Exec Mode Commands (A-C)

The Exec Mode is the initial entry point into the command line interface system. Exec mode commands are useful in troubleshooting and basic system monitoring.

Command Modes

This section includes the commands **aaa test** through **crypto-group**.

Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

☞

Important

The commands or keywords/variables that are available are dependent on platform type, product version, and installed license(s).

aaa test

Tests Authentication, Authorization and Accounting (AAA) functionality between this system and a remote server.

Product

ASN-GW

GGSN

HA

PDSN

SGSN

Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description **aaa test { accounting username** *user_name* **| authenticate** *user_name password* **| session** *user_name password* **}**

accounting username *user_name*

Tests RADIUS or GTPP accounting functionality for the specified user.

user_name must be the name of a user configured on the RADIUS or CFG server.

☞

Important GTPP is used only in conjunction with the GGSN or SGSN product.

authenticate *user_name password*

Tests RADIUS authentication functionality for the specified user.

user_name is the name of a user configured on the RADIUS server. *password* is the user's password.

session *user_name password*

Tests both RADIUS authentication and RADIUS or GTPP accounting functionality for the specified user.

user_name is the name of a user configured on the RADIUS server. *password* is the user's password.

☞

Important GTPP is used only in conjunction with the GGSN or SGSN product.

Usage Guidelines This command is used to test RADIUS-based authentication and RADIUS or GTPP accounting. This command may be useful for diagnosing problems with subscribers and access to the system and/or billing data.

Example

The following command verifies accounting for a user named *user1*:

aaa test accounting username user1

The following command tests authentication for a user named *user1* with the password *abc123*:

aaa test authentication user1 abc123

The following command tests both accounting and authentication for the user named *user1* with the password *abc123*:

aaa test session user1 abc123

abort

Stops software patch or upgrade process.

Product	All
Privilege	Security Administrator, Administrator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description

```
abort { patch | upgrade } [ -noconfirm ]
```

patch

Stops a running software patch process.

upgrade

Stops a running software upgrade process.

Important The **abort upgrade** command can only be used during Stage 1 (busy-out) of an on-line software upgrade.

-noconfirm

Executes the command without any additional prompt and confirmation from the user.

Usage Guidelines Use this command to stop a running StarOS patch or upgrade process. For additional information on software patches and upgrades, refer to the *System Administration Guide*.

Example

The following command stops an in-progress StarOS upgrade:

```
abort upgrade
```

active-charging service

Creates an active charging service (ACS).

Product	ACS
Privilege	Security Administrator, Administrator, Operator

Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description	**active-charging service** *ecs_service_name* **[-noconfirm]**

ecs_service_name

Specifies name of the active charging service.

ecs_service_name must be an alphanumeric string of 1 through 15 characters.

If the named service does not exist, it is created and the CLI mode changes to the ACS Configuration Mode wherein the service can be configured.

If the named service already exists, the CLI mode changes to the ACS Configuration mode wherein the specified active charging service can be configured.

-noconfirm

Executes the command without any additional prompt and confirmation from the user.

Usage Guidelines	Use this command to create an active charging service in the system. This command can be used directly in Exec Mode after issuing the **require active-charging** command in the Global Configuration Mode.

This command allows an operator (rather than security administrators and administrators) to configure the ACS functionality only.

On entering this command, the CLI prompt changes to:

[*context_name*]*hostname*(config-acs)#

Important	Operators need special CLI privilege for ACS functionality to be able to use this CLI command.

Example

The following command creates an active charging service named *test*:

active-charging service test

alarm

Disables the internal audible alarm on the MIO card.

Product	All
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
alarm cutoff
```

Usage Guidelines

Alarm cutoff disables the audible alarm. The alarm may be enabled following this command if an event within the system results in the audible alarm being enabled.

Example

```
alarm cutoff
```

aps

Allows the operator to perform SONET Automatic Protection Switching (APS) administrative operations.

☞

Important Use of this command is limited to the OLC2 and the CLC2 line cards.

Product SGSN

Privilege Security Administrator, Administrator, Operator

Command Modes Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
aps { clear slot#/port# | exercise slot#/port# | lockout slot#/port# | switch {
 force | manual } slot#/port# }
```

clear *slot#/port#*

Clears the last switch command on the specified channelized port.

slot#/port# is the CLC2/OLC2 slot number (valid range is 17 - 48) and appropriate port number (CLC2 valid range is 1 - 4; OLC2 valid value is 1).

exercise *slot#/port#*

Tests the APS protocol on line connected to port.

slot#/port# is the CLC2/OLC2 slot number (valid range is 17 - 48) and appropriate port number (CLC2 valid range is 1 - 4; OLC2 valid value is 1)

lockout *slot#/port#*

Prevents the working port from switching to the protection port.

slot#/port# is the CLC2/OLC2 slot number (valid range is 17 - 48) and appropriate port number (CLC2 valid range is 1 - 4; OLC2 valid value is 1)

switch { force | manual } *slot#/port#*

Switch to either the working port or the protection port:

   • **force**: Forces a switch of ports, even if there is an active alarm state.

   • **manual**: Implements a switch of ports if there are no active alarms.

slot#/port# is the CLC2/OLC2 slot number (valid range is 17 - 48) and appropriate port number (CLC2 valid range is 1 - 4; OLC2 valid value is 1)

Usage Guidelines	This command allows an operator to perform administrative/maintenance APS tasks such as testing the APS protocol, switching the working port to the protection port, and locking out the switching function.

Example

The following command starts an APS protocol test on port 2 of card 27:

```
aps exercise 27/2
```

autoconfirm

Enables or disables confirmation for certain commands. This command affects the current CLI session only.

☞

Important	Use the **autoconfirm** command in the Global Configuration Mode to change the behavior for all future CLI sessions.

Product	All
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]`*host_name*`#`
Syntax Description	`[ no ] autoconfirm`
	no
	Disables autoconfirm if it has been enabled.
Usage Guidelines	When **autoconfirm** is enabled, certain commands ask you to answer yes or no to confirm that you want to execute the command. When **autoconfirm** is disabled, the confirmation prompts never appear. Disabling **autoconfirm** in the Exec mode is active for the current CLI session only.

By default **autoconfirm** is enabled.

☞

Important   If commandguard is enabled, autoconfirm will disable commandguard.

Example

The following command enables command confirmation:

autoconfirm

bulkstats force

Manages the collection and delivery of system statistics (bulkstats) to the configured server.

Product	All
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec The following prompt is displayed in the Exec mode: `[local]host_name#`
Syntax Description	`bulkstats force { gather	transfer }` **gather** Immediately collects the system statistics. **transfer** Immediately sends the currently collected statistics to the configured server.
Usage Guidelines	When the current system statistics are desired immediately as opposed to the normal scheduled collection and delivery intervals issue this command. Troubleshooting the system may require the review of statistics at times when the scheduled delivery is not timely.

Example

The following causes the chassis to immediately collect system statistics. This would be in anticipation of a transfer command.

bulkstats force gather

The following command causes the chassis to immediately send all collected statistics to the configured server.

bulkstats force transfer

call-home send

Manages how Cisco Smart Call Home messages are sent to alert groups.

Product	All
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

call-home send alert-group { configuration profile *profile name* **| inventory profile** *profile name* **}**

configuration profile *profile name*

Sends configuration messages to the previously defined profile, expressed as an alphanumeric string of 1 through 31 characters.

inventory profile *profile name*

Sends inventory messages to the previously defined profile, expressed as an alphanumeric string of 1 through 31 characters.

Usage Guidelines

Use this command to send specified alert-group call-home message from the CLI to all profiles subscribed to the specified alert group, or to a specified profile which does not need to be subscribed to the specified alert-group. For additional information, refer to the *Call-Home Configuration Mode Commands* and *Call-Home Profile Configuration Mode Commands* chapters.

Example

The following command sets the system to send configuration related call-home messages to the profile named *Profile1*.

```
call-home send alert-group configuration profile Profile1
```

call-home test

Sends a test Smart Call Home event message to a specified profile.

Product	All
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description **call-home test message {** *test_message_content* **| profile** *profile name* **}**

call-home test message message *test_message_content*

Defines the message to send to the defined profile as an alphanumeric string of 1 through 128 characters.

profile *profile_name*

Specifies the previously defined profile to which the message will be sent, expressed as an alphanumeric string of 1 through 31 characters.

Usage Guidelines Use this command to send test call-home messages from the CLI to a specified profile. If a message is not specified, the system sends out a default message.

Example

The following command sets the system to send a test call-home message *Test_Message_1* to the profile named *Profile1*.

```
call-home test message Test_Message_1 profile Profile1
```

card busy-out

Moves processes from the source packet processing card to the destination packet processing card, or disables the packet processing card from accepting any new calls. When busy-out is enabled, the packet processing card stops receiving new calls but continues to process calls until they are completed. The command prompt is returned once the command is initiated. The busy-out procedure is completed in background. (ASR 5x00 only)

Product All

Privilege Security Administrator, Administrator, Operator

Command Modes Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description **card busy-out { migrate from** *src_slot* **to** *dst_slot* **} [-noconfirm]**
no card busy-out

no

Disables busy-out. The packet processing card is re-enabled to accept new calls.

migrate from *src_slot* to *dst_slot*

Moves processes from the specified source packet processing card to the specified destination packet processing card. The command prompt is returned once the command is initiated. The card migration is completed in background.

src_slot indicates the source slot number of the card from which processes will be migrated. *dst_slot* indicates the destination slot number of the card to which processes will be migrated.

-noconfirm

Executes the command without any additional prompt and confirmation from the user.

Usage Guidelines

Migrating a packet processing card changes the active/standby status of a packet processing card. This results in the active sessions/processes being moved to the newly active card. This is useful when there is a maintenance activity on the active card which requires removing the card from service.

The destination slot specified must contain a packet processing card which is in the standby state for the command to complete successfully.

⚠

Caution Be cautious when executing this command. Depending on the number of active sessions being migrated, some subscribers may experience service interruptions.

Using busy-out to refuse new calls on a packet processing card allows you to take a card out of service without any interruptions to the end user. An individual system can be taken completely out of service gracefully by enabling busy-out on all packet processing cards and waiting for current calls to complete. The **show card info** command shows if busy-out is enabled.

☞

Important When a packet processing card fails, is migrated, or is restarted for any reason, busy-out is reset to disabled, the default behavior.

☞

Important This command is not supported on all platforms.

Example

The following command migrates the active processes from the packet processing card in slot *12* to the card in slot *14*. This command executes after you provide confirmation of the request.

```
card migrate from 12 to 14
```

The following command migrates the active processes from the packet processing card in slot *1* to the card in slot *8*. This command executes after you provide confirmation of the request.

```
card migrate from 1 to 8
```

The following command sets the packet processing card in slot 1 to stop accepting new calls:

```
card busy-out 1
```

card halt

Halts all StarOS processes on a card. A **card reboot** command must be issued to bring the card back into service after it is halted. (ASR 5x00 only)

Product	All
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
card halt slot_num [ -force ] [ -noconfirm ]
```

slot_num

Indicates the slot number of the card of interest.

-force

Overrides any warnings to force the card to be halted.

-noconfirm

Executes the command without any additional prompt and confirmation from the user.

Usage Guidelines

Halt a card to stop it for maintenance or emergency situations.

⚠️

Caution Caution should be taken in using this command. Halting a card which has no redundant card available may cause a service interruption and loss of active sessions.

☞

Important On the ASR 5500, do not initiate a **card halt** for an active FSC if there are less than two active FSCs in the system. The system returns an error message if there are less than four active FSCs.

⚠️

Caution The **-force** and **-noconfirm** options should only be used concurrently by experienced users as this will cause an immediate halt regardless of warnings and no confirmation from the user.

☞

Important This command is not supported on all platforms.

Example

The following command temporarily stops the card in slot 1.

card halt 1

The following commands force the card to halt and indicate no confirmation is to take place, respectively.

card halt 1 -force -noconfirm
card halt 1 -noconfirm

card migrate

Migrates StarOS processes from an active packet processing card to a standby packet processing card. (ASR 5x00 only)

Product	All
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description

card migrate from *src_slot* **to** *dst_slot* **[-noconfirm]**

src_slot

Indicates the slot number of the packet processing card from which processes will be migrated.

☞

Important The packet processing card in this slot must be in Active mode.

dst_slot

Indicates the slot number of the packet processing card to which processes will be migrated.

-noconfirm

Executes the command without any additional prompt and confirmation from the user.

Usage Guidelines This command allows an operator to move processes from an active to a standby packet processing card.

Example

The following will cause processes currently running on the card in slot 8 to migrate to the standby card in slot 9. The migration will not occur if any warnings are generated.

```
card migrate from 8 to 9
```

card reboot

Performs reset of the target card. For ASR 5500, rebooting a card will result in the card downloading the image from the active MIO card.

Product	All
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
card reboot target_slot [ -force ] [ -noconfirm ]
```

_target_slot_

Initiates a reboot of the card in the specified the slot number.

-force

Indicates that the reboot is to take place ignoring any state or usage warnings that might be generated.

-noconfirm

Executes the command without any additional prompt and confirmation from the user.

Usage Guidelines

A reboot is used to reset the card and receive a new download. This may be useful when a card is not responding or when it is necessary to cause the card to reload its image and restart.

⚠️

Caution   Caution should be taken in using this command. Rebooting a card which has no redundant card available may cause a service interruption and loss of active sessions.

👉

Important   On the ASR 5500, do not initiate a **card reboot** for an active FSC if there are less than <u>four</u> active FSCs in the system. The system returns an error message if there are less than four active FSCs.

⚠️

Caution   The **-force** and **-noconfirm** options should only be used concurrently by experienced users as this will cause an immediate reboot regardless of warnings and no confirmation from the user.

Important   This command is not supported on all platforms.

Example

The following will cause the card in slot 8 to reboot without any confirmation from the user. The card will not reboot if there are any warnings generated.

card reboot 8 -noconfirm

The following command will cause the card in slot 8 to reboot regardless of any warnings. The user must provide confirmation prior to this command executing.

card reboot 8 -force

The following command will cause the card in slot 8 to reboot regardless of any warnings with no additional user confirmation.

card reboot 8 -force -noconfirm

card restart

Performs a soft-reset of the target card causing all application processes to restart. (ASR 5x00 only)

Product	All
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description   **card restart** *target_slot* **[-force] [-noconfirm]**

target_slot

Initiates a restart of the card in the specified slot number.

-force

Indicates the restart is to take place ignoring any state or usage warnings that might be generated.

-noconfirm

Executes the command without any additional prompt and confirmation from the user.

Usage Guidelines   Restarting a card may be useful when a card is not performing as expected (performance drop, increased response delays, etc.). A restart may be preferred to a reboot as the card becomes available in less time than a reboot.

When this command is issued for an active card, the user is prompted for confirmation unless the **-force** and/or **-noconfirm** keywords are used. Because the reboot of standby or redundant cards is non-service impacting, the reboot proceeds immediately after the command execution without user confirmation.

⚠️

Caution   Caution should be taken in using this command. Restarting a card which has no redundant card available may cause a service interruption and loss of active sessions.

☞

Important   This command is not supported on all platforms.

⚠️

Caution   The **-force** and -**noconfirm** options should only be used concurrently by experienced users as this will cause an immediate restart regardless of warnings and no confirmation from the user.

Example

The following will cause the card in slot 8 to restart without any confirmation from the user. The card will not reboot if there are any warnings generated.

```
card restart 8 -noconfirm
```

The following command will cause the card in slot 8 to restart regardless of any warnings. The user must provide confirmation prior to this command executing.

```
card restart 8 -force
```

The following command will cause the card in slot 8 to restart regardless of any warnings with no additional user confirmation.

```
card restart 8 -force -noconfirm
```

card switch

Manages card pairs and their active/standby status (ASR 5x00 and VPC-DI only).

Product	All
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`
Syntax Description	`card switch { from target_slot	to target_slot } [-noconfirm]`

from *target_slot*

Specifies the slot number of a currently active card that is to be switched. The slot number must be valid and contain a card in active mode.

to *target_slot*

Specifies the slot number of a standby card which is to become the active card. The slot number must be valid and contain a card in standby.

-noconfirm

Executes the command without any additional prompt and confirmation from the user.

Usage Guidelines

Card switch-overs change the active/standby status of a card. This is useful when there is a maintenance activity on the active card which requires removing the card from service.

On VPC-DI, a warning is presented during the switchover between Control Functions (CFs) if the HD RAID is degraded.

```
Warning: RAID is degraded. Switchover might lead to data loss.
```

⚠

Caution   Caution should be taken in using this command. Depending on the amount of bandwidth/traffic being switched, some subscribers may experience service interruptions.

Example

The following command switches the active/standby status of the line cards in slots 17 and 18. This command only executes after you provide confirmation of the request.

card switch from 17 to 18

The following command switches the active/standby status of the cards in slots 1 and 2. This command executes immediately with no additional user confirmation.

card switch from 1 to 2 -noconfirm

card upgrade

Upgrades the programmable memory on a card. (ASR 5x00 only)

Product   All

Privilege   Security Administrator, Administrator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description   **card upgrade** *slot_number* **[-noconfirm]**

slot_number

The slot number of the card to be upgraded from 1 through 10.

-noconfirm

Executes the command without any additional prompt and confirmation from the user.

⚠️

Caution Use this command only if instructed by or working with Technical Assistance Center personnel.

☞

Important On the ASR 5500, do not initiate a **card upgrade** for an active FSC if there are less than <u>four</u> active FSCs in the system. The system returns an error message if there are less than four active FSCs.

Usage Guidelines You can only initiate an upgrade if:

- there is no migration occurring,

- the card is active or standby,

- there is no online upgrade in progress.

☞

Important The following operations are <u>not</u> allowed while a card is upgrading: change edc requirement (config), change card [no] shutdown (config), change card active (config), change card redundancy (config), card halt (exec), card reboot (exec), start an online upgrade.

☞

Important Level unlock operations are ignored while a card is upgrading.

☞

Important This command is not supported on all platforms.

Example

The following command initiates a packet processing card upgrade on slot number 10:

card upgrade 10

cdr-push

Initiates a manual push of CDR files to a configured URL.

Product All

Privilege	Security Administrator, Administrator, Operator, Inspector
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	[local]*host_name*#
Syntax Description	**cdr-push { all	local-filename** *file_name* **}**
	all
	Pushes all CDR files to the configured URL.
	local-filename _file_name_
	Pushes only the specified file to the configured URL.
	The *file_name* must be the absolute path of the local file to push, and must be an alphanumeric string of 1 through 1023 characters.
Usage Guidelines	Use this command to manually push CDR files to the configured URL or external storage.
	For information on configuring the external storage, see the **cdr** command in the *EDR Module Configuration Mode Commands* and the *UDR Module Configuration Mode Commands* chapters.
	ASR 5000: Run this command only from the local context. If you are in any other context, you will see this failure message: "Failure: Manual PUSH of CDRs supported only in the local context"
	ASR 5500: Run this command only from the local context. If you are in any other context, you will see this failure message: "Failure: Manual PUSH of CDRs supported only in the local context"
	Example
	The following command pushes all CDR files to the URL:
	cdr-push all

chassis

Specifies the chassis key that will be used to encrypt and decrypt encrypted passwords in the configuration file. If two or more chassis are configured with the same chassis key value, the encrypted passwords can be decrypted by any of the chassis sharing the same chassis key value. As a corollary to this, a chassis key value will not be able to decrypt the passwords that were encrypted using a different chassis key value.

Product	All
Privilege	Security Administrator, Administrator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	[local]*host_name*#

| Syntax Description | `[ no ] chassis { key value `*`key_string`*` | keycheck `*`key_string`*` }` |

no

Resets the chassis key to the factory default value. The factory default value is a local MAC address for the chassis. Once this command is executed, the **chassis key value** command can be used to change the default chassis key.

key value *key_string*

Specifies the chassis key value as an alphanumeric string of 1 through 16 characters.

The chassis key value is stored as a one-way encrypted value, much like a password. It is never displayed in its plain-text form.

keycheck *key_string*

Generates a one-way encrypted key value based on the entered alphanumeric string of 1 through 16 characters.

The generated encrypted key value is compared against the encrypted key value of the previously entered chassis key value. If the encrypted values match, the command succeeds and key check passes. If the comparison fails, a message is displayed indicating that the key check has failed. Note that if the default chassis key MAC address) is currently being used, this key check will always fail since there will be no chassis key value to compare against.

👉

| Important | Fro detailed information regarding the impact of using these commands in various StarOS releases, refer to the *System Settings* chapter of the *System Administration Guide*. |

| Usage Guidelines | Establish multiple, unique chassis keys to encrypt and decrypt passwords in configuration files. |

Example

The following command generates a one-way encrypted key based on the string *tewks367*.

```
chassis key value tewks367
```

clear aaa

Clears all Authentication, Authorization, and Accounting (AAA) statistics for the current context.

Product	ASN-GW
	GGSN
	PDSN
	P-GW
	SAEGW

| Privilege | Security Administrator, Administrator, Operator |

Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`
Syntax Description	**clear aaa local counters**
Usage Guidelines	Clearing the AAA statistics may be useful when monitoring the statistics manually. Clearing resets the counters to zero.
	The keyword **local** is not intended to imply the local context defined for all systems. Rather, it indicates the statistics within the current context are to be cleared.

Example

The following command zeroes out all the AAA statistics in the current context.

clear aaa local counters

clear active-charging analyzer statistics

Clears protocol analyzer statistics.

Product	ACS
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`
Syntax Description	**clear active-charging analyzer statistics [name** *protocol_name* **] [	{ grep** *grep_options* **| more }]**

name *protocol_name*

Clears statistics for the specified protocol analyzer.

If this keyword is not specified all statistics are cleared.

protocol_name must be one of the following:

- **cdp**

- **dns**

- **file-transfer**

- **ftp**

- **http**

- **icmp**

- **icmpv6**

- **imap**

- **ip**

- **ipv6**

- **mipv6**

- **mms**

- **p2p [application** *p2p_list* **| protocol-group** *group_list* **]**: Peer-to-peer analyzer.

    p2p application *p2p_list*: The supported applications are:

    - **8tracks**

    - **abcnetworks**

    - **actionvoip**

    - **actsync**

    - **adobeconnect**

    - **aimini**

    - **amazoncloud**

    - **amazonmusic**

    - **amazonvideo**

    - **antsp2p**

    - **apple-push**

    - **apple-store**

    - **applejuice**

    - **applemaps**

    - **ares**

    - **armagettron**

    - **avi**

    - **badoo**

    - **baidumovie**

    - **battlefld**

    - **bbm**

    - **beatport**

    - **betternet**

    - **bitcasa**

- **bittorrent**
- **bittorrent-sync**
- **blackberry-store**
- **blackberry**
- **blackdialer**
- **box**
- **callofduty**
- **chikka**
- **cisco-jabber**
- **citrix**
- **clubbox**
- **clubpenguin**
- **comodounite**
- **crackle**
- **crossfire**
- **crunchyroll**
- **cyberghost**
- **ddlink**
- **deezer**
- **didi**
- **directconnect**
- **dish-anywhere**
- **disneymovies**
- **dofus**
- **dramafever**
- **dropbox**
- **ebuddy**
- **edonkey**
- **espn**
- **expressvpn**
- **facebook**
- **facetime**

- **fandor**

- **fasttrack**

- **feidian**

- **ficall**

- **fiesta**

- **filetopia**

- **filmontv**

- **flash**

- **flickr**

- **florensia**

- **foursquare**

- **fox-sports**

- **freenet**

- **friendster**

- **fring**

- **funshion**

- **gadugadu**

- **gamekit**

- **gmail**

- **gnutella**

- **go90**

- **goober**

- **google-music**

- **google-push**

- **google**

- **googleplay**

- **googleplus**

- **gotomeeting**

- **gtalk**

- **guildwars**

- **halflife2**

- **hamachivpn**

- **hayu**

- **hbogo**

- **hbonow**

- **heytell**

- **hgtv**

- **hike-messenger**

- **hls**

- **hotspotvpn**

- **hulu**

- **hyves**

- **iax**

- **icall**

- **icecast**

- **icloud**

- **idrive**

- **igo**

- **iheartradio**

- **imesh**

- **imessage**

- **imgur**

- **imo**

- **implus**

- **instagram**

- **iplayer**

- **iptv**

- **irc**

- **isakmp**

- **iskoot**

- **itunes**

- **jabber**

- **jap**

- **jumblo**

- **kakaotalk**

- **kik-messenger**

- **kontiki**

- **kugoo**

- **kuro**

- **linkedin**

- **livestream**

- **lync**

- **magicjack**

- **manolito**

- **mapfactor**

- **mapi**

- **maplestory**

- **meebo**

- **mgcp**

- **mig33**

- **mlb**

- **mojo**

- **monkey3**

- **mozy**

- **msn**

- **msrp**

- **mute**

- **mypeople**

- **myspace**

- **nateontalk**

- **naverline**

- **navigon**

- **nbc-sports**

- **netflix**

- **netmotion**

- **newsy**

- **nick**

- **nimbuzz**

- **nokia-store**

- **octoshape**

- **off**

- **ogg**

- **oist**

- **oovoo**

- **opendrive**

- **openft**

- **openvpn**

- **operamini**

- **orb**

- **oscar**

- **outlook**

- **paltalk**

- **pando**

- **pandora**

- **path**

- **pbs**

- **pcanywhere**

- **periscope**

- **pinterest**

- **plingm**

- **poco**

- **popo**

- **pplive**

- **ppstream**

- **ps3**

- **qq**

- **qqgame**

- **qqlive**

- **quake**

- **quic**

- **quicktime**

- **radio-paradise**

- **rdp**

- **rdt**

- **regram**

- **rfactor**

- **rhapsody**

- **rmstream**

- **rodi**

- **rynga**

- **samsung-store**

- **scydo**

- **secondlife**

- **shoutcast**

- **showtime**

- **silverlight**

- **siri**

- **skinny**

- **skydrive**

- **skype**

- **slacker-radio**

- **slingbox**

- **slingtv**

- **smartvoip**

- **snapchat**

- **softether**

- **sopcast**

- **soribada**

- **soulseek**

- **soundcloud**

- **spark**

- **spdy**

- **speedtest**

- **spike**

- **splashfighter**

- **spotify**

- **ssdp**

- **ssl**

- **starz**

- **stealthnet**

- **steam**

- **stun**

- **sudaphone**

- **svtplay**

- **tagged**

- **talkatone**

- **tango**

- **teamspeak**

- **teamviewer**

- **telegram**

- **thunder**

- **tinder**

- **tmo-tv**

- **tor**

- **truecaller**

- **truphone**

- **tumblr**

- **tunnelvoice**

- **turbovpn**

- **tvants**

- **tvland**

- **tvuplayer**

- **twitter**

- **twitch**

- **ultrabac**

- **ultrasurf**

- **univision**

- **upc-phone**

- **usenet**

- **ustream**

- **uusee**

- **vchat**

- **veohtv**

- **vessel**

- **vevo**

- **viber**

- **vine**

- **voipdiscount**

- **vopium**

- **voxer**

- **vpnmaster**

- **vpnx**

- **vtok**

- **vtun**

- **vudu**

- **warcft3**

- **waze**

- **webex**

- **wechat**

- **weibo**

- **whatsapp**

- **wii**

- **windows-azure**

- **windows-store**

- **winmx**

- **winny**

- **wmstream**

- **wofkungfu**

- **wofwarcraft**

- **wuala**

- **xbox**

- **xdcc**

- **xing**

- **yahoo**

- **yahoomail**

- **yiptv**

- **youku**

- **yourfreetunnel**

- **youtube**

- **zattoo**

p2p protocol-group *group_list*: The supported P2P protocol groups are:

- generic
- anonymous-access
- business
- communicator
- cloud
- e-store
- e-mail
- e-news
- internet-privacy
- filesharing
- gaming
- p2p-filesharing
- p2p-anon-filesharing
- remote-control
- social-nw-gaming
- social-nw-generic
- social-nw-videoconf
- standard
- streaming

- **pop3**

- **pptp**

- **rtcp**

- **rtp**

- **rtsp**

- **sdp**

- **secure-http**

- **sip**

- **smtp**

- **tcp**

- **tftp**

- **udp**

- **wsp**

- **wtp**

grep *grep_options* **| more**

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines   Use this command to clear ACS analyzer statistics.

Example

The following command clears active charging service analyzer information for TCP analyzer:

```
clear active-charging analyzer statistics name tcp
```

clear active-charging charging-action statistics

Clears ACS charging action statistics.

Product   ACS

Privilege   Security Administrator, Administrator, Operator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description	`clear active-charging charging-action statistics [ name` *charging_acion_name* `] [	{ grep` *grep_options* `| more }]`

name *charging_acion_name*

Clears statistics for the specified charging action.

charging_acion_name must be the name of a charging action, and must be an alphanumeric string of 1 through 63 characters.

grep *grep_options* | more

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines	Use this command to clear active charging action statistics.

Example

The following command clears active charging action statistics information for charging action named **pre-paid**:

`clear active-charging charging-action statistics name pre-paid`

clear active-charging content-filtering server-group statistics

Clears statistics for all/a specific CF server group.

Product	CF

Privilege	Security Administrator, Administrator, Operator

Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]`*host_name*`#`

Syntax Description	`clear active-charging content-filtering server-group statistics [ name` *cf_server_group_name* `] [	{ grep` *grep_options* `| more }]`

name *cf_server_group_name*

Clears statistics for the specified CF server group.

cf_server_group_name must be the name of a CF server group, and must be an alphanumeric string of 1 through 15 characters.

grep *grep_options* **| more**

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines   Use this command to clear content filtering statistics for CF server groups.

Example

The following command clears category-based content filtering statistics information for Rulebase named *cf_rule1*:

```
clear active-charging content-filtering category statistics rulebase name
 cf_rule1
```

clear active-charging credit-control statistics

Clears credit control statistics.

Product   ACS

Privilege   Security Administrator, Administrator, Operator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description   **clear active-charging credit-control statistics [group** *cc_group_name* **| server { all | ip-address** *ip_address* **| name** *cc_group_name* **}]**

clear active-charging credit-control statistics

Clears statistics for all credit control groups.

group *cc_group_name*

Clears statistics for the specified credit control group.

cc_group_name must be an alphanumeric string of 1 through 63 characters.

server { all | ip-address *ip_address* **| name** *cc_group_name* **}**

Clears statistics for the credit control server specified as:

- **all**: for all the Diameter peers and hosts

- **ip-address**: an IP address for the credit control group entered in IPv4 dotted-decimal or IPv6 colon-separated-hexadecimal notation

- **cc_group_name**: name of the credit control group server entered as an alphanumeric string of 1 through 127 characters.

