show gatekeeper endpoints	Locates the endpoint in a gatekeeper cluster.

clear h323 gatekeeper stats

To clear statistics about gatekeeper performance, use the **clearh323gatekeeperstats** command in privileged EXEC mode.

clear h323 gatekeeper stats

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.1(5)XM	This command was introduced.
12.2(2)T	This command was integrated into Cisco IOS Release 12.2(2)T.
12.2(2)XB1	This command was implemented on the Cisco AS5850.

Usage Guidelines

The **clearh323gatekeeperstats** command resets the gatekeeper performance counters to zero and records the time at which the last clear was performed.

Examples

The following is sample output from the**showgatekeeperperformancestats**command that shows the counters have been reset to zero after entering the **clearh323gatekeeperstats**command.

```
clear h323 gatekeeper stats
show gatekeeper performance stats
RAS inbound message counters:
Originating ARQ: 0 Terminating ARQ: 0 LRQ: 0
RAS outbound message counters:
ACF: 2  ARJ: 0 LCF: 2  LRJ: 0
ARJ due to overload: 0
LRJ due to overload: 0
Load balancing events: 0
Real endpoints: 2
```

Related Commands

Command	Description
show gatekeeper performance statistics	Displays information about the number of calls accepted and rejected by the gatekeeper.

clear h323 gateway

To clear the H.323 gateway counters, use the **clearh323gateway** command in privileged EXEC mode.

clear h323 gateway [**cause-codes**| **h225**| **ras**]

Syntax Description

cause -codes	(Optional) Clears only the disconnected cause code counters.
h225	(Optional) Clears only the H.225 counters.
ras	(Optional) Clears only the Registration, Admission, and Status (RAS) counters.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.2(4)T	This command was introduced on all Cisco H.323 platforms except for the Cisco AS5300, Cisco AS5350, and Cisco AS5400.

Usage Guidelines

To clear all H.323 counters, use the **clearh323gateway** command without any optional keywords. After you have used the **clearh323gateway** command, the respective counters are set to zero.

Examples

In the following example from a Cisco 3640 router, the **clearh323gateway** command is used without keywords to clear all H.323 counters:

```
Router# clear h323 gateway
All H.323 stats cleared at 01:54:38
```

In the following example from a Cisco 3640 router, the **clearh323gateway** command is used with the **cause-codes**keyword to clear the disconnect cause code counters:

```
Router# clear h323 gateway cause-codes
Cause code stats cleared at 01:54:08
```

In the following example from a Cisco 3640 router, the **clearh323gateway** command is used with the **h225** keyword to clear the H.225 counters:

```
Router# clear h323 gateway h225
H.225 stats cleared at 01:53:18
```

In the following example from a Cisco 3640 router, the **clearh323gateway** command is used with the **ras** keyword to clear the RAS counters:

```
Router# clear h323 gateway ras
RAS stats cleared at 01:53:25
```

Related Commands

Command	Description
debug cch323	Provides debug output for various components within the H.323 subsystem.
show h323 gateway	Displays the statistics for H.323 gateway messages that have been sent and received and displays the reasons for which H.323 calls have been disconnected.

clear http client statistics

To reset to zero all the counters that collect the information about the communication between the HTTP server and the client displayed in the output from the **showhttpclientstatistics**command, use the **clearhttpclientstatistics** command in user EXEC or privileged EXEC mode.

clear http client statistics

Syntax Description

This command has no arguments or keywords.

Command Modes

User EXEC (>) Privileged EXEC (#)

Command History

Release	Modification
12.4(15)T	This command was introduced.

Usage Guidelines

Use the **showhttpclientstatistics** command to display the data collected by the counters the **clearhttpclientstatistics** command resets to zero.

Examples

The following example resets the counters to zero:

```
Router# clear http client statistics
```

Related Commands

Command	Description
show http client statistics	Displays information about the communication between the HTTP server and the client.

clear interface cable-modem

To reset the controller for a specified cable modem daughter card, use the **clearinterfacecable-modem**command in privileged EXEC mode. This command does not have a **no** version.

clear interface cable-modem

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.4(11)T	This command was introduced.

Examples

The following example shows how the **clearinterfacecable-modem** command clears the interface on the selected slot and port:

```
Router# clear interface cable-modem
*May 17 16:36:57.344: %CABLE_MODEM_HWIC-6-RESET: Interface Cable-Modem0/2/0 has been reset:
 clear command
*May 17 16:37:05.348: %LINK-3-UPDOWN: Interface Cable-Modem0/2/0, changed state to down
*May 17 16:37:06.348: %LINEPROTO-5-UPDOWN: Line protocol on Interface Cable-Modem0/2/0,
changed state to down
*May 17 16:37:19.740: %LINK-3-UPDOWN: Interface Cable-Modem0/2/0, changed state to up
*May 17 16:37:27.996: %LINEPROTO-5-UPDOWN: Line protocol on Interface Cable-Modem0/2/0,
changed state to up
```

Related Commands

Command	Description
show interfaces	Displays statistics for all interfaces configured.
show interfaces cable-modem	Displays statistics for all interfaces configured on the port.

clear mgcp src-stats

To clear the statistics gathered for Media Gateway Control Protocol (MGCP) System Resource Check (SRC) Call Admission Control (CAC) on an MGCP gateway, use the **clearmgcpsrc-stats**command in privileged EXEC mode.

clear mgcp src-stats

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.2(2)XB	This command was introduced.
12.2(8)T	This command was integrated into Cisco IOS Release 12.2(8)T.
12.2(11)T	This command was implemented on the Cisco AS5350, Cisco AS5400, and Cisco AS5850.

