Exec Mode show Commands (D-G)

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

Command Modes

This section includes the commands **show dhcp** through **show gtpu-service**.

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).

show dhcp

Displays counter information pertaining to Dynamic Host Configuration Protocol IPv4 (DHCP) functionality based on specific criteria.

Product	GGSN
	ASN-GW
	P-GW
	SAEGW
Privilege	Security Administrator, Administrator, Operator, Inspector
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
show dhcp [ counters | full | summary ] [ all | apn apn_name | callid id |
chaddr mac_address | dhcp-service svc_name | imsi imsi | msid msid | server
server_address | statistics [ dhcp-service svc_name | server server_address ] |
status [ dhcp-service svc_name | server server_address ] | user-address address
 | username name ] [wf1] [ | { grep grep_options | more } ]
```

counters

Displays DHCP counter information.

full

Displays all available information pertaining to the criteria specified.

summary

Displays a summary of the DHCP statistics.

all

Displays counter information for each active PDP context.

apn _apn_name_

Displays information based on an existing Access Point Name (APN) specified as an alphanumeric string of 1 through 63 characters that is case sensitive.

callid _id_

Displays information for an existing call identification number specified as a 4-digit hexadecimal number.

chaddr _mac_address_

Displays information for a mobile node specified by its MAC address.

dhcp-service _svc_name_

Displays information for an existing DHCP service specified as an alphanumeric string of 1 through 63 characters that is case sensitive.

imsi *imsi*

Displays information for an International Mobile Subscriber Identity (IMSI) specified as a string of 1 to 15 digits.

msid *msid*

Displays information for a Mobile Subscriber Identity (MSID) specified as a string of 1 to 15 digits.

server *server_address*

Displays information for a DHCP server specified by its IP address in IPv4 dotted-decimal notation.

statistics [dhcp-service *svc_name* | server *server_address*

Displays DHCP statistics for either a specific or for all DHCP services and servers configured.

dhcp-service *svc_name*: Displays statistics for a DHCP service specified as an alphanumeric string of 1 through 63 characters that is case sensitive.

server *server_address*: Displays statistics for a DHCP server specified by its IP address in IPv4 dotted-decimal notation.

status [dhcp-service *svc_name* | server *server_address*

Displays configuration information for either a specific or for all DHCP services and servers configured.

dhcp-service *svc_name*: Displays statistics for a DHCP service specified as an alphanumeric string of 1 through 63 characters that is case sensitive.

server *server_address*: Displays statistics for a DHCP server specified by its IP address in IPv4 dotted-decimal notation.

user-address *address*

Displays information for a DHCP-assigned user IP address specified in IPv4 dotted-decimal notation.

username *name*

Displays information for a subscriber specified as an alphanumeric string of 1 through 127 characters (including wildcards "$" and "*") that is case sensitive.

wf1

Displays all available information for associated filter keyword in wide-format number 1.

| { 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 the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter in the *Command Line Interface Reference*.

Usage Guidelines   Counters pertaining to DHCP functionality can be displayed as cumulative values or for specific APNs, PDP contexts, servers, or DHCP services.

Example

The following command displays DHCP counter information for a DHCP service called *DHCP-Gi*:

show dhcp dhcp-service DHCP-Gi

The following command displays DHCP counter information for a DHCP Call ID *01ca11a2*:

show dhcp call-id DHCP-Gi

The following command displays DHCP information for the specified mobile node:

show dhcp chaddr 00:05:47:00:37:44

☞

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

show dhcp-service

Displays information for either a specific or for all Dynamic Host Configuration Protocol IPv4 (DHCP) services.

Product	GGSN
	ASN-GW
	P-GW
	SAEGW
Privilege	Security Administrator, Administrator, Operator, Inspector
Command Modes	Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description **show dhcp-service { all | name** *svc_name* **} [| { grep** *grep_options* **| more }]**

all

Displays information for all configured DHCP services.

name *svc_name*

Displays information for a DHCP service name specified as an alphanumeric string of 1 through 63 characters that is case sensitive.

| { 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 the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter in the *Command Line Interface Reference*.

Usage Guidelines

This command is used to verify the configuration of one or all DHCP services for monitoring or troubleshooting purposes. The output is a concise listing of DHCP service parameter settings.

If this command is executed from within the local context with the all keyword, information for all DHCP services configured on the system will be displayed.

Example

The following command displays configuration information for a DHCP service called *dhcp1*:

show dhcp-service name dhcp1

☞

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

show dhcpv6

Displays counter information pertaining to Dynamic Host Configuration Protocol IPv6 (DHCPv6) functionality based on specific criteria.

Product

GGSN

ASN-GW

P-GW

SAEGW

Privilege

Security Administrator, Administrator, Operator, Inspector

Command Modes

Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description

show dhcpv6 [counters | full | summary] [all | callid *id* **| server** *server_address* **| service** *svc_name***| statistics [dhcp-service** *svc_name* **| server** *server_address* **] | status [dhcp-service** *svc_name* **| server** *server_address* **] [| { grep** *grep_options* **| more }]**

counters

Displays DHCPv6 counter information.

full

Displays all available information pertaining to the criteria specified.

summary

Displays a summary of the DHCPv6 statistics.

all

Displays counter information for each active PDP context.

callid *id*

Displays information for an existing call identification number specified as an 8-digit hexadecimal number.

server *server_address*

Displays information for a DHCPv6 server specified by its IP address in IPv6 colon-separated-hexadecimal notation.

☞

Important   In StarOS 15.0 and later releases, this option is deprecated

statistics [dhcp-service *svc_name*

Displays DHCPv6 statistics for either a specific or for all DHCPv6 services.

dhcp-service *svc_name*: Displays statistics for a DHCPv6 service specified as an alphanumeric string of 1 through 63 characters that is case sensitive.

server *server_address*: Displays statistics for a DHCPv6 server specified by its IP address in IPv6 colon-separated-hexadecimal notation.

☞

Important   In StarOS 15.0 and later releases, this option is deprecated

status [dhcp-service *svc_name*

Displays configuration information for either a specific or for all DHCPv6 services and servers configured.

dhcp-service *svc_name*: Displays statistics for a DHCPv6 service specified as an alphanumeric string of 1 through 63 characters that is case sensitive.

server *server_address*: Displays statistics for a DHCPv6 server specified by its IP address in IPv6 colon-separated-hexadecimal notation.

☞

Important   In StarOS 15.0 and later releases, this option is deprecated

|{ 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 the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter in the *Command Line Interface Reference*.

| Usage Guidelines | Counters pertaining to DHCP IPv6 functionality can be displayed as cumulative values or for specific APNs, PDP contexts or DHCPv6 services. |

Example

The following command displays DHCPv6 status information for a DHCPv6 service called *DHCPv6-Gi*:

```
show dhcpv6 status service DHCPv6-Gi
```

☞

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

show dhcpv6-client-profile

Displays configuration information for a specific or all Dynamic Host Configuration Protocol IPv6 (DHCPv6) client profiles.

Product	GGSN
	ASN-GW
	P-GW
	SAEGW

| Privilege | Security Administrator, Administrator, Operator, Inspector |

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

| Syntax Description | **show dhcpv6-client-profile [all | name** *profile_name* **] | { grep** *grep_options* **| more }** |

all

Displays configuration information for all DHCPv6 client profiles.

name *profile_name*

Displays profile configuration information for an existing DHCPv6 client profile specified as an alphanumeric string of 1 through 63 characters.

| { 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 the usage of **grep** and **more**, 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 display configuration information for one or all DHCPv6 client profiles.

Example

The following command displays all DHCPv6 client profiles:

show dhcpv6-client-profile all

show dhcpv6-server-profile

Displays configuration information for a specific or all Dynamic Host Configuration Protocol IPv6 (DHCPv6) server profiles.

Product   GGSN

ASN-GW

P-GW

SAEGW

Privilege   Security Administrator, Administrator, Operator, Inspector

Command Modes   Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description   **show dhcpv6-server-profile [all | name *profile_name*] | { grep *grep_options* | more }**

all

Displays configuration information for all DHCPv6 server profiles.

name *profile_name*

Displays profile configuration information for an existing DHCPv6 server profile specified as an alphanumeric string of 1 through 63 characters.

| { 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 the usage of **grep** and **more**, 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 display configuration information for one or all DHCPv6 server profiles.

Example

The following command displays all DHCPv6 server profiles:

```
show dhcpv6-server-profile all
```

show dhcpv6-service

Displays service information and configuration counters for a specific or all Dynamic Host Configuration Protocol IPv6 (DHCPv6) services.

Product   GGSN

ASN-GW

P-GW

SAEGW

Privilege   Security Administrator, Administrator, Operator, Inspector

Command Modes   Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description   `show dhcpv6-service [ all | name svc_name ] | { grep grep_options | more }`

all

Displays configuration information and counters for all DHCPv6 services.

name *svc_name*

Displays configuration information and counters for an existing DHCPv6 service specified as an alphanumeric string of 1 through 63 characters.

| { 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 the usage of **grep** and **more**, 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 display configuration information and counters for one or all DHCPv6 services.

Example

The following command displays all DHCPv6 services:

show dhcpv6-service all

show diameter-hdd-module

Displays the HDD module configuration information.

☞

Important	This command is license dependent. For more information, contact your Cisco account representative.

Product

HA

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

show diameter-hdd-module { file-space-usage | statistics } [| { grep *grep_options* **| more }]]**

file-space-usage

Displays the limit and usage of hard-disk space for the credit-control-event module.

statistics

Displays statistics for the credit-control-event module.

| { 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 the usage of **grep** and **more**, 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 view the HDD module configuration information.

Example

The following command displays the hard-disk space utilization for the credit-control-event module:

show diameter-hdd-module file-space-usage

show diameter aaa-statistics

Displays Diameter Authentication, Authorization and Accounting (AAA) statistics.

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

show diameter aaa-statistics [all | group *group_name* **[server** *server_name* **] | misc-data [instance** *instance_number* **] | server** *server_name* **] [| { grep** *grep_options* **| more }]**

all

Displays all available Diameter server statistics.

group *group_name* [server *server_name*]

Displays all Diameter server statistics within an existing AAA group specified as an alphanumeric string of 1 through 64 characters.

server_name must be the name of a Diameter server, expressed as an alphanumeric string of 1 through 64 characters.

misc-data instance *instance-number*

Displays Diameter specific miscellaneous statistics among all AAA manager instances. This display also includes the maximum backpressure statistics and the time at which it was seen.

instance *instance_number*: Displays the maximum backpressure statistics at a specified AAA manager instance. The instance number must be an integer from 1 through 385 characters.

server *server_name*

Displays Diameter server statistics for the Diameter server name specified as an alphanumeric string of 1 through 64 characters.

| { 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 the usage of **grep** and **more**, 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 view Diameter AAA statistics.

Example

The following command displays all available Diameter server statistics:

```
show diameter aaa-statistics all
```

show diameter accounting servers aaa-group

Displays Diameter accounting server information for an Authentication, Authorization and Accounting (AAA) group.

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	`show diameter accounting servers [aaa-group group_name] [	{ grep grep_options	more }]`

aaa-group group_name

Specifies the name of an existing AAA group as an alphanumeric string of 0 through 64 characters.

|{ 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 the usage of **grep** and **more**, 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 view Diameter accounting server information for an AAA group.

Example

The following command displays Diameter accounting server information for an AAA group named in *group12*:

```
show diameter accounting servers aaa-group group12
```

show diameter authentication servers aaa-group

Displays Diameter Authentication server information for a specified AAA group.

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	`show diameter authentication servers [ aaa-group group_name ]`
	aaa-group group_name
	Specifies the name of an existing AAA group as an alphanumeric string of 0 through 64 characters.
Usage Guidelines	Use this command to view Diameter authentication server information for an AAA group.

Example

The following command displays Diameter authentication server information for an AAA group named *group12*:

`show diameter authentication servers aaa-group group12`

show diameter dynamic-dictionary

Displays the contents of Diameter dictionary that is loaded dynamically at run time.

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	`show diameter dynamic-dictionary { { all [contents] }	{ name dict_name` `[contents	{ full facility { aaamgr	diamproxy	sessmgr instance` `instance_no } }] [	{ grep grep_options	more }] }`

all

Displays, in text format, the information for all dynamically loaded dictionaries configured in the Global Configuration mode. Displays up to 10KB buffered text from each dictionary file.

name dict_name

Displays detailed information for an existing dynamically loaded dictionary specified as an alphanumeric string of 1 through 15 characters. Displays up to 10KB buffered text from the specified dictionary file.

full facility { aaamgr | diamproxy | sessmgr }

Displays all available information for the specified instance associated with one of the following facilities:

- aaamgr — Accounting and authentication Manager

- diamproxy — Diameter Proxy

- sessmgr — Session Manager

instance *instance_no*

Specifies the instance number from which dynamic dictionary details to be fetched, is an integer value between *0* thriugh *4294967295*.

|{ 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 the usage of **grep** and **more**, 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 view the contents of dynamically loaded Diameter dictionaries.

For more details on the dynamic configuration of Diameter dictionary, refer to the **diameter dynamic-dictionary** command in the *Global Configuration Mode Commands* chapter.

Example

The following command displays the contents of dynamically loaded Diameter dictionary file named *dyn1*:

```
show diameter dynamic-dictionary name dyn1
```

show diameter endpoint

This command has been deprecated, and is replaced by the command.

show diameter endpoints

This command displays the status of Diameter client endpoint(s).

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

```
show diameter endpoints { all | endpoint endpoint_name } [ | { grep grep_options
| more } ]
```

all

Displays status of all Diameter client endpoints.

endpoint *endpoint_name*

Displays status of an existing Diameter client endpoint specified as an alphanumeric string of 1 through 63 characters.

| { 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 the usage of **grep** and **more**, 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 view the status of Diameter client endpoints.

If you are in the local context, then all contexts are searched for the specified endpoint(s). Specify **all** to see all endpoints; otherwise, just the named endpoint will be displayed. If no argument is provided, a summary of all endpoints is displayed.

Default value: N/A

Example

The following command displays status of all Diameter client endpoints.

```
show diameter endpoints all
```

☞

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

show diameter message-queue

Displays Diameter message queue statistics.

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

```
show diameter message-queue counters { inbound | outbound } [ endpoint
endpoint_name [ peer-host peer_id [ peer-realm realm_id ] ] | session-id session_id
] [ | { grep grep_options | more } ]
```

counters { inbound | outbound }

Specifies the message counters:

inbound: Specifies Diameter inbound messages

outbound: Specifies Diameter outbound messages

endpoint *endpoint_name*

Specifies the Diameter endpoint as an alphanumeric string of 1 through 63 characters.

peer-host *peer_id*

Specifies the Diameter peer host as an alphanumeric string of 1 through 63 characters.

peer-realm *realm_id*

Specifies the Diameter peer realm as an alphanumeric string of 1 through 127 characters.

session-id *session_id*

Specifies the session ID as an alphanumeric string of 1 through 127 characters.

| { 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 the usage of **grep** and **more**, 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 view the count of the messages in the Diameter message queue for specific counter type, session ID, or endpoint, peer host, and peer realm.

Example

The following command displays message queue statistics for outbound messages specific to the Diameter endpoint named *asr5k.testnetwork.com*:

```
show diameter message-queue counters outbound endpoint
asr5k.testnetwork.com
```

☞

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

show diameter peers

Displays Diameter peer information.

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

```
show diameter peers [ full | summary ] [ all | [ endpoint endpoint_name ] [
 peer-host peer_id ] [ peer-realm realm_id ] ] [ | { grep grep_options | more
 } ]
```

full

Displays full details of all or specified Diameter peers.

summary

Displays summary details of all or specified Diameter peer(s).

all

Displays details of all Diameter peers.

endpoint *endpoint_name*

Displays details of the origin Diameter endpoint specified as an alphanumeric string of 1 through 255 characters.

peer-host *peer_id*

Displays details of the Diameter peer host specified as an alphanumeric string of 1 through to 63 characters.

peer-realm *realm_id*

Displays details of the Diameter peer realm ID specified as an alphanumeric string of 1 through 127 characters.

| { 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 the usage of **grep** and **more**, 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 view the details of Diameter peers.

If you are in the local context, then all contexts are searched for the specified peer(s).

This is similar to the **show subscribers** CLI command and supports multiple filter options specified at the same time.

If filter options are specified (e.g., **all**, **endpoint**, etc.), the default is for one line of output to be displayed per peer. Use **full** to get detailed information per peer, or **summary** to get summarized information about all matching peers.

If no filter options are specified, a summary output for all peers is displayed. Use the **full** option to get detailed information about every peer.

Default value: N/A

Example

The following command details of the Diameter endpoint named *endpoint12*:

show diameter peers endpoint endpoint12

☞

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

show diameter proclet-map-memcache

Displays DIAMPROXY proclet cached memory information for aaamgr, diactrl or sessmgr.

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   **show diameter proclet-map-memcache { aaamgr** *integer* **| diactrl | sessmgr** *integer* **} [| { grep** *grep_options* **| more }]**

aaamgr *integer*

Selects memcache information for the aaamgr (AAA manager) instance specified as an integer from 1 to 1152.

diactrl

Selects memcache information for the diactrl (Diameter controller).

sessmgr *integer*

Selects memcache information for the sessmgr (Session manager) instance specified as an integer from 1 to 1152.

| { 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 the usage of **grep** and **more**, 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 selectively display the memcache information for specified Diameter-related StarOS proclets.

Example

The following command displays the diactrl memcache:

```
show diameter proclet-map-memcache diactrl
```

show diameter proclet-map-table

Displays DIAMPROXY proclet mapping table information for aaamgr, diactrl or sessmgr.

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

```
show diameter proclet-map-table { aaamgr integer | diactrl | sessmgr integer
 } [ | { grep grep_options | more } ]
```

aaamgr *integer*

Selects map table information for the aaamgr (AAA manager) instance specified as an integer from 1 to 1152.

diactrl

Selects map table information for the diactrl (Diameter controller).

sessmgr *integer*

Selects map table information for the sessmgr (Session manager) instance specified as an integer from 1 to 1152.

| { 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 the usage of **grep** and **more**, 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 selectively display the table information for specified Diameter-related StarOS proclets.

Example

The following command displays the diactrl map table information:

```
show diameter proclet-map-table diactrl
```

show diameter route status

Displays Diameter route health status information.

☞

Important   In 17.0 and later releases, this command has been deprecated.

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   **show diameter route status [endpoint** *endpoint_name* **| full [endpoint** *endpoint_name* **]] [host** *host_name* **[peer** *peer_id* **]] [| { grep** *grep_options* **| more }]**

full

Displays information about which Diameter clients are using which peer/host combinations.

endpoint *endpoint_name*

Displays detailed information for the Diameter client endpoint specified as an alphanumeric string of 1 through 63 characters.

host *host_name*

Displays information for the Diameter host specified as an alphanumeric string of 1 through 63 characters.

peer *peer_id*

Displays information for the Diameter peer host specified as an alphanumeric string of 1 through 63 characters.

| { 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 the usage of **grep** and **more**, 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 view the Diameter route health status.

If you are in the local context, then the route information used by Diameter endpoints in all contexts will be used in the display.

The route status displays status of peer/host combinations. Refer to the **route-failure** CLI command in Diameter Endpoint Configuration mode. When no options are specified, the display will give one line per peer/host combination, indicating how many Diameter clients are using each combination, and for how many clients the combination is available or failed. Specify **full** to see which Diameter clients are using which peer/host combinations. Specify **host** or **peer** to see just combinations with the named host or peer. Specify **endpoint** to see detailed information about the named Diameter client.

Default value: N/A

Example

The following command displays route health status details of the Diameter client endpoint named *endpoint12*:

```
show diameter route status endpoint endpoint12
```

show diameter route table

Displays the Diameter routing table.

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	`show diameter route table [ wide ] [ endpoint ` *endpoint_name* `] [	{ grep ` *grep_options* `	more }]`

wide

Displays the route table information in wide-format.

endpoint *endpoint_name*

Displays the Diameter routing table for the Diameter endpoint specified as an alphanumeric string of 1 through 63 characters.

| { 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 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 view the status of Diameter client endpoints.

If you are in the local context, then the route information used by Diameter endpoints in all chassis contexts will be used in the display.

The route table displays all static and dynamic routes. Refer to the route-entry CLI command in Diameter Endpoint Configuration Mode.

Default value: N/A

Example

The following command displays status of the Diameter client endpoint named *endpoint12*.

```
show diameter route table endpoint endpoint12
```

show diameter statistics

Displays Diameter peer statistics.

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

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

endpoint *endpoint_name*

Displays statistics for the Diameter endpoint specified as an alphanumeric string of 1 through 63 characters.

peer-host *peer_id*

Displays statistics for the Diameter host peer specified as an alphanumeric string of 1 through 255 characters.

peer-realm *realm_id*

Displays statistics for the Diameter peer realm specified as an alphanumeric string of 1 through 127 characters.

proxy

Displays proxy related statistics.

| { 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 the usage of **grep** and **more**, 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 view Diameter statistics for the specified endpoint or proxy.

Example

The following command displays Diameter peer statistics for the endpoint named *endpoint12*:

```
show diameter statistics endpoint endpoint12
```

show diameter-service

Displays information about configured Diameter services.

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
```
show diameter-service { all | lte-s6a trace-id { all | user-name user_name
} | name service_name | statistics name service_name [ vpn-name vpn_context_name
] } [ | { grep grep_options | more } ]
```

all

Displays full information for all configured Diameter services.

lte-s6a trace-id { all | user-name *user_name* }

Displays user trace ID information for an LTE/S6a application.

all: Displays full information.

user-name *user_name*: Displays information for the user specified an alphanumeric string of 1 through 79 characters.

name *service_name*

Displays information for the Diameter service name specified as an alphanumeric string of 1 through 79 characters.

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

Displays statistics for the Diameter service name specified as an alphanumeric string of 1 through 79 characters.

vpn-name *vpn_context_name*: Specifies the name of VPN context as an alphanumeric string of 1 through 79 characters.

|{ 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 the usage of **grep** and **more**, 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 view information on configured Diameter services.

Example

The following command displays statistics for the Diameter service named *ggsn12*:

```
show diameter-service name ggsn12
```

show diameter tps-statistics

Displays the Transactions Per Second (TPS) statistics per Diameter application, endpoint and Diameter proxy facility.

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
```
show diameter tps-statistics [ diamproxy diamproxy_num | application {
auth-eap | e2 | gmb | gx |  gy | rf | s6a |  s6b | sgmb | sta |  swm } |
 endpoint endpoint_name | summary | verbose ] + [ | { grep grep_options | more
 } ]
```

diamproxy *diamproxy_num*

Displays the TPS Key Performance Indicator (KPI) information for the specified Diameter Proxy facility. The *diamproxy_num* must be an integer from 1 through 144.

endpoint *endpoint_name*

Displays 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 5000 and ASR 5500 platforms 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 }

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

summary

Displays summary information of TPS statistics.

verbose

Specifies to display detailed (all available) information. If not specified, concise information is displayed.

| { 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 display TPS KPI information (the cumulative and the historical statistics) for all Diameter applications, endpoint and Diameter proxy facility.

In releases prior to 20, well-defined Key Performance Indicators (KPIs) were not available for measuring the session and Voice-over-LTE (VoLTE) signaling transaction rates on the gateway platforms. KPIs did not differentiate between successful or unsuccessful PDN session activations and deactivations. In addition, the KPIs did not provide any information related to the VoLTE service.

An external server used to collect bulkstats data every 2 minutes from the gateway node. The bulkstats data such as PDN session activations and deactivations events counters are used to calculate the Call Events Per Second (CEPS) KPI on the external server. The gateway node does not calculate the CEPS; but it only provides the counters to the external server for additional processing of relevant bulkstats data.

To address these issues, CEPS, Session Events Per Second (SEPS), Gx Transactions Per Second (TPS), Gy-TPS, S6b-TPS, Rf-TPS, SWm-TPS KPIs have been implemented. These KPIs measure the signaling load on the gateway, and also the event rate for VoLTE call setup and tear down. This enables operators to perform network dimensioning/planning for the gateway node.

This show CLI command is capable of providing the following for all signaling interfaces:

* CEPS and SEPS KPI values per second, but calculated averaged over 2 minutes

• 8 historical SEPS and CEPS KPI values

• Gx-TPS, Gy-TPS, S6b-TPS, Rf-TPS, and SWm-TPS KPIs per second, but calculated averaged over 1, 10 seconds, 30 seconds, 1 minute, 5 minutes, 10 minutes and 15 minutes

☞

Important   TPS is computed based on average of sent and received Diameter messages.

Average values of all KPIs will be provided by the gateway to the external servers using bulkstats data every 2 minutes if requested. The total KPI TPS value as well as breakdown TPS values by each card (i.e., Diameter proxy) on every Diameter interface will be provided using the show CLI command and bulkstats data.

Example

The following command displays the summary information of TPS KPI statistics for Gy application:

```
show diameter tps-statistics application gy summary
```

show dns-client

Displays cache and/or statistics for a specified Domain Name System (DNS) client.

Product	ePDG
	SGSN
	HSGW
	MME
	P-GW
	SAEGW
Privilege	Security Administrator, Administrator, Operator, Inspector
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description   `show dns-client { cache client` *name* `[ query-name` *name* `| query-type { A |`
`AAAA | NAPTR | SRV } ] | statistics client` *name* `} [ | { grep` *grep_options* `|`
`more } ]`

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

displays statistics for the cache of an existing DNS client specified as an alphanumeric string of 1 through 255 characters.

query-name *name*: Filters DNS results based on the domain name specified as an alphanumeric string of 1 through 255 characters. *name* is the domain name used to perform the DNS query. It 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 32-bit domain IPv4 address records (A records).

- **AAAA**: Filters DNS results based on 128-bit domain IPv6 address records (AAAA resource records).

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

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

statistics client *name*

Displays statistics for an existing DNS client specified as an alphanumeric string of 1 through 255 characters.

| { 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 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 display DNS cache and/or statistics for a specified DNS client.

Example

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

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

☞

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

show dynamic-policy statistics

Displays 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	**show dynamic-policy statistics { hsgw-service** *name* **| pdsn-service** *name* **| sgw-service** *name* **}**

hsgw-service *name*

Displays 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*

Displays 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*

Displays 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 display PCC statistics for the specified service and its Gx interface communicating with the PCRF.

Example

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

show dynamic-policy statistics hsgw-service hsgw4

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

show dynamic-policy statistics pdsn-service cdma4

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

show dynamic-policy statistics sgw-service sgw4

show egtpc peers

Displays information about eGTP-C peers.

Product	ePDG
	MME
	P-GW
	SAEGW
	S-GW
Privilege	Inspector

Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
show egtpc peers [ address ip_address | egtp-service name ] | interface {
epdg-egress | mme | pgw-ingress | sgsn | sgw-egress | sgw-ingress |
path-failure-history } [ address ip_address ] [ wf1 ] } ] [ | { grep
grep_options | more } ]
```

address *ip_address*

Displays information about a eGTP-C peer specified by its IP address in IPv4 dotted-decimal notation or IPv6 colon-separated-hexadecimal notation.