Usage Guidelines   Use this command to clear credit control statistics.

Example

The following command clears statistics information for credit control:

```
clear active-charging credit-control statistics
```

clear active-charging dns-learnt-ip-addresses

Clears DNS learnt IP address statistics for the DNS Snooping feature.

Product   ACS

Privilege   Security Administrator, Administrator, Operator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description
```
clear active-charging dns-learnt-ip-addresses statistics sessmgr { all |
 instance sessmgr_instance } [ | { grep grep_options | more } ]
```

sessmgr { all | instance sessmgr_instance }

Clears statistics for all or the specified Session Manager (SessMgr) instance.

- **all**: Clears statistics for all SessMgr instances.

- **instance** *sessmgr_instance*: Clears statistics for the specified SessMgr instance.

   sessmgr_instance must be an integer from 1 through 65535.

grep *grep_options* | more

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines   Use this command to clear DNS learnt IP address statistics for the DNS Snooping feature.

On clearing the statistics using this command, only the entries-flushed, entries-replaced, and IP-Overflows statistics are cleared as these are cumulative statistics. Total-entries will not be cleared as it is an instantaneous statistic of the current total entries in that rule line.

Example

The following command clears all DNS learnt IP address statistics:

clear active-charging dns-learnt-ip-addresses statistics sessmgr all

clear active-charging edr-format statistics

Clears ACS statistics for all or a specific Event Data Record (EDR) format.

Product	ACS
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	[local]*host_name*#
Syntax Description	**clear active-charging edr-format statistics [name** *edr_format_name* **]**

name edr_format_name

Clears statistics for the specified EDR format.

edr_format_name must be the name of an EDR format, and must be an alphanumeric string of 1 through 63 characters.

☞

Important	If an EDR format name is not specified, statistics for all EDR formats are cleared.

Usage Guidelines Use this command to clear the accumulated statistics for the specified EDR format.

Example

The following command clears the statistics for all EDR formats:

clear active-charging edr-format statistics

clear active-charging edr-udr-file statistics

Clears Event Data Record (EDR) and Usage Data Record (UDR) file related statistics.

Product	ACS
Privilege	Security Administrator, Administrator, Operator

Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description	**clear active-charging edr-udr-file statistics**

Usage Guidelines	Use this command to clear EDR and UDR file statistics.

Example

The following command clears statistical information for EDR and UDR files:

```
clear active-charging edr-udr-file statistics
```

clear active-charging firewall statistics

Clears Stateful Firewall statistics.

Product	PSF

Privilege	Security Administrator, Administrator, Operator

Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description	**clear active-charging firewall statistics [callid** *call_id* **| domain-name** *domain_name* **| nat-realm** *nat_realm_name* **| protocol { icmp | icmpv6 | ip | ipv6 | other | tcp | udp } | username** *user_name* **] [acsmgr instance** *instance_id* **] [| { grep** *grep_options* **| more }]**

acsmgr instance *instance_id*

Specifies an ACS Manager instance ID as an integer from 1 through 65535.

callid *call_id*

Specifies a call identification number as an eight-byte hexadecimal number.

domain-name *domain_name*

Specifies the domain name.

domain_name must be an alphanumeric string of 1 through 127 characters.

nat-realm *nat_realm_name*

Specifies the NAT realm.

nat_realm_name must be an alphanumeric string of 1 through 31 characters.

protocol { icmp | ip | other | tcp | udp }

Specifies a protocol for the statistics.

- **icmp**: ICMPv4

- **icmpv6**

- **ip**: IPv4

- **ipv6**

- **other**: Protocols other than TCP, UDP, and ICMPv4/ICMPv6

- **tcp**

- **udp**

username *user_name*

Specifies the user name.

user_name must be an alphanumeric string of 1 through 127 characters.

grep *grep_options* | more

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines   Use this command to clear Stateful Firewall statistics.

Example

The following command clears all Stateful Firewall statistics:

```
clear active-charging firewall statistics
```

clear active-charging firewall track-list

Clears the list of servers being tracked for involvement in any Denial-of-Service (DOS) attacks.

Product   PSF

Privilege   Security Administrator, Administrator, Operator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description   `clear active-charging firewall track-list attacking-servers`

Usage Guidelines   Use this command to clear the list of servers being tracked for involvement in any DOS attacks.

Example

The following command clears the list of servers being tracked for involvement in any DOS attacks:

```
clear active-charging firewall track-list attacking-servers
```

clear active-charging fw-and-nat policy statistics

Clears statistics for all or a specific Firewall-and-NAT policy.

Product   PSF

NAT

Privilege   Security Administrator, Administrator, Operator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description
```
clear active-charging fw-and-nat policy statistics { all | name policy_name
} [ | { grep grep_options | more } ]
```

all

Clears information for all Firewall-and-NAT policies.

name *policy_name*

Clears information for the specified Firewall-and-NAT policy.

policy_name must be the name of a Firewall-and-NAT policy, and must be an alphanumeric string of 1 through 63 characters.

grep *grep_options* | more

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines   Use this command to clear statistics for all or a specific firewall-and-NAT policy.

Example

The following command clears statistics for the firewall-and-NAT policy named *test123*:

```
clear active-charging fw-and-nat policy statistics name test123
```

clear active-charging group-of-ruledefs statistics

Clears ACS group of ruledefs statistics.

Product

ACS

Privilege

Security Administrator, Administrator, Operator

Command Modes

Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description

```
clear active-charging group-of-ruledefs statistics [ name group_of_ruledefs
 ] [ | { grep grep_options | more } ]
```

name *group_of_ruledefs*

Clears statistics for the specified group of ruledefs.

group_of_ruledefs must be the name of a group of ruledefs, and must be an alphanumeric string of 1 through 63 characters.

grep *grep_options* | more

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines

Use this command to clear statistical information related to all or specified Active Charging Service group of ruledefs.

Example

The following command clears statistical information related to the group of ruledefs named *ruledef_group12*:

```
clear active-charging group-of-ruledefs statistics name ruledef_group12
```

clear active-charging nat statistics

Clears NAT realm statistics.

Product

NAT

Privilege

Security Administrator, Administrator, Operator

Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description	**clear active-charging nat statistics [nat-realm** *nat_realm_name* **] [| { grep** *grep_options* **| more }]**

nat statistics

This command when issued in the local context clears statistics for all NAT realms in all contexts. When issued within a specific context, this command clears statistics for all NAT realms in that context.

nat-realm *nat_realm_name*

This command when issued in the local context clears statistics for the specified NAT realm in all contexts. When issued in a specific context, this command clears statistics for the specified NAT realm in that context.

nat_realm_name: Specifies name of the NAT realm as an alphanumeric string of 1 through 31 characters.

grep *grep_options* | more

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines	Use this command to clear NAT realm statistics.

Example

The following command when issued in the local context, clears NAT realm statistics for NAT realms named *test135* in all contexts:

```
clear active-charging nat statistics nat-realm test135
```

clear active-charging regex statistics

Clears regular expression (regex) related statistics.

Product	ACS

Privilege	Security Administrator, Administrator, Operator, Inspector

Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description	**clear active-charging regex statistics ruledef { all | instance** *instance_number* **}**

all

Clears all regex-related statistics.

instance *instance_number*

Clears regex-related statistics for specified Session Manager instance.

instance_number must be an integer from 1 through 65535.

Usage Guidelines   Use this command to clear regular expression (regex) related statistics.

Example

The following command clears all regex-related statistics:

clear active-charging regex statistics ruledef all

clear active-charging rulebase statistics

Clears ACS rulebase statistics.

Product   ACS

Privilege   Security Administrator, Administrator, Operator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description   **clear active-charging rulebase statistics [name** *rulebase_name* **] [| { grep** *grep_options* **| more }]**

rulebase_name

Clears statistics for the specified ACS rulebase.

rulebase_name must be the name of a rulebase, and must be an alphanumeric string of 1 through 15 characters.

grep *grep_options* **| more**

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines   Use this command to clear ACS rulebase statistics.

Example

The following command clears statistics for the ACS rulebase named *postpaid*:

```
clear active-charging rulebase statistics name postpaid
```

clear active-charging ruledef statistics

Clears statistics for rule definitions configured in the Active Charging Service (ACS).

Product	ACS
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
clear active-charging ruledef statistics [ charging | firewall | name
ruledef_name | tpo ] [ | { grep grep_options | more } ]
```

charging

Clears statistics for all charging ruledefs.

firewall

Clears statistics for all Stateful Firewall ruledefs.

name *ruledef_name*

Clears statistics for the specified ruledef.

ruledef_name must be the name of a ruledef, and must be an alphanumeric string of 1 through 63 characters.

tpo

☞

Important   The Traffic Performance Optimization (TPO) in-line service is not supported in this release.

grep *grep_options* | more

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines   Use this command to clear ACS ruledef statistics.

Example

The following command clears all ruledef statistics:

```
clear active-charging ruledef statistics
```

clear active-charging subsystem

Clears all ACS subsystem information.

Product	ACS
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`
Syntax Description	`clear active-charging subsystem`
Usage Guidelines	Use this command to clear all ACS subsystem information.

Example

The following command clears all ACS subsystem information:

```
clear active-charging subsystem
```

clear active-charging tcp-proxy statistics

Clears ACS TCP Proxy statistics.

Product	ACS
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`
Syntax Description	`clear active-charging tcp-proxy statistics [all	ip-layer	proxy-fac	rulebase rulebase_name	socket-migration	tcp-layer]`

all

Clears all TCP Proxy statistics.

ip-layer

Clears TCP Proxy statistics for IP layer.

proxy-fac

Clears TCP Proxy Flow Admission Control statistics.

rulebase *rulebase_name*

Clears TCP Proxy statistics for the specified rulebase.

rulebase_name must be the name of a rulebase, and must be an alphanumeric string of 1 through 63 characters.

socket-migration

Clears TCP Proxy Socket Migration related statistics.

tcp-layer

Clears TCP Proxy statistics for TCP layer.

Usage Guidelines	Use this command to clear TCP Proxy statistics.

Example

The following command clears TCP Proxy statistics for the rulebase named *test14*:

```
clear active-charging tcp-proxy statistics rulebase test14
```

clear active-charging tethering-detection statistics

Clears statistics pertaining to the Tethering Detection feature.

Product	ACS
Privilege	Security Administrator, Administrator, Operator, Inspector
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`
Syntax Description	`clear active-charging tethering-detection statistics`
Usage Guidelines	Use this command to clear statistics pertaining to the Tethering Detection feature.

clear active-charging tpo policy statistics

The Traffic Performance Optimization (TPO) in-line service is not supported in this release.

clear active-charging tpo profile statistics

The Traffic Performance Optimization (TPO) in-line service is not supported in this release.

clear active-charging url-blacklisting statistics

Clears URL Blacklisting feature related statistics.

Product	CF
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
clear active-charging url-blacklisting statistics [ rulebase name
rulebase_name ] [ | { grep grep_options | more } ]
```

rulebase name *rulebase_name*

Clears URL Blacklisting information for the specified rulebase.

rulebase_name must be the name of a rulebase, and must be an alphanumeric string of 1 through 63 characters.

grep *grep_options* | more

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines

Use this command to clear URL Blacklisting feature related statistics, optionally for a specific rulebase.

Example

The following command clears URL Blacklisting feature related statistics for *rulebase12*:

```
clear active-charging url-blacklisting statistics rulebase name rulebase12
```

clear active-charging video detailed-statistics

Resets the detailed statistics for TCP video flows.

> ☞
>
> **Important**   In release 20.0, MVG is not supported. This command must not be used in release 20.0. For more information, contact your Cisco account representative.

Product	MVG
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description   `clear active-charging video detailed-statistics`

Usage Guidelines   Use this command to reset the detailed statistics for TCP video flows.

Example

The following command resets the detailed statistics for TCP video flows:

`clear active-charging video detailed-statistics`

clear administrator

Ends the session of an administrative user specified by either user name or session ID.

Product	All
Privilege	Security Administrator, Administrator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description   `clear administrator { name user_name | session id id_num }`

name **user_name**

Identifies the user name of the administrative user.

session id **id_num**

Identifies the ID number of the administrative user session as displayed in the output of the **show administrators session id** command.

Usage Guidelines   This command is used to terminate command line interface sessions for other administrative users.

Example

The following command ends the session of the administrative user identified as *user1*:

```
clear administrator name user1
```

The following command ends the session of the administrative user with the session ID of *3*:

```
clear administrator session id 3
```

clear alarm

Clears outstanding alarm conditions

Product	All
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
clear alarm { all | chassis | id num | port slot/port | slot slot }
```

all

Clear all outstanding alarms.

chassis

Clears chassis-wide and fan tray alarms.

id *num*

Clears a specific alarm by its internal alarm ID. *num* is the internal alarm identification number.

port *slot/port*

Clears alarms for the specified port. *slot/port* is the card slot and port on the card for which to clear alarms.

slot *slot*

Clears alarms for the specified slot. *slot* is the card slot for which to clear alarms.

Usage Guidelines   Use this command to clear outstanding alarm conditions.

Example

To clear all outstanding alarms, use the following command:

```
clear alarm all
```

To clear all alarms for slot *7*, enter the following command:

```
clear alarm slot 7
```

clear alcap

Clears the Access Link Control Application Part (ALCAP) session statistics of an ALCAP service associated with a Home-NodeB Gateway (HNB-GW) service instance configured and running on a system.

Product	HNB-GW
Privilege	Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
clear alcap statistics [ alcap-service alcap_svc_name [ aal2-node aal2_node_name
 [ aal2-path aal2_path_id ] ] ]
```

alcap-service *alcap_svc_name*

Specifies the name of the ALCAP service for which statistics are to be cleared.

aal2-node *aal2-node*

Specifies the name of the ATM Adaptation Layer 2 (AAL2) node for which ALCAP service statistics will be cleared.

aal2-path *aal2_path_id*

Specifies the identity number of the AAL2 path on a specific ATM Adaptation Layer 2 (AAL2) node for which ALCAP service statistics will be cleared.

Usage Guidelines

This command is used to clear the sessions statistics and counters for ALCAP service.

Example

The following command clears the service session statistics of ALCAP service named as *alcap_hnb_svc1*:

```
clear alcap statistics alcap-service alcap_hnb_svc1
```

clear asngw-service

Clears the service session statistics for an Access Service Network Gateway (ASN-GW) service specified by either service name or trusted peer address.

Product	ASN-GW
Privilege	Security Administrator, Administrator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description
```
clear asngw-service statistics [ name svc_name | peer-address ip_address ]
```

name svc_name

Identifies the name of the ASN-GW service for which statistics will be cleared. *svc_name* must be an alphanumeric string of 1 through 63 characters.

peer-address ip_address

Identifies the IP address of the ASN-GW peer for which service statistics will be cleared. *ip_address* must be entered in IPv4 dotted-decimal notation.

Usage Guidelines   This command is used to terminate command line interface sessions for ASN GW services.

Example

The following command clears the service session statistics of the ASN-GW service named *aasn_svc1*:

```
clear asngw-service statistics name asn_svc1
```

clear asnpc-service

Clears the service session statistics of an ASN paging controller service specified by either ASN PC service name or trusted paging controller peer address.

Product	ASN-GW
Privilege	Security Administrator, Administrator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description
```
clear asnpc-service statistics [ name svc_name | peer-address ip_address ]
```

name svc_name

Identifies the name of the ASN PC service for which session statistics will be cleared. *svc_name* must be an alphanumeric string of 1 through 63 characters.

peer-address *ip_address*

Identifies the IP address of the ASN PC peer for which all service statistics will be cleared. *ip_address* must be entered in IPv4 dotted-decimal notation.

Usage Guidelines This command is used to terminate command line interface sessions for ASN PC services.

Example

The following command clears the service session statistics of ASN PC service named as *asnpc_svc1*:

```
clear asnpc-service statistics name asnpc_svc1
```

clear apn statistics

Deletes all previously gathered statistics for either a specific Access Point Name (APN) or all APNs configured with the given context.

Product GGSN

P-GW

SAEGW

Privilege Security Administrator, Administrator, Operator

Command Modes Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description `clear apn statistics [ name` *apn_name* `| smgr-instance` *instance* `] [ | { grep` *grep_options* `| more } ]`

name *apn_name*

Specifies the name of a specific APN configured in the context for which to clear statistics. *apn_name* is the name of the APN expressed as an alphanumeric string of 1 through 63 characters that is case sensitive.

smgr-instance *instance*

Specifies a particular Sessmgr instance in the context for which to clear APN statistics. *instance* must be an integer from 1 to 4294967295.

grep *grep_options* | more

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines	Statistics for a single APN can be cleared using the **name** keyword. Statistics for all APNs in the context can be deleted by entering the command with no keywords.

If this command is executed from within the local context with no keywords, statistics will be cleared for every APN configured on the system regardless of context. In addition, if the **name** keyword is used when executing from within the local context, statistics for all APNs configured with the specified name will be cleared regardless of context.

Example

The following command clears statistics for an APN called *isp1*:

```
clear apn statistics name isp1
```

clear bcmcs statistics

Clears Broadcast Multicast Service (BCMCS) statistics.

Product	PDSN
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description	`clear bcmcs statistics [ pdsn-service service_name ]`

pdsn-service service_name

Specifies a specific PDSN service for which to clear BCMCS-specific statistics. This value must be an alphanumeric string of 1 through 63 characters.

Usage Guidelines	Use this command to clear accumulated BCMCS statistics. You may specify an individual PDSN or peer to selectively clear statistics.

Example

```
clear bcmcs statistics
clear bcmcs statistics pdsn-service service_name
```

clear blacklisted-gtpu-bind-address

Clears the GTP-U loopback address blacklisted by a specific radio network controller (RNC) as defined for a specific IuPS Service configuration.

Product	SGSN

Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description	**clear blacklisted-gtpu-bind-address** *ip_address* **rnc-id** *rnc_id* **mcc** *mcc_num* **mnc** *mnc_num* **iups-service** *name*

ip_address

Specifies the IP loopback address that has been blacklisted in IPv4 dotted-decimal notation. This loopback address was originally defined with the **associate-gtpu-bind-addfress** command in the Radio-Network-Controller Configuration mode of the IuPS Service.

Usage Guidelines	This command enables this loopback address to be used for future RAB-assignment requests.

Example

clear blacklisted-gtpu-bind-address *1.1.1.1* **rnc-id** *2* **mcc** *123* **mnc** *321* **iups-service** *iups1*

clear bssap+ statistics

Clears the BSSAP+ protocol (base station subsystem GPRS protocol) statistics collected for the Gs interface between the SGSN and the MSC/VLR.

Product	SGSN
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description	**clear bssap+ statistics [gs-service** *gs_svc_name* **] [vlr { isdn-number** *ISDN_Num***| name** *vlr_name* **}] [	{ grep** *grep_options* **| more }]**

gs-service *gs_svc_name*

Specifies the name of a preconfigured Gs service handling BSSAP+ information as an alphanumeric string of 1 through 63 characters that is case sensitive.

vlr { isdn-number *ISDN_Num*| name *vlr_name* }

Specifies a VLR (by ISDN number or name) handling BSSAP+ information.

isdn-number *ISDN_num* is the configured E.164-type ISDN number for the VLR. Enter a numerical string of 1 to 15 digits.

name *vlr_name* is the configured name of the VLR entered as an alphanumeric string of 1 through 63 characters.

Usage Guidelines Use this command to delete or clear collected BSSAP+ protocol statistics for the entire SGSN or for a specified Gs interface. Using the keywords of this command, the interface can be identified by defining a specific VLR connected to the SGSN or by identifying the Gs service to which the interface has been configured.

Example

The following command clears the BSSAP+ statistics collected for the Gs interface configured for the Gs service named *gssvc1*.

```
clear bssap+ statistics gs-service gssvc1
```

clear bssgp statistics

Clears collected BSSGP protocol (base station subsystem GPRS protocol) statistics for traffic between the base station subsystem (BSS) and the SGSN.

Product SGSN

Privilege Security Administrator, Administrator, Operator

Command Modes Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description ```clear bssgp statistics [gprs-service``` *gprs_svc_name* ``` | nse``` *nse_id* ``` [bvc``` *bvc_id* ```] [| { grep``` *grep_options* ``` | more }]```

gprs-service *gprs_svc_name*

Specifies the name of a preconfigured GPRS service for which the BSSGP statistics have been collected as an alphanumeric string of 1 through 63 characters that is case sensitive.

nse *nse_ID*

Clears the BSSGP statistics collected for the network service entity (NSE) specified as an integer from 0 through 65535.

bvc *bvc_ID*

Enter this keyword to clear the BSSGP statistics collected for the identified BSSGP virtual connection (BVC) specified as n integer from 0 through 65000.

grep *grep_options* | more

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

| **Usage Guidelines** | Use this command to clear the BBSGP statistics for a particular GPRS service or NSEI. |

Example

The following command deletes the collected BSSGP statistics for the GPRS service named *gprs1*.

```
clear bssgp statistics gprs-service gprs1
```

clear bulkstats

Clears counters and accumulated bulk statistics related information.

Product	All
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

| **Syntax Description** | `clear bulkstats { counters | data }` |

counters

Clears the counters maintained by the system's "bulkstats" facility.

data

Clears any accumulated data that has not been transferred. This includes any "completed" files that have not been successfully transferred.

| **Usage Guidelines** | Once bulk statistics collection is enabled, the system stores the information until the specified transfer criteria is met or until a manual transfer is initiated. The system maintains counters for the "bulkstats" software facility. (Refer to the **data** keyword for the **show bulkstats** command for information on viewing the counters.) |

This command can be used to delete bulk statistics information that has been collected but not transferred and/or to clear the counters that have been maintained.

Example

The following command clears bulk statistics-related counters:

```
clear bulkstats counters
```

clear ca-certificate-list statistics

This command clears CA-Certificate-List with matched count.

Product	ePDG
Privilege	Security Administrator, Administrator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`
Syntax Description	`clear ca-certificate-list statistics`
Usage Guidelines	Use this command to clears CA-Certificate-List with matched count.

Example

The following command clears CA-Certificate-List with matched count:

`clear ca-certificate-list statistics`

clear cae-group statistics server

This command resets the discardable statistics, which are the Hit Count, Timeout Consecutive (Cumulative), and Last Failure statistics, for all CAEs or for a specific CAE. The CAE (Content Adaptation Engine) is an optional component of the Mobile Videoscape.

☞

Important In release 20.0, MVG is not supported. This command must not be used in release 20.0. For more information, contact your Cisco account representative.

Product	MVG
Privilege	Security Administrator, Administrator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`
Syntax Description	`clear cae-group statistics server { all	name cae_name }`

all

Resets the discardable statistics for all CAEs.

nam***cae_name***

Specifies the name of a CAE.

Usage Guidelines   Use this command to reset the discardable statistics for all CAEs or for a specific CAE. This command must be issued in the same context in which the associated CAE group is defined.

Example

The following command clears the discardable statistics for the CAE named *server_1*:

```
clear cae-group statistics server name server_1
```

clear call-home statistics

Clears Cisco Call Home feature statistics.

Product   All

Privilege   Security Administrator, Administrator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description   `clear call-home statistics`

Usage Guidelines   Use this command to reset the statistics for all Call Home events.

Example

The following command clears the discardable statistics for the Call Home feature:

```
clear call-home statistics
```

clear cdr statistics

Clears statistics related to charging data records (CDRMOD).

Product   All

Privilege   Security Administrator, Administrator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description	`clear cdr statistics`
Usage Guidelines	Use this command to reset the statistics for charging data records.

Example

The following command clears the discardable statistics related to CDRs:

`clear cdr statistics`

clear cli history

Clears the tracking history of command line interface (CLI) command usage.

Product	All
Privilege	Security Administrator, Administrator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]`*host_name*`#`
Syntax Description	`clear cli history`
Usage Guidelines	Use this command to clear the tracking history of CLI command usage.

Example

The following command clears the CLI history:

`clear cli history`

clear cmp cert-name

Clears information stored for the specified IPSec Certificate Management Protocol v2 (CMPv2) certificate.

Product	All products supporting IPSec CMPv2 features

☞	
Important	This command appears in the CLI for this release. However, it has not been qualified for use with any current Cisco StarOS gateway products.

Privilege	Security Administrator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

| **Syntax Description** | **clear cmp cert-name** *cert_name* |

cert-name *cert_name*

Specifies the CMP certificate name as an alphanumeric string of 1 through 129 characters.

| **Usage Guidelines** | Use this command to clear the information for the specified CMP certificate. |

Example

The following command clears information for the specified CMP certificate:

clear cmp cert-name certificate01

clear cmp statistics

Clears statistics for IPSec Certificate Management Protocol v2 (CMPv2) certificates.

| **Product** | All products supporting IPSec CMPv2 features |

> ☞
>
> **Important**   This command appears in the CLI for this release. However, it has not been qualified for use with any current Cisco StarOS gateway products.

| **Privilege** | Security Administrator |

| **Command Modes** | Exec |

The following prompt is displayed in the Exec mode:

[local]*host_name*#

| **Syntax Description** | **clear cmp statistics** |

| **Usage Guidelines** | Use this command to clear statistics for IPSec CMPv2 certificates. |

Example

The following command clears CMPv2 certificates:

clear cmp statistics

clear confdmgr confd cdb

Erases the configuration in the ConfD Database (CDB) which is an XML database used by ConfD to store configuration objects. StarOS accesses the database via ConfD-supplied APIs.

⚠

Caution   Clearing the CDB is a terminal operation. The CDB must be repopulated afterwards.

✎

Note   The CDB cannot be erased unless the Context Configuration mode **no server confd** command is run in the local context to disable ConfD and NETCONF protocol support.

Product	All
Privilege	Security Administrator, Administrator
Command Modes	Exec The following prompt is displayed in the Exec mode: `[local]host_name#`
Syntax Description	`clear confdmgr confd cdb [ -noconfirm ]` **-noconfirm** Executes the command without any additional prompt and confirmation from the user.

Usage Guidelines	This command clears the CDB of all existing entries. Before the command executers you are prompted as follows:
	
	`About to delete the ConfD configuration database`
	`The running configuration is NOT affected.`
	`Are you sure? [Yes|No]:`

👉

Important   If you re-enable **server confd** after running **clear confd**, there will be no default CDB to support NETCONF protocol and associated API exchanges.

Example

The following command erases the entries in the CDB:

clear confdmgr confd cdb

clear confdmgr statistics

Clears everything listed in the "Statistics" section of the output of the **show confdmgr** command.

Product	All
Privilege	Security Administrator, Administrator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description   **clear confdmgr statistics**

statistics

Clears everything listed in the "Statistics" section of the output of the **show confdmgr** command, including:

- Triggers
- Notifications
- Successful notifications
- Failed notifications
- Unexpected

Usage Guidelines   This command clears operational statistics associated with the ConfD engine and NETCONF protocol.

Example

The following command clears confdmgr statistics:

`clear cnfdmgr statistics`

clear config

Replaces the active configuration source file with an empty configuration where possible.

Product	All
Privilege	Security Administrator, Administrator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description   **clear config [-noconfirm]**

-noconfirm

Executes the command without any additional prompt and confirmation from the user.

Usage Guidelines   This command clears the current configuration when a complete overwrite is desired or if it is necessary to start from an empty configuration.

☞

Important   Clearing the configuration will cause the active configuration source file to be empty and of no use in configuring the system to an active state providing service.

☞

Important   This command should only be performed on configurations that have been previously backed up for easy restoration.

Example

The following command clears the active configuration after the user provides confirmation of the request.

clear config

The following command clears the active configuration source file immediately with no user confirmation.

clear config -noconfirm

clear congestion-control statistics

Clears the congestion control statistics for all instances of the specified manager type.

Product   All

Privilege   Security Administrator, Administrator, Operator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description   **clear congestion-control statistics { a11mgr | asngwmgr | asnpcmgr | bindmux | gtpcmgr | hamgr | hnbmgr | imsimgr | ipsecmgr | ipsgmgr | imsimgr | l2tpmgr }**

a11mgr

Clears the statistics for all A11 Manager instances.

asngwmgr

Clears the statistics for all ASN GW Manager instances

asnpcmgr

Clears the statistics for all ASN PC-LR Manager instances

bindmux

Clears the statistics for all IPCF BindMux-Demux Manager instances.

gtpcmgr

Clears the statistics for all GTPC Manager instances.

hamgr

Clears the statistics for all HA Manager instances.

hnbmgr

☞

Important   In Release 20 and later, HNBGW is not supported. This keyword must not be used for HNBGW in Release 20 and later. For more information, contact your Cisco account representative.

Clears the statistics for all HNB Manager instances.

imsimgr

Clears the statistics for all IMSI Manager instances.

ipsecmgr

Clears the statistics for all IPSEC Manager instances.

ipsgmgr

Clears the statistics for all IPSG Manager instances.

l2tpmgr

Clears the statistics for all L2TP Manager instances.

Usage Guidelines   Use this command to statistics for all instances of the specified manager.

☞

Important   When this command is issued in any context other than the local context, only instances of the specified manager for the current context have the statistics cleared. When the current context is the local context, all instances of the specified manager type in all contexts have the statistics cleared.

Example

The following command clears the statistics for all instances of the A11 manger:

```
clear congestion-control statistics a11mgr
```

clear content-filtering category statistics

Clears the Category-based Content Filtering application statistics.