Usage Guidelines

Use the **clearmgcpsrc-stats**commandto clear the MGCP gateway buffer that holds SRC CAC statistics gathered during the most recent inspection interval.

Examples

The following example clears MGCP VoIP SRC CAC statistics:

```
Router# clear mgcp src-stats
```

Related Commands

Command	Description
show mgcp statistics	Displays MGCP statistics regarding received and transmitted network messages.

clear mgcp statistics

To reset the Media Gateway Control Protocol (MGCP) statistical counters, use the **clearmgcpstatistics** command in privileged EXEC mode.

clear mgcp statistics

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.1(1)T	This command was introduced on the Cisco AS5300.
12.1(3)T	This command was implemented on the Cisco 3660, Cisco UBR924, and Cisco 2600 series.
12.2(11)T	This command was implemented on the Cisco AS5850.

Examples

The following is an example shows the MGCP statistical counters being reset:

```
Router# clear mgcp statistics
```

Related Commands

Command	Description
mgcp	Starts the MGCP daemon.
show mgcp statistics	Displays statistics for received and transmitted packets.

clear mrcp client statistics

To clear all Media Resource Control Protocol (MRCP) statistics, use the **clearmrcpclientstatistics** command in privileged EXEC mode.

clear mrcp client statistics {**all**| **hostname** {*hostname*| *ip-address*}}

Syntax Description

all	Clears the accumulated MRCP session statistics for all hosts.
hostname	Clears the accumulated MRCP session statistics for the specified host.
hostname	Host name of the MRCP server. Format uses host name only or *hostname***:***port*.
ip -address	IP address of the MRCP server.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.2(11)T	This command was introduced on the Cisco 3640, Cisco 3660, Cisco AS5300, Cisco AS5350, and Cisco AS5400.

Usage Guidelines

This command resets all MRCP session statistics to 0. Use the **showmrcpclientstatisticshostname**command to display the current statistics.

Examples

The following example resets the statistics for the host called "asr_server":

```
Router# clear mrcp client statistics hostname asr_server
```

Related Commands

Command	Description
show mrcp client statistics hostname	Displays cumulative information about MRCP sessions.

clear rlm group

To reset all Redundant Link Manager (RLM) time stamps to zero, use the **clearrlmgroup**command in privileged EXEC mode.

clear rlm group [*group-number*] [**link**| **statistics**]

Syntax Description

group-number	(Optional) RLM group number. Range is from 0 to 255. There is no default value.
link	(Optional) Specifies the RLM group link.
statistics	(Optional) Specifies the RLM group statistics.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
11.3(7)	This command was introduced.
15.0(1)M	This command was modified in a release earlier than Cisco IOS Release 15.0(1)M. The **statistics** keyword was added.

Examples

The following example resets the time stamps on RLM group 1:

```
Router# clear rlm group 1 link
!
02:48:17: rlm 1: [State_Up, rx ACTIVE_LINK_BROKEN] over link [10.1.1.1(Loopback1), 10.1.4.1]
02:48:17: rlm 1: link [10.1.1.2(Loopback2), 10.1.4.2] requests activation
02:48:17: rlm 1: link [10.1.1.1(Loopback1), 10.1.4.1] is deactivated
02:48:17: rlm 1: [State_Recover, rx LINK_BROKEN] over link [10.1.1.2(Loopback2), 10.1.4.2]
02:48:17: rlm 1: link [10.1.1.1(Loopback1), 10.1.4.1] = socket[10.1.1.1, 10.1.4.1]
02:48:17: rlm 1: [State_Recover, rx USER_SOCKET_OPENED] over link [10.1.1.1(Loopback1),
10.1.4.1] for user RLM_MGR
02:48:17: rlm 1: link [10.1.1.1(Loopback1), 10.1.4.1] is opened
02:48:17: rlm 1: link [10.1.1.2(Loopback2), 10.1.4.2] = socket[10.1.1.2, 10.1.4.2]
02:48:17: rlm 1: [State_Recover, rx USER_SOCKET_OPENED] over link [10.1.1.2(Loopback2),
10.1.4.2] for user RLM_MGR
02:48:17: rlm 1: link [10.1.1.2(Loopback2), 10.1.4.2] is opened
02:48:17: rlm 1: link [10.1.1.1(Loopback1), 10.1.5.1] = socket[10.1.1.1, 10.1.5.1]
02:48:17: rlm 1: [State_Recover, rx USER_SOCKET_OPENED] over link [10.1.1.1(Loopback1),
10.1.5.1] for user RLM_MGR
02:48:17: rlm 1: link [10.1.1.1(Loopback1), 10.1.5.1] is opened
02:48:17: rlm 1: link [10.1.1.2(Loopback2), 10.1.5.2] = socket[10.1.1.2, 10.1.5.2]
02:48:17: rlm 1: [State_Recover, rx USER_SOCKET_OPENED] over link [10.1.1.2(Loopback2),
10.1.5.2] for user RLM_MGR
02:48:17: rlm 1: link [10.1.1.2(Loopback2), 10.1.5.2] is opened
02:48:17: rlm 1: [State_Recover, rx LINK_OPENED] over link [10.1.1.1(Loopback1), 10.1.4.1]
02:48:17: rlm 1: link [10.1.1.1(Loopback1), 10.1.4.1] requests activation
```

```
02:48:17: rlm 1: [State_Recover, rx LINK_OPENED] over link [10.1.1.2(Loopback2), 10.1.4.2]
02:48:17: rlm 1: [State_Recover, rx START_ACK] over link [10.1.1.1(Loopback1), 10.1.4.1]
02:48:17: rlm 1: link [10.1.1.1(Loopback1), 10.1.4.1] is activated
```