egtp-service *name* [address *ip_address*]

Displays information about eGTP-C peers associated with an existing egtp-service name specified as an alphanumeric string of 1 through 63 characters.

address *ip_address*: Additionally, the results can be filtered based on the IP address associated with an existing eGTP-C peer service specified in IPv4 dotted-decimal notation or IPv6 colon-separated-hexadecimal notation.

interface { epdg-egress | mme | pgw-ingress| sgsn | sgw-egress | sgw-ingress } [address *ip_address*] [wf1]

Displays information about eGTP-C peers associated with the service interface configured on this system.

epdg-egress:Displays ePDG's egress EGTP interface.

mme: Displays information about eGTP-C MME peers associated with the service interface configured on this system. Additionally, the results can be filtered based on the IP address associated with the MME peer.

pgw-ingress: Displays information about eGTP-C P-GW ingress peers associated with the service interface configured on this system. Additionally, the results can be filtered based on the IP address associated with the P-GW ingress peer.

sgsn: Displays information about eGTP-C SGSN peers associated with the S4 service interface configured on this system. Additionally, the results can be filtered based on the IP address associated with the SGSN peer.

sgw-egress: Displays information about eGTP-C S-GW egress peers associated with the service interface configured on this system. Additionally, the results can be filtered based on the IP address associated with the S-GW egress peer.

sgw-ingress: Displays information about eGTP-C S-GW ingress peers associated with the service interface configured on this system. Additionally, the results can be filtered based on the IP address associated with the S-GW ingress peer.

address *ip_address*: Specifies the IP address of the selected peer in IPv4 dotted-decimal notation or IPv6 colon-separated-hexadecimal notation.

wf1: Specifies that the output is to be displayed in wide format number 1.

path-failure-history

Provides detailed information on the last five path failures that occur per configured P-GW peers. This information can assist operators in debugging path failures in the network.

| { 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 display information about eGTP-C peers associated with the service interface configured on this system. The output contains the following information about the peer:

- Status of the peer

- Echo status

- Restart counter status

- Peer restart counter knowledge

- Service ID

- Peer IP address

- Current sessions

- Maximum sessions

☞

Important   The primary command, **show egtpc peers**, when entered without additional keywords, displays information for all peers associated with the service operating on this system.

Example

The following command returns an output for an eGTP-C S-GW egress peers associated with the service interface configured on this system with an IP address of *209.165.200.229*:

show egtpc peers interface sgw-egress address 209.165.200.229

The following command returns an output for an eGTP-C MME peer associated with the service interface configured on this system with an IP address of *209.165.200.229*:

show egtpc peers interface mme address 209.165.200.229

show egtpc sessions

Displays eGTP-C session information.

Product   ePDG

MME

P-GW

SAEGW

S-GW

Privilege	Inspector
Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description

```
show egtpc sessions [ egtp-service name | interface { epdg-egress | mme |
 pgw-ingress | sgsn | sgw-egress | sgw-ingress } ] [ | { grep grep_options
 | more } ]
```

egtp-service name

Displays information about eGTP-C sessions associated with an existing egtp-service specified as an alphanumeric string of 1 through 63 characters.

interface { epdg-egress | mme | pgw-ingress | sgsn | sgw-egress | sgw-ingress }

Displays information about eGTP-C sessions associated with the service interface configured on this system.

epdg-egress:Displays information about ePDG egress associated with EGTP interface.

mme: Displays information about eGTP-C sessions associated with the MME interface configured on this system.

pgw-ingress: Displays information about eGTP-C sessions associated with the P-GW ingress interface configured on this system.

sgsn: Displays information about eGTP-C sessions associated with the SGSN eGTP-C S4 interface configured on this system.

sgw-egress: Displays information about eGTP-C sessions associated with the S-GW egress interface configured on this system.

sgw-ingress: Displays information about eGTP-C sessions associated with the S-GW ingress interface configured on this system.

| { 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 display session information for a specific eGTP service or for sessions associated with an interface type configured on this system.

Example

The following command displays eGTP-C session information for sessions associated with all P-GW ingress interfaces configured on this system:

```
show egtpc sessions interface pgw-ingress
```

The following command displays eGTP-C session information for sessions associated with all MME interfaces configured on this system:

```
show egtpc sessions interface mme
```

show egtpc statistics

Displays evolved GPRS Tunneling Protocol Control (eGTP-C) plane statistics for a specific service name or interface type.

Product	ePDG
	MME
	P-GW
	SAEGW
	S-GW
Privilege	Inspector
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description
```
show egtpc statistics [ demux-only | egtp-service name [ interface-type {
 s2a | s2b | s5s8 } ] | epdg-address ip_address | event-statistics |
header-decoder-errors | interface { epdg-egress | mme | pgw-ingress  [
interface-type { s2a | s2b | s5s8 } ]| sgsn | sgw-egress | sgw-ingess }
| mme-address ip_address | path-failure-reasons | pgw-address ip_address |
piggybacking-statistics | sessmgr-only | sgsn-address ip_address |
sgw-address ip_address ] [ verbose ] [ | { grep grep_options | more } ]
```

demux-only

Displays entry point statistics at demux manager.

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

Displays statistics for an existing eGTP service specified as an alphanumeric string of 1 through 63 characters.

interface-type: Displays 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.

epdg-address *ip_address*

Displays eGTP-C statistics for an existing ePDG IP address expressed in IPv6 colon-separated-hexadecimal notation.

event-statistics

Displays total eGTP-C events sent/received.

header-decoder-errors

Displays header decoding errors of incoming packets at eGTP-C stack/demux manager.

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

epdg-egress: Displays eGTP-C statistics for all ePDG egress interfaces.

mme: Displays eGTP-C statistics for all MME interfaces.

pgw-ingress: Displays eGTP-C statistics for all eGTP P-GW ingress interfaces.

interface-type: Displays 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.

sgsn: Displays eGTP-C statistics for all eGTP S4 SGSN interfaces.

sgw-egress: Displays eGTP-C statistics for all eGTP S-GW egress interfaces.

sgw-ingress: Displays eGTP-C statistics for all eGTP S-GW ingress interfaces.

mme-address *ip_address*

Displays eGTP-C statistics for an existing MME IP address expressed in IPv4 dotted-decimal notation or IPv6 colon-separated-hexadecimal notation.

path-failure-reasons

Displays breakup of reasons for path failure.

pgw-address *ip_address*

Displays eGTP-C statistics for an existing P-GW IP address expressed in IPv4 dotted-decimal notation or IPv6 colon-separated-hexadecimal notation.

piggybacking-statistics

Displays total piggybacked messages sent/received at eGTP-C stack.

sessmgr-only

Displays entry point statistics at sessmgr.

sgsn-address *ip_address*

Displays eGTP-C statistics for an existing SGSN S4 IP address expressed in IPv4 dotted-decimal or IPv6 colon-separated-hexadecimal notation.

sgw-address *ip_address*

Displays eGTP-C statistics for an existing S-GW IP address expressed in IPv4 dotted-decimal or IPv6 colon-separated-hexadecimal notation.

verbose

Displays the maximum amount of detail available for this commands output. If this option is not specified, the output is truncated to a more concise level.

All of the cause codes supported for GTPv2 are displayed as part of this option. All the cause code values are shown for each of the messages.

|{ 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 display evolved GPRS Tunneling Protocol Control (eGTP-C) plane statistics for a specific service name or interface type.

Example

The following command displays eGTP-C statistics for interfaces configured as S-GW ingress interfaces:

```
show egtpc statistics interface sgw-ingess
```

The following command displays eGTP-C session information for sessions associated with all MME interfaces configured on this system:

```
show egtpc sessions interface mme
```

show egtp-service

Displays configuration information for evolved GPRS Tunneling Protocol (eGTP) services on this system.