Product

CF

Privilege

Security Administrator, Administrator, Operator

Command Modes

Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
clear content-filtering category statistics [ facility srdbmgr instance
instance_value ]
```

facility srdbmgr instance *instance_value*

Clears logged events for the specified SRDB Manager instance.

instance_value must be an integer from 1 through 8.

In release 9.0 and later, *instance_value* must be an integer from 1 through 10000.

Usage Guidelines

Use this command to clear all Category-based Content Filtering application statistics, or statistics for a specific SRDB Manager instance.

Example

The following command clears all Category-based Content Filtering application statistics:

```
clear content-filtering category statistics
```

clear crash

Removes a specific crash file or all crash files.

Product

All

Privilege

Security Administrator, Administrator, Operator

Command Modes

Exec

The following prompt is displayed in the Exec mode:

`[local]`*host_name*`#`

Syntax Description   `clear crash [ list | number ` *crash_num* ` ]`

list | number *crash_num*

list: removes all crash files.

number *crash_num*: removes only the crash file specified as an integer from 1 through 30.

Usage Guidelines   Clear crashes for general maintenance activities in cleaning out old, unused, or files which are of no importance.

Example

The following will remove all crash files.

`clear crash list`

The following command will remove only crash file *27*.

`clear crash numer 27`

clear credit-control statistics

Clears credit control statistics.

Product   All

Privilege   Security Administrator, Administrator, Operator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

`[local]`*host_name*`#`

Syntax Description   `clear credit-control statistics cc-service ` *cc_service_name*

cc-service *cc_service_name*

Specifies an existing Credit Control service name as an alphanumeric string of 1 through 63 characters.

Usage Guidelines   Use this command to clear active credit control statistics.

Example

The following command clears the configured credit control statistics for a service named *service1*:

`clear credit-control statistics cc-service service1`

clear crypto

Clears crypto associations or crypto statistics.

Product	ePDG
	PDSN
	HA
	GGSN
	PDG/TTG
	PDIF
	SCM
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
clear crypto { isakmp [ tag map_name | peer peer_ip ] | security-association
 { counters tag map_name [ tx | rx ] | tag map_name | peer peer_ip[ sa-index
numbr ] } | statistics { ikev2 } [service-ip-address ip-address | service-name
 name ] }
```

isakmp [tag *map_name* | peer *peer_ip*]

When no keywords are specified, this command clears all of the ISAKMP security associations for the current context.

tag *map_name*: Clears the ISAKMP SAs for the specified crypto map. *map_name* is the name of an existing crypto map.

peer *peer_ip*: Deletes the ISAKMP SAs for the specified peer. *peer_ip* must be entered in IPv4 dotted-decimal or IPv6 colon-separated-hexadecimal notation.

security-association { counters map *map_name* [tx | rx] | tag *map_name* | peer *peer_ip* [sa-index *numbr*] }

counters tag *map_name* [**tx** | **rx**]: Resets the counters for the specified crypto map. *map_name* is the name of an existing crypto map. **tx** specifies that only the transmit SA counters are reset. **rx** specifies that only the receive SA counters are reset. If neither **tx** or **rx** are specified, both transmit and receive SA counters are reset.

tag *map_name*: Tears down a Security Association (SA) for the specified crypto map. *map_name* is the name of an existing crypto map.

peer *peer_ip*: Clears the SAs for all tunnels who have the peer at the specified IP address. *peer_ip* must be entered in Pv4 dotted-decimal or IPv6 colon-separated-hexadecimal notation.

[sa-index *numbr*: Clears a specified security association. *numbr* is an integer from 1 to 4 for releases prior to 15.0, or 1 to 5 for release 15.0 and higher.

⚠️

Caution   Modification(s) to an existing crypto map and/or ISAKMP policy configuration will not take effect until the related security association has been cleared.

statistics ikev2 [service-ip-address *ip-address* | service-name *name*]

ikev2: Clears global IKEv2 statistics for the current context.

service-ip-address *ip-address*: Clears statistics for the specified service-ip address. **service-name** *name*: Clears statistics for the specified service name.

Usage Guidelines   Clear SAs and apply changes to the crypto map or clear the crypto statistics for this context.

Example

The following clears all IKEv2 crypto statistics for the current context:

```
clear crypto statistics ikev2
```

clear cs-network statistics

👉

Important   In Release 20 and later, HNBGW is not supported. This command must not be used for HNBGW in Release 20 and later. For more information, contact your Cisco account representative.

Clears the HNB-Circuit Switched (CS) network service associated for an HNB-GW service instance.

Product   HNB-GW

Privilege   Operator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description
```
clear cs-network statistics [ name cs_svc_name | ranap-only | rtp-only |
sccp-only ]
```

name *cs_svc_name*

Clears the session statistics for an HNB-CS Network service name configured and running on this system. *cs_svc_name* must be an alphanumeric string of 1 through 63 characters.

ranap-only

Clears the session statistics limited to Radio Access Network Application Protocol (RANAP) traffic only for the specified HNB-CS Network service.

rtp-only

Clears the session statistics limited to Real Time Protocol (RTP) traffic only for the specified HNB-CS Network service.

sccp-only

Clears the session statistics limited to Signaling Connection Control Part (SCCP) traffic only for the specified HNB-CS Network service.

Usage Guidelines   Use this command to clear the session statistics for overall session or in selected part of user session for HNB-CS Network services configured and running on a system.

Example

The following command clears the session statistics for RANAP part of session for the HNB-CS Network service *hnb_CS_1*:

```
clear cs-network statistics name hnb_CS_1 ranap-only
```

clear dhcp statistics

Deletes all previously gathered statistics for either a specific or all DHCP IPv4 servers configured within the given context.

Product   GGSN

ASN-GW

P-GW

SAEGW

Privilege   Security Administrator, Administrator, Operator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description
```
clear dhcp statistics [ dhcp-service svc_name | server ip_address ]
```

dhcp-service *svc_name*

Specifies the name of a specific DHCP service for which to clear statistics as an alphanumeric string of 1 through 63 characters that is case sensitive.

server *ip_address*

Specifies the IP address of a DHCP server in IPv4 dotted-decimal notation as configured in the context for which to clear statistics.

Usage Guidelines	Statistics for a single server can be cleared using the **server** keyword. Statistics for all DHCP servers in the context can be deleted by entering the command with no keywords.
	This command can be executed from any context configured on the system.
	If this command is executed from within the local context with no keywords, statistics will be cleared for every DHCP server configured on the system regardless of context. In addition, if the server keyword is used when executing from within the local context, statistics for all DHCP servers configured with the specified name will be cleared regardless of context.

Example

The following command clears statistics for all configured DHCP servers within the context:

```
clear dhcp statistics
```

clear dhcpv6 statistics

Deletes all previously gathered statistics for either a specific or all DHCP IPv6 (DHCPv6) servers configured within the given context.

Product	ASN-GW
	GGSN
	P-GW
	SAEGW
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]`*host_name*`#`
Syntax Description	`clear dhcpv6 statistics [ server` *ipv6_address* `| service` *svc_name* `]`

server *ipv6_address*

Specifies the IP address of a DHCP server in IPv6 colon-separated-hexadecimal notation as configured in the context for which to clear statistics.

service *svc_name*

Specifies the name of a specific DHCPv6 service for which to clear statistics as an alphanumeric string of 1 through 63 characters that is case sensitive.

Usage Guidelines	Statistics for a single server can be cleared using the **server** keyword. Statistics for all DHCPv6 servers in the context can be deleted by entering the command with no keywords.
	This command can be executed from any context configured on the system.

If this command is executed from within the local context with no keywords, statistics will be cleared for every DHCPv6 server configured on the system regardless of context. In addition, if the server keyword is used when executing from within the local context, statistics for all DHCPv6 servers configured with the specified name will be cleared regardless of context.

Example

The following command clears statistics for all configured DHCPv6 servers within the context:

```
clear dhcpv6 statistics
```

clear diameter aaa-statistics

Clears Diameter AAA statistics.

Product	All
Privilege	Security Administrator, Administrator, Inspector, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description
```
clear diameter aaa-statistics [ all | debug-info | group aaa_group | server
 diameter_server ] [ | { grep grep_options | more } ]
```

all

Clears all Diameter server statistics.

debug-info

Clears Diameter debug statistics.

group aaa_group

Clears Diameter server statistics for the specified AAA group.

aaa_group must be the name of a AAA server group, and must be an alphanumeric string of 1 through 64 characters.

server diameter_server

Clears Diameter server statistics for the specified Diameter server.

diameter_server must be an alphanumeric string of 1 through 64 characters.

grep grep_options | more

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines

Use this command to clear Diameter AAA statistics.

Example

The following command clears Diameter server statistics for the specified AAA group:

```
clear diameter aaa-statistics group aaagroup3
```

clear diameter route

Clears the Diameter routes in the Diabase.

Product

ASN GW

ePDG

GGSN

HA

HSGW

IPSG

MME

PDG/TTG

PDSN

P-GW

SCM

SGSN

S-GW

Privilege

Security Administrator, Administrator, Operator

Command Modes

Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description

```
clear diameter route dynamic [ endpoint endpoint_name | peer peer_name |
facility { aaamgr | sessmgr } [ instance instance_number ] ] [ | { grep
grep_options | more } ]
```

dynamic

Clears all dynamic routes under all the Diameter endpoints.

endpoint *endpoint_name*

Clears the dynamic routes for the specified endpoint.

endpoint_name must be the name of a Diameter endpoint, and must be an alphanumeric string of 1 through 63 characters.

peer *peer_name*

Clears the dynamic routes for the specified peer.

peer_name must be an alphanumeric string of 1 through 63 characters.

facility { aaamgr | sessmgr } [instance *instance_number* **]**

Clears the dynamic routes for the specified facility – AAA Manager or Session Manager.

Specify the instance number to clear the dynamic routes for a particular facility's instance. The *instance_number* must be an integer from 1 through 99999.

grep *grep_options* **| more**

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines   Use this command to clear the Diameter routing tables that gets added in the system whenever messages are routed through the Diameter proxy/Diabase. These message remain in the system for a long period.

The user has the flexibility to clear the route based on any combination of these keyword options. Running the command **clear diameter route dynamic endpoint** *endpoint-name* **peer** *peer-name* will result in flushing of the routes that match both endpoint and peer value. Similarly, with this CLI command "**clear diameter route dynamic endpoint** *endpoint-name* **peer** *peer-name* **facility { aaamgr | sessmgr } instance** *instance_number*, the routes in a particular facility with the specified endpoint and peer name can be deleted.

Example

The following command clears all dynamic Diameter routes for the specified peer:

```
clear diameter route dynamic peer p1
```

clear diameter statistics

Clears the Diameter statistics.

Product   All

Privilege   Security Administrator, Administrator, Operator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description

```
clear diameter statistics [ [ proxy ] endpoint endpoint_name [ peer-host
host_id [ peer-realm realm_id ] ] ] [ | { grep grep_options | more } ]
```

endpoint *endpoint_name*

Clears statistics for the specified endpoint.

endpoint_name must be the name of a diameter endpoint, and must be an alphanumeric string of 1 through 63 characters.

proxy

Clears proxy related statistics.

peer-host *host_id*

Clears statistics for the specified Diameter peer host ID.

host_id must be an alphanumeric string of 1 through 255 characters.

peer-realm *realm_id*

Clears statistics for the specified Diameter peer realm.

realm_id must be an alphanumeric string of 1 through 127 characters.

grep *grep_options* | more

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines

Use this command to clear Diameter statistics.

Example

The following command clears all Diameter statistics for the specified endpoint:

```
clear diameter statistics endpoint endpt345
```

clear diameter-service

Clears information pertaining to configured Diameter services.

Product

All

Privilege

Security Administrator, Administrator, Operator

Command Modes

Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
clear diameter-service { eap { all | session-id session_id } | lte-s6b {
all | session-id session_id } | lte-sta { all | session-id session_id } | mbms
 { bearer-contexts { all | bmsc-bearer-service name service_name } |
ue-context { all | bmsc-bearer-service name service_name } } | statistics
name service_name [ vpn-name vpn context_name ] }
```

eap { all | session-id *session_id* }

Clears subscribers from the EAP interface.

all: Clears all subscribers.

session-id *session_id*: Clears a call for the session ID specified as an alphanumeric string of 1 through 63 characters.

lte-s6b { all | session-id *session_id* }

Clears subscribers from the S6b interface.

all: Clears all subscribers.

session-id *session_id*: Clears a call for the session ID specified as an alphanumeric string of 1 through 63 characters.

lte-sta { all | session-id *session_id* }

Clears subscribers from STa interface.

all: Clears all subscribers.

session-id *session_id*: Clears a call for the session ID specified as an alphanumeric string of 1 through 63 characters.

mbms { bearer-contexts { all | bmsc-bearer-service name *service_name* } | ue-context { all | bmsc-bearer-service name *service_name* } }

Clears information from the SGSN-APP interface.

bearer-contexts { all | bmsc-bearer-service name *service_name* **}**: Clears information from the bearer-context gmb-interface.

all: Clears all subscribers.

bmsc-bearer-service name *service_name* **}**: Specifies the name of a bmsc-bearer-service as an alphanumeric string of 1 through 63 characters.

ue-context { all | bmsc-bearer-service name *service_name* **}**: Clear information UE context for gmb-interface.

all: Clears all subscribers.

bmsc-bearer-service name *service_name* **}**: Specifies the name of a bmsc-bearer-service as an alphanumeric string of 1 through 63 characters.

service_name

service_name must be a name of a Diameter service expressed as an alphanumeric string of 1 through 63 characters.

statistics name *service_name* [vpn-name *vpn context_name*]

Clears the Diameter service associated with the specified statistics.

name *service_name*: Specifies the name of a Diameter service as an alphanumeric string of 1 through 63 characters.

vpn-name *vpn context_name*: Clears statistics for the vpn-context name specified as an alphanumeric string of 1 through 63 characters.

Usage Guidelines   Use this command to clear information pertaining to configured Diameter services.

Example

The following command clears Diameter service information for all subscribers associated with EAP interface:

```
clear diameter-service eap all
```

clear diameter tps-statistics

Clears Diameter Transactions Per Second (TPS) statistics information.

Product   ePDG

P-GW

SAEGW

S-GW

Privilege   Security Administrator, Administrator, Operator, Inspector

Command Modes   Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description
```
clear diameter tps-statistics application { auth-eap | e2 | gmb | gx |
gy | rf | s6a |  s6b | sgmb | sta |  swm } | endpoint endpoint_name [ | {
grep grep_options | more } ]
```

endpoint *endpoint_name*

Clears the TPS KPI information only for the endpoint specified as a string of size ranging from 1 through 255 characters.

☞

Important   The Diameter Endpoints configured on ASR 5500 platform are not shared between various Diameter applications. For example, Gx and Gy should have separate Diameter endpoints configured.

application { auth-eap | e2 | gmb | gx | gy | rf | s6a | s6b | sgmb | sta | swm }

Clears the TPS KPI information only for the specified Diameter application.

grep *grep_options* | more

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines   Use this command to clear both historical as well as cumulative KPIs for Session and Network Initiated Setup/Teardown events. For example, if this clear CLI command is invoked at time 2:31:20, then all KPI information pegged till time "2:31:20" is cleared.

Example

The following command clears Diameter TPS statistics for the endpoint named *edp1*:

```
clear diameter tps-statistics endpoint edp1
```

clear dns-client

Clears DNS cache and/or statistics for a specified DNS client.

Product   SCM

Privilege   Security Administrator, Administrator, Operator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description
```
clear dns-client name { cache [ query-name name | query-type { A | AAAA |
NAPTR | SRV } ] | statistics }
```

dns-client *name*

Specifies the name of an existing DNS client whose cache and/or statistics are being cleared as an alphanumeric string of 1 through 255 characters.

cache [query-name *name* | query-type { A | AAAA | NAPTR | SRV }]

Specifies that the cache for the defined DNS client is to be cleared.

query-name *name*: Filters DNS results based on the domain name. The name is an alphanumeric string of 1 through 255 characters. that is the domain name used to perform the DNS query. This name is different from the actual domain name which is resolved. For example, to resolve the SIP server for *service.com*, the query name is *_sip._udp.service.com* and the query type is **SRV**.

query-type:

- **A**: Filters DNS results based on domain IP address records (A records).

- **AAAA**: Filters DNS results based on AAAA records (AAAA resource records).

- **NAPTR**: Filters DNS results based on Name Authority Pointer records.

- **SRV**: Filters DNS results based on service host records (SRV records).

statistics

Specifies that statistics for the defined DNS client are to be cleared.

Usage Guidelines   Use this command to clear DNS cache and/or statistics for a specified DNS client.

Example

The following command clears statistics for a DNS client named *domain1.com*:

```
clear dns-client domain1.com statistics
```

clear dns-proxy statistics

Clears all DNS proxy statistics.

Product   SCM

Privilege   Security Administrator, Administrator, Operator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description   `clear dns-proxy statistics`

Usage Guidelines   Use this command to clear all DNS proxy statistics.

Example

The following command clears DNS proxy statistics:

```
clear dns-proxy statistics
```

clear dynamic-policy statistics

Clears policy control and charging (PCC) statistics from the interface communicating with the Policy and Charging Rules Function (PCRF) via Gx(x).

Product	HSGW
	PDSN
	SAEGW
	S-GW
Privilege	Inspector
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description
```
clear dynamic-policy statistics { hsgw-service name | pdsn-service name |
sgw-service name }
```

hsgw-service *name*

Clears policy control and charging statistics from the Gxa interface communicating with the PCRF. *name* must be an existing HSGW service name and be from 1 to 63 alphanumeric characters.

pdsn-service *name*

Clears policy control and charging statistics from the Gx interface communicating with the PCRF. *name* must be an existing PDSN service name and be from 1 to 63 alphanumeric characters.

sgw-service *name*

Clears policy control and charging statistics from the Gxc interface communicating with the PCRF. *name* must be an existing S-GW service name and be from 1 to 63 alphanumeric characters.

Usage Guidelines
Use this command to clear PCC statistics for the specified service and its Gx interface communicating with the PCRF.

Example

The following command clears HSGW statistics for an HSGW service named *hsgw4*:

```
clear dynamic-policy statistics hsgw-service hsgw4
```

The following command clears PCC statistics for a PDSN service named *cdma4*:

```
clear dynamic-policy statistics pdsn-service cdma4
```

The following command clears S-GW statistics for an S-GW service named *sgw4*:

```
clear dynamic-policy statistics sgw-service sgw4
```

clear egtpc

Clears enhanced GPRS Tunneling Protocol control plane (eGTP-C) statistics and counters found in **show** command outputs and bulk statistics associated with all eGTP-C-related services or those defined by the parameters in this command.

Product	MME
	P-GW
	S-GW
	SAEGW
Privilege	Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description
```
clear egtpc statistics [ egtp-service name [ interface { s2a | s2b | s5s8
} ] | interface-type { interface-mme | interface-pgw-ingress [ interface
{ s2a | s2b | s5s8 } ] | interface-sgsn | interface-sgw-egress |
interface-sgw-ingress } | mme-address ip_address | pgw-address ip_address |
sgsn-address ip_address | sgw-address ip_address ]
```

egtp-service *name* **[interface { s2a | s2b | s5s8 }]**

Clears all statistics and counters associated with an existing eGTP service name specified as an alphanumeric string of 1 through 63 characters.

interface: Clears the eGTP-C sub-interface statistics only for the specified eGTP-C service. Possible interfaces are:

- **s2a**: Interface type Sa
- **s2b**: Interface type Sb
- **s5s8**: Interface type S5/S8

☞ **Important** The keywords **s2a** and **s2b** are only visible if WiFi Integration functionality is enabled. WiFi Integration requires that a valid license key be installed. Contact your local Sales or Support representative for information on how to obtain a license.

interface-type { interface-mme | interface-pgw-ingress [interface { s2a | s2b | s5s8 }] | interface-sgsn | interface-sgw-egress | interface-sgw-ingress }

interface-mme: Clears statistics and counters derived from all MME interface types associated with this system.

interface-pgw-ingress: Clears statistics and counters derived from all P-GW ingress interface types associated with this system.

interface: Clears the eGTP-C interface statistics of a particular sub-interface of P-GW ingress. Possible interfaces are:

- **s2a**: Interface type Sa
- **s2b**: Interface type Sb
- **s5s8**: Interface type S5/S8

☞

Important   The keywords **s2a** and **s2b** are only visible if WiFi Integration functionality is enabled. WiFi Integration requires that a valid license key be installed. Contact your local Sales or Support representative for information on how to obtain a license.

interface-sgw-egress: Clears statistics and counters derived from all S-GW egress interface types associated with this system.

interface-sgsn: Clears statistics and counters derived from all SGSN S4 interface types associated with this system.

interface-sgw-ingress: Clears statistics and counters derived from all S-GW ingress interface types associated with this system.

mme-address *ip_address*

Clears all statistics and counters derived from an existing MME IP address specified in IPv4 dotted-decimal or IPv6 colon-separated-hexadecimal notation.

pgw-address *ip_address*

Clears all statistics and counters derived from an existing P-GW IP address specified in IPv4 dotted-decimal or IPv6 colon-separated-hexadecimal notation.

sgw-address *ip_address*

Clears all statistics and counters derived from an existing S-GW IP address specified in IPv4 dotted-decimal or IPv6 colon-separated-hexadecimal notation.

sgsn-address *ip_address*

Clears all statistics and counters derived from an existing SGSN S4 IP address specified in IPv4 dotted-decimal or IPv6 colon-separated-hexadecimal notation.

Usage Guidelines   Use this command to clear running statistics and counters found in show command and bulk statistics outputs for all eGTP-C-related services or for specific interfaces, services, or IP addresses as specified by parameters in this command.

Example

The following command clears eGTP-C statistics and counter associated with all P-GW ingress interfaces configured on this system:

```
clear egtpc statistics interface-type interface-pgw-ingress
```

The following command clears eGTP-C statistics and counter associated with all MME interfaces configured on this system:

```
clear egtpc statistics interface-type interface-mme
```

clear event-notif statistics

Clears the statistical information collected over a configured Event Notification (SNMP) interface based on specific criteria.

Product	All
Privilege	Inspector
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description　`clear event-notif statistics`

Usage Guidelines　Use this command to clear the statistical information collected over configured Event Notification interface based on specific criteria.

Example

The following command clears the counter information for all Event Notification collection servers configured in a context:

```
clear event-notif server all
```

clear event-record

Clears event record statistics for a P-GW node.

Product	P-GW
Privilege	Inspector
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description　`clear event-record statistics pgw [ | { grep grep_options | more } ]`

grep *grep_options* **| more**

Pipes (sends) the output of this command to a specified command. You must specify a command to which the output of this command will be sent.

For details on using the **grep** and **more** commands, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines   Use this command to clear event record statistics for a P-GW node.

Example

The following command clears all P-GW event level statistics:

```
clear event-record statistics pgw
```

clear firewall

This command is obsolete.

clear fng-service statistics

Deletes all previously gathered statistics for a specific Femto Network Gateway (FNG) service or all FNG services configured within a context.

Product   FNG

Privilege   Security Administrator, Administrator, Operator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description   `clear fng-service statistics { name` *service_name* `}`

name *service_name*

Specifies the name of a specific FNG service configured in the context for which to clear statistics as an alphanumeric string of 1 through 63 characters that is case sensitive.

Usage Guidelines   Statistics for a single FNG service can be cleared using the **name** keyword. Statistics for all FNG services in the context can be deleted by entering the command with no keywords.

If this command is executed from within the local context with no keywords, statistics will be cleared for every FNG service configured on the system regardless of context. In addition, if the **name** keyword is used when executing from within the local context, statistics for all FNG services configured with the specified name will be cleared regardless of context.

Example

The following command clears statistics for an FNG service named fng1:

```
clear fng-service statistics name fng1
```

clear gmb statistics

Deletes the collected statistics for the Gmb reference point. Gmb handles broadcast multicast service center (BM-SC) related signaling, which includes the user specific and bearer service messages for Multimedia Broadcast/Multicast Service (MBMS) service.

Product	GGSN
Privilege	Security Administrator, Administrator, Operator, Inspector
Command Modes	Exec The following prompt is displayed in the Exec mode: `[local]host_name#`
Syntax Description	`clear gmb statistics [apn name	bmsc-profile profile_name` **apn *name*** Deletes only the Gmb information for the specified Access Point Name (APN) specified as an alphanumeric string of 1 through 62 characters. **bmsc-profile *profile_name*** Deletes only the Gmb information for the specified BM-SC profile specified as an alphanumeric string of 1 through 79 characters.
Usage Guidelines	Use this command to delete usage statistics for the Gmb reference point.

Example

The following command deletes all Gmb statistics:

```
clear gmb statistics
```

clear gmm-sm statistics

Deletes the collected statistics for the GPRS Mobility Management and Session Management (GMM/SM) configurations for various SGSN services.

Product	SGSN

Privilege	Security Administrator, Administrator, Operator, Inspector
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]`*host_name*`#`

Syntax Description

```
clear gmm-sm statistics [ gmm-only | gprs-service service_name |
iups-service service_name | plmn-id mcc mcc mnc mnc | recovered-values |
sgsn-service service_name | sm-only ]
```

gmm-only

Deletes only GPRS mobility management (GMM) information for the specified filter. Filter options include:

- **gprs-service** *service_name*
- **iups-service** *service_name*
- **plmn-id**
- **recovered values**
- **sgsn-service** *service_name*

gprs-service *srvc_name*

Deletes the statistics for a 2.5G GPRS service specified as an alphanumeric string of 1 through 63 characters that uniquely identifies a preconfigured GPRS service. The delete request can be narrowed by adding either the **nsei** or **routing-area** keywords.

iups-service *srvc_name*

Deletes the statistics for a IuPS service specified as an alphanumeric string of 1 through 63 characters that uniquely identifies a preconfigured IuPS service. The delete request can be narrowed by adding either the **rnc** or **routing-area** keywords.

plmn-id mcc *mcc* mnc*mnc* [access-type { gprs | umts }]

Deletes the statistics for services within a specified PLMN.

mcc Specifies the mobile country code (MCC) as part of the identification of the RNC or RA. *mcc_id* must be an integer from 100 to 999.

mnc Specifies the mobile network code (MNC) as part of the identification of the RNC or RA. *mnc_id* must be a 2- or 3-digit integer from 00 to 999.

access-type keyword fine-tunes the delete procedure and only deletes GMM/SM statistics for the IuPS (access-type UMTS) and/or the GPRS (access-type GPRS) services belonging to the PLMN.

recovered-values

Deletes only the recovered values for the backed-up key KPI counters. The delete request can be narrowed by adding one of three filters:

- **gprs-service** *service_name*
- **iups-service** *service_name*
- **sgsn-service** *service_name*

sgsn-service *srvc_name*

Deletes the statistics for a 3G SGSN service specified as an alphanumeric string of 1 to 63 characters that uniquely identifies the SGSN service. The delete request can be narrowed by adding either the **rnc** or **routing-area** keywords.

sm-only

Deletes only session management (SM) information for the specified keyword parameters.

mcc

mcc Specifies the mobile country code (MCC) as part of the identification of the RNC or RA. *mcc_id* must be an integer from 100 to 999.

mnc

mnc Specifies the mobile network code (MNC) as part of the identification of the RNC or RA. *mnc_id* must be a 2- or 3-digit integer from 00 to 999.

lac *lac_id*

Specifies the location area code (LAC) as part of the identification of the RNC or RA. *lac_id* must be an integer from 1 to 65535.

nsei*nse_id*

Deletes the GMM/SM session statistics for the identified network service entity (NSEI). *nse_id* must be an integer from 0 to 65535 that uniquely identifies a configured NSEI.

rnc*rnc_id*

Fine-tunes the deletion of GMM/SM session statistics just for the specified radio network controller (RNC). *rnc_id* must be an integer from 0 to 4095.

rac *rac_id*

Specifies the routing area code (RAC) as part of the identification of the RNC or RA. *rac_id* must be an integer from 1 to 255.

routing-area mcc *mcc_id* mnc *mnc_id* lac *lac_id* rac *rac_id*

Enter the **routing-area** keyword to fine-tune the clearing of the GMM/SM statistics for a specified routing area (RA) identified by the MCC, MNC, LAC and RAC.

Usage Guidelines   Use this command to delete usage statistics for the GMM/SM session configurations for SGSN services, including BSC attaches, activations, and throughput.

Example

The following command deletes GMM/SM statistics for a specific routing area defined for the SGSN's GPRS service:

```
clear gmm-sm statistics gprs-service gprs1 routing-area mcc 123 mcc 131
lac 24 rac 11
```

The following command displays all possible information for GMM/SM statistics:

```
show gmm-sm statistics verbose
```

☞

Important   Output descriptions for **show** commands are available in the *Statistics and Counters Reference*.

clear gprsns statistics

Deletes collected statistics for the 2.5G SGSN's General Packet Radio Service (GPRS) Network Service (NS) layer (link level).

Product	SGSN
Privilege	Inspector
Command Modes	Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description   `clear gprsns statistics { msg-stats nse `*nse_id*` | sns-msg-stats }[ | { grep `*grep_options*` | more } ]`

msg-stats

Deletes collected transmit (tx) and receive (rx) message statistics for the NS layer.

consolidated nse *nse_id*

nse_id: Enter an integer from 0 to 65535.

nse *nse_id*

Deletes statistics for an NSE specified as an integer from 0 to 65535.

sns-msg-stats

Deletes subnetwork service (SNS) sublayer message statistics.

grep *grep_options* | more

You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

| Usage Guidelines | This command is used to display Frame Relay statistics configured for the NSE/NSVC with the commands documented in the *Network Service Entity - Peer NSEI Configuration Mode* chapter. |

Collected statistics are cleared (deleted) with the **clear gprsns statistics** described in the *Exec Mode Commands (A-C)* chapter.

Example

The following command displays the collected message statistics for NSEI *1422*:

```
show gprsns statistics msg-stats nse 1422
```

☞

| Important | Output descriptions for **show** commands are available in the *Statistics and Counters Reference*. |

clear gprsssf statistics

Deletes all Customized Applications for Mobile networks Enhanced Logic (CAMEL) service gprsSSF (GPRS Service Switching Function) statistics collected since the last reset or **clear** command.

Product	SGSN
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

| Syntax Description | `clear gprsssf statistics [ camel-service srvc_name | gprs [ 2g-sgsn-app | 3g-sgsn-app ] | gsmscf-address { address | all } | sms ] [ | { grep | more } ]` |

camel-service *srvc_name*

Clears only CAMEL service statistics for the configured CAMEL service specified as an alphanumeric string of 1 through 63 characters.

gprs [2g-sgsn-app | 3g-sgsn-app]

Clears only CAMEL service statistics for either a 2.5G or 3G SGSN.

gsmscf-address { *address* | all }

Filters the command to only clear CAMEL service statistics for specified GSM service control function (gsmSCF) addresses. *address* is a standard ISDN E.164 address of 1 to 15 digits.

sms

Filters the command to only clear CAMEL service statistics for SMS protocol information.

grep *grep_options* **| more**

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines   This command instructs the SGSN to delete collected CAMEL service statistics for either specified CAMEL services, or for SMS or GPRS applications in all contexts.

Example

The following command will delete gprsSSF statistics collected for the CAMEL service residing at SCP identified by the gsmSCF address:

```
clear gprsssf statistics gsmscf-address 412211411151
```

clear gtpc statistics

Deletes all previously gathered GTPC (GTPv0, GTPv1-C, GTPv1-U) statistics within the given context based on the specified criteria.

Product   GGSN

Privilege   Security Administrator, Administrator, Operator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description   **clear gtpc statistics [[custom1 | gtpcmgr-instance** *gtpcmgr_instance_number* **| smgr-instance** *sessmgr_instance_number* **] [apn** *apn_name* **| ggsn-service** *ggsn_service_name* **| mseg-service** *mseg_service_name* **| sgsn-address** *sgsn_ipv4_address* **]]**

custom1

Clears the statistics of GTP-C messages for preservation mode and free of charge service.

This keyword is a customer-specific function used for Preservation-Mode and Free-of-Charge Service that is enabled under customer-specific license. For more information on this support, contact your Cisco account representative.

gtpcmgr-instance *gtpcmgr_instance_number*

Clears GTP-C statistics for a GTPC Manager instance specified as an integer from 1 through 4294967295.

smgr-instance *sessmgr_instance_number*

Clears GTP-C statistics for a Session Manager instance specified as an integer from 1 through 4294967295.

apn *apn_name*

Clears GTP-C statistics for an existing APN specified as an alphanumeric string of 1 through 63 characters that is case sensitive.

ggsn-service *ggsn_service_name*

Clears GTP-C statistics for an existing GGSN service specified as an alphanumeric string of 1 through 63 characters that is case sensitive.

mseg-service *mseg_service_name*

☞

Important   This keyword is not supported in this release.

sgsn-address *sgsn_ipv4_address*

Clears GTP-C statistics for an existing SGSN specified by IP address in IPv4 dotted-decimal notation.

Usage Guidelines   GTPC statistics can be cleared for a single APN, GGSN service, or SGSN. All GTPC statistics in the context can be deleted by entering the command with no keywords.

This command can be executed from any context configured on the system.

If this command is executed from within the local context with no keywords, all GTPC statistics will be cleared regardless of context.

GTPP statistics are not affected by this command.

Example

The following command clears all GTPC statistics context:

```
clear gtpc statistics
```

clear gtpp statistics

Deletes all previously gathered GTPP statistics within the given context for either single or all Charging Gateway Functions (CGFs).

Product   ePDG

GGSN

P-GW

SAEGW

SGSN

Privilege   Security Administrator, Administrator, Operator

Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description	**clear gtpp statistics [cgf-address** *ipv4/ipv6_address* **[port** *port_num* **]]**

cgf-address *ipv4/ipv6_address* **[port** *port_num* **]**

Deletes statistics for a CGF identified by its IP address entered in IPv4 dotted-decimal or IPv6 colon-separated-hexadecimal notation.

port *port_num*: Specifies the port number of CGF server. The port number must be an integer ranging from 1 to 65535.

This optional keyword is introduced to ease the identification of product specific CDRs. This configuration provides the flexibility to send ePDG, SaMOG and P-GW LBO CDRs to the same CGF server on different ports.

When the port is specified, this command clears the GTPP statistics for specified CGF server IP address and port. If port is not provided then it will clear the statistics for all CGF servers with the specified IP address.

Usage Guidelines	Statistics for a single CGF can be cleared using the **cgf-address** keyword. Statistics for all CGFs in the context can be deleted by entering the command with no keywords.

This command can be executed from any context configured on the system.

If this command is executed from within the local context with no keywords, statistics will be cleared for every CGF configured on the system regardless of context. In addition, if the **cgf-address** keyword is used when executing from within the local context, statistics for all CGFs configured with the specified name will be cleared regardless of context.

Example

The following command deletes all GTPP statistics for a CGF server with an IP address of 192.168.1.42:

`clear gtpp statistics cgf-address 192.168.1.42`

clear gtpp storage-server local file statistics

Clears AAA proxy GTPP group level statistics for CDRs stored on the local hard disk.

Product	GGSN
	SGSN
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description	`clear gtpp storage-server local file statistics [ group name name ]`
Usage Guidelines	If executed from the local context, this command clears statistics for all GTPP groups configured on the system. If executed from the context within which the storage servers (hard disk) is configured, statistics are deleted for only that context.

clear gtpp storage-server statistics

Clears statistics for configured GTPP storage servers (GSS).

Product	GGSN
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`
Syntax Description	`clear gtpp storage-server statistics`
Usage Guidelines	If executed from the local context, this command clears statistics for all GTPP storage servers configured on the system. If executed from the context within which the servers are configured, statistics are deleted for only those servers.

clear gtpu statistics

Clears enhanced GPRS Tunneling Protocol user plane statistics and counters found in **show** command outputs and bulk statistics associated with all GTP-U-related services or those defined by the parameters in this command.

Product	P-GW
	S-GW
	MME
	SAEGW
Privilege	Operator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`
Syntax Description	`clear gtpu statistics [gtpu-service gtpu_service_name	mseg-service mseg_service_name	peer-address { ipv4/ipv6_address	all] }`

gtpu-service *gtpu_service_name*

Clears GTP-U statistics for an existing GTP-U service specified as an alphanumeric string of 1 through 63 characters.

mseg-service *mseg_service_name*

☞

Important   This keyword is not supported in this release.

peer-address { [*ipv4/ipv6_address* **| all] }**

Clears GTP-U statistics for an existing peer IP address entered in IPv4 dotted-decimal or IPv6 colon-separated-hexadecimal notation.

all

Clears GTP-U statistics for all existing peers.

Usage Guidelines   Use this command to clear running statistics and counters found in show command and bulk statistics outputs for all GTP-U-related services or for specific services or IP addresses as specified by parameters in this command.

Example

The following command clears GTP-U statistics and counter associated with a GTP-U service name *gtpu-12* configured on this system:

```
clear gtpu statistics gtpu-service gtpu-12
```

clear hd-storage-policy

Clears statistic information for HD storage policies configured on the system.

Product   HSGW

P-GW

S-GW

SAEGW

Privilege   Operator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description   `clear hd-storage-policy statistics { all | name `*name*` }`

statistics { all | name *name* }

all: Clears ACR statistical information for all HD storage policies configured on the system.

name *name*: Clears ACR statistical information for an existing HD storage policy specified as an alphanumeric string of 0 through 63 characters.

Usage Guidelines Use this command to clear statistics for HD storage policies configured on the system.

Example

The following command clears statistics for an HD storage policy named *pgwsgw*:

```
clear hd-storage-policy statistics name pgwsgw
```

clear henbgw-access-service statistics

☞

Important In Release 20, 21.0 and 21.1, HeNBGW is not supported. This command must not be used for HeNBGW in these releases. For more information, contact your Cisco account representative.

Clears HENBGW ACCESS service statistics.

Product HeNB-GW

Privilege Operator

Command Modes Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description
```
clear henbgw-access-service statistics [ henbgw-access-service
henbgw_acc_svc_name | miscellaneous |  peer-id peer_id_value  | s1ap | sctp ] [
 | { grep grep_options | more } ]
```

henbgw-access-service *henbgw_acc_svc_name*

Clear statistics per specified HENBGW ACCESS service.

henbgw_acc_svc_name is a string of size 1 to 63.

miscellaneous

Clears Miscellaneous statistics.

peer-id

Clears information about HENB associations for the specified peer.

peer_id_value is an integer value ranging from 0 to 4294967295.

s1ap

Clears S1AP statistics.

sctp

Clears SCTP statistics.

grep *grep_options* | more

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines   Use this command to clear HENBGW ACCESS service statistics

Example

The following command clears S1AP statistics :

```
clear henbgw-access-service statistics s1ap
```

clear henbgw-network-service statistics

☞

Important   In Release 20, 21.0 and 21.1, HeNBGW is not supported. This command must not be used for HeNBGW in these releases. For more information, contact your Cisco account representative.

Clears HENBGW NETWORK service statistics.

Product   HeNB-GW

Privilege   Operator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description   **clear henbgw-network-service statistics [henbgw-network-service** *henbgw_net_svc_name* **| peer-id** *peer_id_value* **| s1ap | sctp] [| { grep grep_options | more }]**

henbgw-network-service *henbgw_net_svc_name*

Clear statistics per specified HENBGW NETWORK service.

henbgw_net_svc_name is a string of size 1 to 63.

peer-id

Clears information about MME associations for the specified peer.

peer_id_value is an integer value ranging from 0 to 4294967295.

s1ap

Clears S1AP statistics.

sctp

Clears SCTP statistics.

| { grep *grep_options* | more }

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines   Use this command to clear HENBGW NETWORK service statistics

Example

The following command clears S1AP statistics :

```
clear henbgw-network-service statistics s1ap
```

clear hexdump-module statistics

Clears and resets all information related to hexdump-module statistics.

Product   ePDG

SaMOG

Privilege   Security Administrator, Administrator, Operator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description   `clear hexdump-module statistics [ | { grep `*`grep_options`*` | more } ]`

grep *grep_options* | more

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

Please refer to the Regulating the *Command Output* section in this reference for details on the usage of grep and more.

Usage Guidelines

Use this command to clears and reset all information related to hexdump-module statistics.

Example

The following command resets hexdump-module statistics.

```
clear hexdump-module statistics
```

clear hnbgw sessions

☞

Important

In Release 20 and later, HNBGW is not supported. This command must not be used for HNBGW in Release 20 and later. For more information, contact your Cisco account representative.

Clears the active/dormant session information about registered Nabs) on Home-NodeB Gateway (HNB-GW) service instances configured and running on this system based on different filter criteria.

Product

HNB-GW

Privilege

Operator

Command Modes

Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
clear hnbgw sessions { all | cell-id cell_id | hnb-address hnb_ip_address |
hnb-local-id hnb_id | hnbgw-service hnbgw_svc_name | hnbid hnb_glbl_id | mcc mcc
 mnc mnc [ -noconfirm ] [ lac lac | rac rac ] }
```

all

Clears the summarized or full information for all registered HNB sessions on an HNB-GW service instance running on system. Clearing the statistics can be filtered based on given filtering.

cell-id *cell_id*

Clears HNB session statistics for a registered cell ID on an HNB-GW service instance. *cell_id* is the identification number of the Femto cell where the user/subscriber is geographically located expressed as an integer from 0 through 268435455.

hnb-address *hnb_ip_address*

Clears the session statistics for HNB session(s) based on a registered HNB IP address entered in IPv4 dotted-decimal notation.

hnb-local-id *hnb_id*

Clears the session statistics of HNB session(s) for a registered local id of HNB specified as as an integer from 1 through 255.

hnbgw-service *hnbgw_svc_name*

Clears the session statistics for registered HNB session(s) on an existing HNB-GW service name specified as an alphanumeric string of 1 through 63 characters.

hnbid *hnb_glbl_id*

Clears the statistics for HNB session(s) based on the registered HNB global id specified as an integer from 1 through 255

mcc *mcc*

Clears statistics for HNB session(s) based on the registered Mobile Country Code (MCC) identification number of the UE. *mcc* must be an integer from 101 through 999.

mnc *mnc*

Clears the statistics for HNB session(s) based on the registered Mobile Network Code (MNC) identification number of the UE. *mnc* must be a 2- or 3-digit integer from 00 through 999

lac *lac*

Clears the statistics for HNB session(s) based on the registered Location Area Code (LAC) identification number of the UE. *lac* must be an integer from 1 through 65535.

rac *rac*

Clears the statistics for HNB session(s) based on the registered Radio Access Code (RAC) identification number of the UE. *rac* must be an integer from 1 through 255.

rnc *rnc*

Clears the statistics for HNB session(s) based on the registered Radio Network Code (RAC) identification number of the HNB. *rnc* must be an integer from 1 through 65535.

-noconfirm

Executes the command without any additional prompt and confirmation from the user.

☞

Important   The Operator privilege does not have access to this keyword.

Usage Guidelines   Use this command to clear the session statistics of all or specific registered HNB session(s) or in selected part of user session for HNB-GW services configured and running on this system.

Example

The following command clears the session statistics for all registered HNBs on the HNB-GW service named *hnbgw1*:

```
clear hnbgw sessions hnbgw-service hnbgw1
```

clear hnbgw statistics

☞

Important In Release 20 and later, HNBGW is not supported. This command must not be used for HNBGW in Release 20 and later. For more information, contact your Cisco account representative.

Clears the HNB-GW service and HNB related statistics from an HNB-GW node.

Product HNB-GW

Privilege Operator

Command Modes Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description
```
clear hnbgw statistics [ gtpu-only ] [ hnb-access-mode { closed | hybrid
 | open } ] [ hnbap-only ] [ hnbgw-service hnbgw_svc_name [ gtpu-only |
hnb-access-mode { closed | hybrid | open } | hnbap-only | ipne-only |
ranap-only | rtp-only | rua-only | sabp-only | sctp-only ] ] [ hnbid
hnb_identifier] [ hnbap-only | ranap-only | rtp-only | rua-only ] ]  [ hnbid
 | ipne-only | ranap-only | rtp-only | rua -only | sabp-only | sctp-only
 ]
```

gtpu-only

Clears the statistics for GTP-U traffic only for the selected HNB/HNB-GW service.

hnb-access-mode { closed | hybrid | open }

Clears the session statistics of an existing HNB-GW service based on access mode filters.

- **closed**: clears the statistics of only those UEs which are connected through Closed HNBs to the HNB-GW services on a chassis. This command applies to all Closed HNB sessions on a chassis. If any other criteria specified it will filter the statistics based on given criteria.
- **hybrid**: clears the statistics of only those UEs which are connected through Hybrid HNBs to the HNB-GW services on a chassis. This command applies to all Hybrid HNB sessions on a chassis. If any other criteria specified it will filter the statistics based on given criteria.
- **open**: clears the statistics of only those UEs which are connected through Open HNBs to the HNB-GW services on a chassis. This command applies to all Open HNB sessions on a chassis. If any other criteria specified it will filter the statistics based on given criteria.

hnbap-only

Clears the statistics for Home NodeB Application Part (HNBAP) traffic only for the selected HNB/HNB-GW service.

hnbgw-service *hnbgw_svc_name*

Clears the session statistics for an existing \HNB-GW service name specified as an alphanumeric string of 1 through 63 characters.

hnbid *hnb_identifier*

Clears the session statistics for an existing Home-NodeB identifier specified as an alphanumeric string of 1 through 255 characters.

ipne-only

Clears IPNE statistics for selected HNBGW Service.

ranap-only

Clears the session statistics for Radio Access Network Application Protocol (RANAP) traffic only for the selected HNB/HNB-GW service.

rtp-only

Clears the session statistics for Real Time Protocol (RTP) traffic only for the selected HNB/HNB-GW service.

rua-only

Clears the session statistics for RANAP User Adaptation (RUA) traffic only for the selected HNB/HNB-GW service.

sabp-only

Clears the session statistics for Signaling Connection Control Part (SCCP) traffic only for the selected HNB-GW service.

sctp-only

Filters the session statistics to display only Stream Control Transmission Protocol (SCTP) traffic for the selected HNB-GW service.

Usage Guidelines Use this command to clear the session statistics for an overall session or in a selected part of a user session for HNB-GW services and/or HNBs configured and running on this system.

Example

The following command clear the session statistics for the HNBAP portion of session details for the HNB-GW service named *hnbgw1*:

```
clear hnbgw statistics hnbgw-service hnbgw1 hnbap-only
```

The following command clears the session statistics for the RANAP portion of session details for the HNB identified as *102*:

```
clear hnbgw statistics hnbid 102 ranap-only
```

clear hsgw-service

Clears HRPD Serving Gateway (HSGW) statistics and counters found in **show** command outputs and bulk statistics associated with all HSGW services or a specific service defined by the parameter in this command.

Product

HSGW

Privilege

Operator

Command Modes

Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
clear hsgw-service statistics [ dns-stats | name service_name [ dns-stats
] ] [ | { grep grep_options | more } ]
```

dns-stats

Clears DNS-related statistics.

name name

Clears statistics and counters for a an existing HSGW service name specified as an alphanumeric string of 1 through 63 characters.

grep grep_options | more

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines

Use this command to clear statistics for HSGW services configured on the system.

Example

The following command clears statistics for an HSGW service named *hsgw3*:

```
clear hsgw-service statistics name hsgw3
```

clear hss-peer-service

Clears statistic information for Home Subscriber Service (HSS) peer services configured on the system.

Product	MME
Privilege	Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description   `clear hss-peer-service statistics [ service name ]`

statistics [service name]

statistics: Clears HSS peer service statistical information for all HSS peer services configured on the system.

service *name*: Clears HSS peer service statistic information for an existing HSS peer service specified as an alphanumeric string of 1 through 64 characters.

Usage Guidelines   Use this command to clear statistics for HSS peer services configured on the system.

Example

The following command clears statistics for an HSS peer service named *hss4*:

`clear hss-peer-service statistics service name hss4`

clear ims-authorization

Clears statistics for a specified or all IP Multimedia System (IMS) Authorization Service(s).

Product	GGSN
	SCM
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description   `clear ims-authorization { policy-control statistics [ ims-auth-service`
`service_name ] | service statistics [ name service_name ] } [ | { grep grep_options`
`| more } ]`

ims-auth-service *service_name*

Clears statistics for the specified IMSA service.

service_name must be an alphanumeric string of 1 through 64 characters.

grep *grep_options* **| more**

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines   Use this command to clear IMSA Service statistics.

Example

The following command clears IMSA policy-control statistics for an IMSA service named *test_service*:

```
clear ims-authorization policy-control statistics ims-auth-service
test_service
```

clear ims-sh-service statistics

Clears all IP Multimedia System (IMS) Sh interface (Diameter) statistics for a specific or all services using the Sh interface.

Product   PDIF

Privilege   Security Administrator, Administrator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description   `clear ims-sh-service statistics [ service` *service_name* `]`

service *service_name*

Clears statistics for the specified existing IMS service.

service_name must be an alphanumeric string of 1 through 64 characters.

Usage Guidelines   Use this command to clear interface Sh interface statistics for a specified or all IMS services.

Example

The following command clears all Sh interface statistics:

```
clear ims-sh-service statistics
```

clear ip access-group statistics

Clears all interface access control list (ACL) statistics and the context level ACL statistics that have been configured in the current context. Be aware that updating an access list also causes all ip access-groups utilizing the list to be cleared.

Product	ASN-GW
	GGSN
	PDSN
Privilege	Security Administrator, Administrator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description   `clear ip access-group statistics`

Usage Guidelines   Use this command to clear all interface ACL statistics and the context level ACL statistics that have been configured in the current context.

Example

The following command clears the ACL statistics:

`clear ip access-group statistics`

clear ip arp

Clears the address resolution protocol (ARP) cache for a given IP address.

Product	All
Privilege	Security Administrator, Administrator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description   `clear ip arp` *ip_address*

ip_address

Specifies the IP address for which to clear the ARP cache in IPv4 dotted-decimal or IPv6 colon-separated-hexadecimal notation.

Usage Guidelines   Clear the ARP cache when network changes have occurred for the case where the cached data may cause undue overhead in routing packets.

Example

The following command clears the ARP cache for the IP address *10.2.3.4*:

```
clear ip arp 10.2.3.4
```

clear ip bgp peer

Resets Border Gateway Protocol (BGP) connections for all peers or for specified peers in the current context.

Product   HA

Privilege   Security Administrator, Administrator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description   **clear ip bgp peer {** *ip_address* **| all | as** *as_num* **} [in | out | soft | vpnv4 | vpn6 | vrf** *vrf_name* **[in | out | soft]]**

ip_address

Specifies the IP address of the neighbor for which BGP connections should be reset in IPv4 dotted-decimal or IPv6 colon-separated-hexadecimal notation.

all

Resets BGP connections for all peers.

as *as_num*

Resets BGP connections for all peers in the specified autonomous system (AS). *as_num* must be an integer from 1 through 65535.

in

Softly reconfigures inbound updates.

out

Softly reconfigures outbound updates.

soft

Softly reconfigures inbound and outbound updates.

vpnv4

Clears BGP sessions within the VPNv4 address family.

vpnv6

Clears BGP sessions within the VPNv6 address family.

vrf *vrf_name*

Clears BGP sessions within the specified VRF. *vrf_name* is an alphanumeric string of 1 through 63 characters.

Usage Guidelines   Use this command to BGP information for the current context.

Example

The following command resets BGP connections for all neighbors:

```
clear ip bgp peer all
```

clear ip localhosts

Removes the host specified from the current context's local host list for IP address mappings.

Product   All

Privilege   Security Administrator, Administrator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description
```
clear ip localhosts [ host_name ]
```

host_name

Specifies the name of the host to be removed as an alphanumeric string of 1 through 127 characters. When omitted, all local host name mappings will be removed.

Usage Guidelines   Clears a host name when it is no longer valid for the current context to access. The host name specified will be unrecognized by the current context once the command is performed.

Example

```
clear ip localhosts
clear ip localhosts 10.2.3.4
clear ip localhosts remoteABC
```

clear ip ospf process

Clears Open Shortest Path FIrst (OSPF) database information for the current context and re-establishes neighbor adjacency.

Product	All
Privilege	Security Administrator, Administrator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`
Syntax Description	`clear ip ospf process`
Usage Guidelines	Use this command to clear the OSPF database information for the current context and re-establishes neighbor adjacency.

Example

The following command clears the OSPF database information for the current context and re-establishes neighbor adjacency:

`clear ip ospf process`

clear ipne statistics

Clears IP Network Enabler (IPNE) statistics for a specified or all IPNE services.

Product	MINE
Privilege	Administrator, Security Administrator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`
Syntax Description	`clear ipne statistics [ service service_name ]`

service service_name

Specifies the name of an existing IPNE service for which statistics will be cleared as an alphanumeric string of 1 through 64 characters.

Usage Guidelines	Clears IPNE statistics for a specified or all IPNE services.

Example

The following example clears all IPNE statistics:

```
clear ipne statistics
```

clear ipsg statistics

Clears IP Services Gateway (IPSG) statistics for a specified or all IPSG services.

Product	eWAG
	IPSG
Privilege	Administrator, Security Administrator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	[local]*host_name*#
Syntax Description	`clear ipsg statistics [ service` *service_name* `]`
	service *service_name*
	Specifies the name of an IPSG service for which statistics will be cleared.
	service_name must be an alphanumeric string of 1 through 64 characters.
Usage Guidelines	Clears IPSG service statistics for a specified or all IPSG services.

Example

The following command clears statistics for all IPSG services:

```
clear ipsg statistics
```

clear ipv6 neighbors

Clears an IPv6 address from the neighbor cache.

Product	PDIF
Privilege	Administrator, Security Administrator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	[local]*host_name*#

| **Syntax Description** | `clear ipv6 neighbors` *ip_address* |

ip_address

Specifies the IP address in IPv6 colon-separated-hexadecimal notation.

| **Usage Guidelines** | Clears a specific address from the neighbor cache. |

Example

Use the following example to clear *3ffe:ffff:101::230:6eff:fe04:d9aa/48*:

`clear ipv6 neighbors 3ffe:ffff:101::230:6eff:fe04:d9aa/48`

clear ipv6 ospf process

Restarts Open Shortest Path First Version 3 (OSPFv3) with available configuration.

Product	GGSN
	HA
	PDSN

| **Privilege** | Administrator, Security Administrator |

| **Command Modes** | Exec |

The following prompt is displayed in the Exec mode:

`[local]host_name#`

| **Syntax Description** | `clear ipv6 ospf process` |

| **Usage Guidelines** | Force a restart of OSPFv3 process using the available configuration. |

Example

`clear ipv6 ospf process`

clear l2tp

Clears all or specific Layer 2 Tunnelling Protocol (L2TP) statistics or clears and disconnects all or specified sessions or tunnels.

Product	PDSN
	GGSN
	LNS

Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
clear l2tp { statistics [ lac-service service_name | lns-service service_name
 | pdsnclosedrp-service service_name | peer-address ip_address ] | tunnels {
 all [ clear-sa ] | callid call_id | lac-service service_name [ clear-sa ]
 | lns-service service_name | pdsnclosedrp-service service_name | peer-address
 ip_address [ clear-sa ] } }
```

statistics [lac-service *service_name* | lns-service *service_name* | peer-address *ip_address*]

With no optional keywords specified, this command clears all L2TP statistics for the current context.

lac-service *service_name*: Clears all L2TP statistics for the specified LAC service in the current context.

lns-service *service_name*: Clears all L2TP statistics for the specified LNS service in the current context.

pdsnclosedrp-service *service_name*: Clears all L2TP statistics for the specified PDSN closed R-P service in the current context.

peer-address *ip_address*: Clears all L2TP statistics for the destination (peer LNS) at the specified IP address. The IP address is entered using IPv4 dotted-decimal notation.

tunnels { all [clear-sa] | callid *call_id* | lac-service *service_name* [clear-sa] | peer-address *ip_address* [clear-sa] }

all: Clears all tunnels in the current context.

lac-service service_name: Clears all tunnels in the current context that belong to the specified LAC service and closes the tunnels.

lns-service service_name: Clears all tunnels in the current context that belong to the specified LNS service and closes the tunnels.

pdsnclosedrp-service service_name: Clears all tunnels in the current context that belong to the specified PDSN Closed R-P service and closes the tunnels.

peer-address ip_address: Clears all tunnels in the current context whose destination (peer LNS) is the system at the specified IP address. The IP address is specified using IPv4 dotted-decimal notation.

callid call_id: Uses the unique identifier that specifies a particular tunnel in the system to clear that tunnel and disconnect it. The output of the command **show l2tp tunnels** contains a field labeled Callid Hint which lists the call id information to use with this command. This is an 8-byte hexadecimal number.

clear-sa: If any security associations have been established they are cleared.

Usage Guidelines Clear L2TP all or specific L2TP statistics or clear sessions in a tunnel and disconnect the tunnel.

Example

To clear all L2TP statistics for the current context, use the following command:

```
clear l2tp statistics
```

To clear all L2TP statistics for the LAC service named *lac1*, use the following command:

clear l2tp statistics lac-service lac1

Use the following command to clear L2TP statistics for the LNS peer at the IP address *10.10.10.100*:

clear l2tp statistics peer-address 10.10.10.100

The following command clears and closes all tunnels in the current context:

clear l2tp tunnels all

The following command clears and closes all tunnels for the LAC service named *lac2*:

clear l2tp tunnels lac-service lac2

The following command clears and closes all tunnels the peer at the IP address *10.10.10.110*:

clear l2tp tunnels peer-address 10.10.10.110

clear lawful-intercept

Refer to the *Lawful Intercept Configuration Guide* for a description of this command.

clear llc statistics

Deletes collected traffic statistics for the GPRS logical link-control (LLC) layer.

Product	SGSN
Privilege	Inspector
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description   **clear llc statistics [gprs-service** *srvc_name* **] [| { grep grep_options | more }]**

gprs-service *srvc_name*

Clears the collected statistics for an existing GPRS service specified as an alphanumeric string of 1 through 63 characters.

grep *grep_options* | more

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For more information on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Reference*.

Usage Guidelines	This command deletes statistics collected for the traffic that has gone through the LLC layer for either all GPRS services or for a specified GPRS service.

Example

The following command deletes all LLC statistics for GPRS service *gprs1*:

```
clear llc statistics gprs-service gprs1
```

clear lma-service statistics

Clears Local Mobility Anchor (LMA) statistics and counters found in **show** command outputs and bulk statistics associated with all LMA services or a specific service defined by the parameter in this command.

Product	P-GW
	SAEGW
Privilege	Operator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`
Syntax Description	`clear lma-service statistics [ name service_name ]`
	name service_name
	Clears statistics and counters for an existing LMA service name specified as an alphanumeric string of 1 through 63 characters.
Usage Guidelines	Use this command to clear statistics and counters in show command outputs and bulk statistics for all LMA services or for a specific LMA service.

Example

The following command clears statistics and counters for an LMA service named *lma3*:

```
clear lma-service statistics name lma3
```

clear local-policy

Clears local Quality of Service (QoS) policy service statistics and counters found in **show** command outputs and bulk statistics associated with all local QoS policy services or a specific service defined by the parameter in this command.

Product	P-GW

SAEGW

Privilege	Operator

Command Modes Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description **clear local-policy statistics [service** *service_name* **]**

service *service_name*

Clears statistics and counters for an existing local policy service name specified as an alphanumeric string of 1 through 64 characters.

Usage Guidelines Use this command to clear statistics and counters in **show** command outputs and bulk statistics for all local QoS policy services or a specific service.

Example

The following command clears statistics and counters for a local QoS policy service named *lp3*:

clear local-policy statistics service lp3

clear local-user

Clears information pertaining to local-user administrative accounts.

Product All

Privilege Security Administrator

Command Modes Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description **clear local-user { database [-noconfirm] | statistics | username** *name* **lockout }**

clear local-user database

Clears the local-user database by deleting all information for all local-user accounts.

⚠️

Caution Use this command only in the event of security concerns or to address concerns of the local-user account database integrity.

-noconfirm

Executes the command without any additional prompt and confirmation from the user.

clear local-user statistics

Clears statistics pertaining to local-user accounts.

clear local-user userame *name* lockout

Removes lockouts associated with the local-user account expressed as an alphanumeric string of 3 through 16 characters that is case sensitive.

Usage Guidelines

This command can be used to remove local-user account lockouts, reset local-user-related statistics to 0, or to delete the local-user database.

Example

The following command removes the lockout placed on a local-user account named *SecureAdmin*:

```
clear local-user username SecureAdmin lockout
```

clear location-service

Clears collected statistics and information pertaining to Location Services.

Product

MME

SGSN

Privilege

Security Administrator

Command Modes

Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description

```
clear location-services statistics [ service location_svc_name ]
```

statistics

Clears all location service statistics.

service *location_svc_name*

Clears statistics only for the specified location service.

Usage Guidelines

Use this command to clear location service statistics.

Example

The following command clears the Location service statistics only for the location service named *location_service1*:

```
clear location-service statistics service location_service1
```

clear mag-service statistics

Clears Mobile Access Gateway (MAG) statistics and counters found in **show** command outputs and bulk statistics associated with all MAG services or a specific service defined by the parameter in this command.

Product	HSGW
	S-GW
	SAEGW

Privilege	Operator

Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
clear mag-service statistics [ name service_name ]
```

name service_name

Clears statistics and counters for an existing MAG service name specified as an alphanumeric string of 1 through 63 characters.

Usage Guidelines

Use this command to clears statistics and counters in show command outputs and bulk statistics for all MAG services or for a specific MAG service.

Example

The following command clears statistics and counters for a MAG service named *mag1*

```
clear mag-service statistics name mag1
```

clear map statistics

Clears Mobile Application Part (MAP) statistics (SS7) for a specified service or all services.

Product	GGSN
	SGSN

Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`
Syntax Description	`clear map statistics [ name service_name ]  [ recovered-values ]`

name service_name

Clears statistics and counters for an existing MAP service name specified as an alphanumeric string of 1 through 63 characters.

recovered-values

Clears only recovered values for key MAP KPI counters that were backed-up.

Usage Guidelines	Delete MAP statistics for a single or all GGSN/SGSN services.

Example

The following command deletes all MAP statistics.

`clear map statistics`

clear maximum-temperatures

Clears information pertaining to component maximum temperatures. (ASR 5x00 only)

Product	All
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`
Syntax Description	`clear maximum-temperatures`
Usage Guidelines	Reset the timestamp to the current time and clear previous maximum temperatures for all temperature monitored components. This may be useful when preparing to study system performance, monitor usage, or troubleshoot the administrative interfaces.

Example

The following command resets the maximum temperature statistics for all monitored chassis components.

`clear maximum-temperatures`

clear mipfa statistics

Clears the statistics for the mobile IP foreign agent (MIPFA). The statistics for a specific foreign agent service may be cleared by an explicit command.

Product	PDSN
	GGSN
	ASN-GW
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description

```
clear mipfa statistics [ fa-service name | peer-address ip_address ]
```

fa-service *name* | peer-address *ip_address*

fa-service *name*: Clears the statistics for an existing FA service specified as an alphanumeric string of 1 through 63 characters. "Total sessions" counters for all peers associated with the service are also reset.

peer-address *ip_address*: Clears the statistics for the peer IP address specified in IPv4 dotted-decimal notation. "Total sessions" counter for the specified peer is also reset.

Usage Guidelines

Clear all statistics for the MIP foreign agent or for a specific service. This may be useful in monitoring performance and troubleshooting as the statistics may be cleared at a well known time and then collected and transferred for review.

Example

The following clears all statistics for the mobile IP foreign agent.