Related Commands

Command	Description
clear interface	Resets the hardware logic on an interface.
interface	Defines the IP addresses of the server, configures an interface type, and enters interface configuration mode.
link (RLM)	Specifies the link preference.
protocol rlm port	Reconfigures the port number for the basic RLM connection for the whole RLM group.
retry keepalive	Allows consecutive keepalive failures a certain amount of time before the link is declared down.
server (RLM)	Defines the IP addresses of the server.
show rlm group statistics	Displays the network latency of the RLM group.
show rlm group status	Displays the status of the RLM group.
show rlm group timer	Displays the current RLM group timer values.
timer	Overwrites the default setting of timeout values.

clear rpms-proc counters

To clear Resource Policy Management System (RPMS) statistics counters for the number of leg 3 authentication, authorization, and accounting (AAA) preauthentication requests, successes, and rejects, use the **clearrpms-proccounters** command in privileged EXEC mode.

clear rpms-proc counters

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC (#)

Command History

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

Examples

The following example clears statistics counters for leg 3 AAA preauthentication requests, successes, and rejects:

```
Router# clear rpms-proc counters
```

Related Commands

Command	Description
show rpms-proc counters	Displays statistics for the number of leg 3 AAA preauthentication requests, successes, and rejects.

clear rudpv0 statistics

To clear the counters that track Reliable User Datagram Protocol (RUDP) statistics, enter the **clearrudpv0statistics**command in privileged EXEC mode.

clear rudpv0 statistics

Syntax Description

This command has no arguments or keywords.

Command Default

The statistical information accumulates.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.0(7)XR	This command was introduced.
12.1(1)T	This command was integrated into Cisco IOS Release 12.1(1)T.

Examples

The following example shows how to clear RUDP statistics on a Cisco 2611:

```
Router(config)#clear rudpv0 statistics
```

Related Commands

Command	Description
show rudpv0 failures	Displays RUDP information about failed connections and the reasons for them.
show rudpv0 statistics	Displays RUDP information about number of packets sent, received, and so forth.

clear rudpv1 statistics

To clear the counters that track Reliable User Datagram Protocol (RUDP) statistics, use the **clearrudpv1statistics**command in privileged EXEC mode.

clear rudpv1 statistics

Syntax Description

This command has no arguments or keywords.

Command Default

The statistical information accumulates.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.1(1)T	This command was introduced.
12.2(2)T	This command was implemented on Cisco 7200.
12.2(4)T	This command was implemented on the Cisco 2600 series, Cisco 3600 series, and Cisco MC3810.
12.2(2)XB1	This command was implemented on the Cisco AS5850.
12.2(8)T	This command was integrated into Cisco IOS Release 12.2(8)T and implemented on the Cisco IAD2420 series.
12.2(11)T	This command was implemented on the Cisco AS5300, Cisco AS5350, Cisco AS5400, Cisco AS5800, and Cisco AS5850 in this release.

Examples

The following example clears all RUDP statistics for all available session groups:

```
Router# clear rudpv1 statistics
```

Related Commands

Command	Description
debug rudpv1	Displays debugging information for RUDP.
show rudpv1	Displays RUDP information.

clear sccp server statistics

To clear the counts displayed under the **showsccpserverstatistics** command, use the **clearsccpserverstatistics** command in privileged EXEC mode.

clear sccp server statistics

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.4(15)XY	This command was introduced.
15.0(1)M	This command was integrated into a release earlier than Cisco IOS Release 15.0(1)M.