Product	ePDG
	MME
	P-GW
	SAEGW
	S-GW
Privilege	Inspector
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
show egtp-service { all | name service_name } [ | { grep grep_options | more
} ]
```

all

Displays configuration information for all eGTP services configured on this system.

name *service_name*

Displays configuration information for an existing eGTP service specified as an alphanumeric string of 1 through 63 characters.

|{ 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 the usage of the **grep** and **more** commands, refer to the *Regulating a Command's Output* section of the *Command Line Interface Reference Guide*.

Usage Guidelines   Use this command to view configuration information for eGTP services on this system.

Example

The following command displays service statistics for the eGTP service named *egtp1*:

```
show egtp-service name egtp1
```

show emps-profile

Displays a particular or all eMPS profile(s) configured with its associated attributes.

Product	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

show emps-profile { all | name *emps_profile_name* **}**

all

Displays configuration information for all eMPS profiles configured with its associated attributes.

name*emps_profile_name*

Displays configuration information for an existing eMPS profile specified as an alphanumeric string of 1 through 63 characters.

Usage Guidelines   Use this command for displaying emps-profile-name, configured eARP value, configured DSCP value, and enabled or disabled message-priority.

Example

The following command displays service statistics for the eMPS profile named *emps1*:

show emps-profile name emps1

show epdg-service

Displays information about selected EPDG calls/services.

| **Product** | ePDG |

| **Privilege** | Inspector |

Command Modes   Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description

show epdg-service { **all** [**counters** [| { **grep** *grep_options* | **more** }]] | **name** *epdg_service_name* [**counters** [| { **grep** *grep_options* | **more** }]] | **statistics** [**apn-name** *apn_name* | **dns-stats** | **name** *name*] | **session** { **all** | **apn-name** *apn_name* | **callid** *call_id* | [**counters**] | [**full**] | **ip-address** { **<** *ip_address* | **>** *ip_address* | **IP-ADDRESS** | **greater-than** *ip_address* | **less-than** *ip_address* } | **peer-address** *peer_address* | [**summary**] | **username** *user_name* [| { **grep** *grep_options* | **more** }] } **statistics** [**dns-stats**] [**name** *service_name*] [**peer-address** *peer_address*] [| { **grep** *grep_options* | **more** }] }

all

Displays information for all configured services.

counters

Displays counters associated with EPDG service.

name *epdg_service_name*

Displays specific service. This must be followed by service name *epdg_service_name*, which is a string of size between 1 and 63.

statistics

Displays information about total of collected information for specific protocol since last restart or clear command.

apn-name *apn-name*

Displays statictics for specific APN, must be followed by apn name, which is a string of size between 1 and 63.

dns-stats

Displays information related to DNS PGW selection.

name *name*

Displays specific service. Must be followed by service name.

session

Displays information about configured EPDG sessions.

callid *call_id*

Specifies a Call Identification Number as an eight-digit hexadecimal number.

full

Displays all available information for associated display or filter keyword (previous keyword).

ip-address

Displays IP address of the subscriber. Must be followed by IPv4 address in dotted-decimal notation.

< *ip_address* | less-than *ip_address*

Specifies Less Than. Must be followed by an IP address specified in IPv4 dotted-decimal or IPV6 colon-separated-hexadecimal notation.

> *ip_address* | greater-than *ip_address*

Specifies Greater Than. Must be followed by an IP address specified in IPv4 dotted-decimal or IPV6 colon-separated-hexadecimal notation.

peer-address *peer_address*

Specifies the IP address of an IP Peer in IPv4 address dotted-decimal or IPV6 address colon-separated-hexadecimal notation.

summary

Displays the summary of available information for associated display or filter keyword (previous keyword).

username *user_name*

Displays the name of specific user within current context. *user_name* is an alphanumeric string of 1 through 127 characters.

statistics

Displays the total of collected information for specific protocol since last **reload** or **clear** command.

dns-stats

Displays information related to DNS PGW selection.

name *service_name*

Displays specific service. *service_name* is an alphanumeric string of 1 through 63 characters.

|{ 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 display information about selected EPDG calls/services.

Example

The following command displays ePDG counter information:

show epdg-service all counters *| grep 21*

show event-record

Displays event record statistics for a P-GW node.

Product	P-GW
	ePDG

Privilege	Inspector

Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
show event-record statistics { epdg | 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 display all event record statistics for a P-GW node.

Example

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

```
show event-record statistics pgw
```

show external-inline-servers

This command is obsolete.

show fa-service

Displays information on configured foreign agent (FA) services.

Product	PDSN
	GGSN
	ASN-GW

Privilege	Security Administrator, Administrator, Operator, Inspector

Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description

show fa-service { all | name *fa_name* **} [| { grep** *grep_options* **| more }]**

all | name fa_name

all: indicates information on all foreign agent services is to be displayed.

name *fa_name*: indicates only the information for the named FA service is to be displayed.

| { 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 the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter in the *Command Line Interface Reference*.

Usage Guidelines   Display foreign agent service configuration information.

Example

The following commands display information on the FA service *sampleService* and all services, respectively.

show fa-service name sampleService

show fa-service all

☞

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

show fa-spi-list

Displays Security Parameter Indices (FA-SPIs) for configured foreign agent (FA) services.

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

The following prompt is displayed in the Exec mode:

`[local]host_name#`

| **Syntax Description** | `show fa-spi-liste { all | name` *fa_name* `} [ | { grep` *grep_options* `| more } ]` |

all | name *fa_name*

all: indicates information on all foreign agent services is to be displayed.

name *fa_name*: indicates only the information for the named FA service is to be displayed.

| { 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 the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter in the *Command Line Interface Reference*.

| **Usage Guidelines** | Display foreign agent SPI information. |

Example

The following command displays SPI information for the FA service *sampleService*.

```
show fa-spi-list name sampleService
```

☞

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

show fans

Displays the current control status, speed, and temperature for the upper and lower fans in an ASR 5x00 chassis.

| **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** | `show fans [ verbose ] [ | { grep` *grep_options* `| more } ]` |

verbose

ASR 5500 only: Displays additional information regarding the state of the fan trays.

| { 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 the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter in the *Command Line Interface Reference*.

Usage Guidelines   View the fan information to verify system hardware status as necessary.

Example

The following command displays information regarding the cooling fans in the ASR 5x00 chassis:

show fans

☞

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

show file

Displays the contents of the file specified. The contents are paginated as if it were normal ASCII output.

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   **show file url** *url* **[| { grep** *grep_options* **| more }]**

url *url*

Specifies the location of a file to display. *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 }[/*directory* **]/***file_name*
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.

For the ASR 5500:

```
[ file: ]{ /flash | /usb1 | /hd }[ /directory ]/file_name
tftp://{ host[ :port# ] }[ /directory ]/file_name
[ http: | ftp: | sftp: ]//[ username[ :password ]@ ] { host }[ :port# ][
/directory ]/file_name
```

☞

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.

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

Usage Guidelines Display the contents of files to view such information as log data, trace information, etc.

Example

The following will display the contents of the local file */pub/log.txt*.

show file //pcmcia1/pub/log.txt

The following command will display the contents of the file */pub/log.txt* on remote host *remoteABC*.

show file ftp://remoteABC/pub/log.txt

show fng-service

Displays information about specified Femto Network Gateway (FNG) service configuration, status, and counters, and includes information about all the sessions currently maintained by the FNG.

Product FNG

Privilege Security Administrator, Administrator, Operator, Inspector

Command Modes Exec

The following prompt is displayed in the Exec mode:

`[local]`*`host_name`*`#`

Syntax Description

`show fng-service { all [ counters ] | name `*`service_name`***` | session | statistics }`**

all

Displays information for all configured FNG services.

counters

Displays counters associated with the FNG service.

name service_name

Displays information only for an existing FNG service specified as an alphanumeric string of 1 through 63 characters.

session

Displays information about configured FNG sessions.

☞

Important See **show fng-service session** for detailed options.

statistics service_name

Total of collected information for specific protocol since the last **restart** or **clear** command.

☞

Important See **show fng-service statistics** for detailed options.

|{ 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 the usage of **grep** and **more**, refer to the section *Regulating a Command's Output* in the chapter *Command Line Interface Overview* in the *Command Line Interface Reference*.

Usage Guidelines Use this command to view information for selected configured FNG services.

Example

The following command displays available information for all active FNG services.

`show fng-service all`

☞

Important Command output descriptions are available in the *Statistics and Counters Reference*.

show fng-service session

Displays statistics for specific Femto Network Gateway (FNG) sessions.

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

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description

```
show fng-service session [ all | callid call_id | counters | full [ all |
 callid call_id | ip-address ip-address | peer-address ip_address | username
name ] | ip-address ip-address | peer-address ip-address | summary [ all |
callid call_id | ip-address ip-address | peer-address ip-address | username
name ] | username name ]
```

all

Displays all related information for all active FNG sessions.

callid

Displays PPP information for the call ID specified as a 4-digit hexadecimal number.

counters

Displays counters for the configured FNG sessions.

full

Displays all available information for the associated display or filter keyword.

ip-address *ipv4_address*

Displays information for the subscriber IP address specified in IPv4 dotted-decimal notation.

peer-address *ipv4_address*

Displays information for the IP peer specified by its IP address in IPv4 dotted-decimal notation.

summary

Displays summary information for FNG sessions.

username *user_name*

Displays information for a username within the current context specified as an alphanumeric string of 1 through 127 characters.

| { 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 the usage of **grep** and **more**, refer to the section *Regulating a Command's Output* in the *Command Line Interface Overview* chapter.

Usage Guidelines   Use this command to view configuration information for an FNG session.

Example

The following command displays all available FNG sessions.

show fng-service session all

☞

Important   Command output descriptions are available in the *Statistics and Counters Reference*.

show fng-service statistics

Displays statistics for the FNG since the last restart or clear command. The output includes the number of each type of protocol message. For example, the output includes the various types of EAP messages.

Product   FNG

Privilege   Security Administrator, Administrator, Operator, Inspector

Command Modes   Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description   **show fng-service statistics [name** *service_name* **| peer-address** *ipv4_address* **]**

name *service_name*

Displays statistics for an existing service name specified as an alphanumeric string of 1 through 63 characters.

peer-address *ipv4_address*

Displays statistics for an IP peer specified by its IP address in IPv4 dotted-decimal notation.

| { 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 the usage of **grep** and **more**, refer to the section *Regulating a Command's Output* in the *Command Line Interface Overview* chapter.

Usage Guidelines   Use this command to display FNG statistics.

☞

Important   You may use more than one keyword per command line.

Example

The following command displays information about the FNG service.