```
clear mipfa statistics
```

The following commands clear the statistics for the example service only.

```
clear mipfa statistics fa-service sampleService
clear mipfa statistics peer-address 10.2.3.4
```

clear mipha statistics

Clears the statistics for the mobile IP home agent (MIPHA). The statistics for a home agent service may be cleared by explicit command.

Product	PDSN
	HA

Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`
Syntax Description	`clear mipha statistics [ ha-service name | peer-address ip_address ]`
	ha-service *name* | peer-address *ip_address*
	ha-service *name*: Clears the statistics for an existing HA service name specified as an alphanumeric string of 1 through 63 characters. "Total sessions" counters for all peers associated with the service are also reset.
	peer-address *ip_address*: Clears the statistics for an IP address specified using IPv4 dotted-decimal notation. "Total sessions" counter for the specified peer is also reset.
Usage Guidelines	Clear all statistics for the MIP home agent or for a specific service. This may be useful in monitoring performance and troubleshooting as the statistics may be cleared at a well known time and then collected and transferred for review.

Example

The following clears all statistics for the mobile IP foreign agent.

```
clear mipha statistics
```

The following command clears the statistics for the example service only.

```
clear mipha statistics ha-service sampleService
clear mipha statistics peer-address 10.2.3.4
```

clear mipmn statistics

Clears the statistics for mobile IP mobile node (MIPMN).

Product	PDSN
	HA
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`
Syntax Description	`clear mipmn statistics`
Usage Guidelines	Clear all statistics for MIP mobile node. This may be useful in monitoring performance and troubleshooting as the statistics may be cleared at a well known time and then collected and transferred for review.

Example

The following clears all statistics for MIP mobile node:

```
clear mipmn statistics
```

clear mipv6ha statistics

Clears the statistics for mobile IP IPv6 home agent (MIPv6HA).

Product	PDSN
	HA
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	[local]*host_name*#
Syntax Description	`clear mipv6ha statistics`
Usage Guidelines	Clear all statistics for a MIP IPv6 home agent. This may be useful in monitoring performance and troubleshooting as the statistics may be cleared at a well known time and then collected and transferred for review.

Example

The following clears all statistics for MIPv6 home agent:

```
clear mipv6ha statistics
```

clear mme-service db record

Clears the MME database records all instances of session manager running for an MME service filtered with IMSI or GUTI as criteria.

Product	MME
Privilege	Inspector
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	[local]*host_name*#

Syntax Description
```
clear mme-service db record { all | guti plmn plmn_id group-id mme_grp_id
code mme_code m-tmsi mtmsi_value | imsi imsi_identifier | instance instance_id }
```

all

Clears all detached database records.

guti plmn *plmn_id* group-id *mme_grp_id* code *mme_code* m-tmsi *mtmsi_value*

This set of keywords specifies the filter criteria as a Globally Unique Temporary Identifier (GUTI) to clear the database records for MME service.

The GUTI is constructed from the GUMMEI and the M-TMSI where GUMMEI is constructed from PLMN (MMC and MNC) *plmn_id* and MME Identifier is constructed from an MME Group ID (MMEGI) *mme_grp_id* and an MME Code (MMEC) *mme_code*.

Within the MME, the mobile is identified by the M-TMSI *mtmsi_value*

imsi *imsi_identifier*

Specifies the filter criteria as International Mobile Subscriber Identity (IMSI) to clear the database records of a session instance. *imsi_identifier* is a 15-character IMSI field that identifies the subscriber's home country and carrier.

instance *instance_id*

Clears all detached database records in an existing session manager instance specified as an integer from 1 through 4294967295.

Usage Guidelines
Use this command to clear/remove database records for all or a particular instance of session manager for MME services on this system.

Example

The following command clears the summary database records of a session instance for subscriber having IMSI as *123455432112345* in the MME service:

```
clear mme-service db record imsi 123455432112345
```

clear mme-service db statistics

Clears the MME database statistics for MME sessions for all or specific session instances on this system.

Product MME

Privilege Inspector

Command Modes Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
clear mme-service db statistics [ instance smgr_instance ]
```

instance *smgr_instance*

Specifies that MME database statistics for a specific instance of session manager running for MME service are to be remove. The instance ID expressed is an integer from 0 through 4294967295. If an instance is not specified, database statistics of all instances will be removed.

Usage Guidelines

Use this command to clear/remove database statistics for all or a particular instance of session manager for MME services on this system.

Example

The following command removes/clears the database statistics of all instances of the MME service on a system:

```
clear mme-service db statistics
```

clear mme-service statistics

Clears MME service statistics based on various criteria.

Product

MME

Privilege

Security Administrator, Administrator

Command Modes

Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
clear mme-service statistics [ dcnr | decor [ decor-profile profile_name ]
| emm-only | esm-only | handover | mme-service mme_svc_name | offload |
paging-profile [ profile-name paging_profile_name ] | peer-id peer_identifier |
 recovered-values | s1ap | sctp | tai all | taidb db_name ] + [ | { grep
grep_options | more } ]
```

dcnr

Clears the dual connectivity NR statistics.

decor [decor-profile *profile_name*]

Clears the Decor statistics for all the configured Decor profile(s).

decor-profile *profile_name*: Clears the Decor statistics for the specified Decor profile. *profile_name* must be an alphanumeric string of 1 through 63 characters.

emm-only

Clears EPS mobility management (EMM) related statistics for all MME services, or clears these statistics for a specific MME service name or a specific eNodeB association peer identifier.

esm-only

Clears EPS session management (ESM) related statistics for all MME services, or clears these statistics for a specific MME service name or a specific eNodeB association peer identifier.

handover

Clears handover related statistics (such as Intra-MME, EUTRAN<->EUTRAN via S10, EUTRAN<->UTRAN via GnGp, EUTRAN<->GERAN via GnGp, and EUTRAN<->UTRAN via S3) for all MME services, or clears these statistics for a specific MME service name or a specific eNodeB association peer identifier.

mme-service *mme_svc_name*

Clears all statistics for the specified MME service name.

offload

Clears all load rebalancing (UE offload) statistics for all MME services, or clears these statistics for a specific MME service name or a specific eNodeB association peer identifier.

paging-profile [profile-name *paging_profile_name*]

Clears the paging profile statistics for all the configured paging-profile(s) one after another.

profile-name *paging_profile_name*: Clears the paging profile statistics for the given profile name. *paging_profile_name* must be an alphanumeric string of 1 through 63 characters.

peer-id *peer_identifier*

Clears all statistics for the specified eNodeB association peer identifier.

recovered-values

Clears all recovered statistics if the *Backup and Recovery of Key KPI Statistics* feature has been enabled. For details, refer to the **statistics-backup** command in the Global Configuration mode and the feature chapter in the *MME Administration Guide*.

s1ap

Clears all all S1-AP statistics for all MME services, or clears these statistics for a specific MME service name or a specific eNodeB association peer identifier.

sctp

Clears all all SCTP statistics for all MME services, or clears these statistics for a specific MME service name or a specific eNodeB association peer identifier.

tai all

Clears statistics stored for all TAIs in all TAI management databases.

taidb *db_name*

Clears statistics stored for all TAIs in the specified TAI management database.

grep *grep_options* **| more**

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines   This command is used to clear the statistical information of an MME service based on various filter criteria.

Example

The following command clears the service statistics of all MME service on a system:

```
clear mme-service statistics
```

clear multicast-sessions

Disconnects broadcast-multicast sessions based on specified criteria.

Product   PDSN

SGSN

Privilege   Security Administrator, Operator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

`[local]`*host_name*`#`

Syntax Description   **clear multicast-sessions [-noconfirm] [** *keywords* **] [verbose]**

-noconfirm

Executes the command without any additional prompt and confirmation from the user.

all

Disconnects all multicast sessions.

callid *call_id*

Clears the call specified by *call_id*. The call ID is as an 8-byte hexadecimal number.

card-num *slot_num*

Specifies the slot number of the packet processing card by which the multicast session is processed as a number from 1 through 7 or 10 through 16 (for the ASR 5000) or from 1 through 3 or 6 through 10 (for the ASR 5500).

flowid *id*

Clears calls for a specific Broadcast/Multicast Service (BCMCS) flow id, specified as a hexadecimal numbe.r

flowid-type [flow | program]

Clears multicast sessions according to the type of flow.

flow: Clears all multicast sessions for the flow ID type "flow".

program: Clears all multicast sessions for the flow ID type "program".

mcast-address *ipv4_address*

Clears multicast sessions for a specific multicast address. Must be followed by the IP address of an interface in IPv4 dotted-decimal notation.

pcf *ipv4_address*

Clears multicast sessions connected via the packet control function defined by an IP address in IPv4 dotted-decimal notation.

pdsn_service *name*

Clears multicast sessions connected to an existing packet data service name.

sgsn-service *svc_name*

Displays information for multicast sessions connected to an existing SGSN service name.

verbose

Displays as much information as possible. If this option is not specified, the output is the standard level which is the concise mode.

Usage Guidelines

Clear multicast sessions to aid in troubleshooting the system when no additional subscribers may connect or when a specific service or remote address may be having connection problems. This command may also be useful when preparing for maintenance activities such that connects may be cleared to perform any necessary procedures.

The keywords are filters that modify or filter the criteria for deciding which sessions to clear and are described below. Multiple keywords can be entered on a command line.

When multiple keywords are specified, the multicast sessions deleted must meet the specifications of all of the keywords.

Example

The following command clears the broadcast-multicast sessions having multicast address *10.2.3.4*:

clear multicast-sessions mcast-address 10.2.3.4

The following command clears the broadcast-multicast session(s) having call id *00004e22*:

clear multicast-sessions callid 00004e22

clear nat-ip

Clears the NAT IP addresses forcibly from NAT pools.

Product	NAT
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description **clear nat-ip {** *ip_address* **| pool** *pool_name* **} context** *context_name* **[-noconfirm]**

ip_address

Specifies the NAT IP address to be released from subscribers, in IPv4 dotted-decimal notation.

pool *pool_name*

Specifies the NAT pool name, that is an existing IP pool or IP pool group, specified as an alphanumeric string of 1 through 31 characters.

context *context_name*

Clears statistics for the VPN context name where the NAT pool belongs to, specified as an alphanumeric string of 1 through 79 characters.

-noconfirm

Executes the command without any additional prompt and confirmation from the user.

Usage Guidelines Use this command to clear the NAT IP addresses from Session Manager to VPN for NAT pools, by forcibly releasing the IP addresses from the subscriber calls.

Example

The following command clears the NAT IP statistics for the configured IP address *1.1.1.1* in the **test123** VPN context:

clear nat-ip 1.1.1.1 context test123

The following command clears the NAT IP statistics for the **pool1** NAT pool in the **test123** VPN context without user confirmation:

```
clear nat-ip pool pool1 context test123 -noconfirm
```

clear pcc-policy service statistics

Clears statistical information of all or a specific policy control and charging (PCC) service configured in a context.

Product	IPCF
Privilege	Security Administrator, Administrator, Operator, Inspector
Command Modes	Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description

```
clear pcc-policy statistics [ name pcc_plcy_svc_name ]
```

name *pcc_plcy_svc_name*

Clears information only for an existing PCC-Policy service in the current context, expressed as an alphanumeric string of 1 through 79 characters.

Usage Guidelines

Use this command to clears the statistical information of all or an specific PCC-Policy services configured in a context.

Clearing of statistics can further be filtered for specific PCC-Policy service name as well.

Example

The following command clears the statistical information for the PCC-Policy service named *pcc_policy1* in summarized output:

```
clear pcc-policy service statistics name pcc_policy1
```

clear pcc-policy session

Clears the active/dormant session information about PCC-Policy service instances configured and running on this system based on different filter criteria.

Product	IPCF
Privilege	Security Administrator, Administrator, Operator, Inspector
Command Modes	Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description

```
clear pcc-policy sessions [ all] [apn | call-id call_id | imsi imsi_id |
ip-address pcc_pcef_ip_address | service pcc_plcy_svc_name ] [ local-purge ]
```

all

Clears the session information of all registered IP-CAN session(s) on a PCC-Policy service instance running on the system. The display can be filtered based on given filtering criteria.

apn *apn_name*

Clears the session information for PCC-Policy service sessions connected via an existing APN,

imsi *imsi_id*

Clears the session information of IP-CAN session(s) based on the IMSI identifier of a subscriber on a PCC-Policy service instance. *imsi_id* is the International Mobile Subscriber Identity (IMSI) and must be a 15-character field which identifies the subscriber's home country and carrier.

ip-address *pcc_pcef_ip_address*

Clears the session statistics of IP-CAN session(s) based on the registered PCEF (Policy and Charging Enforcement Function) node IP address expressed in IPv4 dotted-decimal or IPv6 colon-separated-hexadecimal notation.

call-id *call_id*

Clears the session statistics of IP-CAN session(s) based on the existing registered call id of an IP-CAN session subscriber specified in eight-bye hexadecimal format.

pcc-policy-service *pcc_plcy_svc_name*

Clears the session statistics of registered IP-CAN session(s) based on an existing PCC-Policy service name, expressed as an alphanumeric string of 1 through 63 characters.

local-purge

Clears the session information for PCC-Policy service sessions locally only.

Usage Guidelines

Use this command to clear the session statistics of all or specific registered IP-CAN session(s) or in selected part of user session for PCC-Policy services configured and running on this system.

Example

The following command clears the session statistics for all registered PCC-Policy service instances on a system/context locally only:

```
clear pcc-policy sessions all local-purge
```

clear pcc-sp-endpoint statistics

Clears the statistical information of all or specific PCC-Sp-Endpoint instance configured in a context.

Product	IPCF
Privilege	Security Administrator, Administrator, Operator, Inspector
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description	`clear pcc-sp-endpoint statistics [ name sp_endpt_name ]`

name *sp_endpt_name*

Clears information only for an existing PCC-Sp-Endpoint instance specified as an alphanumeric string of 1 through 79 characters.

Usage Guidelines	Use this command to clear the statistical information of all or an specific PCC-Sp-Endpoint interface configured in a context.

Clearing of statistics can further be filtered for specific PCC-Sp-Endpoint instance name as well.

Example

The following command clears the statistical information for the PCC-Sp-Endpoint instance named *sp1* in summarized output:

`clear pcc-sp-endpoint statistics name sp1`

clear pdg-service statistics

Deletes all previously gathered statistics for a specific Packet Data Gateway (PDG) service or all PDG services configured within a context.

Product	PDG/TTG
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description	`clear pdg-service statistics [ name service_name ]`

name *service_name*

Clears the statistics for the PDG service name configured in the context, expressed as an alphanumeric string of 1 through 63 characters that is case sensitive.

Usage Guidelines	Usage Statistics for a single PDG service can be cleared using the name keyword. Statistics for all PDG services in the context can be deleted by entering the command with no keywords.

If this command is executed from within the local context with no keywords, statistics will be cleared for every PDG service configured on the system regardless of context. In addition, if the name keyword is used when executing from within the local context, statistics for all PDG services configured with the specified name will be cleared regardless of context.

Example

The following command clears statistics for a PDG service named *pdg1*:

```
clear pdg-service statistics pdg1
```

clear pgw-service

Clears PDN Gateway (P-GW) statistics and counters found in **show** command outputs and bulk statistics associated with all P-GW services or a specific service defined by the parameter in this command.

Product	P-GW
	SAEGW
Privilege	Operator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`
Syntax Description	`clear pgw-service statistics [name service_name] [	{ grep grep_options	more }]`

name service_name

Clears statistics and counters for an existing P-GW service name, expressed as an alphanumeric string of 1 through 63 characters.

grep grep_options | more

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines   Use this command to clear statistics and counters in show command outputs and bulk statistics for all P-GW services or for a specific P-GW service.

Example

The following command clears statistics and counters for an P-GW service named *pgw5*:

```
clear pgw-service statistics name pgw5
```

clear port

Clears port related statistics.

Product

All

Privilege

Security Administrator, Administrator, Operator

Command Modes

Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description

clear port { datalink counters { all | *slot/port* **} | npu counters { all |** *slot/port* **[untagged | vlan** *tag_id* **] }**

datalink counters

Clears data link port statistics.

npu counters

Clears statistics for the network processing unit(s).

all

Clears counters for all datalink or NPU ports.

slot/port

Clears the statistics for the specified slot and port number.

untagged

Clears NPU statistics for all ports that do not have a VLAN tag.

vlan *tag_id*

Clears NPU statistics for the port that has a previously configured VLAN tag ID.

Usage Guidelines

Manually clear the statistics for a specified port. This is useful when preparing to troubleshoot or monitor the system.

Example

The following command clears the data link related statistics for port 1 in slot 17.

clear port datalink counters 17/1

The following command clears the network processing unit related statistics for port 1 in slot 17.

clear port npu counters 17/1

The following command clears the network processing unit related statistics for port 10 in slot 5.

```
clear port npu counters 5/10
```

clear ppp statistics

Clears point-to-point protocol (PPP) related statistics. All PPP statistics may be cleared or just those for a specific packet data service may be cleared.

Product	PDSN
	GGSN
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`

Syntax Description
```
clear ppp statistics [ ggsn-service ggsn_name | lns-service lns_name |
pcf-address [ pcf_ip_addr | all ] | pdsn-service pdsn_name |
pdsnclosedrp-service pdsnclosedrp_name ]
```

ggsn-service ggsn_name

Clears statistics only for the time the session is connected to the named GGSN service.

lns-service lns_name

Clears statistics only for the time the session is connected to the named LNS service.

pcf-address [pcf_ip_addr | all]

Clears statistics only for the time the session is connected to the specified PCF (Packet Control Function) or for all PCFs. *pcf_ip_addr* must be entered using IPv4 dotted-decimal notation.

pdsn-service pdsn_name

Clears statistics only for the named PDSN service.

pdsnclosedrp-service pdsnclosedrp_name

Clears statistics only for the time the session is connected to the named PDSN Closed RP service.

Usage Guidelines   Allows you to manually reset PPP statistics when it is desired to have counts begin again from a specific point in time.

Example

The following clears the statistics for all PPP counters and services.

```
clear ppp statistics
```

The following clears only the point-to-point protocol statistics for the service named *sampleService*.

```
clear ppp statistics pdsn-service sampleService
```

clear prepaid 3gpp2 statistics

Clears all of the statistics counters for 3GPP2 Pre-paid accounting. Statistics may be cleared for all services or for an individual service.

Product	PDSN
	GGSN
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`
Syntax Description	`clear prepaid 3gpp2 statistics { all	{ ggsn-service	ha-service	lns-service	pdsn-service	pdsnclosedrp-service } { all	name service_name } }`

all

Clears prepaid statistics for all services.

ggsn-service

Clears statistics for GGSN service(s).

ha-service

Clears statistics for HA service(s).

lns-service

Clears statistics for LNS service(s).

pdsn-service

Clears statistics for PDSN service(s).

pdsnclosedrp-service

Clears statistics for PDSN Closed-RP service(s).

{ all | name service_name }

all: Clears statistics for all services of the specified type.

name *service_name*: Clears statistics for the named service of the specified service type.

Usage Guidelines Use this command to clear Pre-paid statistics for a particular named service or for all services.

Example

To clear statistics for a PDSN service name *PDSN1*, enter the following command:

```
clear prepaid 3gpp2 statistics pdsn-service name PDSN1
```

clear prepaid wimax

Clears all of the statistical counters for WiMAX prepaid accounting. Statistics may be cleared for all services or for an individual service.

Product ASN-GW

Privilege Operator

Command Modes Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description **clear prepaid wimax statistics { all | asngw-service { all | name** *service_name* **} | ha-service { all | name** *service_name* **} }**

all

Clears prepaid statistics for all services.

asngw-service

Clears prepaid statistics for ASN-GW service(s).

ha-service

Clears prepaid accounting statistics for HA service(s).

{ all | name **service_name** }

all: Clears statistics for all services of the specified type.

name *service_name*: Clears statistics for the named service of the specified service type.

Usage Guidelines Use this command to clear prepaid WiMAX accounting statistics for named service or for all services.

Example

The following command clears prepaid WiMAX accounting statistics for an ASN-GW service name *asn1*:

```
clear prepaid wimax statistics asngw-service name asn1
```

clear ps-network statistics

☞

Important   In Release 20 and later, HNBGW is not supported. This command must not be used for HNBGW in Release 20 and later. For more information, contact your Cisco account representative.

Clears the HNB-Packet Switched (PS) network service associated with an HNB-GW service instance.

Product   HNB-GW

Privilege   Operator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description   `clear ps-network statistics [ name cs_svc_name | gtpu-only | ranap-only | rtp-only | sccp-only ]`

name *ps_svc_name*

Clears the session statistics based on an existing HNB-PS network service name, expressed as an alphanumeric string of from 1 through 63 characters.

gtpu-only

Clears the session statistics for GTP-U traffic only for the specified HNB-PS Network service.

ranap-only

Clears the session statistics for Radio Access Network Application Protocol (RANAP) traffic only for the specified HNB-PS Network service.

sccp-only

Clears the session statistics for Signaling Connection Control Part (SCCP) traffic only for the specified HNB-PS Network service.

Usage Guidelines   Use this command to clear the session statistics for overall session or in selected part of user session for HNB-CS Network services configured and running on a system.

Example

The following command clears the session statistics for RANAP part of session for the HNB-PS Network service *hnb_PS_1*:

```
clear ps-network statistics name hnb_PS_1 ranap-only
```

clear qos npu stats

Clears information pertaining to NPU QoS priority queue bandwidth allocation and sharing.

Product	GGSN
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`
Syntax Description	`clear qos npu stats inter-subscriber traffic slot slot_num`

inter-subscriber traffic slot _slot_num_

Clears inter-subscriber traffic statistics for the ASR 5000 application or line card or the ASR 5500 DPC or MIO card installed in the specified slot.

_slot_num_ indicates the number of the chassis slot in which the card is installed and can be configured to an integer value from 1 through 48 (for the ASR 5000 or 1 through 10 (for the ASR 5500).

Usage Guidelines	Allows you to manually reset statistics pertaining to NPU QoS priority queue bandwidth allocation.

Example

The following command clears statistics for a card installed in chassis slot _3_:

```
clear qos npu stats inter-subscriber traffic slot 3
```

clear radius accounting archive

Clears archived RADIUS accounting messages associated with an AAA group, or all the archived RADIUS accounting messages in the context in which the command is executed depending on the option chosen. The scope of the command is limited to the context in which it is executed (including the local context).

☞

Important This command is only available in StarOS 8.3 and later. For more information, please contact your local service representative.

Product	All
Privilege	Security Administrator, Administrator

Command Modes

Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
clear radius accounting archive { all | radius group group_name } [
-noconfirm ]
```

all

Clears all archived RADIUS accounting messages in the context.

radius group group_name

Clears all archived RADIUS accounting messages for the specified RADIUS group.

group_name must be the name of a RADIUS server group, and must be an alphanumeric string of 0 through 64 characters.

-noconfirm

Executes the command without any additional prompt and confirmation from the user.

Usage Guidelines

Use this command to clear the archived RADIUS accounting messages associated with an AAA group, or all the archived RADIUS accounting messages in the context in which the command is executed.

Example

Use the following command to clear all archived RADIUS accounting messages for the group named *test12*.

```
clear radius accounting archive radius group test12
```

clear radius counters

Clears the statistics for all RADIUS servers or a server group.

Product

ASN-GW

GGSN

PDSN

P-GW

SAEGW

Privilege

Security Administrator, Administrator, Operator

Command Modes

Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description	`clear radius counters { all	radius group` *group_name* `| server` *ip_address* `[port` *number* `] }`

all | radius group *group_name* | server *ip_address* [port *number*]

all: Clears statistics for all servers.

radius group *group_name*: Clears all configured authentication/accounting servers in the specified RADIUS group. *group_name* must be the name of server group configured in a specific context for authentication/accounting, expressed as an alphanumeric string of 1 through 63 characters.

server *ip_address* **[port** *number* **]**: Clears statistics only for the server specified using IPv4 dotted-decimal or IPv6 colon-separated-hexadecimal notation. Optionally, you can specify the port which is to have its RADIUS statistics cleared as an integer from 0 through 65535.

Usage Guidelines	Clears all the configured RADIUS servers' statistics to reset them to zero prior to logging or monitoring the system for troubleshooting, performance measurements, etc.

Note that this CLI command will clear all the statistics associated with the configured RADIUS accounting and authentication servers except these two counters –

- Access Request current consecutive failures in a mgr
- Accounting-Request Current Consecutive Failures in a mgr

Example

The following command clears the statistics for all RADIUS servers.

`clear radius counters all`

The following command resets the statistics only for the server *10.2.3.4*.

`clear radius counters server` *10.2.3.4*

The following command resets the statistics only for the server group named *star1*.

`clear radius counters radius group star1`

clear rlf-context-statistics

Clears the statistics for all active Rate Limiting Function (RLF) contexts.

Product	GGSN
	P-GW

Privilege	Security Administrator, Administrator, Operator, Inspector

Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]`*host_name*`#`

Syntax Description	`clear rlf-context-statistics { diamproxy [ endpoint` *endpoint_name* `[ peer-realm` *realm_name* `[ peer-host` *host_name* `]]]	sessmgr [gtpc-context-name` *context_name grep_options* `] ingress] } [	{ grep	more }]`

endpoint *endpoint_name*

Clears the context information only for the endpoint specified as a string of size ranging from 1 through 63 characters.

realm *realm_name*

Clears the context information only for the realm specified as a string of size ranging from 1 through 127 characters.

peer-host *host_name*

Clears the context information only for the host specified as a string of size ranging from 1 through 63 characters.

grep *grep_options* **| more**

Pipes (sends) the output of the command to the command specified. You must specify a command to which the output will be sent.

For details on the usage of the **grep** and **more** commands, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines	Use this command to clear the statistics for all active RLF contexts.

Example

The following command clears the statistics for all active RLF contexts:

`clear rlf-context-statistics diamproxy`

clear rohc statistics

Clears statistics and counters collected since the last reload or **clear** command was issued for RObust Header Compression (ROHC) [RFC 3095].

Product	PDSN
	ASN-GW
	HSGW
Privilege	Administrator, Config-administrator, Operator, Inspector
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]`*host_name*`#`

Syntax Description	`clear rohc statistics [ pdsn-service` *pdsnsvc_name* `| asngw-service` *asngwsvc_name*

pdsn-service pdsnsvc_name

Clears ROHC statistics and counters for the specified PDSN service.

asngw-service asngwsvc_name

Clears ROHC statistics and counters for the specified ASN-GW service.

Usage Guidelines	Use this command to clear ROHC statistics for all services or for a specific PDSN or ASNGW service.

Example

The following command clears ROHC statistics and counters for the PDSN service named *pdsn1*:

`clear rohc statistics pdsn-service pdsn1`

clear rp service-option

Clears the radio-packet (R-P) interface service option statistics.

Product	PDSN
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]`*host_name*`#`
Syntax Description	`clear rp service-option statistics [ number` *option_num* `| pdsn-service` *pdsn_name* `]`

number option_num | pdsn-service pdsn_name

Default: clears the statistics for all service options and all packet data services.

number *option_num*: Specifies the R-P service option number for which the statistics are to be cleared as an integer from 0 through 1000.

pdsn-service *pdsn_name*: Specifies the PDSN service name for which statistics will be cleared.

Usage Guidelines	Clear the R-P service option statistics prior to monitoring the system for bench marking or for detecting areas of further research.

Example

The following resets the service option statistics for service option *23* and packet data service *sampleService*, respectively.

```
clear rp service-option statistics number 23
clear rp service-option statistics pdsn-service sampleService
```

clear rp statistics

Clears the radio-packet (R-P) interface statistics. The statistics for a specific packet data server or peer node may be cleared if specified.

Product

PDSN

Privilege

Security Administrator, Administrator, Operator

Command Modes

Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description

```
clear rp statistics [ pdsn-service name | peer-address [ peer_address | all
] ]
```

pdsn-service *name* | peer-address [*peer_address* | all]

Default: clears all R-P associated statistics.

pdsn-service *name*: Specifies the packet data service name that is to have its statistics reset.

peer-address [*ip_address* **| all]**: Specifies that statistics for the specified peer, or all peers, are to be cleared. The *ip_address* must be specified using IPv4 dotted-decimal notation.

Usage Guidelines

Clear the statistics to prepare for monitoring the system.

Example

The following command resets all the associated statistics for the R-P interfaces.

`clear rp statistics`

The following command clears the statistics for the packet data service *sampleService*.

`clear rp statistics pdsn-service sampleService`

The following command resets the statistics associated with peer node with IP address *10.2.3.4*.

`clear rp statistics peer-address 10.2.3.4`

clear rsvp statistics

Clears the Resource Reservation Protocol (RSVP) statistics.

Product

All

Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description	`clear rsvp statistics`
Usage Guidelines	Clear RSVP statistics.

Example

The following command resets all RSVP statistics.

`clear rsvp statistics`

clear saegw-service

Clears System Architecture Evolution Gateway (SAEGW) statistics and counters found in **show** command outputs and bulk statistics associated with all SAEGW services or a specific service defined by the parameter in this command.

Product	SAEGW
Privilege	Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description

`clear saegw-service statistics { all | name service_name } [ | { grep grep_options | more } ]`

all

Clears all SAEGW node-level statistics.

name service_name

Clears statistics and counters for an existing SAEGW service name, expressed as an alphanumeric string of 1 through 63 characters.

grep grep_options | more

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines	Use this command to clear statistics and counters in show command outputs and bulk statistics for all SAEGW services or for a specific SAEGW service.

Example

The following command clears statistics and counters for an SAEGW service named *saegw5*:

```
clear saegw-service statistics name saegw5
```

clear samog-service statistics

Clear statistics associated with S2a Mobility Over GTP (SaMOG) services.