Examples

The following example shows the Skinny Client Control Protocol (SCCP) server statistics counts being cleared, followed by verification that the counters are reset to zero with the**showsccpserverstatistics**command. The field descriptions are self-explanatory.

```
Router# show sccp server statistics
Failure type              Error count
------------------------  -----------
Send queue enqueue        0
Socket send               0
Msg discarded upon error  0
```

Related Commands

Command	Description
show sccp server statistics	Displays the number of SCCP messages sent and received by the SCCP server.

clear sdspfarm counters

To reset the server counts of the digital signal processor farms that are registered to the Skinny Client Control Protocol (sdspfarm) displayed under the **servershowsdspfarmmessagestatistics** command to zero, use the **clearsdspfarmcounters** command in privileged EXEC mode.

clear sdspfarm counters

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.4(15)XY	This command was introduced.

Examples

The following example shows the sdspfarm counters being cleared and verification that the counters are reset to zero with the**showsdspfarmsessionsstate** command:

```
Router# clear sdspfarm counters
Router# show sdspfarm sessions state

Call state      Num of sessions
----------      ---------------
IDLE            1022
ALERTING        0
SEIZE           0
PROGRESS        0
CONNECTED       0
DIGITS          0
BUSY            0
RINGING         0
ERROR           0
HOLD            0
END             0
STOP            0
START           2
RESTART         0
UNKNOWN         0
DELAYED-SMT     0
```

Field descriptions should be self-explanatory.

Related Commands

Command	Description
show sdspfarm message statistics	Displays the number of SCCP messages sent and received by the SCCP server.
show sdspfarm sessions state	Displays the number of sessions in each SCCP call state.

clear sgcp statistics

To clear all Simple Gateway Control Protocol (SGCP) statistics, use the **clearsgcpstatistics** command in privileged EXEC mode.

clear sgcp statistics

Syntax Description

This command has no arguments or keywords.

Command Default

No default behavior or values

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.0(5)T	This command was introduced in a private release on the Cisco AS5300 only and was not generally available.
12.0(7)XK	This command was implemented on the Cisco MC3810 and the Cisco 3600 series (except for the Cisco 3620) in a private release that was not generally available.
12.1(2)T	This command was integrated into Cisco IOS Release 12.1(2)T.

Examples

The following example shows all SGCP statistics being cleared:

```
Router# clear sgcp statistics
```

Related Commands

Command	Description
show sgcp statistics	Displays global statistics for SGCP packet counts.

clear sip-ua statistics

To reset the Session Initiation Protocol (SIP) user-agent (UA) statistical counters, use the **clearsip-uastatistics** command in privileged EXEC mode.

clear sip-ua statistics

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.2(13)T	This command was introduced.

Usage Guidelines

Use this command to clear all SIP statistics counters that are displayed by the **showsip-uastatistics** command.

Examples

The following example shows all SIP-UA statistics being cleared:

```
Router# clear sip-ua statistics
```

Related Commands

Command	Description
show sip-ua statistics	Displays response, traffic, and retry SIP statistics.

clear sip-ua tcp connection

To clear a session initiation protocol (SIP) TCP connection, use the **clearsip-uatcpconnection**command in privileged EXEC mode.

clear sip-ua tcp connection{**id***connection-id*[**target ipv4***:address:port* **|** **id***connection-id*]}**target ipv4***:address:port*

Syntax Description

id *connection-id*	Specifies the ID of the connection that needs to be closed in the SIP TCP process. The *connection-id*argument represents the connection ID. The range is from 1 to 2048.
target ipv4: *address* **:** *port*	Specifies the target address for the connection that needs to be closed in the SIP transport layer.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.3(8)T	This command was introduced.
12.4(6)T	This command was replaced by the **clearsip-ua**command.

Usage Guidelines

Inappropriate usage of the **clearsip-uatcpconnection** command can lead to erroneous call behavior, inappropriate usage of connections, and failure of calls.

Examples

To cear the connection entry only at the upper transport layer, assign the target IP address and port:

```
Router# clear sip-ua tcp connection target ipv4:172.18.194.183:5060
```

To clear the connection entry only at the lower TCP or User Datagram Protocol (UDP) layer, specify the connection:

```
Router# clear sip-ua tcp connection id 1
```

To completely clear a valid connection to target 172.18.194.183, port 5060, consider the following output example from the **showsip-uaconnections**command:

```
Router# show sip-ua connections tcp detail

Total active connections : 1
No. of send failures : 0
No. of remote closures : 0
No. of conn. failures : 0
```

```
No. of inactive conn. ageouts : 0
Max. tcp send msg queue size of 1, recorded for 172.18.194.183:5060
---------Printing Detailed Connection Report---------
Note:
** Tuples with no matching socket entry
- Do 'clear sip <tcp/udp> conn t ipv4:<addr>:<port>'
to overcome this error condition
++ Tuples with mismatched address/port entry
- Do 'clear sip <tcp/udp> conn t ipv4:<addr>:<port> id <connid>'
to overcome this error condition
Remote-Agent:172.18.194.183, Connections-Count:1
Remote-Port Conn-Id Conn-State WriteQ-Size
=========== ======= =========== ===========
5060 1 Established 0
```