```
show fng-service statistics
```

☞

Important   Command output descriptions are available in the *Statistics and Counters Reference.*

show freeze-ptmsi imsi

Displays the P-TMSI (packet-temporary mobile subscriber identify) corresponding to the IMSI (international mobile subscriber identity) that has entered a frozen state after the purge timeout timer expires.

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   ```show freeze-ptmsi imsi imsi_num```

imsi *imsi_num*

Specifies the IMSI that has been frozen as a sequence of up to 15 digits. The first three digits are the MCC (mobile country code). The next two or three digits are the MNC (mobile network code). The remaining digits are the MSIN (mobile station identification number).

Usage Guidelines   This command enables the operator to know whether a frozen IMSI has an associated P-TMSI.

Example

The following command displays the P-TMSI corresponding to a frozen IMSI:

```
show freeze-ptmsi imsi 262090426000194
```

show ggsn sessmgr

Displays session manager (SessMGR) statistics specific to the gGSN service.

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

Syntax Description **`show ggsn sessmgr { all | instance`** *smgr_inst* **`}`**

all

Displays all SessMGR statistics specific to the system's GGSN services.

instance *smgr_inst*

Displays the statistics for a session manager instance of the GGSN service specified as an integer between 1 and 10000000.

Usage Guidelines	Use this command to display information for GGSN services.

Example

The following command displays GGSN SessMGR statistics for all GGSN services on the system:

`show ggsn sessmgr all`

show ggsn-service

Displays configuration information for Gateway GPRS Support Node (GGSN) services on the system.

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 **`show ggsn-service { all | name`** *ggsn_svc_name* **`} [ | { grep`** *grep_options* **`| more`**
 `}]`

all

Displays information for all GGSN services configured with the given context.

name *ggsn_svc_name*

Displays information for an existing GGSN service name specified as an alphanumeric string of 1 through 63 characters that is case sensitive.

| { 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 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 is used to verify the configuration of one or all GGSN services for monitoring or troubleshooting purposes. The output is a concise listing of GGSN service parameter settings.

If this command is executed from within the local context with the all keyword, information for all GGSN services configured on the system will be displayed.

Example

The following command displays configuration information for a GGSN service called *ggsn1*:

```
show ggsn-service name ggsn1
```

show ggsn-service sgsn-table

Lists all Serving GPRS Support Nodes (SGSNs) by IP addresses and shows the current number of subscribers to each SGSN.

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
```
show ggsn-service sgsn-table
```

Usage Guidelines   While there are existing commands to show SGSN subscriber information, this command is the only way to list all SGSNs by IP address and show the current number of subscribers to each SGSN.

Example

The following command will bring up a table showing the current active/inactive status, IP address, reboots/restarts and SGSN users.

```
show ggsn-service sgsn-table
```

☞

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

show global-title-translation

Displays configuration information for Global Title Translation (GTT).

Product   SGSN

Privilege   Inspector

Command Modes   Exec

The following prompt is displayed in the Exec mode:

`[local]host_name#`

Syntax Description
```
show global-title-translation { address-map { all | instance instance } |
association { all | instance instance } }
```

address-map { all | instance }

Displays configuration information for either the entire GTT address map database or for a specific instance of an address map. *instance* is an integer from 1 to 4096 which uniquely identifies the address map configuration.

association { all | instance }

Displays configuration information for either the entire database of GTT association lists for for a specific instance of GTT association configuration. *instance* is an integer from 1 to 16 which uniquely identifies the GTT association configuration.

Usage Guidelines   This command displays the configuration for the GTT address maps and associations.

Example

The following command displays the address map *2047*.

```
show global-title-translation address-map 2047
```

show gmb statistics

Displays 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

show gmb statistics [apn *name* **| bmsc-profile** *profile_name* **] [| { grep** *grep_options* **| more }]**

apn *name*

Displays 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*

Displays only the Gmb information for the specified BM-SC profile specified as an alphanumeric string of 1 through 79 characters.

| { 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 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
Use this command to display usage statistics for the Gmb reference point.

Example

The following command displays all Gmb statistics:

```
show gmb statistics
```

show gmm-sm statistics

Displays statistics for the GPRS Mobility Management and Session Management (GMM/SM) configuration of the system's SGSN service. GMM/SM supports mobility to allow the SGSN to know the location of a

Mobile Station (MS) at any time and to activate, modify and deactivate the PDP sessions required by the MS for user data transfer.

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

```
show gmm-sm statistics [ gmm-only | gprs-service srvc_name | iups-service
srvc_name | plmn-id mcc mcc mnc mnc [ access-type { gprs | umts } ] |
recovered-values | sgsn-service srvc_name | sm-only ] [ verbose ] [ | {
grep grep_options | more } ]
```

Keywords are presented below. Primary keywords are listed in the order of selection as shown in the syntax. Secondary or filtering keywords are presented alphabetically after the description of the primary keywords.

gmm-only

Displays only GPRS mobility management (GMM) information for other specified keyword parameters for the current context.

gprs-service srvc_name

Displays the statistics for an existing 2.5G GPRS service name specified as an alphanumeric string of 1 through 63 characters.

The display request can be narrowed by adding either the **nsei** or **routing-area** filter keywords.

iups-service srvc_name

Displays the statistics for an existing IuPS service specified as an alphanumeric string of 1 through 63 characters.

The display request can be narrowed by adding either the **rnc** or **routing-area** filter keywords.

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

Filters the statistics display per PLMN.

Enter the **access-type** keyword to fine-tune the display of the GMM/SM statistics to an aggregate of the IuPS (select access-type UMTS) and/or the GPRS (select access-type GPRS) services belonging to the PLMN.

recovered-values

Only displays recovered values for key KPI counters that were backed-up.

sgsn-service srvc_name

Displays the statistics for an existing 3G SGSN service specified as an alphanumeric string of 1 through 63 characters.

The display request can be narrowed by adding either the **rnc** or **routing-area** filter keywords.

sm-only

Displays only session management (SM) information for other specified keyword parameters for the current context.

access-type *type*

Filters the display of service statistics by 2.5G GPRS services or 3G IuPS services for UMTS:

- **gprs**

- **umts**

If this keyword is not included, then statistics for both access types are displayed.

lac *lac_id*

Specifies the location area code (LAC) as part of the identification of the RNC or RA as an integer from 1 through 65535.

mcc *mcc_id*

Specifies the mobile country code (MCC) as part of the identification of the RNC or RA an integer from 100 through 999.

mnc *mnc_id*

Specifies the mobile network code (MNC) as part of the identification of the RNC or RA as a 2- or 3-digit integer from 00 through 999.

nsei *nse_id*

Displays the GMM/SM session statistics for an existing network service entity (NSEI) specified as an integer from 0 to 65535.

rac *rac_id*

Specifies the routing area code (RAC) as part of the identification of the RNC or RA as an integer from 1 through 255.

rnc *rnc_id*

Enter this keyword to fine-tune the display of the GMM/SM session statistics just for the radio network controller (RNC) specified as an integer from 0 through 4095.

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

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

verbose

Displays all possible statistics for specified command or keyword.

| { 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 more information 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 display usage statistics for the GMM/SM session configurations for SGSN services, including a BSC attaches, activations, and throughput.

Example

The following command displays GMM/SM statistics for a specific routing area defined for the 2.5G SGSN's GPRS service:

show 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 commands are available in the *Statistics and Counters Reference*.

show gprsns statistics

Displays the statistics for the 2.5G SGSN's GPRS 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   **show gprsns statistics { msg-stats { consolidated nse *nse_id* | nse *nse_id* } | sns-msg-stats } | { grep *grep_options* | more }**

msg-stats

Displays the transmit (Tx) and receive (Rx) message statistics (except for SNS messages) in the statistics output.

consolidated nse *nse_id*

nse_id: Enter an integer from 0 to 65535.

nse *nse_id*

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

sns-msg-stats

Display subnetwork service (SNS) sublayer message statistics.

| { 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 the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter in the *Command Line Interface Reference*.

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

Example

Use the following command to display the collected message statistics for NSEI *1422*:

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

☞

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

show gprsns status

Displays the status of the network service virtual circuits (NSVC) for the GPRS 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	`show gprsns status { nsvc-status-all nse nse_id	nsvc-status-consolidated nse nse_id	nsvc-status-per-bvci bvci bvc_id nse nse_id }	{ grep grep_options	more }`

nsvc-status-all nse { all | nse*nse_id* **}**

Displays status information for all NSVCs included in the NSE specified as an integer from 0 to 65535.

nsvc-status-consolidated nse *nse_id*

nsvc-status-per-bvci bvci *bvc_id* **nse** *nse_id*

bvc_id is an integer from 0 to 65535.

nse_id is an integer from 0 to 65535.

|{ 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 the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter in the *Command Line Interface Reference*.

Usage Guidelines This command is used to display the status of the NSVC.

Example

Use the following command to display status of all NSVC for NSE 1422:

show gprsns status nsvc-status-all nse 1422

☞

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

show gprs-service

Displays the statistics for GPRS 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 **show gprs-service { all | name** *gprs_srvc_name* **} [nsei { all | id** *nse_id* **} |**
 { grep *grep_options* **| more }]**

all

Instructs the SGSN to display information for all GPRS services configured with this context.

name *gprs_srvc_name*

Instructs the SGSN to display information for the specified GRPS service.

gprs_srvc_name is a case-sensitive string of 1 to 63 characters, any combination of letters, digits, dots (.) and dashes (-) that identifies a specific GPRS service.

nsei { all | id }*nse_id*

Instructs the SGSN to display network service entity information for either a specific NSEI or for all NSEI configured for the specified GRPS service(s).

nse_id is an integer from 0 to 65535.

|{ 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 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 is used to verify the configuration of one or all GPRS services for monitoring or troubleshooting purposes. The output is a concise listing of GPRS service parameter settings.

If this command is executed from within the local context with the all keyword, information for all GPRS services configured on the system will be displayed.

Example

The following command displays configuration information for all GPRS services configured in this context:

```
show gprs-service all
```

Use a command similar to the following to display statistics for NSEI *4257* for the GPRS service named *London2*:

```
show gprs-service name London2 nsei id 4257
```

☞

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

show gprsssf

Displays statistics for various 3GPP Customised Applications for Mobile network Enhanced Logic (CAMEL) service GPRS Service Switching Function (gprsSSF) entities.

Product	SGSN

Privilege	Inspector

Command Modes	Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description

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

counters

Displays collected status counter information for CAMEL service entities.

statistics

Displays collected statistics for CAMEL service entities.

camel-service *srvc_name*

Filters the display of counters and statistics for an existing CAMEL service name in the SGSN configuration specified as an alphanumeric string of 1 through 63 characters that is case sensitive.

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

Filters the counter/statistic output to display GPRS protocol information specific to either the 2.5G or 3G SGSN.

gsmscf-address { *address* | all }

The GSM service control function (gsmSCF) address is the ISDN address of the SCP where the CAMEL service resides. It is possible to display information for one or all of the configured CAMEL services.

address is a standard ISDN E.164 address of 1 to 15 digits.

sms

Filters the display of counters and statistics for SMS protocol information.

| { 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 the usage of **grep** and **more**, 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 display CAMEL service status counter information and statistics collected since the last restart or clear command. If filters are not included with the command, then all statistics or counters are displayed for all CAMEL services in all contexts in which CAMEL services have been defined.

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

Example

Use the following command to display the status counter totals of the GPRS Dialogue parameters for a 3G SGSN:

```
show gprsssf counter gprs 3g-sgsn-app
```

☞

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

show gs-service

Displays configuration information and statistics for Gs services configured on system.

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   **show gs-service { all | name** *svc_name* **} [| { grep** *grep_options* **| more }]**

all

Displays information for all Gs services configured with in the given context.

name svc_name

Displays information for an existing Gs service specified as an alphanumeric string of 1 through 63 characters that is case sensitive.

| { 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 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 is used to verify the configuration of one or all Gs services for monitoring or troubleshooting purposes.

If this command is executed from within the local context with the all keyword, information for all Gs services configured on the system will be displayed.

Example

The following command displays configuration information for all Gs services configured on a system:

```
show gs-service all
```

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

show gtpc

Displays GPRS Tunnelling Protocol-Control (GTPC) information for GTPv0, GTPv1-C, GTPv1-U with filtering options.

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
```
show gtpc [ full | counters | summary ] { all | apn apn_name | imsi imsi_value
 [ nsapi nsapi_value ] | callid  callid | sgsn-address ip_address | ggsn-service
 ggsn_name | user-address ip_address | username username }
```

[full | counters | summary]

Specifies the level of information to be displayed. The following levels can be used:

- **full**: Indicates detailed information is to be displayed.

- **counters**: Indicates the output is to include the statistical counters.

- **summary**: Indicates only summary information is to be displayed.

{ all | apn *apn_name* | imsi *imsi_value* [nsapi *nsapi_value*] | callid *callid* | sgsn-address *ip_address* | ggsn-service *ggsn_name* | user-address *ip_address* | username *username* }

Specifies the filter criteria used when displaying GTP information. The following filters can be used:

- **all**: Specifies that all available information is to be displayed.

- **apn** *apn_name*: Specifies that GTP information for an APN specified as an alphanumeric string of 1 through 63 characters that is case sensitive.

- **imsi** *imsi_value* [**nsapi** *nsapi_value*]: Displays GTP information for an International Mobile Subscriber Identity (IMSI) specified as an integer from 1 through 15 characters. Optionally, the IMSI could be further filtered by specifying a particular PDP context using the Network Service Access Point Identifier (NSAPI) expressed as an integer from 5 through 15.

> **Important** In release 18.2 and later, this command option has been deprecated.

- **callid** *callid*: Displays GTP information for a call identification number specified as a 4-digit hexadecimal number.

☞ **Important**   In release 18.2 and later, this command option has been deprecated.

- **sgsn-address** *ip_address*: Displays GTP information for an SGSN specified by its IP address in IPv4 dotted-decimal notation.

- **ggsn-service** *ggsn_name*: Displays GTP information for an existing GGSN service specified an alphanumeric string of 1 through 63 characters that is case sensitive.

- **user-address** *ip_address*: Displays GTP information for a user PDP context specified as an IP address in IPv4 dotted-decimal notation.

☞ **Important**   In release 18.2 and later, this command option has been deprecated.

- **username** *username*: Displays GTP information for a username specified as an alphanumeric string of 1 through 127 characters (including wildcards '$' and '*') that is case sensitive.

☞ **Important**   In release 18.2 and later, this command option has been deprecated.

Usage Guidelines   This command displays statistics for every GTP message type based on the filter criteria. This information is useful for system monitoring or troubleshooting.

Example

The following command displays GTPC counters for a GGSN service named *ggsn1*:

show gtpc counters ggsn-service ggsn1

The following command displays GTPC full information:

show gtpc full

The following command displays GTPC summary information for a specific call identification number of *05f62f34*:

show gtpc summary callid 05f62f34

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

show gtpc statistics

Displays GTPv0, GTPv1-C, GTPv1-U statistics with filtering options.

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

```
show gtpc statistics [ [ custom1 | custom2 ] [ apn apn_name | ggsn-service
 ggsn_service_name | mseg-service mseg_service_name | sgsn-address ipv4_address ]
[ [ verbose ] format1 ] [ | { grep grep_options | more } ]
```

custom1

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

This keyword is customer specific and license enabled. For more information, contact your Cisco sales representative.

custom2

Displays statistics for GTP-C messages related to overcharging protection on loss of radio coverage for a GGSN service.

This keyword is feature specific and license enabled. For more information, contact your Cisco sales representative.

apn *apn_name*

Displays 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*

Displays 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 *ipv4_address*

Displays GTP statistics for an SGSN specified by its IP address in IPv4 dotted-decimal notation.

verbose

Displays detailed instead of concise statistics.

format1

Displays more detailed statistical breakouts.

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

Usage Guidelines	The information displayed by this command consists of session statistics such as the number of currently active sessions categorized by PDP context type, and statistics for every GTP message type. The statistics are cumulative.

If the verbose keyword is used, additional information will be displayed such as statistics for every type of error code.

Example

The following command displays verbose GTP statistics:

```
show gtpc statistics verbose
```

☞

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

show gtpp

Displays information on the GPRS Tunneling Protocol Prime (GTPP) for the selected charging gateway function (CGF) or GCDR storage server.

Product	GGSN
	P-GW
	SAEGW
	SGSN
Privilege	Security Administrator, Administrator, Operator, Inspector
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description	`show gtpp { accounting	counters { all	cgf-address	group }	group { all	name }	statistics { cgf-address	group }	storage server { counters	group	local	statistics	status	streaming } } [	{ grep grep_options	more }]`

Usage Guidelines This command displays the GTPP related information for the selected CGF or the G-CDRs storage server.

If this command is issued from within the local context, information for all GTPP accounting servers configured on the system is displayed regardless of context.

Example

The following command displays the GTPP counters for all the servers:

show gtpp counters all

☞

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

show gtpp accounting

Displays information on the GPRS Tunneling Protocol Prime (GTPP) accounting server configuration.

Product
GGSN

P-GW

SAEGW

SGSN

Privilege Security Administrator, Administrator, Operator, Inspector

Command Modes Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description **show gtpp accounting servers { group name** *group_name* **} [| { grep** *grep_options* **| more }]**

group name *group_name*

Displays information and CDR statistics for an existing GTPP server group name specified as an alphanumeric string of 1 through 63 characters.

|{ 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 more information 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 view the status of GTPP accounting servers configured within a context for monitoring or troubleshooting purposes.

If this command is issued from within the local context, information for all GTPP accounting servers configured on the system is displayed regardless of context.

Example

The following command displays the status of and information on configured GTPP accounting servers:

show gtpp accounting servers

☞

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

show gtpp counters

Displays GTPP counters for configured Charging Gateway Functions (CGFs) within the given context.

Product	ePDG
	GGSN
	P-GW
	SAEGW
	SGSN
Privilege	Security Administrator, Administrator, Operator, Inspector
Command Modes	Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description **show gtpp counters { all [gcdrs] | cgf-address** *ipv4/ipv6_address* **[gcdrs | port** *port_num* **] | group name** *group_name* **} [| { grep** *grep_options* **| more }]**

all

Displays counters for all CGFs configured within the context.

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

Displays counters for a CGF specified by its IP address in IPv4 dotted-decimal or IPv6 colon-separated-hexadecimal notation.

gcdrs: Displays G-CDR specific GTPP counters only.

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 port is specified along with the IP address, this command displays the GTPP counters for the specified CGF server IP address and port. If port is not provided, then it will show the accumulated counters for all CGF servers with the specified IP address.

group name *group_name*

Displays counters for a GTPP server group name specified as an alphanumeric string of 1 through 63 characters.

| { 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 more information on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter in the *Command Line Interface Reference*.

Usage Guidelines Counters for a single CGF can be viewed using the **cgf-address** keyword. Counters for all CGFs in the context can be viewed by entering the command with the **all** keyword.

If this command is issued from within the local context and no CGF-address is specified, the counters displayed will be cumulative for all CGFs configured on the system regardless of context.

Example

The following command displays counters for all CGF servers:

```
show gtpp counters all
```

☞

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

show gtpp group

Displays information pertaining to the configured GTPP storage server group.

Product GGSN

P-GW

SAEGW

SGSN

Privilege Security Administrator, Administrator, Operator, Inspector

Command Modes Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description	**show gtpp group { name** *gtpp_group_name* **| all } [	{ grep** *grep_options* **| more }]**

name *gtpp_group_name*

Displays information and CDR statistics for an existing GTPP server group name specified as an alphanumeric string of 1 through 63 characters.

all

Displays statistics for all configured GTPP storage server groups, including default group.

| { 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 more information 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 display the CDR statistics on the basis of GTPP server groups. It shows the information for all or specific GTPP server group configured in the context from which this command is issued.

Example

The following command displays the status of the GTPP server group backup server configured in a context called *GTPP_Group1*:

show gtpp group name GTPP_Group1

☞

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

show gtpp statistics

Displays GTPP statistics for configured Charging Gateway Functions (CGFs) within the context.

Product	ePDG
	GGSN
	P-GW
	SAEGW
	SGSN

Privilege	Security Administrator, Administrator, Operator, Inspector

Command Modes	Exec

The following prompt is displayed in the Exec mode:

`[local]`*host_name*`#`

Syntax Description

show gtpp statistics { cgf-address *ipv4/ipv6_address* **[port** *port_num* **] | group name** *group_name* **} [| { grep** *grep_options* **| more }]**

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

Displays statistics for a CGF specified by its IP address expressed 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 displays statistics of GTPP messages sent/received by CGF server IP address and specified port. If port is not provided then it will show the accumulated statistics for all CGF servers with the specified IP address.

group name *group_name*

Displays server statistics information of an existing GTPP server group name specified as an alphanumeric string of 1 through 63 characters.

|{ 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 more information on the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter in the *Command Line Interface Reference*.

Usage Guidelines

Statistics for a single CGF can be viewed by specifying its IP address. Statistics for all CGFs in the context can be viewed by **not** specifying an IP address.

If this command is issued from within the local context, the statistics displayed will be cumulative for all CGFs configured on the system regardless of context.

Example

The following command displays statistics for a CGF with an IP address of *209.165.200.224*:

show gtpp statistics cgf-address 209.165.200.224

☞

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

show gtpp storage-server

Displays information pertaining to the configured GTPP storage server (GSS).

Product	GGSN
	P-GW
	SAEGW
	SGSN
Privilege	Security Administrator, Administrator, Operator, Inspector
Command Modes	Exec

The following prompt is displayed in the Exec mode:

```
[local]host_name#
```

Syntax Description
```
show gtpp storage-server [ counters { all | group name group_name } | group
 name group_name | local file { counters { all | group name group_name } |
statistics [ group name group_name ] } | status { group name group_name |
verbose } | streaming file { counters { all | group name group_name } |
statistics [ group name group_name ] } ] [ | { grep grep_options | more } ]
```

counters

Displays counters for the external GTPP storage server.

group name *group_name*

Displays GTPP backup server information for the group name specified as an alphanumeric string of 1 through 63 characters.

local file

Displays statistics and counters for the local storage-server. This is the hard disk if hard disk support has been enabled with the **gtpp storage-server mode** command in the GTPP Group Configuration Mode.

statistics

Displays statistics for the GTPP storage server.

status [verbose]

Displays status of the GTPP storage server. **verbose** enables the detailed view.

streaming

Displays the status of Charging Data Record (CDR) backup on HDD while streaming mode is enabled.

| { 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 the usage of **grep** and **more**, refer to the *Regulating a Command's Output* section of the *Command Line Interface Overview* chapter in the *Command Line Interface Reference*.

Usage Guidelines

Executing this command with no keywords displays status information for the GTPP backup server configured in the context from which this command is issued.

Example

The following command displays the GTPP CDR file statistics stored on the local SMC hard disk.

show gtpp storage-server local file counters all

The following command displays the status of the GTPP backup server configured in a context called ggsn1:

show gtpp storage-server

The following command displays statistics for the GTPP backup server configured in a context called ggsn1:

show gtpp storage-server statistics

The following command displays GCDR storage server counters:

show gtpp storage-server counters

The following command displays GCDR storage server status:

show gtpp storage-server status

☞

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

show gtpu

Displays GPRS Tunneling Protocol user plane (GTP-U) statistics and counters on this system.

Product

ePDG

P-GW

SAEGW

SGSN

S-GW

Privilege

Inspector

Command Modes

Exec

The following prompt is displayed in the Exec mode:

`[local]`*host_name*`#`

Syntax Description

```
show gtpu { local-addresses | statistics [ [ gtpu-service gtpu_service_name
 ] [ gtpumgr-instance gtpumgr_instance | local-address ipv4/ipv6_address |
mseg-service mseg_service_name| peer-address ipv4/ipv6_address ] ] [ | { grep
grep_options | more } ] }
```

local-addresses

Displays the number of sessions on all GTPU local addresses in all GTPU services.

statistics

Diplays all GTP-U statistics on all GTP-U services. Refine the display by including one of the filters listed below.

gtpu-service *gtpu_service_name*

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

gtpumgr-instance *instance_number*

Displays information for an existing GTP-U manager instance specified as an integer from 1 through 4294967295.

local-address *ipv4/ipv6_address*

Displays subsriber statistics and counters in the current active session per local GTPU IP address specified in IPv4 dotted-decimal or IPv6 colon-separated-hexadecimal notation in a GTPU service.

mseg-service *mseg_service_name*

☞

Important   This keyword is not supported in this release.

peer-address *ipv4/ipv6_address*

Displays GTP-U statistics and counters for an existing peer IP address specified in IPv4 dotted-decimal or IPv6 colon-separated-hexadecimal notation.

|{ 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 the usage of the **grep** and **more** commands, refer to the *Regulating a Command's Output* section of the *Command Line Interface Reference Guide*.

Usage Guidelines   Use this command to view statistics and counters for GTP-U traffic on this system. Refine the statistics display by including a filter with the command.

> 👉
>
> **Important** The **show gtpu statistics** command should be given from the local context only; issuing the command from any other context will result in an error message.

Example

The following command displays statistics for the GTP-U service named *gtp1*:

show gtpu statistics gtpu-service gtp1

The following command displays active sessions on all local-addresses categorisied by GTPU service:

show gtpu local-addresses

The following command displays statistics for local GTPU address *168.123.123.1*:

show gtpu statistics local-address *168.123.123.1*

show gtpu-service

Displays configuration information for GPRS Tunneling Protocol user plane (GTP-U) services on this system.

Product	ePDG
	P-GW
	SAEGW
	S-GW
	UPF
Privilege	Inspector
Command Modes	Exec

The following prompt is displayed in the Exec mode:

[local]*host_name*#

Syntax Description **show gtpu-service { all | name** *service_name* **} [| { grep** *grep_options* **| more }]**

all

Displays configuration information for all GTP-U services configured on this system.

name service_name

Displays configuration information for an existing GTP-U service specified an alphanumeric string of 1 through 63 characters.

| { 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 the usage of the **grep** and **more** commands, refer to the *Regulating a Command's Output* section of the *Command Line Interface Reference Guide*.

Usage Guidelines   Use this command to view configuration information for GTP-U services on this system.

Example

The following command displays service statistics for the GTP-U service named *gtpu1*:

```
show gtpu-service name gtpu1
```