Product	SAMOG
Privilege	Inspector
Syntax Description	`clear samog-service statistics` *samog_service_name*

clear samog-service statistics *samog_service_name*

Clears SaMOG service-related statistical information. Service name should be between *1* and *63*.

Usage Guidelines	Use this command to clear statistics and counters in show command outputs and bulk statistics for all SaMOG services or for a specific SaMOG service.

Example

The following command clears SaMOG Statistics *21* :

```
clear samog-service statistics 21
```

clear sbc statistics

Clears SBc service statistics based on various criteria.

Product	MME
Privilege	Security Administrator, Administrator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description	`clear sbc statistics { all	peer-id` *peer_id* `| sbc-service-name` *sbc_svc_name* `}	{	grep` *grep_options* `| more }]`

all

Clears statistics for all SBs services.

peer-id *peer_id*

Clears statistics for a Cell Broadcast Center (CBC) peer association specified as an integer value from 0 through 4294967295.

Use the **show sbc-service cbc-associations all** command to display the available CBC association peer IDs.

sbc-service-name *sbc_svc_name*

Clears all statistics for an existing SBc service specified as an alphanumeric string of 1 through 63 characters.

grep *grep_options* **| more**

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

| **Usage Guidelines** | Use this command to clear the statistical information of an SBc service based on various filter criteria. |

Example

The following command clears all statistics for the SBc service named *sbc1*

```
clear sbc statistics sbc-service-name sbc1
```

clear sccp statistics

Clears SS7 Signaling Connection Control Part (SCCP) statistics collected for services that use the SCCP protocol.

Product	SGSN
Privilege	Inspector
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`
Syntax Description	`clear sccp statistics [iups-service iups_srvc_name	map-service map_srvc_name` `| sccp-network ntwk_index [dpc dpc [ssn ssn]	global-title-translation` `{ address-map instance add_map_inst	association instance assoc_inst } [` `sessmgr instance sessmgr_inst]] [	{ grep grep_options	more }]`

iups-service *iups_srvc_name*

Deletes collected SCCP protocol statistics for an existing Iu-PS service in the current context specified as an alphanumeric string of 1 through 63 characters.

map-service *map_srvc_name*

Deletes collected SCCP protocol statistics for an existing MAP service specified as an alphanumeric string of 1 through 63 characters.

sccp-network *ntwk_index*

Deletes collected SCCP protocol statistics for the SSCP network configuration with the a network index specified as an integer from 1 through 12.

The following filters can be added to limit the clearing of SCCP network statistics:

- **dpc** *dpc*: Specifies a differentiated pointcode address to limit the deletion of collected SCCP network statistics to those for the identified destination.

- **ssn** *ssn*: Specifies a subsystem number as an integer from 1 to 255 to limit the deletion of collected SCCP network statistics.

- **global-title-translation address-map instance** *add_map_inst*: Specifies an identified GTT address-map as an integer from 1 to 4096 to limit the deletion of collected SCCP network statistics.

- **global-title-translation association instance** *assoc_inst*: Specifies an identified GTT association as an integer from 1 to 16 to limit the deletion of collected SCCP network statistics.

- **sessmgr instance** *sessmgr_inst*: Specifies an identified session manager instance as an integer from 1 to 384 to limit the deletion of collected SCCP network statistics.

Usage Guidelines   Use this command to delete all collected SCCP statistics or to delete SCCP statistics for a specified service, SCCP network, or session manager.

Example

The following command deletes all collected SCCP statistics:

```
clear sccp statistics
```

The following command clears all collected SCCP statistics for the IuPS service named *iups-serv1*:

```
clear sccp statistics iups-service iups-serv1
```

clear security

Clears the database statistics maintained by the system for the specified Talos Intelligence server.

Product   All

Privilege   Security Administrator, Administrator, Operator

Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`

Syntax Description	`clear security server talos-intelligence` *server_name*
	server_name
	Specifies the name of the Talos Intelligence server for which database statistics will be cleared. *server_name* must be an alphanumeric string of 1 through 63 characters.

Usage Guidelines	Use this command to reset the database statistics maintained by the system for the specified Talos Intelligence server.

clear session disconnect-reasons

Clears the session disconnect reason statistics for all sessions on the system.

Product	All

Privilege	Security Administrator, Administrator, Operator

Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`

Syntax Description	`clear session disconnect-reasons [ buckets ]`
	[buckets]
	This keyword option clears session disconnect reason statistics <u>only</u> from the three indexed buckets that may be associated with all session managers. The buckets are created when the Exec mode **session disconnect-reasons bucket-interval** command is enabled.

Usage Guidelines	Sets the counters for session disconnect reasons to zero (0) in preparation for a monitoring or troubleshooting session.
	Example
	`clear session disconnect-reasons`

clear session-event-record statistics

Clears statistics collected during session event module transfers.

Product	S-GW

SAEGW

| **Privilege** | Operator |

| **Command Modes** | Exec |

The following prompt is displayed in the Exec mode:

`[local]`*`host_name`*`#`

| **Syntax Description** | `clear session-event-record statistics` |

| **Usage Guidelines** | Use this command to delete all collected session event record statistics. |

clear session setuptime

Clears the session setup time statistics for Packet Control Functions (PCFs) or SGSNs. If no keyword is specified the summary statistics displayed by the **show session setuptime** command are cleared.

| **Product** | All |

| **Privilege** | Security Administrator, Administrator, Operator |

| **Command Modes** | Exec |

The following prompt is displayed in the Exec mode:

`[local]`*`host_name`*`#`

| **Syntax Description** | `clear session setuptime [ pcf [ `*`pcf_addr`*` | all ] | sgsn-address [ `*`sgsn_addr`*` | all ]` |

pcf [*pcf_addr* | all]

pcf_addr: Clears the setup time counters for the PCF at the IP address specified in IPv4 dotted-decimal notation.

all: Clears the setup time counters for all PCFs.

sgsn-address [*sgsn_addr* | all]

sgsn_addr: Clears the setup time counters for the SGSN at the IP address specified in IPv4 dotted-decimal notation.

all: Clears the setup time counters for all SGSNs.

| **Usage Guidelines** | Sets the counters for session disconnect reasons to zero (0) in preparation for a monitoring or troubleshooting session. |

Example

To clear the statistics for the PCF at IP address *192.168.100.10*, enter the following command:

`clear session setuptime pcf 192.168.100.10`

clear session subsystem

Clears all session subsystem statistics for the current context.

Product	All
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`
Syntax Description	`clear session subsystem`
Usage Guidelines	Clears the statistics in preparation for a troubleshooting or monitoring session so that the counters are at a well known values.

Example

`clear session subsystem`

clear sgsn-fast-path statistics

Clears information related to SGSN fast-path.

> ✎
>
> **Note** This command is not supported by SGSN from software release 16.2 onwards as the NPU FastPath feature is not supported by SGSN from the 16.2 release.

Product	SGSN
Privilege	Inspector
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`
Syntax Description	`show sgsn-fast-path statistics [all	smgr-instance` *smgr_inst* `] [	{ grep` *grep_options* `| more }]`

all

Deletes collected fast-path statistics for all session managers.

smgr-instance *smgr_inst*

Clears collected fast-path statistics for a session manager instance specified as an integer from 1 to 65535.

grep *grep_options* | more

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

Please refer to the *Regulating the Command Output* section in this reference for details on the usage of **grep** and **more**.

Usage Guidelines   Use this command to clear all statistics for SGSN fast-path configurations.

Example

The following command deletes all collected fast-path statistics for all SGSN session managers:

```
clear sgsn-fast-path statistics
```

clear sgsn-map-app

Deletes collected statistics for the SGSN Mobile Application Part (MAP).

Product   SGSN

Privilege   Inspector

Command Modes   Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description   `clear sgsn-map-app statistics [ | { grep grep_options | more } ]`

clear sgsn-map-app statistics

Clears all collected statistics for the SGSN MAP application.

grep *grep_options* | more

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

Please refer to the *Regulating the Command Output* section in this reference for details on the usage of **grep** and **more**.

Usage Guidelines   Use this command to delete collected statistics for the SGSN MAP application.

Example

The following command clears all collected SGSN MAP statistics:

clear sgsn-map-app statistics

clear sgsn rlf-context-statistics

Clears the Paging throttle RLF context statistics.

Product

SGSN

Privilege

Inspector

Command Modes

Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description

```
clear sgsn rlf-context-stats sessmgr { all | instance <instance_value> } [
peer-nsei-id <NSE_identifier> | peer-rnc-id <RNC_identifier> ] [ | { grep
grep_options | more } ]
```

sessmgr

Clears the RLF statistics specific to Session Managers.

all

Clears the RLF context statistics for all the Session Managers.

instance

Clears the RLF context statistics for the specified Session Manager.

instance_value

The Session Manager instance specified as an integer from 1 to 384.

peer-nsei-id

Specifies the Peer NSEI ID for which RLF context statistics need to be cleared.

NSE_identifier

The Peer NSEI identifier specified as an integer from 0 to 65535.

peer-rnc-id

Specifies the Peer RNC ID for which RLF context statistics need to be cleared.

RNC_identifier

The Peer RNC identifier specified as an integer from 0 to 65535.

grep *grep_options* **| more**

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

Please refer to the *Regulating the Command Output* section in this reference for details on the usage of **grep** and **more**.

Usage Guidelines	This command can be configured to clear the Paging throttle RLF context statistics for:

- All the Session Managers.
- The specified Session Manager.
- The specified Peer NSEI.
- The specified Peer RNC.

The keyword **sessmgr** is a mandatory keyword. Specifying the **peer-nsei-id** or **peer-rnc-id** is optional. When the **peer-nsei-id** or **peer-rnc-id** is not specified the global statistics are cleared. If the Session Manager instance is specified, the RLF context statistics for that Session Manager are cleared. If the keyword **all** is configured the RLF statistics for all the Session Managers are cleared.

Example

The following command clears the Paging throttle RLF context statistics for all the Session Managers:

```
clear sgsn rlf-context-statistics sessmgr all
```

clear sgs-service

Clears SGs interface statistics associated with a Visitor Location Register (VLR).

Product	MME

Privilege	Operator

Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description	**clear sgs-service { statistics [name** *name* **]	vlr-status [service-name** *name* **] [vlr-name** *name* **] }**

statistics [name *name*]

Clears statistics for all SGs services or a specific SGs service.

name *name*: Clears the statistics for an existing SGs service specified as an alphanumeric string of 1 through 63 characters.

vlr-status [service-name *name*] [vlr-name *name*] }

Clears statistics for all VLRs, a VLR related to a SGs service, or a specific VLR.

service-name *name*: Clears the SGs statistics for an existing VLR specified as an alphanumeric string of 1 through 63 characters.

Usage Guidelines	Use this command to clear statistics for all SGs services, Visitor Location Registers (VLRS), or a specific SGs service or VLR name.

Example

The following command clears statistics for an SGs service named *sgs2*:

```
clear sgs-service statistics name sgs2
```

clear sgtpc statistics

Clears all SGSN GTP-C (SGTPC) interface statistics for the current context.

Product	MME
	SGSN
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`
Syntax Description	`clear sgtpc statistics [gsn-address ipv4_address	sgtp-service sgtp_srvc_name]`

gsn-address *ipv4_address*

Clears GTPC packet statistics for the interface specified as an IP address in IPv4 dotted-decimal notation.

sgtp-service *sgtp_srvc_name*

Clears GTPC packet statistics for an existing SGTP service specified as an alphanumeric string of 1 through 63 characters.

Usage Guidelines	Use this command to clear the statistics in preparation for a troubleshooting or monitoring session.

☞

Important	Statistics are vital for troubleshooting. We recommend that you check with your Cisco support personnel prior to clearing these statistics.

Example

```
clear sgtpc statistics sgtp-service SGSN1sgtp12
```

clear sgtpu statistics

Clears all SGSN GTP-U (SGTPU) statistics for the current context.

Product

SGSN

Privilege

Security Administrator, Administrator, Operator

Command Modes

Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description

```
clear sgtpu statistics [ ggsn-address ipv4_address | gprs-service gprs_srvc_name
 nsei nse_id | iups-bind-address ipv4_address | iups-service iups_srvc_name |
recovered-values | rnc-address ipv4_address | sgtp-service sgtp_srvc_name ]
```

ggsn-address *ipv4_address*

Clears GTPU packet statistics for a specific GGSN specified as an IP address in IPv4 dotted-decimal notation.

gprs-service *gprs_srvc_name* nsei *nse_id*

gprs-service *gprs_srvc_name*: Clears GTPU packet statistics for the interface for a specific GPRS service specified as an alphanumeric string of 1 through 63 characters.

nsei *nse_id*: Specifies a network service entity (NSEI) as an integer from 0 through 65535.

iups-bind-address *ipv4_address*

Clears GTPU packet statistics for the bind address of an IuPS interface specified as an IP address in IPv4 dotted-decimal notation.

iups-service *iups_srvc_name*

Clears GTPU packet statistics for an active IuPS service interface specified as an alphanumeric string of 1 through 63 characters.

recovered-values

Clears only recovered values for key SGTP KPI counters that were backed-up.

To narrow the results, this keyword can be combined with either the **iups-service** or the **sgtp-service** keywords.

rnc-address *ipv4_address*

Clears GTPU packet statistics for an RNC specified as an IP address in IPv4 dotted-decimal notation.

sgtp-service *sgtp_srvc_name*

Clears GTPU packet statistics for an active SGTP service interface specified as an alphanumeric string of 1 through 63 characters.

Usage Guidelines	Use this command to clear the statistics in preparation for a troubleshooting or monitoring session.

☞

Important	Statistics are vital for troubleshooting. We recommend that you check with your Cisco support personnel prior to clearing these statistics.

Example

Use this command to clear collected SGTPU statistics for a specific NSEI of a configured GPRS service:

```
clear sgtpu statistics gprs-service SGSN1Gprs1 nsei 2445
```

clear sgw-service statistics

Clears Serving Gateway (S-GW) statistics and counters found in **show** command outputs and bulk statistics associated with all S-GW services or a specific service defined by the parameter in this command.

Product	S-GW
	SAEGW
Privilege	Operator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	[local]*host_name*#
Syntax Description	**clear sgw-service statistics { all	name** *service_name* **}**

all

Clears statistics and counters for all S-GW services configured on the system.

name service_name

Clears statistics and counters for an existing S-GW service name specified as an alphanumeric string of 1 through 63 characters.

Usage Guidelines	Use this command to clears statistics and counters in show command outputs and bulk statistics for all S-GW services or for a specific S-GW service.

Example

The following command clears statistics and counters for an S-GW service named *sgw3*:

```
clear sgw-service statistics name sgw3
```

clear sls-service statistics

Clears SLs service statistics based on various criteria.

Product	MME
Privilege	Security Administrator, Administrator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description

`clear sls-service statistics [ name svc_name ] [ sls | sctp ] [ esmlc-id esmlc-id ] [ | { grep grep_options | more } ]`

name *svc_name*

Clears all statistics for an existing SLs service specified as an alphanumeric string of 1 through 63 characters

sls

Clears only SLs interface related statistics.

sctp

Clears only SCTP related statistics.

esmlc-id *esmlc-id*

Clears all statistics for an existing E-SMLC peer specified as an integer value from 0 through 255.

grep *grep_options* | more

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines

This command is used to clear the statistical information of an SLs service based on various filter criteria.

Example

The following command clears only the SCTP statistics for the SLs service named *sls1*:

`clear sls-service statistics name sls1 sctp`

clear sms statistics

Deletes collected traffic statistics for the Short Message Service (SMS).

Product

SGSN

Privilege

Administrator, Security Administrator, Operator

Command Modes

Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description

`clear sms statistics [ name map_srvc ] [ recovered-values ] [ | { grep grep_options | more } ]`

name *map_srvc*

Specifies a MAP Service as an alphanumeric string of 1 to 63 characters.

[recovered-values]

Clears only recovered values for key SMS KPI counters that were backed-up.

grep *grep_options* | more

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of the **grep** and **more** commands, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter in the *Command Line Interface Reference*.

Usage Guidelines

Use this command to delete collected traffic statistics for SMS. It is possible to clear the statistics of a specific MAP service associated with the SMS by including the **name** filter.

Example

Use the following command to clear SMS statistics for MAP service *MAP-LONDON1*:

`clear sms statistics name MAP-LONDON1`

clear sndcp statistics

Deletes all collected statistics for the packet traffic going through the Subnetwork Dependent Convergence Protocol (SNDCP) layer.

Product

SGSN

Privilege

Security Administrator, Administrator, Operator

Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`

Syntax Description	`clear sndcp statistics [ gprs-service ` *srvc_name* `] [	{ grep ` *grep_options* ` |` `more }]`

gprs-service *srvc_name*

Specifies a GPRS service as an alphanumeric string of 1 through 63 characters.

grep *grep_options* | more

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of the **grep** and **more** commands, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter in the *Command Line Interface Reference*.

Usage Guidelines	Use this command to delete all collected SNDCP traffic statistics. Include the **gprs-service** keyword to filter the clearing action to only deleted statistics for one GPRS service.

Example

Use the following command to clear all collected SNDCP layer traffic statistics:

`clear sndcp statistics`

Use the following command to delete SNDCP layer traffic statistics for the *test1* GPRS service:

`clear sndcp statistics gprs-service test1`

clear snmp trap

Clears all SNMP event trap notifications from the buffer.

Product	All
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`
Syntax Description	`clear snmp trap { history	statistics }`

history

Clears all SNMP historical trap information from the system buffer.

statistics

Clears all SNMP event trap information from the system buffer.

Usage Guidelines Use this command to empty the buffer of all SNMP trap notifications.

Example

The following command clears the all historical SNMP traps from the system buffer:

```
clear snmp trap history
```

clear srp

Clears system Service Redundancy Protocol (SRP) statistics.

Product All products that support Interchassis Session Recovery (ICSR)

Privilege Security Administrator, Administrator, Operator

Command Modes Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description
```
clear srp { audit-statistics | call-loss statistics | checkpoint statistics
 | statistics }
```

audit-statistics

Clears SRP audit statistics.

call-loss statistics

Clears SRP call loss history.

checkpoint statistics

Clears SRP checkpoint interface statistics.

statistics

Clears SRP statistics.

Usage Guidelines Clears the SRP statistics to prepare the system for SRP monitoring.

Example

The following command resets all the associated statistics for SRP checkpoints.

```
clear srp checkpoint statistics
```

The following command resets all the associated statistics for SRP.

```
clear srp statistics
```

clear ss7-routing-domain

Deletes specified statistics for an SS7 routing domain.

Product	SGSN
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
clear ss7-routing-domain domain_index { asp | mtp2 | mtp3 | qsaal | sscf }
```

domain_index

Specifies the index number of the SS7 routing domain as an integer from 1 through 12.

asp

Clears statistics and status information for the SS7 Application Service Part (ASP) in the specified SS7 routing domain.

m3ua

Clears statistics and status information for the SS7 MTP3 User Adaptation Layer (M3UA) in the specified SS7 routing domain.

mtp2

Clears statistics and status information for the SS7 Message Transfer Part-2 (MTP2) in the specified SS7 routing domain.

mtp3

Clears statistics and status information for the SS7 Message Transfer Part-3 (MTP3) in the specified SS7 routing domain.

qsaal

Clears statistics and status information for the Service Specific Connection-Oriented Protocol (SSCOP) sub-layer of the Quasi Signaling Application Adaptation Layer (QSAAL) in the specified SS7 routing domain.

sscf

Clears statistics and status information for the Service Specific Coordination Function (SSCF [q.2140]) in the specified SS7 routing domain.

Usage Guidelines   Deletes statistics for the specified SS7 routing domain.

Example

The following command clears SS7 ASP routing statistics for domain index *4*:

```
clear ss7-routing-domain 4 asp
```

clear subscribers

Disconnects subscribers based on specified criteria.

Product   All

Privilege   Security Administrator, Administrator, Operator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description   **clear subscribers [** *keywords* **] [verbose] [-noconfirm]**

The keywords are filters that modify or filter the criteria for deciding which subscriber sessions to clear and are described below. Multiple keywords can be entered on a command line.

When multiple keywords are specified, the subscriber sessions deleted must meet the specifications of all of the keywords.

For example; if you enter the following command:

```
clear subscribers ip-pool pool1 card-num 1
```

Only subscriber sessions that were assigned an IP address from the IP pool named *pool1* and are also being processed by the processing card in slot *1* are cleared. All other subscriber sessions that do not meet these criteria remain and are not cleared.

☞

Important   Calls already marked as disconnecting will not be designated for clearing. For example, if 100 calls are temporarily in the disconnecting state, the **show subscribers all** command output displays all 100 calls. However, the **clear subscribers all** command output will indicate that there are no calls available for clearing, since they are already in the disconnecting state.

-noconfirm

Executes the command without any additional prompt and confirmation from the user.

☞

Important   The Operator privilege does not have access to this keyword.

active

Only disconnects subscribers who currently have active sessions.

active-charging-service *ecs_service_name*

Clears information for subscribers using the Active charging Service.

ecs_service_name must be the name of the Active Charging Service, expressed as an alphanumeric string of 1 through 15 characters.

all

Disconnects all subscribers.

> ☞
>
> **Important**   The Operator privilege does not have access to this keyword.

apn *apn_name* [rulename *rule_name* | without-dynamic-rule | without-override-control]

Clears all PDP contexts accessing a specific access point name (APN).

apn_name is the name of the APN expressed as an alphanumeric string of 1 through 63 characters that is case sensitive.

[rulename *rule_name* **| without-dynamic-rule | without-override-control]**

rulename *rule_name* is the charging rule name.

without-dynamic-rule refers to subscribers without any dynamic rule associated with them.

without-override-control refers to subscribers without any override control rule associated with them.

asn-peer-address *ip_address*

Clears information for subscribers on an ASN-GW trusted peer.

ip_address is the address of the ASN-GW peer server entered using IPv4 dotted-decimal notation.

asngw-service *service_name*

Clears counters for subscribers accessing the ASN-GW service.

service_name must be an existing service expressed as an alphanumeric string of 1 through 63 characters.

asnpc-service *service_name*

Clears counters for subscribers accessing the ASN PC service.

service_name must be an existing service expressed as an alphanumeric string of 1 through 63 characters.

bandwidth-policy *bandwidth_policy_name*

Clears information for subscribers using the specified bandwidth policy.

bandwidth_policy_name must be the name for an existing bandwidth policy, expressed as an alphanumeric string of 1 through 63 characters.

bearer-establishment { direct-tunnel | normal | pending }

Clears all subscribers from the specified bearer establishment type.

direct-tunnel: Select subscribers having direct tunnel establshed with the RNC.

normal: Select subscribers having bearer established with SGSN.

pending: Select subscribers for whom bearer is not fully established.

bng-only

Clears information related to BNG calls only.

bng-service *service_name*

Clears all subscribers from the specified BNG service.

service_name must be an existing service expressed as an alphanumeric string of 1 through 63 characters.

callid *id*

Clears the call specified by *call_id*. The call ID must be specified as a 4-byte hexadecimal number.

card-num *card_num*

The slot number of the processing card by which the subscriber session is processed. *card_num* is a slot number from 1 through 7 or 10 through 16 (for the ASR 5000) or from 1 through 4 or 7 through 10 (for the ASR 5500).

cbb-policy *cbb_policy_name*

Clears information for subscribers using the specified CBB policy.

cbb_policy_name must be the name for an existing CBB policy expressed as an alphanumeric string of 1 through 63 characters.

ccoa-only

This option clears the subscribers that registered a MIP co-located COA directly with the HA.

This option is only valid when MIPHA session license is enabled.

cgw-only

Clears information related to CGW calls only.

configured-idle-timeout [< | > | greater-than | less-than] *value*

Disconnects subscribers whose idle timeout matches the specified criteria. A value of 0 (zero) indicates that the subscribers idle timeout is disabled.

<: Filters output so that only information less than the specified value is cleared.

>: Filters output so that only information greater than the specified value is cleared.

greater-than: Filters output so that only information greater than the specified value is cleared.

less-than: Filters output so that only information less than the specified value is cleared.

value: If no other filtering options are specified only output matching *value* is cleared. If *value* is not specified all data is cleared. *value* must be an integer from 0 through 4294967295.

connected-time [< | > | greater-than | less-than] *value*

Disconnects subscribers who have been connected for the specified length of time.

<: Filters output so that only information less than the specified value is cleared.

>: Filters output so that only information greater than the specified value is cleared.

greater-than: Filters output so that only information greater than the specified value is cleared.

less-than: Filters output so that only information less than the specified value is cleared.

value: If no other filtering options are specified only output matching *value* is cleared. If *value* is not specified all data is cleared. *value* must be an integer from 0 through 4294967295.

css-delivery-sequence *name*

☞

Important   This is a restricted keyword. In StarOS 9.0 and later, this keyword is obsoleted.

css-service *name*

☞

Important   This is a restricted keyword. In StarOS 9.0 and later, this keyword is obsoleted.

del-cause { none | reactiv-req }

When subscribers are deleted, the GGSN/P-GW/SAEGW may include "Cause-IE" in the resulting Delete Bearer/Delete PDP Context Requests generated for default bearer.

none: Omit GTP "Cause-IE" in DBR/DPC generated for default bearer.

reactiv-req: The DBR/DPC will include "Cause-IE" with GTP cause code "Reactivation Requested".

The behavior for "Cause-IE" will be effective only if the **clear subscribers** command results in the sending of a Delete Bearer Request for default bearer, or Delete PDP Context is sent to delete the PDN connection or its last PDP context.

The behavior for "Cause-IE" specified in this CLI shall override the cause-code set by existing features.

☞

Important   This option is only valid when Cause IE Enhancement for Delete Bearer Request license is enabled. Contact your Cisco account representative for more information.

dhcp-server *address*

Clears all PDP contexts that currently possess an IP address assigned from a specific DHCP server. *dhcp_address* is the IP address of the DHCP server expressed in IPv4 dotted-decimal notation.

dormant

Only disconnects subscriber sessions that are dormant (not transmitting or receiving data).

ebi *number*

Clears subscribers based on an EPS bearer identity (EBI). *number* must be a valid EBI and an integer value from 5 to 15.

enodeb-address *ip_address*

Clears subscribers based on the eNodeB to which they are attached. *ip_address* must be a valid IP address of an existing eNodeB entered using IPv4 dotted-decimal or IPv6 colon-separated-hexadecimal notation.

epdg-address *ip_address*

Clears subscribers based on the ePDG to which they are attached. *ip_address* must be a valid IP address of an existing ePDG entered using IPv4 dotted-decimal or IPv6 colon-separated-hexadecimal notation.

The following filter keywords are valid with this command:

```
epdg-address, epdg-service,
```

epdg-service *service_name*

Clears subscribers of a configured ePDG service. *service_name* must be a valid string of size 1 to 63.

The following filter keywords are valid with this command:

```
epdg-address, epdg-service
```

fa *ip_address*

Disconnects all subscribers connected to the foreign agent specified by the IP address in IPv4 dotted-decimal notation.

fa-service *fa_name*

Disconnects all subscribers connected to an existing foreign agent name.

firewall { not-required | required }

Clears all subscriber information for the specified subscribers:

not-required: Subscribers for whom firewall processing is not-required.

required: Subscribers for whom firewall processing is required.

firewall-policy *fw_policy_name*

This keyword is obsolete.

fw-and-nat policy *fwnat__policy_name*

Clears information for subscribers using the specified Firewall-and-NAT policy.

fwnat_policy_name must be the name of an existing Firewall-and-NAT policy expressed as an alphanumeric string of 1 through 63 characters.

fng-service *service_name*

Clears subscriber sessions connected to the FNG service. *service_name* must be an existing service expressed as an alphanumeric string of 1 through 63 characters.

ggsn-service *name*

Clears all PDP contexts accessing an existing GGSN service specified as an alphanumeric string of 1 through 63 characters that is case sensitive.

gprs-only lai mcc *mobile_country_code* mnc *mobile_network_code* lac *location_area_code*

Notes:

- **gprs-only**: Specifies the clearing of SGSN 2G subscribers only.

- **lai**: Specifies location area identity.

- **mcc** *mobile_country_code*: Specifies mobile country code. *mobile_country_code* must be a string of size 3 to 3 ranging from 100 through 999.

- **mnc** *mobile_network_code*: Specifies mobile network code. *mobile_network_code* must be a string of size 2 to 3 ranging from 00 through 999.

- **lac** *location_area_code*: Specifies location area code. *location_area_code* must be an integer from 1 to 65535.

gprs-service *name*

Clears all PDP contexts associated with the 2G SGSN. This keyword can be used with filtering keywords that are part of the **clear subscriber** command set.

Using this keyword can trigger a network-initiated service request (paging) procedure.

name identifies a specific GPRS service configuration expressed as an alphanumeric string of 1 through 63 characters.

gsm-traffic-class { background | conversational | interactive { *priority* } | streaming }

Subscribers whose traffic matches the specified 3GPP traffic class.

- **background**: 3GPP QoS background class.

- **conversational**: 3GPP QoS conversational class.

- **interactive**: 3GPP QoS interactive class. Must be followed by a traffic priority. priority can be configured to any integer value from 1 to 3.

- **streaming**: 3GPP QoS streaming class.

gtpu-bind-address *ip_address*

Disconnects all subscribers connected to the GTP-U service bind address.

ip_address must be specified in IPv4 dotted-decimal or IPv6 colon-separated-hexadecimal notation.

gtpu-service *service_name*

Disconnects all subscribers and erase subscriber information based on the GTP-U service name.

service_name must be an existing GTP-U service expressed as an alphanumeric string of 1 through 63 characters.

gtp-version

Displays the specific GTP version number. Must be followed by one of the supported GTP versions (0 or 1).

The following filter keywords are valid with this command:

active-charging-service, apn, asngw-service, asnpc-service, asn-peer-address, bearer-establishment, callid, card-num, coaa-only, configured-idle-timeout, connected-time, dhcp-server, fa, fa-service, firewall, ggsn-service, gprs-service, gsm-traffic-class, gtp-version, ha, ha-ipsec-service, ha-service, idle-time, ims-auth-service, imsi, ip-address, ip-alloc-method, ip-pool, ipv6-address, ipv6-prefix, l3-tunnel-local-addr, lac, lac-service, lns, lns-service, long-duration-time-left, mip-udp-tunnel-only, mipv6ha-service, msid, msisdn, network-requested, network-type, pcf, pdg-service, pdif-service, pdsn-service, pdsnclosedrp-service, plmn-type, rulebase, rx-data, session-time-left, sgsn-address, sgsn-service, tx-data, username, grep, more

ha *address*

Disconnects all subscribers connected to the home agent.

ha_address must be specified using IPv4 dotted-decimal notation.

ha-ipsec-only

Disconnects all MIP HA sessions with IPSec tunnels.

ha-service *name*

Disconnects all subscribers connected to the home agent specified by *ha_name* must have been previously defined.

henbgw-access-service *svc_name*

☞

Important In Release 20, 21.0 and 21.1, HeNBGW is not supported. This keyword must not be used for HeNBGW in these releases. For more information, contact your Cisco account representative.

Disconnects all subscribers and erase subscriber information based on the HeNB-GW access service name.

henbgw-only

☞

Important In Release 20, 21.0 and 21.1, HeNBGW is not supported. This keyword must not be used for HeNBGW in these releases. For more information, contact your Cisco account representative.

Disconnects subscribers emerging from a HeNBGW service configured on this system.

hnbgw-service *svc_name*

☞

Important   In Release 20 and later, HNBGW is not supported. This keyword must not be used for HNBGW in Release 20 and later. For more information, contact your Cisco account representative.

Disconnects all subscribers and erase subscriber information based on the HNB-GW service name.

svc_name must be an existing HNB-GW service expressed as an alphanumeric string of 1 through 63 characters.

hsgw-only

Disconnects subscribers emerging from a HRPD Serving Gateway (HSGW) service configured on this system.

hsgw-service *name*

Disconnects subscribers using this HRPD Serving Gateway (HSGW) service configured on this system. *name* must be an existing HSGW service expressed as an alphanumeric string of 1 through 63 characters.

idle-time [< | > | greater-than | less-than] *value*

Disconnects subscribers whose idle time matches the specified length of time.

<: Filters output so that only information less than the specified value is cleared.

>: Filters output so that only information greater than the specified value is cleared.

greater-than: Filters output so that only information greater than the specified value is cleared.

less-than: Filters output so that only information less than the specified value is cleared.

value: If no other filtering options are specified only output matching *value* is cleared. If *value* is not specified all data is cleared. *value* must be an integer from 0 through 4294967295.

imei *imei*

SGSN only.

Disconnects one or more subscribers based on the international mobile equipment identity (IMEI or IMEI-SV) of the subscriber's mobile equipment.

imei - enter 14 to 16 digits to match the first 14 digits of a retrieved IMEI/IMEISV for a single subscriber. to match a range of subscribers, the string may be shorter and include '$' as a wildcard for a single digit or '*' as a wildcard for multiple digits.

ims-auth-service *imsa_service_name*

Disconnects subscribers using this IMS Authorization Service configured on this system.

imsa_service_name must be an existing IMS Authorization Service expressed as an alphanumeric string of 1 through 63 characters.

imsi *id*

Disconnects the subscriber with the specified id. The IMSI (International Mobile Subscriber Identity) ID is a 50-bit field which identifies the subscriber's home country and carrier. Wildcard characters $ and * are allowed. The * wildcard matches multiple characters and the $ wildcard matches a single character. If you do

not want the wildcard characters interpreted as a wildcard enclose them in single quotes ('). For example; '$'.

interface-type { S2bGTP | S5S8GTP }

Disconnects subscribers based on their interface type.

S2bGTP: Indicates that the GTP protocol is used on the S2b interface for the subscribers being disconnected.

S5S8GTP: Indicates that the GTP protocol is used on the S5/S8 interface for the subscribers being disconnected.

ip-address *ip_address*

Disconnects all subscribers connected to the specified *ip_address*. The address must be specified using IPv4 dotted-decimal notation.

Note: This keyword is not supported for use with the MME or SGSN.

ip-alloc-method { aaa-assigned | dhcp [relay-agent | proxy-client] | dynamic-pool | l2tp-lns-assigned | mip-ha-assigned | ms-provided-static | not-ms-provided-static | static pool }

Displays the specific IP Allocation Method. Must be followed by one of the IP Allocation Methods:

- **aaa-assigned**: Selects subscribers whose IP Addresses were assigned by AAA.

- **dhcp**: Selects subscribers whose IP Addresses were assigned by DHCP.

- **dynamic-pool**: Selects subscribers whose IP Addresses were assigned from a dynamic IP address pool.

- **l2tp-lns-assigned**: Selects subscribers whose IP Addresses were assigned by the Layer 2 Tunnelling Protocol Network Server.

- **mip-ha-assigned**: Selects subscribers whose IP Addresses were assigned by the Mobile IP Home Agent.

- **ms-provided-static**: Selects subscribers whose IP Addresses were provided by the Mobile Station.

- **not-ms-provided-static**: Selects subscribers whose IP Addresses were not provided by the Mobile Station.

- **proxy-client**: Selects subscribers whose IP Addresses were assigned by the DHCP Proxy Client

- **relay-agent**: Selects subscribers whose IP Addresses were assigned by the DHCP Relay Agent

- **static-pool**: Selects subscribers whose IP Addresses were assigned from a static IP address pool.

ip-pool *name*

Disconnects all subscribers assigned addresses from the IP address pool *pool_name*. *pool_name* must be the name of an existing IP pool or IP pool group.

ipv4

Clears all subscribers with IPv4 Firewall enabled/disabled.

ipv6

Clears all subscribers with IPv6 Firewall enabled/disabled.

ipv6-address *ipv6_address*

Clears all subscribers connected to the specified IPv6 *ipv6_address* must be specified in IPv6 colon-separated-hexadecimal notation.

Note: This keyword is not supported for use with the MME or SGSN.

ipv6-prefix *prefix*

Clears subscribers from a specific IPv6 address prefix.

l3-tunnel-local-addr *ip_address*

Disconnects all calls for this Layer 3 tunneling interface.

ip_address must be specified in IPv4 dotted-decimal or IPv6 colon-separated-hexadecimal notation.

l3-tunnel-remote-addr *ip_address*

Disconnects all calls for this Layer 3 tunneling peer.

ip_address must be specified in IPv4 dotted-decimal or IPv6 colon-separated-hexadecimal notation.

lac *ip_address*

Disconnects all calls to the peer LAC (L2TP access concentrator).

ip_address must be specified using IPv4 dotted-decimal notation.

lac-service *service_name*

Disconnects all calls for this LAC service.

service_name is an alphanumeric string of 1 through 63 characters.

lma-service *lma_name*

Disconnects subscribers using this LMA service configured on this system. *lma_name* must be an existing LMA service expressed as an alphanumeric string of 1 through 63 characters.

lns *ip_address*

Disconnects calls to the peer LNS (L2TP network server) specified by *ip_address* must be specified using IPv4 dotted-decimal notation.

lns-service *name*

Disconnects calls associated with the LNS service named *name*. *name* is an alphanumeric string of 1 through 63 characters.

long-duration-time-left [< | > | greater-than | less-than] *value*

Disconnects subscriber sessions whose time left for the maximum duration of their session matches the length of time specified.

<: Filters output so that only information less than the specified value is cleared.

>: Filters output so that only information greater than the specified value is cleared.

greater-than: Filters output so that only information greater than the specified value is cleared.

less-than: Filters output so that only information less than the specified value is cleared.

value: If no other filtering options are specified only output matching *value* is cleared. If *value* is not specified all data is cleared. *value* must be an integer from 0 through 4294967295.

mag-service *name*

Disconnects subscribers using this Mobile Access Gateway (MAG) service configured on this system.

name must be an existing MAG service and be from 1 to 63 alphanumeric characters.

max-subscribers *max_count* [uniform]

The maximum number of subscribers to be cleared.

max_count must be an integer from 0 through 20000000.

uniform: Subscribers will be cleared uniformly.

mip-udp-tunnel-only

This option clears the subscribers that negotiated MIP-UDP tunneling with the HA.

This option is only valid when MIP NAT Traversal license is enabled.

mipv6ha-service *service_name*

Disconnects subscribers using this MIPV6 Home Agent service configured on this system.

service_name must be an existing MIPV6 HA service and be from 1 to 63 alphanumeric characters.

mme-address *ipv4_addr*

Disconnects subscribers using this peer Mobility Management Entity (MME). *ipv4_addr* must be an existing peer MME IP address entered using IPv4 dotted-decimal notation.

mme-onlytai mcc *mobile_country_code* mnc *mobile_network_code* tac *tracking_area_code*

Disconnects all MME subscriber sessions on the system.

- **tai** : Specifies specific tai interface. Must be followed by mcc, mnc and tac.

- **mcc** *mobile_country_code*: Specifies mobile country code. *mobile_country_code* must be a string of size 3 to 3 ranging from 100 through 999.

- **mnc** *mobile_network_code*: Specifies mobile network code. *mobile_network_code* must be a string of size 2 to 3 ranging from 00 through 999.

- **tac** *tracking_area_code*: Specifies tracking area code. *tracking_area_code* must be an integer value between 1 and 65535.

mme-service *name*

Disconnects subscribers using this MME service configured on this system. *name* must be an existing MME service expressed as an alphanumeric string1 through 63 characters.

mseg-only

☞

Important   This keyword is not supported in this release.

mseg-service *mseg_service_name*

☞

Important   This keyword is not supported in this release.

msid *id*

Disconnects the mobile user identified by *ms_id*. *ms_id* must be from 7 to 16 digits specified as an IMSI, MIN, or RMI. Wildcard characters $ and * are allowed. The * wildcard matches multiple characters and the $ wildcard matches a single character. If you do not want the wildcard characters interpreted as a wildcard enclose them in single quotes ('). For example; '$'.

In case of **enforce imsi-min equivalence** is enabled on the chassis and MIN or IMSI numbers supplied, this filter will clear subscribers with a corresponding MSID (MIN or IMSI) whose lower 10 digits matches to lower 10 digits of the supplied MSID.

clear subscribers msid *111110123456789* or

clear subscribers msid *0123456789*

will clear any subscriber with a MSID that match the lower 10 digits of MSID supplied, i.e. 0123456789.

msisdn *msisdn*

Clears information for the mobile user identified by Mobile Subscriber ISDN Number (MSISDN). *msisdn* must be from 7 to 16 digits specified as an IMSI, MIN, or RMI.

nat { not-required | required [nat-ip *nat_ip_address* **| nat-realm** *nat_realm_name* **] }**

Clears all subscriber information for the specified subscribers:

not-required: Subscribers for whom NAT processing is not required.

required: Subscribers for whom NAT processing is required.

☞

Important   The **nat-ip** keyword is only available in StarOS 8.3 and later.

nat-ip *nat_ip_address*: Subscribers for whom NAT processing is enabled and are using the specified NAT IP address. *nat_ip_address* specifies the NAT IP address using IPv4 dotted-decimal notation.

nat-realm *nat_realm_name*: Subscribers for whom NAT processing is enabled and are using the specified NAT realm. *nat_realm_name* specifies the NAT realm name expressed as an alphanumeric string of 1 through 63 characters.

network-requested

Disconnect subscriber sessions that were initiated by the GGSN network requested create PDP context procedure.

network-type { gre | ipv4 | ipv6 | ipip | l2tp | mobile-ip | proxy-mobile-ip }

Disconnects subscriber sessions based on the network type. The following network types can be selected:

- **gre**: Generic Routing Encapsulation (GRE) per RFC 2784

- **ipv4**: Internet Protocol version 4 (IPv4)

- **ipv6**: Internet Protocol version 6 (IPv6)

- **ipip**: IP-in-IP encapsulation per RFC 2003

- **l2tp**: Layer 2 Tunneling Protocol encryption per RFC 2661

- **mobile-ip**: Mobile IP

- **proxy-mobile-ip**: Proxy Mobile IP

non-volte-call [auto-delete][del-cause { none | reactiv-req }] [max-subscribers *max_count* [uniform]] [pace-out-interval *interval_in_seconds*]

Disconnects PDN connections that do not have an active voice call.

This keyword is available for APN and chassis maintenance for P-GW, S-GW, SAEGW, GGSN, and ePDG.

auto-delete: Clears the PDN/call when the last VoLTE dedicated bearer goes down for P-GW, S-GW, SAEGW, GGSN, and ePDG.

Calls will not be cleared when one of the calls in a multiple PDN scenario is a VoLTE PDN. When the VoLTE PDN goes down, all of the other PDNs found for the same IMSI are brought down, which will bring down the call automatically.

pace-out-interval *interval_in_seconds*

The **clear subscribers non-VoLTE auto-delete** command was implemented in StarOS release 17.0. This command can generate a burst of Delete Bearer Requests (DBR) and Delete Session Requests (DSR) in customer setups. To prevent the flooding of peer nodes with session removal control procedures, it is important to distribute these messages in a periodic manner.

The **pace-out-interval** keyword allows operators to specify the time duration for removing the sessions so that control messages sent across to peer nodes are evenly distributed.

Sessions that are "paced-out" over a period of time move into a disconnecting state; however, data and control path activity continue as usual until the system sends out session deletion message(s). In the case of session recovery, "paced-out" sessions are recovered in the connected state and the **clear subscriber** command must be initiated again to clear the recovered sessions.

pace-out-interval is the time, in seconds, that session deletion messages are distributed.

interval_in_seconds must be an integer from 0 to 86400.

pcf [< | > | less-than | greater-than] *ipv4_address* **[[< | > | less-than | greater-than]** *ipv4_address* **]**

Displays information for subscribers connected via the packet control function with a specific or range of IP address *ipv4_ddress*. The address must be specified using IPv4 dotted-decimal notation.

- <: Filters output so that only information less than the specified IPv4 address value is displayed.

- >: Filters output so that only information greater than the specified IPv4 address value is displayed.

- **less-than**: Filters output so that only information less than the specified IPv4 address value is displayed.

- **greater-than**:Filters output so that only information greater than the specified IPv4 address value is displayed.

Note: It is possible to define a limited range of IP addresses by using the less-than and greater-than options to define minimum and maximum values.

pcp { not-required | required }

Clears all subscriber information for the specified subscribers:

not-required: Subscribers for whom PCP processing is not required.

required: Subscribers for whom PCP processing is required.

pdsn-service *name*

Disconnect all subscribers connected to the packet data service *pdsn_name*. The packet data service must have been previously configured.

pdsnclosedrp-service *service_name*

Disconnect all subscribers connected to the Closed R-P service *service_name*. The Closed R-P service must have been previously configured.

pdg-service *service_name*

Disconnects subscriber sessions that are using the PDG service.

service_name must be an existing service expressed as an alphanumeric string of 1 through 63 characters.

pdif-service *service_name*

Clears counters for subscribers accessing the Packet Data Interworking Function (PDIF) service.

service_name must be an existing service expressed as an alphanumeric string of 1 through 63 characters.

pgw-address *ip_address*

Clears specific P-GW interface.

ip_address must be followed by IP address of interface, using IPv4 dotted-decimal or IPv6 colon-separated-hexadecimal notation.

The following filter keywords are valid with this command:

```
epdg-address, epdg-service,
```

pgw-only { all [del-cause { none | reactiv-req }] [max-subscribers *max_count*] [pace-out-interval *interval_in_seconds*] | imsi *id* ebi *id* | mag-address *ip_addr* | pgw-service *name* | sgw-address *ip_addr* }

all: Disconnects all subscribers for all P-GW services on this system.

imsi *id*: Disconnects subscribers based on their International Mobile Subscriber Identification (IMSI). *id* must be the 3-digit MCC (Mobile Country Code), follow by the 2 or 3 digits of the MNC (Mobile Network Code) and the MSIN (Mobile Subscriber Identification Number).

id should not exceed 15 digits.

Example: 123-45-678910234 must be entered as 12345678910234

ebi *id*: The EBI (EPS Bearer Identity)

id must be a valid EBI and be an integer value from 5 to 15.

mag-service *ip_addr*: Disconnects all subscribers using this MAG address.

pgw-service *name*: Disconnects all subscribers using this P-GW service.

name must be an existing P-GW service expressed as an alphanumeric string of 1 through 63 characters.

sgw-address *ip_addr*: Disconnects all subscribers using this S-GW IP address.

ip_addr must be an existing IP address entered using IPv4 dotted-decimal notation or IPv6 colon-separated-hexadecimal notation.

plmn-type { home | roaming | visiting }

For GGSN, disconnects subscribers whose subscriber type matches the specified type.

profile-id *id*

Clears information for subscribers using thegranted profile-id for the flow.

*id*must be an integer from 0 to 4294967295.

profile-name *name*

Clears information for subscribers using the specified policy profile name.

name must be name of an existing profile expressed as an alphanumeric string of 1 through 63 characters.

qci *number*

Disconnects subscribers based on their QCI identity.

number must be an integer from 0 to 9.

rulebase *rulebase_name*

Clears information for subscribers using the specified rulebase.

rulebase_name must be name of an existing rulebase expressed as an alphanumeric string of 1 through 63 characters.

rulename *rule_name*

Displays subscribers associated with the specific rule name. The rule_name options are: predefined, static, and dynamic rules..

rx-data [< | > | greater-than | less-than] *value*

Disconnects subscribers who have received the specified number of bytes of data.

<: Filters output so that only information less than the specified value is cleared.

>: Filters output so that only information greater than the specified value is cleared.

greater-than: Filters output so that only information greater than the specified value is cleared.

less-than: Filters output so that only information less than the specified value is cleared.

value: If no other filtering options are specified only output matching *value* is cleared. If *value* is not specified all data is cleared. *value* must be an integer from 0 through 18446744073709551615.

s1u-state { active | idle | idle-active }

Disconnects subscribers based on their S1-User Plane Protocol State.

active: Selects subscribers having S1-U state set to active.

idle: Selects subscribers having S1-U state set to idle.

idle-active: Selects subscribers having S1-U state set to idle-active.

s5-proto { gtp | pmip }

Disconnects subscribers based on their S5 interface protocol type.

gtp: Indicates that the GTP protocol is used on the S5 interface for the subscribers being disconnected.

pmip: Indicates that the PMIP protocol is used on the S5 interface for the subscribers being disconnected.

saegw-only { all [max-subscribers *max_count*] [pace-out-interval *interval_in_seconds*] | co-located | imsi *id* ebi *id* | pgw-anchored | saegw-service *name* | sgw-address *ip_addr* | sgw-anchored }

all: Disconnects all subscribers for all SAEGW services on this system.

co-located: Disconnects only co-located subscribers which have both S-GW and P-GW functions.

imsi *id*: Disconnects subscribers based on their International Mobile Subscriber Identification (IMSI). *id* must be the 3-digit MCC (Mobile Country Code), follow by the 2 or 3 digits of the MNC (Mobile Network Code) and the MSIN (Mobile Subscriber Identification Number).

id should not exceed 15 digits.

Example: 123-45-678910234 must be entered as 12345678910234

ebi *id*: The EBI (EPS Bearer Identity)

id must be a valid EBI and be an integer value from 5 to 15.

pgw-anchored: Disconnects only PGW-anchored subscribers.

saegw-service *name*: Disconnects all subscribers using this SAEGW service.

name must be an existing SAEGW service expressed as an alphanumeric string of 1 through 63 characters.

sgw-address *ip_addr*: Disconnects all subscribers using this S-GW IP address.

ip_addr must be an existing IP address entered using IPv4 dotted-decimal notation or IPv6 colon-separated-hexadecimal notation.

sgw-anchored: Disconnects only SGW-anchored subscribers.

saegw-service *name*

Disconnects all subscribers using this SAEGW service. *name* must be an existing SAEGW service expressed as an alphanumeric string of 1 through 63 characters.

session-time-left [< | > | greater-than | less-than] *value*

The amount of time left for the subscriber session.

<: Filters output so that only information less than the specified value is cleared.

>: Filters output so that only information greater than the specified value is cleared.

greater-than: Filters output so that only information greater than the specified value is cleared.

less-than: Filters output so that only information less than the specified value is cleared.

value: If no other filtering options are specified only output matching *value* is cleared. If *value* is not specified all data is cleared. *value* must be an integer from 0 through 4294967295.

sgsn-address *ip_address*

Clears all PDP contexts currently being facilitated by a specific SGSN.

ip_address is the IP address of the SGSN entered using IPv4 dotted-decimal notation.

sgsn-only lai mcc *mobile_country_code* mnc *mobile_network_code* lac *location_area_code*

Notes:

- **sgsn-only**: Specifies the clearing of SGSN 3G subscribers only.

- **lai**: Specifies location area identity.

- **mcc** *mobile_country_code*: Specifies mobile country code. *mobile_country_code* must be a string of size 3 to 3 ranging from 100 through 999.

- **mnc** *mobile_network_code*: Specifies mobile network code. *mobile_network_code* must be a string of size 2 to 3 ranging from 00 through 999.

- **lac** *location_area_code*: Specifies location area code. *location_area_code* must be an integer from 1 to 65535.

sgsn-service *name*

Clears all PDP contexts associated with SGSN. This keyword can be used with filtering keywords that are part of the **clear subscriber** command set.

Using this keyword can trigger a network-initiated service request (paging) procedure.

name identifies a specific SGSN-service configuration expressed as an alphanumeric string of 1 through 63 characters.

sgw-address *ip_address*

Disconnects subscribers using the Serving Gateway (S-GW) IP address.

ip_address must be specified in IPv4 dotted-decimal or IPv6 colon-separated-hexadecimal notation.

sgw-only all [max-subscribers *max_count* [uniform]] [pace-out-interval *interval_in_seconds*] [verbose]

Disconnects all S-GW subscriber sessions on the system.

sgw-service *name*

Disconnects subscribers using this Serving Gateway (S-GW) service configured on this system. *name* must be an existing S-GW service expressed as an alphanumeric string of 1 through 63 characters.

smgr-instance *sessmgr_instance_number*

Disconnects subscribers on the specified sessmgr instance.

sessmgr_instance_number must be an integer from 1 to 4294967295.

tpo { not-required | required }

☞

Important The Traffic Performance Optimization (TPO) in-line service is not supported in this release.

tx-data [< | > | greater-than | less-than] *value*

Disconnects subscribers who have transmitted the specified number of bytes of data.

<: Filters output so that only information less than the specified value is cleared.

>: Filters output so that only information greater than the specified value is cleared.

greater-than: Filters output so that only information greater than the specified value is cleared.

less-than: Filters output so that only information less than the specified value is cleared.

value: If no other filtering options are specified only output matching *value* is cleared. If *value* is not specified all data is cleared. value must be an integer from 0 through 18446744073709551615.

username *name*

Disconnect the subscriber with the specified username

name is the username of the subscriber to be cleared. *name* must be a sequence of characters and/or wildcard characters ('$' and '*') from 1 to 127 characters. The * wildcard matches multiple characters and the $ wildcard matches a single character. If you do not want the wildcard characters interpreted as wildcard enclose them in single quotes ('). For example; '$'.

verbose

Indicates the output should provide as much information as possible. If this option is not specified then the output is the standard level which is the concise mode.

without-dynamic-rule

Displays subscribers without any dynamic rule associated with them.

without-override-control

Displays subscribers without any override control rule associated with them.

wsg-service *name*

Disconnects subscribers using this WSG service configured on this ASR 9000 VSM. *name* must be an existing WSG (SecGW) service expressed as an alphanumeric string of 1 through 63 characters.

grep *grep_options* | more

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines   Clear subscribers sessions to aid in troubleshooting the system when no additional subscribers may connect or when a specific service or remote address may be having connection problems. This command may also be used to clear connections when preparing for maintenance activities.

Related commands to clear subscription data - *for SGSN use only*

- For a 2G SGSN, the **admin-disconnect-behavior clear-subscription** command in the GPRS Service Configuration mode enables the SGSN to clear subscription data after the administrative disconnect - **clear subscribers all** has been issued.

- For a 3G SGSN, the **admin-disconnect-behavior clear-subscription** command in the SGSN Service Configuration mode enables the SGSN to clear subscription data after the administrative disconnect - **clear subscribers all** has been issued.

Example

The following examples illustrate the basic command usage as well as the redirection of the command output. Not all options are exemplified as all options follow the same basic constructs.

The following are basic subscriber clearing examples.

```
clear subscribers username ser1
clear subscribers ha sampleService
clear subscribers ip-pool pool2 verbose
```

The following command disconnects users connected to the foreign agent with IP address *10.2.3.4*.

```
clear subscribers fa 10.2.3.4
```

clear super-charger

Deletes the subscriber's backed-up subscription data with an SGSN supercharger subscription configuration (3GPP TS.23.116).

Product	SGSN
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description   `clear super-charger { imsi | all }`

imsi

Specifies a subscriber's international mobile subscriber identity (IMSI) number. This 15-digit number includes the MCC (mobile country code), the MNC (mobile network code) and the MSIN (mobile station identification number).

all

Instructs the SGSN to delete subscription data for all super charger subscribers.

Usage Guidelines   Use this command to clear (delete) the subscription data records for one or all subscribers within a supercharger subscription configuration.

Example

The following command deletes the backed up records for the subscriber identified by the IMSI *90121882144672*.

`clear super-charger imsi 90121882144672`

clear supplementary-service statistics

Clears the statistics for Supplementary Service Information.

Product	SGSN
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description   `clear supplementary-service statistics`

Usage Guidelines   Use this command to clear the Supplementary Service Information.

Example

The following command clears the Supplementary Service Information:

clear supplementary-service statistics

clear tacacs session

Clears TACACS+ sessions.

Product	All
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]`*host_name*`#`

Syntax Description

```
clear tacacs session { all | session id session_id [ force ] }
```

all

Clears all TACACS+ sessions in idle state.

session id *session_id*

Will clear a specified TACACS+ session. *session_ id* must be an integer from 1 to 127.

The command will only be successfully executed if the session is in idle state; otherwise, it will fail.

force

Will clear a specified TACACS+ session whether or not the session is in idle state.

☞

Important This keyword should be used with caution.

If a TACACS+ session ends up in not completed login state, you may have to use this option to clear the session.

Usage Guidelines Use this command to clear TACACS+ sessions.

Example

The following command clears all TACACS+ sessions in idle state.

clear tacacs session all

clear task resources

Deletes the collected resource statistics for system tasks.

Product	All
Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
clear task resources { card card_num { facility facility { all | instance id
max } | facility facility { all | instance id max } | max }
```

th e

card *card_num*

Default: all powered on cards.

Specifies a single card for which task information is to be cleared where *card_num* must be from 1 to 48 for the ASR 5000 and 1 through 20 for the ASR 5500.

facility *facility*{ all | instance *id* max }

Default: all facilities.

Specifies the list of facilities for which task information will be cleared. A specific instance of the facility may be cleared as specified by ID or all instances may be cleared. The value of *id* must be an integer from 0 through 10000000. *facility* must be one of:

- **a11mgr**: A11 Interface Manager facility

- **aaamgr**: AAA Manager Facility

- **aaaproxy**: AAA Proxy manager Facility

- **acsctrl**: Active Charging Service (ACS) Controller Facility [Release 11.0 and earlier versions only]

- **acsmgr**: Active Charging Service (ACS) Manager Facility

- **afctrl**: Fabric Manager [ASR 5500 only]

- **afmgr**: Fabric Manager [ASR 5500 only]

- **alcapmgr**: Access Link Control Application Part (ALCAP) Manager

- **asngwmgr**: ASN Gateway Manager

- **asnpcrmgr**: ASN Paging/Location-Registry (ASN-PC) Manager

- **bfd**: Bidirectional Forwarding Detection

- **bgp**: Border Gateway Protocol (BGP) Facility

- **bngmgr**: Broadband Network Gateway (BNG) Manager

- **bulkstat**: Bulk Statistics Manager Facility

- **callhome**: Call Home Controller

- **cbsmgr**: Cell Broadcasting Service (CBS) Manager

- **cdfctrl**: Charging Data Function (CDF) Controller

- **cdfmgr**: CDF Manager

- **cdrmod**: Charging Detail Record (CDR) Module

- **cli**: Command Line Interface (CLI) Facility

- **connproxy**: Proxy for connections from same card/chassis

- **cspctrl**: Card Slot Port controller Facility

- **cssctrl**: Content Service Steering Controller

- **dcardctrl**: IPSec Daughter-card Controller Logging Facility

- **dcardmgr**: IPSec Daughter-card Manager Logging Facility

- **dgmbmgr**: Diameter Gmb Application Manager

- **dhmgr**: Distributed Host Manager

- **diamproxy**: Diameter Proxy

- **drvctrl**: Driver Controller Facility

- **egtpegmgr**: EGTP Egress Demux Manager

- **egtpinmgr**: EGTP Ingress Demux Manager

- **evlogd**: Event Log Daemon Facility

- **famgr**: Foreign Agent Manager Facility

- **gtpcmgr**: GTP-C Protocol Logging facility (GGSN product only)

- **gtpumgr**: GTP-U Demux Manager

- **h248prt**: H.248 Protocol Task [Release 11.0 and earlier versions only]

- **hamgr**: Home Agent Manager Facility

- **hatcpu**: High Availability Task CPU Facility

- **hatsystem**: High Availability Task Facility

- **hdctrl**: Hard Disk Controller

- **henbgwdemux**: Home eNodeB Gateway demux manager

☞

Important In Release 20, 21.0 and 21.1, HeNBGW is not supported. This keyword must not be used for HeNBGW in these releases. For more information, contact your Cisco account representative.

• **henbgwmgr**: Home eNodeB Gateway Manager

☞

Important In Release 20, 21.0 and 21.1, HeNBGW is not supported. This keyword must not be used for HeNBGW in these releases. For more information, contact your Cisco account representative.

• **hnbmgr**: HNBGW HNB Manager

☞

Important In Release 20, 21.0 and 21.1, HeNBGW is not supported. This keyword must not be used for HeNBGW in these releases. For more information, contact your Cisco account representative.