Then execute the **clearsip-uatcpconnection** command:

```
Router# clear sip-ua tcp connection id 1 target ipv4:172.18.194.183:5060

Purging the entry from sip tcp process
Purging the entry from reusable global connection table
```

The result is that all connections are cleared after inputting the **clearsip-uatcpconnection**command:

```
Router# show sip-ua connections tcp detail
Total active connections : 0
No. of send failures : 0
No. of remote closures : 0
No. of conn. failures : 0
No. of inactive conn. ageouts : 0
Max. tcp send msg queue size of 1, recorded for 172.18.194.183:5060
---------Printing Detailed Connection Report---------
Note:
** Tuples with no matching socket entry
- Do 'clear sip <tcp/udp> conn t ipv4:<addr>:<port>'
to overcome this error condition
++ Tuples with mismatched address/port entry
- Do 'clear sip <tcp/udp> conn t ipv4:<addr>:<port> id <connid>'
to overcome this error condition
Remote-Agent:172.18.194.183, Connections-Count:0
```

Related Commands

Command	Description
clear sip-ua udp connection	Clears a SIP UDP connection.
show sip-ua connections	Displays SIP UA transport connection tabless.
timers connection aging	Sets the time before the SIP UA ages out a TCP and UDP connection.

clear sip-ua tcp tls connection

To clear a session initiation protocol (SIP) TCP connection, use the **clearsip-uatcptlsconnection**command in privileged EXEC mode.

clear sip-ua tcp tls connection {**id***connection-id*[**target ipv4***:address:port* | **id***connection-id*]}**target ipv4***:address:port*

Syntax Description

id *connection-id*	Specifies the ID of the connection that needs to be closed in the SIP TCP process. The *connection-id*argument represents the connection ID. The range is from 1 to 2048.
target ipv4: *address* **:** *port*	Specifies the target address for the connection that needs to be closed in the SIP transport layer.

Command Modes

Privileged EXEC

Command History

Release	Modification
12.4(6)T	This command was replaced by the **clearsip-ua**command.

Usage Guidelines

Inappropriate usage of the **clearsip-uatcptlsconnection** command can lead to erroneous call behavior, inappropriate usage of connections, and failure of calls.

Examples

To cear the connection entry only at the upper transport layer, assign the target IP address and port:

```
Router# clear sip-ua tcp tls connection target ipv4:172.18.194.183:5060
```

To clear the connection entry only at the lower TCP or User Datagram Protocol (UDP) layer, specify the connection:

```
Router# clear sip-ua tcp tls connection id 1
```

To completely clear a valid connection to target 172.18.194.183, port 5060, consider the following output example from the **showsip-uaconnections**command:

```
Router# show sip-ua connections tcp tls detail

Total active connections : 1
No. of send failures : 0
No. of remote closures : 0
No. of conn. failures : 0
No. of inactive conn. ageouts : 0
Max. tcp send msg queue size of 1, recorded for 172.18.194.183:5060
---------Printing Detailed Connection Report---------
```

```
Note:
** Tuples with no matching socket entry
- Do 'clear sip <tcp/udp> conn t ipv4:<addr>:<port>'
to overcome this error condition
++ Tuples with mismatched address/port entry
- Do 'clear sip <tcp/udp> conn t ipv4:<addr>:<port> id <connid>'
to overcome this error condition
Remote-Agent:172.18.194.183, Connections-Count:1
Remote-Port Conn-Id Conn-State WriteQ-Size
=========== ======= =========== ===========
5060 1 Established 0
```

Then execute the **clearsip-uatcpconnection** command:

```
Router# clear sip-ua tcp tls connection id 1 target ipv4:172.18.194.183:5060

Purging the entry from sip tcp process
Purging the entry from reusable global connection table
```

The result is that all connections are cleared after inputting the **clearsip-uatcpconnection**command:

```
Router# show sip-ua connections tcp tls detail
Total active connections : 0
No. of send failures : 0
No. of remote closures : 0
No. of conn. failures : 0
No. of inactive conn. ageouts : 0
Max. tcp send msg queue size of 1, recorded for 172.18.194.183:5060
---------Printing Detailed Connection Report---------
Note:
** Tuples with no matching socket entry
- Do 'clear sip <tcp/udp> conn t ipv4:<addr>:<port>'
to overcome this error condition
++ Tuples with mismatched address/port entry
- Do 'clear sip <tcp/udp> conn t ipv4:<addr>:<port> id <connid>'
to overcome this error condition
Remote-Agent:172.18.194.183, Connections-Count:0
```

Related Commands

Command	Description
clear sip-ua udp connection	Clears a SIP UDP connection.
show sip-ua connections	Displays SIP UA transport connection tabless.
timers connection aging	Sets the time before the SIP UA ages out a TCP and UDP connection.

clear sip-ua udp connection

To clear a SIP UDP connection, use the **clearsip-uaudpconnection**command in privileged EXEC mode.

clear sip-ua udp connection {**id** *value* [**target** *ip-address*]| [**id** *value*] **target** *ip-address*}

Syntax Description

id *value*	Specifies the ID of the connection that needs to be closed in the SIP UDP process. The *value* argument represents the value of the connection ID. The range is from 1 to 2048.
target *ip -address*	Specifies the target address for the connection that needs to be closed in the SIP transport layer. The *ip-address* argument is the target address in the form of **ipv4:***address***:***port*.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.3(8)T	This command was introduced.
12.4(6)T	This command was replaced by the **clearsip-ua**command.