• **hwctrl**: Hardware Monitor Controller

• **hwmgr**: Hardware Monitor Manager

• **imsimgr**: SGSN IMSI Manager

• **ipsecctrl**: IP Security Controller Facility

• **ipsecmgr**: IP Security Manager Facility

• **ipsgmgr**: IP Services Gateway Facility

• **kvctrl**: KV Controller

• **kvmgr**: KV Manager

• **l2tpdemux**: L2TP Demultiplexor (LNS) Facility

• **l2tpmgr**: L2TP Manager Facility

• **lagmgr**: Link Aggregation Group (LAG) Manager

• **linkmgr**: SGSN/SS7 Link Manager

• **m3ap**: M3 Application Part Facility

• **m3ua**: M3UA Protocol Facility

• **magmgr**: Mobile Access Gateway (MAG) Manager

• **megadiammgr**: MegaDiameter Manager

• **mme-app**: Mobility Management Entity (MME) Application Facility

• **mme-embms**: MME evolved Multimedia Broadcast Multicast Service Facility

- **mme-misc**: MME miscellaneous logging facility

- **mmedemux**: MME Demux Manager logging facility

- **mmemgr**: MME Manager logging facility

- **mmgr**: SGSN/SS7 Master Manager

- **mpls_sig**: Multiprotocol Label Switching

- **mptest**: Migration Performance Test on Packet Accelerator Card

- **netwstrg**: Network Storage Manager [Release 11.0 and earlier versions only]

- **npuctrl**: Network Processor Unit Control Facility

- **npudrv**: Network Processor Unit Driver Facility [ASR 5500 only]

- **npumgr**: Network Processor Unit Manager Facility

- **npusim**: Network Processor Unit Simulator [ASR 5500 only]

- **nputst**: Network Processor Unit Tester

- **nsctrl**: Charging Service Controller [Release 11.0 and earlier versions only]

- **nsmgr**: Charging Service Process Manager [Release 11.0 and earlier versions only]

- **orbns**: Object Request Broker Notification Server Facility

- **orbs**: Object Request Broker System Facility

- **ospf**: Open Shortest Path First Facility

- **ospfv3**: Open Shortest Path First (OSPFv3)

- **pdgmgr**: Packet Data Gateway (PDG) Manager

- **phsgwmgr**: PHS Gateway manager

- **phspcmgr**: PHS Paging Controller manager

- **rct**: Recovery Control Task Facility

- **rdt**: Redirect Task Facility

- **rip**: Routing Information Protocol Facility

- **rmctrl**: Resource Manager Controller Facility

- **rmmgr**: Resource Manager Facility

- **sct**: Shared Configuration Task Facility

- **sessctrl**: Session Controller Facility

- **sessmgr**: Session Manager Facility

- **sesstrc**: Session Trace Collection task

- **sft**: Switch Fabric Monitoring Task

- **sgtpcmgr**: SGSN GTP-C Manager

- **sipcdprt**: SIP Call Distributor Task [Release 11.0 and earlier versions only]

- **sitmain**: System Initialization Task Main Facility

- **sitparent**: Card based system initialization facility that applies to MIO card.

- **snmp**: SNMP Protocol Facility

- **srdb**: Static Rating Database

- **testctrl**: Test Controller

- **testmgr**: Test Manager

- **threshold**: Threshold Server Facility

- **vpnctrl**: Virtual Private Network Controller Facility

- **vpnmgr**: VPN Manager Facility

- **zebos**: ZEBOS™ OSPF Message Facility

all: Clears information for all instances of the specified facility.

instance *id*: Clears information for the facility instance specified as an integer from 0 through 10000000.

max

Default: current usage levels are cleared.

Clears just the maximum usage levels for tasks as opposed to all current usage levels.

Usage Guidelines   Use this command to clear (delete) the collected resource statistics for system tasks.

Example

The following command deletes the Switch Fabric Monitoring Task statistics for instance 100 running on card 2.

```
clear task resources card 2 facility sft instance 100 max
```

clear tcap statistics

Deletes the collected statistics for traffic that has passed through the SS7 TCAP (Transaction Capabilities Application Part) layer.

Product   SGSN

Privilege   Security Administrator, Administrator, Operator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description

```
clear tcap statistics [ camel-service [ all | name camel_srvc ] | map-service
 [ all | name map_srvc ] ] [ | { grep grep_options | more } ]
```

camel-service [all | name *camel_srvc*]

Deletes TCAP statistics for either all CAMEL (Customized Applications for Mobile Network Enhanced Logic, GSM 09.78) services or only for the named CAMEL service.

map-service [all | name *mapl_srvc*]

Deletes TCAP statistics for either all MAP services or only for the named MAP service.

grep *grep_options* | more

Pipes (sends) the output of this command to the specified command. You must specify a command to which the output of this command will be sent.

For details on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter.

Usage Guidelines

Use this command to clear (delete) the collected TCAP statistics for MAP or CAMEL services.

Example

The following command deletes the collected statistics for a MAP service named *MAP-Tewk*.

```
clear tcap statistics map-service name MAP-Tewk
```

clear wsg-service statistics

Deletes statistics collected for a Wireless Security Gateway (WSG) service.

Privilege

Security Administrator, Administrator, Operator

Product

SecGW (WSG)

Command Modes

Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description

```
clear wsg-service statistics [ name srvc_name ]
```

name *srvc_name*

Specifies the name of a WSG service for which statistics will be deleted.

Usage Guidelines

Deletes statistics for all WSG services or for a specified WSG service.

Example

The following command deletes statistics for all WSG services:

```
clear wsg-service
```

cli

Specifies command line interface (CLI) session behavior.

Product

All

Privilege

Security Administrator, Administrator, Operator, Inspector

Command Modes

Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
[ no ] cli { history | stop-on-first-error | test-commands [ encrypted ]
password password_string }
```

no

Disables the specified keyword functionality.

history

Enables command line history for the current command line session. Default: Enabled

stop-on-first-error

When enabled and a configuration file is loaded, the system stops loading the configuration file on the first syntax error. Default: Disabled

test-commands [encrypted] password *password_string*

If you are logged in as a Security Administrator or Administrator enabling this command displays diagnostic commands and supplemental keywords to existing commands. The **cli hidden** command in Global Configuration mode must be enabled to grant access to this keyword. Default: Disabled

⚠️

Caution CLI test-commands are intended for diagnostic use only. Access to these commands is not required during normal system operation. These command are intended for use only by Cisco TAC personnel. Some of these commands can slow system performance, drop subscribers, and/or render the system inoperable

[encrypted] password *password_string*: Password must be entered to access the CLI test-commands. This password must have been previously configured by a Security Administrator via the Global Configuration mode **tech-suport test-commands password** command. The password is an alphanumeric string of 1 through 64 characters (plain text password) or 1 through 524 characters (encrypted password).

If the **password** keyword is <u>not</u> entered, the user is prompted (no-echo) to enter the password. If **tech-support test-commands password** has not been enabled, you will be unable to execute **cli test-commands**.

☞

Important   An SNMP trap is generated whenever a user enables **cli test-commands** (**starTestModeEntered**). Refer to the *SNMP MIB Reference* for additional information.

Usage Guidelines   This command controls CLI settings pertaining to the maintenance of a per-session command history and syntax error monitoring during configuration file loading.

By default, the system maintains a list of commands executed during each CLI session. This list is referred to as a history.

In addition, the system can be configured to stop loading a configuration if a syntax error is detected. By default, the system identifies the error but continues to process the configuration file.

Example

The following command disables the keeping of a CLI history for the current session:

no cli history

clock set

Sets the system time.

Product   All

Privilege   Security Administrator, Administrator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description   **clock set** *date_time*

date_time

Specifies the date and time to set the system clock in the format YYYY:MM:DD:HH:mm or YYYY:MM:DD:HH:mm:ss. Where:

- YYYY = 4-digit year

- MM = 2-digit month in the range 01 through 12

- DD = 2-digit day in the range 01 through 31

- HH = 2-digit hour in the range 00 through 23

- mm = 2-digit minute in the range 00 through 59

• ss = 2-digit second in the range 00 through 59

Usage Guidelines   Set the clock to adjust the system clock for such things as timing drift, day-light savings adjustment, etc. New settings are immediately applied to all CPUs in the system.

☞

Important   This command should only be used if there is no NTP server enabled for any context. If NTP is running on the system, this command returns a failure.

Example

The following commands set the system clock where one sets the exact second as well.

```
clock set 2011:08:05:02:30
clock set 2011:08:05:02:31:30
```

cmp enroll current-cert

Triggers a Certification Request (CR) after generating a public and private key pair, as well as an X.509 certificate to be included in the CR for a second certificate from the same Certificate Authority (CA). This is a Certificate Management Protocol v2 command.

Product   All products supporting IPSec CMPv2 features

☞

Important   This command appears in the CLI for this release. However, it has not been qualified for use with any current Cisco StarOS gateway products.

Privilege   Security Administrator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

`[local]`*host_name*`#`

Syntax Description   **cmp enroll current-cert** *old-cert-name* **modulus** *mod_type* **subject-name** *"subject_string"* **cert-name** *name* **ca-root** *ca_name* **ca-url** *url*

current-cert *old-cert-name*

Specifies a valid security gateway certificate as an alphanumeric string of 1 through 129 characters.

modulus *mod_type*

Specifies the modulus of the generated certificate. *mod_type* is one of the following integers: 1024, 2048, 4096 or 512.

subject-name *"subject_string"*

Specifies the subject string of the certificate in double quotation marks. *"subject_string"* is an alphanumeric string of 1 through 256 characters.

cert-name *name*

Specifies the name of the newly obtained certificate which also serves as the fileame to be stored on /flash disk. *name* is an alphanumeric string of 1 through 129 characters.

ca-root *ca_name*

Specifies the root certificate of the CA server.. *ca_name* is an alphanumeric string of 1 through 129 characters.

ca-url *url*

Specifies the URL to which the CA server listens. *url* is in the format:
http://<host>[:<port>][/<directory>]/<filename>.

Usage Guidelines   Use this command to trigger a certification request for a second certificate from the same CA.

Example

The following command requests a second certificate from the same CA:

```
cmp enroll current-cert aqaw12345 modulus 1024 subject-name
"test_certificate" cert-name cert01 ca-root ca001 ca-url
http://excel:2033/certficates/aqaw12345
```

cmp fetch cert-name

This command is only applicable for the ASR 9000 running VPC-SI on a Virtualized Services Module (VSM). CMPv2 operations are performed only on one VSM in the chassis. The certificates along with the private key file and the root certificate are stored on the supervisor card. When invoked on other VSMs in the chassis, this command reads the certificate, private key and the root certificate from the supervisor card.

Product   All products supporting IPSec CMPv2 features

☞

Important   This command appears in the CLI for this release. However, it has not been qualified for use with any current Cisco StarOS gateway products.

Privilege   Security Administrator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description   **cmp fetch current-cert** *old-cert-name* **ca-root** *ca_name*

current-cert *old-cert-name*

Specifies a valid security gateway certificate as an alphanumeric string of 1 through 129 characters.

ca-root *ca_name*

Specifies the root certificate of the CA server. *ca_name* is an alphanumeric string of 1 through 129 characters.

Usage Guidelines   Use this command to read the certificate, private key and the root certificate from the supervisor card in an ASR 9000.

Example

The following command fetches a certificate from a specified CA:

```
cmp fetch current-cert aqaw12345 ca-root ca001
```

cmp initialize

Triggers an Initial Certification Request (CR) after generating a public and private key pair, as well as an X.509 certificate to be included in the CR. This is a Certificate Management Protocol v2 command.

Product   All products supporting IPSec CMPv2 features

☞

Important   This command appears in the CLI for this release. However, it has not been qualified for use with any current Cisco StarOS gateway products.

Privilege   Security Administrator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description   **cmp intialize modulus** *mod_type* **cert-name** *name* **subject-name** *"subject_string"* **ca-psk** *key* **ca-root** *ca_name* **ca-url** *url*

modulus *mod_type*

Specifies the modulus of the generated certificate. *mod_type* is one of the following integers: 1024, 2048, 4096 or 512.

cert-name *name*

Specifies the name of the newly obtained certificate which also serves as the filename to be stored on /flash disk. *name* is an alphanumeric string of 1 through 129 characters.

subject-name *"subject_string"*

Specifies the subject string of the certificate in double quotation marks. *"subject_string"* is an alphanumeric string of 1 through 256 characters.

ca-psk *key*

Specifies the Pre-Shard Key provided by the CA server for CMPv2 operation. *key* is an alphanumeric string of 1 through 129 characters.

ca-root *ca_name*

Specifies the root certificate of the CA server. *ca_name* is an alphanumeric string of 1 through 129 characters.

ca-url *url*

Specifies the URL to which the CA server listens. *url* is in the format:
http://<host>[:<port>][/<directory>]/<filename>.

| **Usage Guidelines** | Use this command to trigger an initial certification request from the CA. |

Example

The following command sends an Initial Certification Request to a specified CA:

```
cmp initialize modulus 1024 cert-name cert001 subject-name "test" ca-psk
 AB33569 ca-root cert1 ca-url http://excel:2033/certficates/aqaw12345
```

cmp poll

Triggers a pollReq for the specified certificate. This is a Certificate Management Protocol v2 command.

Product	All products supporting IPSec CMPv2 features

👉

Important	This command appears in the CLI for this release. However, it has not been qualified for use with any current Cisco StarOS gateway products.

Privilege	Security Administrator

Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`

Syntax Description	`cmp poll current-cert old-cert-name`

current-cert *old-cert-name*

Specifies a valid security gateway certificate as an alphanumeric string of 1 through 129 characters.

Usage Guidelines   Use this command to poll the current certificate.

Example

The following command polls the current certificate:

```
cmp poll current-cert aqaw12345
```

cmp update

Triggers a Key Update Request after generating a public and private key pair, as well an X.509 certificate to be included in the Key Update Request for a certificate that is about to expire. This is a Certificate Management Protocol v2 command.

Product   All products supporting IPSec CMPv2 features

☞

Important   This command appears in the CLI for this release. However, it has not been qualified for use with any current Cisco StarOS gateway products.

Privilege   Security Administrator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description   **cmp update current-cert** *old-cert-name* **modulus** *mod_type* **ca-root** *ca_name* **ca-url** *url*

modulus *mod_type*

Specifies the modulus of the generated certificate. *mod_type* is one of the following integers: 1024, 2048, 4096 or 512.

current-cert *old-cert-name*

Specifies a valid security gateway certificate as an alphanumeric string of 1 through 129 characters.

ca-root *ca_name*

Specifies the root certificate of the CA server. *ca_name* is an alphanumeric string of 1 through 129 characters.

ca-root *ca_name*

Specifies the root certificate of the CA server. *ca_name* is an alphanumeric string of 1 through 129 characters.

ca-url *url*

Specifies the URL to which the CA server listens. *url* is in the format:
http://<host>[:<port>][/<directory>]/<filename>.

Usage Guidelines   Use this command to initiate a manual update of the current certificate.

Example

The following command requests a second certificate from the same CA:

```
cmp update modulus 1024 current-cert aqaw12345   ca-root ca001 ca-url
http://excel:2033/certficates/aqaw12345
```

commandguard

Enable / disable Commandguard feature to prevent operators from accidentally entering configuration modes
by presenting yes/no confirmation prompts.

Product   SGSN

Privilege   Security Administrator, Administrator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description
```
commandguard
[ default | no ] commandguard
```

[default | no]

Restores the default behavior for confirmation prompting and disables the Commandguard feature.

Usage Guidelines   When **commandguard** is enabled it affects the **configure** and **autoconfirm** CLI commands by causing them
to prompt (Y/N) for confirmation. This feature protects operators from accidentally entering configuration
mode via CLI or file replay.

☞

Important   When **autoconfirm** is enabled, **commandguard** has no affect.

Example

The following command enables the Commandguard feature:

commandguard

The following command restores system default confirmation prompts:

default commandguard

The following command instructs the SGSN to ignore Commandguard when enabled:

autoconfirm

configure

Moves to the Global Configuration mode to modify the running configuration. May also be used to pre-load a configuration file specified by its URL for modification in the Global Configuration mode.

You can also use this command to update the ConfD Configuration Database (CDB) that supports the NETCONF protocol. Another option locks access to the configuration mode.

Product	All
Privilege	Security Administrator, Administrator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
configure [ confd ] [ encrypted ] [ url ] [ lock [ force | warn ] ] [
-noconfirm ]
```

configure

Moves from Exec mode to the Global Configuration mode for modifying the configuration.

confd

This keyword is always used in conjunction with a URL and is <u>not</u> supported on the ASR 5000. The **configure confd** *url* command applies the configuration at the URL to the ConfD configuration database (CDB) if no errors exist in the file as specified by the URL. The operator remains in the Exec mode. The CDB supports NETCONF protocol.

encrypted

Allows a Lawful Intercept (LI) administrator to execute only encrypted LI contexts from a saved configuration file. This keyword is only visible to an LI Administrator.

Note   For additional information o the use of this command, refer to the *Lawful Intercept Configuration Guide.*

url

Specifies the location of a configuration file to pre-load for modification. If no URL is specified, modifications are made to the running configuration.

url may refer to a local or a remote file. *url* must be entered using one of the following formats:

For the ASR 5000 (<u>not</u> supported with the **confd** keyword):

- **[file:]{ /flash | /pcmcia1 | /hd-raid | /sftp }** [*/directory*]*/file_name*

- **tftp://{** *host*[*:port#*] **}** [*/directory*]*/file_name*

- **[http: | ftp: | sftp:]//[** *username* [*:password*] **@] {** *host* **}** [*:port#*] [*/directory*]*/file_name*

For the ASR 5500:

- **[file:]{ /flash | /usb1 | /hd-raid / sftp }** [*/directory*]*/file_name*

- **tftp://{** *host*[*:port#*] **}** [*/directory*]*/file_name*

- **[http: | ftp: | sftp:]//[** *username* [*:password*] **@] {** *host* **}** [*:port#*] [*/directory*]*/file_name*

> ☞
>
> **Important**   Do <u>not</u> use the following characters when entering a string for the field names below: "/" (forward slash), ":" (colon) or "@" (at sign).

directory is the directory name.

filename is the actual file of interest.

username is the user to be authenticated.

password is the password to use for authentication.

host is the IP address or host name of the server.

port# is the logical port number that the communication protocol is to use.

lock [force | warn]

Locks the configuration mode for exclusive access by this administrator. This option prevents multiple administrators from simultaneously modifying the configuration.

The **force** option forces all other administrators to exit to Exec mode, including anyone currently holding the exclusive lock.

The **warn** option warns all other administrators to exit to Exec mode. This administrator will be taking the exclusive lock soon. You may want to use this option before actually forcing administrators out of configuration mode.

-noconfirm

Executes the command without any additional prompt and confirmation from the user.

Usage Guidelines   If no URL is specified, executing this command causes the CLI to enter the Global Configuration Mode and modify the running configuration.

If a URL is specified, executing this command loads the specified configuration file for modification in Global Configuration mode.

Use the **confd** *url* option to apply the contents of a configuration script specified by the URL to the CDB. This option does not send you to Global Configuration mode.

The **encrypted** option can only be executed by an administrator with **li-administration** privilege enabled. For additional information see the *Lawful Intercept Configuration Guide*.

By default, configuration (config) mode is shared among all administrative users. You have the option of requesting an exclusive lock of the config mode to assure that no other user is modifying the configuration at the same time. When an administrator holds the exclusive lock, no other administrators are allowed to enter into config mode or load a config file. Any other administrators attempting to enter into config mode or load a config file will see the following message:

```
Failure: User <username> has the exclusive lock
 - please enter 'show administrators' for more information
```

If another administrator attempts to enter config mode with the exclusive lock when it is already enabled, the following message appears:

```
Failure: Another administrator is still in configuration mode
 - please enter 'show administrators' for more information
```

Administrators who have been forced to exit from config mode will see the following message:

```
Warning: Administrator <username> has forced you to exit from configuration mode
```

☞

Important   For additional information about config mode locking mechanisms, refer to the *System Administration Guide*.

Examples

The following command sends you to the Global Configuration mode and allows you to modify the currently running configuration:

configure

The following command loads a configuration file via FTP from the specified pathname:

configure ftp://sampleNode/pub/glob.cfg

For the ASR 5000 the following command loads a configuration file from a PCMCIA card:

configure /pcmcia1/pub/glob.cfg verbose

For the ASR 5500 the following command loads a configuration file from a USB flash drive:

configure /usb1/pub/glob.cfg verbose

For NETCONF-ConfD, the following command copies the script from the flash drive pathname to the CDB:

configure confd /flash/confd/cdb.cfg

The following command warns other administrators that you are seeking an exclusive lock on the config mode:

configure lock warn

context

Sets the current context to the context specified.

Product	All
Privilege	Security Administrator, Administrator, Operator, Inspector
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]`*host_name*`#`

Syntax Description	**context** *name*

name

Specifies the context of interest as an alphanumeric string of 1 through 79 characters. Must be a previously defined context.

Usage Guidelines	Change the current context when it is desired to configure and/or manage a specific context.

Example

The following sets the current context to the *sampleContext* context.

context sampleContext

copy

Copies files from one location to another. Allows files to be copied to/from locally, as well as from one remote location to another.

Product	All
Privilege	Security Administrator, Administrator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]`*host_name*`#`

Syntax Description	**copy** *from_url to_url* **[passive] [-noconfirm]**

from_url

Specifies the source of the copy. *url* may refer to a local or a remote file. *url* must be entered using the following format:

For the ASR 5000:

- **[file:]{ /flash | /pcmcia1 | /hd-raid }[** */directory* **]/***file_name*

- **tftp://{** *host*[*:port#* **] }[** */directory* **]/***file_name*

- **[http: | ftp: | sftp:]//[** *username* **[** *:password* **]@] {** *host* **}[** *:port#* **][** */directory* **]/***file_name*

For the ASR 5500:

- **[file:]{ /flash | /usb1 | /hd-raid }[** */directory* **]***/file_name*

- **tftp://{** *host*[*:port#*] **}[** */directory* **]***/file_name*

- **[http: | ftp: | sftp:]//[** *username* **[** *:password* **]@] {** *host* **}[** *:port#* **][** */directory* **]***/file_name*

For VPC:

- **[file:]{ /flash | /hd-raid | /usb1 | /usb2 | /cdrom1 }[** */directory* **]***/file_name*

> Ú
>
> **Important** The USB ports and CD-ROM must be configured via the hypervisor to be accessible.

- **tftp://{** *host*[*:port#*] **}[** */directory* **]***/file_name*

- **[http: | ftp: | sftp:]//[** *username* **[** *:password* **]@] {** *host* **}[** *:port#* **][** */directory* **]***/file_name*

> Ú
>
> **Important** Use of the ASR 5000 SMC hard drive is not supported in this release.

> Ú
>
> **Important** Do not use the following characters when entering a string for the field names below: "/" (forward slash), ":" (colon) or "@" (at sign).

directory is the directory name.

filename is the actual file of interest.

username is the user to be authenticated.

password is the password to use for authentication.

host is the IP address or host name of the server.

port# is the logical port number that the communication protocol is to use.

to_url

Specifies the destination of the copy. *url* may refer to a local or a remote file. *url* must be entered using the following format:

For the ASR 5000:

- **[file:]{ /flash | /pcmcia1 | /hd-raid }[** */directory* **]** */file_name*

- **tftp://{** *host*[*:port#*] **} [** */directory* **]** */file_name*

- **[ftp: | sftp:] / / [** *username* **[** *:password* **] @] {** *host* **} [** *:port#* **] [** */directory* **]** */file_name*

For the ASR 5500:

- **[file:]{ /flash | /usb1 | /hd-raid }[** */directory* **]** */file_name*

- **tftp://{** *host*[*:port#* **] } [** */directory* **]** */file_name*

- **[ftp: | sftp:] / / [** *username* **[** *:password* **]** **@] {** *host* **} [** *:port#* **] [** */directory* **]** */file_name*

For VPC:

- **[file:]{** **/flash | /hd-raid | /usb1 | /usb2 | /cdrom1 }[** */directory* **]***/file_name*

> ☞
>
> | **Important** | The USB ports and CD-ROM must be configured via the hypervisor to be accessible. |

- **tftp://{** *host*[*:port#* **] }[** */directory* **]***/file_name*

- **[http: | ftp: | sftp:]//[** *username* **[** *:password* **]@] {** *host* **}[** *:port#* **][** */directory* **]***/file_name*

> ☞
>
> **Important** Use of the SMC hard drive is not supported in this release.

directory is the directory name.

filename is the actual file of interest.

username is the user to be authenticated.

password is the password to use for authentication.

host is the IP address or host name of the server.

port# is the logical port number that the communication protocol is to use.

passive

Indicates the file copy is to use the passive mode FTP.

-noconfirm

Executes the command without any additional prompt and confirmation from the user.

> ☞
>
> **Important** Use of the **-noconfirm** option allows the overwriting of an existing file if the destination file already exists.

Usage Guidelines Copy configuration files, log files, etc., to provide backups of data through the network.

Example

For the ASR 5000, the following copies files from the local */flash/pub* directory to remote node *remoteABC*'s */pcmcia2/pub* directory with and without confirmation respectively.

```
copy http://remoteABC/pub/june.cfg /flash/pub/june.cfg
copy tftp://remoteABC/pub/june.cfg /pcmcia2/pub/june.cfg -noconfirm
```

For the ASR 5500, the following copies files from the local */flash/pub* directory to remote node *remoteABC*'s */flash/pub* directory with and without confirmation respectively.

```
copy http://remoteABC/pub/june.cfg /flash/pub/june.cfg
copy tftp://remoteABC/pub/june.cfg /flash/pub/june.cfg -noconfirm
```

The following copies files from remote node *remoteABC* to remote node *remote123*.

```
copy ftp://remoteABC/pub/may.cfg ftp://remote123/pub/may.cfg
```

crash copy

Copies individual crash files (one-at-a-time) and optionally the core dump file from the stored crash records on the chassis to a user-specified location.

Product	All
Privilege	Security Administrator, Administrator
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
crash copy number number url to_url [ core ]
```

number number

Specifies the identification number of the crash record as an integer representing a valid record number from 1 through 120. To determine the numeric identity of a specific crash file, use the **show crash list** command in Exec mode.

url to_url

Specifies the destination of the copy. *url* may refer to a local or a remote file and must be entered using the following format:

For the ST16:

- **[file:] { /flash | /pcmcia1 | /pcmcia2 }** [*/directory*] **/**

- **tftp://** { *host* **[** *:port#* **]** } [*/directory*] **/**

- **[ftp: | sftp:]//[** *username* **[** *:password* **]** @ **] {** *host* **} [** *:port#* **] [** */directory* **] /**

For the ASR 5000:

- **[file:] { /flash | /pcmcia1 | /hd }** [*/directory*] **/**

- **tftp://{** *host* **[** *:port#* **]** } [*/directory*] **/**

- **[ftp: | sftp:]//[** *username* **[** *:password* **]** @ **] {** *host* **} [** *:port#* **] [** */directory* **] /**

For the ASR 5500:

- **[file:] { /flash | /usb1 | /hd }** [*/directory*] /

- **tftp://{** *host*[*:port#*] **}** [*/directory*] /

- **[ftp: | sftp:]//[** *username* **[** *:password* **]** @ **] {** *host* **}** [*:port#*] [*/directory*] /

For VPC:

- **[file:]{ /flash | /hd-raid | /usb1 | /usb2 | /cdrom1 }**[*/directory*]*/file_name*

> ☞
>
> **Important** The USB ports and CD-ROM must be configured via the hypervisor to be accessible.

- **tftp://{** *host*[*:port#*] **}**[*/directory*]*/file_name*

- **[http: | ftp: | sftp:]//[** *username* **[** *:password* **]**@ **] {** *host* **}**[*:port#*][*/directory*]*/file_name*

> ☞
>
> **Important** Use of the SMC hard drive is not supported in this release.

directory: the name of the target directory.

username: the username to be authenticated to provide access to targeted server.

password: the username's password to be authenticated.

host: the IP address or host name of the targeted server.

port#: the number of the target server's logical port used for the selected communication protocol.

> ☞
>
> **Important** Do **not** specify a target filename as this will prevent the file from writing to the target server. The system generates and provides a timestamp-based filename that appears at the destination when the **copy** command completes.

core

Copies the core dump to the targeted storage server. The core cannot be copied alone; it must be part of a **crash copy** action included when copying a crash file.

Usage Guidelines Copy crash files of core dump to another location for backup or analysis.

Example

The following uses FTP to copy stored record number *5* and the core dump from the crash record list to a targeted remote node directory called *crasharchive* through port *22* of the targeted server *remoteABC* with access through user *homeboy* whose password is *secret.7.word*.

```
crash copy number 5 url ftp://homeboy:secret.7.word@
remoteABC:22/crasharchive/ core
```

crypto blacklist file update

Updates the blacklist (access denied) file using the path specified when the blacklist was enabled.

Product

All products supporting IPSec crypto blacklisting

☞

Important   This command appears in the CLI for this release. However, it has not been qualified for use with any current Cisco StarOS gateway products.

Privilege

Security Administrator

Command Modes

Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description   **`crypto blacklist file update`**

Usage Guidelines   Update the blacklist file. For additional information on blacklisting, refer to the *System Administration Guide*.

Example

The following command updates the blacklist file:

`crypto blacklist file update`

crypto rsa-keygen modulus

Generates an RSA key pair and Certificate Signing Request (CSR) using information to authenticate the site.

Product

All products that support IPSec

☞

Important   This command appears in the CLI for this release. However, it has not been qualified for use with any current Cisco StarOS gateway products.

Privilege

Security Administrator

Command Modes

Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description   **`crypto rsa-keygen modulus { 1024 | 2048 | 4096 | 512 }`**

Usage Guidelines   Generate an RSA key pair and Certificate Signing Request (CSR) using information to authenticate the site. You can specify the modulus (key size of the generated certificate) as 512. 1024, 2048 or 4096 bits.

A CSR is a message sent to a Certification Authority (CA) to request a public key certificate for an entity, where the entity is the subject of the certificate. The software creating the CSR must first generate an RSA key pair; the key pair comprises a public and private key. The public key is bundled with the subject's name, and other information to form the CSR.

Example

The following command generates a CSR for a certificate with a modulus of 2048 bits:

```
crypto rsa-keygen modulus 2048
```

crypto whitelist file update

Updates the whitelist (access granted) file using the path specified when the whitelist was enabled.

Product   All products supporting IPSec crypto whitelisting

☞

Important   This command appears in the CLI for this release. However, it has not been qualified for use with any current Cisco StarOS gateway products.

Privilege   Security Administrator

Command Modes   Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description   `crypto whitelist file update`

Usage Guidelines   Update the whitelist file. For additional information on whitelisting, refer to the *System Administration Guide*.

Example

The following command updates the whitelist file:

```
crypto whitelist file update
```

crypto-group

Allows the manual switchover of redundant IPSec tunnels belonging to a specific crypto group.

Product   PDSN

GGSN

Privilege	Security Administrator, Administrator, Operator
Command Modes	Exec
	The following prompt is displayed in the Exec mode:
	`[local]host_name#`
Syntax Description	`crypto-group name group_name activate { primary	secondary }`

name group_name

Specifies the name of an existing crypto group with which the tunnels to be switched are associated.

activate { primary | secondary }

Allows you to specify which tunnel to activate:

- **primary**: Switches traffic to the primary tunnel in the group.

- **secondary**: Switches traffic to the secondary tunnel in the group.

Usage Guidelines	This command is used in conjunction with the Redundant IPSec Tunnel Fail-over feature.

Use this command to manually switch traffic to a specific tunnel in a crypto group if the automatic switchover options have been disabled. Refer to the **switchover** command in the Crypto Group configuration mode for more information.

Example

The following command manually switches user traffic to the secondary tunnel in the crypto group called *group1*:

`crypto-group group1 activate secondary`