Usage Guidelines

Inappropriate usage of the **clearsip-uaudpconnection** command without understanding the issue or the implications can lead to erroneous call behavior, inappropriate usage of connections, and failure of calls.

Examples

To purge the connection entry only at the upper transport layer, assign the target IP address and port.

```
Router# clear sip-ua udp connection target ipv4:172.18.194.183:5060
```

To purge the connection entry only at the lower TCP/UDP layer, assign the connection ID.

```
Router# clear sip-ua udp connection id 1
```

Note Inappropriate usage of the **clear** command without understanding the issue or the implications would lead to erroneous call behavior, inappropriate usage of connections, and failure of calls.

To completely purge a valid connection to target 172.18.194.183, port 5060, consider the following example.

Before executing the **clearsip-uaudpconnection** command, running the **showsip-uaconnections** command gave the following output.

```
Router# show sip-ua connections udp detail

Total active connections : 1
No. of send failures : 0
No. of remote closures : 0
No. of conn. failures : 0
No. of inactive conn. ageouts : 0
Max. udp send msg queue size of 1, recorded for 172.18.194.183:5060
---------Printing Detailed Connection Report---------
Note:
** Tuples with no matching socket entry
- Do 'clear sip <tcp/udp> conn t ipv4:<addr>:<port>'
to overcome this error condition
++ Tuples with mismatched address/port entry
- Do 'clear sip <tcp/udp> conn t ipv4:<addr>:<port> id <connid>'
to overcome this error condition
Remote-Agent:172.18.194.183, Connections-Count:1
Remote-Port Conn-Id Conn-State WriteQ-Size
=========== ======= =========== ===========
5060 1 Established 0
```

Then execute the **clearsip-uaudpconnection** command:

```
Router# clear sip-ua udp connection id 1 target ipv4:172.18.194.183:5060

Purging the entry from sip udp process
Purging the entry from reusable global connection table
```

The final result is that all connections are cleared after executing the **clearsip-uaudpconnection**command:

```
Router# show sip-ua connections udp detail
Total active connections : 0
No. of send failures : 0
No. of remote closures : 0
No. of conn. failures : 0
No. of inactive conn. ageouts : 0
Max. udp send msg queue size of 1, recorded for 172.18.194.183:5060
---------Printing Detailed Connection Report---------
Note:
** Tuples with no matching socket entry
- Do 'clear sip <tcp/udp> conn t ipv4:<addr>:<port>'
to overcome this error condition
++ Tuples with mismatched address/port entry
- Do 'clear sip <tcp/udp> conn t ipv4:<addr>:<port> id <connid>'
to overcome this error condition
Remote-Agent:172.18.194.183, Connections-Count:0
```

Related Commands

Command	Description
clear sip-ua tcp connection	Clears a SIP TCP connection.
show sip-ua connections	Displays SIP UA transport connections.
timers connection aging	Sets the time before the SIP UA ages out a TCP and UDP connection.

clear ss7 sm-stats

To clear the counters that track session manager statistics, use the **clearss7sm-stats** command in privileged EXEC mode.

clear ss7 sm-stats [**session-set** *number*]

Syntax Description

session-set	(Optional) Specifies the session set.
number	(Optional) Specifies the session-set number. The range is from 0 to 3.

Command Default

The statistical information accumulates.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.0(7)XR	This command was introduced.
12.1(1)T	This command was integrated into Cisco IOS Release 12.1(1)T.
15.0(1)M	This command was modified in a release earlier than Cisco IOS Release 15.0(1)M. The **session-set** keyword and *number* argument were added.

Examples

The following example shows how to clear session manager statistics:

```
Router# clear ss7 sm-stats session-set 2
```

Related Commands

Command	Description
show ss7 sm stats	Displays session manager information about number of packets queued, received, and so forth.

clear statistics dial-peer voice

To reset voice call counters and recent call details stored in a dial peer, use the **clearstatisticsdial-peervoice** command in privileged EXEC mode.

clear statistics dial-peer voice{*tag*| **busy-trigger-counter**}

Syntax Description

tag	(Optional) Identification tag number of a specific dial peer. A valid entry is any integer that identifies a specific dial peer. Range is from 1 to 2147483647.
busy-trigger-counter	(Optional) Specifies to clear the dial peer busy trigger call counter.

Command Default

If the *tag* argument is not used, counters in all the configured voice dial peers are cleared.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.2(8)T	This command was introduced on the Cisco AS5300.
15.0(1)M	This command was modified in a release earlier than Cisco IOS Release 15.0(1)M. The **busy-trigger-counter** keyword was added.
Cisco IOS XE Release 2.1	This command was integrated into Cisco IOS XE Release 2.1 and implemented on the Cisco ASR 1000 Series Aggregation Services Routers.

Usage Guidelines

The **clearstatisticsdial-peervoice** command resets the following statistical information about calls:

- Time elapsed since last clearing of statistics
- Connect time
- Charged units
- Accepted calls
- Refused calls
- Successful calls
- Failed calls
- Incomplete calls

- Last disconnect cause
- Last disconnect text
- Last setup time

Examples

The following example shows how to clear voice dial peer statistics using tag 1234:

```
Router# clear statistics dial-peer voice 1234
Clear voice call statistics stored in this voice dial-peer [confirm]y
```

The following example shows how to clear statistics in all the configured voice dial peers:

```
Router# clear statistics dial-peer voice
Clear voice call statistics stored in all voice dial-peers [confirm]y
```

Related Commands

Command	Description
dial-peer voice	Enters dial peer configuration mode and specifies the method of voice encapsulation.
show call history voice record	Displays CDR events in the call history table.
show dial-peer voice	Displays configuration information for dial peers.

clear stcapp statistics

To clear SCCP Telephony Control Application (STCAPP) statistics, use the **clearstcappstatistics**command in privileged EXEC mode.

clear stcapp statistics {**all**| **port** *slot-number*}

Syntax Description

all	Clears all STCAPP statistics.
port	Clears port-level STCAPP statistics.
slot-number	Voice interface slot number. The range is from 0 to 2147483647.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
15.0(1)M	This command was introduced in a release earlier than Cisco IOS Release 15.0(1)M.

Examples

The following example show how to clear all STCAPP statistics:

```
Router# clear stcapp statistics all
```

Related Commands

Command	Description
stcapp	Enables the STCAPP.

clear subscription

To clear all active subscriptions or a specific subscription, use the **clearsubscription** command in privileged EXEC mode.

clear subscription {**all**| **session-id** *session-id*| **statistics**}

Syntax Description

all	All active subscriptions.
session-id *session-id*	Subscription session to be cleared.
statistics	Global subscription statistics and all subscription history records.

Command Default

No default behavior or values

Command Modes

Privileged EXEC (#)

Command History

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

Usage Guidelines

To cancel a specific subscription, use the *session-id* argument. The session ID can be found in the display frm from the**showsubscriptions** command. When this command is used, the applications associated with subscriptions receive the ev_subscribe_cleanup event. On receiving this event, the script closes the subscription.

Examples

The following example shows global statistics and history records being cleared:

```
Router# clear subscription statistics
```

Related Commands

Command	Description
retry subscribe	Configures the number of retries for SUBSCRIBE messages.
show subscription sip	Displays active SIP subscriptions.

Command	Description
subscription maximum	Specifies the maximum number of outstanding subscriptions to be accepted or originated by the gateway.

clear tgrep counters

To clear Telephony Gateway Registration Protocol (TGREP) counters, use the **cleartgrepcounters**command in privileged EXEC mode.

clear tgrep counters {*****| **carrier** *string*| **csr**| **dial-peer** *tag*| **trunk-group** *label*} **[csr] [ac]**

Syntax Description

*****	Clears all TGREP counters.
carrier	Clears available circuit counters.
string	Carrier ID.
dial-peer	Clears dial-peer.
tag	Dial peer tag. The range is from 1 to 2147483647.
trunk-group *label*	Clears the trunk-group counters.
csr	(Optional) Clears the call success rate counters.
ac	(Optional) Clears all the available circuit counters.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
15.0(1)M	This command was introduced in a release earlier than Cisco IOS Release 15.0(1)M.

Examples

The following example show how to clear all tgrep counter information:

```
Router# clear tgrep counters *
```

Related Commands

Command	Description
clear tgrep neighbor	Clears all neighbor sessions.

clear tgrep neighbor

To clear Telephony Gateway Registration Protocol (TGREP) neighbor sessions, use the **cleartgrepneighbor** command in privileged EXEC mode.

clear tgrep neighbor {*****| *ip-address*}

Syntax Description

*	Clears all neighbor sessions.
ip-address	IP addresses of neighbor sessions.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
15.0(1)M	This command was introduced in a release earlier than Cisco IOS Release 15.0(1)M.

Examples

The following example shows how to clear neighbor sessions:

```
Router# clear tgrep neighbor *
```

Related Commands

Command	Description
clear tgrep counters	Clears TGREP counters.

clear voice accounting method

To clear VoIP AAA accounting statistics for a specific accounting method on the gateway, use the**clearvoiceaccountingmethod** command in privileged EXEC mode.

clear voice accounting method *method-list-name*

Syntax Description

method-list-name	Name of the method list.

Command Modes

Privileged EXEC

Command History

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

Examples

The following example clears accounting statistics for method list "h323":

```
Router# clear voice accounting method h323
```

Related Commands

Command	Description
voice statistics type csr	Configures the collection of signaling and VoIP AAA accounting statistics.

clear voice dsp

To "cold-start" one or more digital signal processor (DSP) voice channels, use the **clearvoicedsp**command in privileged EXEC mode.

clear voice dsp{**channels**| **error**}[[*slot*]][*/dsp*]{*/channel*}

channels	Clears DSP calls on a specific channel or a range of channels.
error	Clears DSP error statistics.
slot	(Optional) Specifies either a single slot or the first slot in a range. To specify a range of slots, you can enter a **-***second slot in the syntax of this argument***.** The second slot specifies the end of the range. All slots in the range are affected by the command.
/ *dsp*	(Optional) Specifies either a single DSP on the slot or the first DSP in a range. To specify a range of DSPs, you can enter a **-***second DSP in the syntax of this argument***.** The second DSP specifies the end of the range. All DSPs in the range are affected by the command.
/ *channel*	(Optional) Specifies either a single channel on the DSP or the first channel in a range. To specify a range of channels, you can enter a **-***second channel in the syntax of this argument***.** The second channel specifies the end of the range. All channels in the range are affected by the command.

Command Default If this command is not used, active calls continue on the DSP voice channels.

Command Modes Privileged EXEC (#)

Command History

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

Usage Guidelines

The **clearvoicedsp** command allows you to cold-start DSPs. Execution of this command causes the configured firmware to be downloaded to the specified DSP or a range of DSPs. This command can be executed irrespective of the state of the DSPs. All the active channels of the DSPs are prematurely terminated.

Examples

The following example clears all active calls on slot 2, DSP 1:

```
Router# clear voice dsp 2/1
```

The following example clears the active calls on slot 2, DSP 1, channel 1:

```
Router# clear voice dsp 2/1/1
```

Related Commands

Command	Description
show voice dsp	Displays the current status or selective statistics of DSP voice channels

clear voice statistics

To clear voice-statistic collection settings on the gateway to reset the statistics collection, use the **clearvoicestatistics** command in privileged EXEC mode.

{**clear voice statistics** [**csr** [**accounting**| **signaling**]]| **[iec]**}

Syntax Description

csr	(Optional) All accounting and signaling statistics are cleared, but Cisco VoIP internal error codes (IECs) are not cleared.
accounting	(Optional) Only accounting statistics are cleared.
signaling	(Optional) Only signaling statistics are cleared.
iec	(Optional) Only Cisco VoIP IECs are cleared.

Command Default

If no keywords are specified, all accounting and signaling statistics, and all IECs are cleared.

Command Modes

Privileged EXEC (#)

Command History

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

Examples

The following example clears all accounting and signaling statistics, and all Cisco VoIP IECs:

```
Router# clear voice statistics
```

The following example clears all accounting and signaling statistics:

```
Router# clear voice statistics csr
```

The following example clears only accounting statistics:

```
Router# clear voice statistics csr accounting
```

The following example clears only signaling statistics:

```
Router# clear voice statistics csr signaling
```

The following example clears only Cisco VoIP IECs:

```
Router# clear voice statistics iec
```

Related Commands

Command	Description
voice statistics type csr	Configures the collection of signaling and VoIP AAA accounting statistics.

clear voip fpi rtts

To clear the Voice over IP (VoIP) forwarding plane interface (FPI) round-trip time counter, use the **clear voip fpi rtts** command in privileged EXEC mode.

clear voip fpi rtts

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
Cisco IOS XE Release 3.9S	This command was introduced.

Examples

The following example shows how to clear the VoIP FPI round-trip time counter.

```
Router# clear voip fpi rtts
```

clear voip fpi stats

To clear the Voice over IP (VoIP) forwarding plane interface (FPI) statistics counter, use the **clear voip fpi stats** command in privileged EXEC mode.

clear voip fpi stat

Syntax Description

This command has no arguments or keywords.

Command History

Release	Modification
Cisco IOS XE Release 3.9S	This command was introduced.

Examples

The following example shows how to clear the VoIP FPI statistics counter.

```
Router# clear voip fpi stats
```

clear vsp statistics

To clear all Voice Streaming Processing (VSP) statistics that are displayed when the **showvsp** command is used, use the **clearvspstatistics** command in privileged EXEC mode.

clear vsp statistics

Syntax Description

This command has no arguments or keywords.

Command Default

No default behavior or values

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.2(11)T	This command was introduced on the Cisco 3640, Cisco 3660, Cisco AS5300, Cisco AS5350, and Cisco AS5400.

Usage Guidelines

This command resets all cumulative VSP statistics to 0. Use the **showvspstatistics** command to display the current statistics.

Examples

The following example resets the statistics for VSP sessions:

```
Router# clear vsp statistics
```

Related Commands

Command	Description
show vsp	Displays cumulative information about VSP sessions.