

S-GW Paging Profile Configuration Mode Commands

When some operators add an additional IMS service besides VoLTE such as RCS, they can use the same IMS bearer between the two services. In this case, separate paging is supported at the MME using an ID which can be assigned from the S-GW according to the services, where the S-GW distinguishes IMS services using a small DPI function to inspect where the traffic comes from using an ID which is assigned from SGW according to the services. The S-GW distinguishes IMS services using a small DPI function to inspect where the traffic comes from (for example IP, Port and so on). After the MME receives this ID from the S-GW after IMS service inspection, the MME will do classified separate paging for each of the services as usual.

Command Modes

This chapter describes SGW paging profile configuration mode commands. These commands support Separate Paging for IMS Service Inspection.

Exec > Global Configuration > S-GW Paging Profile Configuration

configure > sgw-paging-profile three tupple

Entering the above command sequence results in the following prompt:

```
[local] host_name(sep-paging-default)#
```

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

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do show

Executes all **show** commands while in Configuration mode.

Product

All

Privilege

Security Administrator, Administrator

Syntax Description `do show`

Usage Guidelines Use this command to run all Exec mode **show** commands while in Configuration mode. It is not necessary to exit the Config mode to run a **show** command.

The pipe character **|** is only available if the command is valid in the Exec mode.



Caution There are some Exec mode **show** commands which are too resource intensive to run from Config mode. These include: **do show support collection**, **do show support details**, **do show support record** and **do show support summary**. If there is a restriction on a specific **show** command, the following error message is displayed:

```
Failure: Cannot execute 'do show support' command from Config mode.
```

end

Exits the current configuration mode and returns to the Exec mode.

Product All

Privilege Security Administrator, Administrator

Syntax Description `end`

Usage Guidelines Use this command to return to the Exec mode.

exit

Exits the current mode and returns to the parent configuration mode.

Product All

Privilege Security Administrator, Administrator

Syntax Description `exit`

Usage Guidelines Use this command to return to the parent configuration mode.

ipv4 | ipv6

Enables operators to specify a 3-tuple lookup (source IP address, source port and protocol) on the inner IP packet of the GTPU data packet at the S-GW. This configuration is to support the Separate Paging for IMS Service Inspection feature on the S-GW.

Product S-GW

Privilege

Administrator, Security Administrator

Command Modes

Exec > Global Configuration > S-GW Paging Profile Configuration

configure > sgw-paging-profile three tupple

Entering the above command sequence results in the following prompt:

```
[local] host_name(sep-paging-default)#
```

Syntax Description

[no] { [ipv4 *ipv4_address* **| ipv6** *ipv6_address* **] port** *source_port_num* **protocol { [tcp | udp] } paging-identifier** *integer*

no

Removes the specified paging profile configuration.

ipv4 ***ipv4_address***

Specifies the IPv4 address to use for Separate Paging for IMS. Must be in IPv4 address format.

ipv6 ***ipv6_address***

Specifies the IPv6 address to use for Separate Paging for IMS. Must be in IPv6 address format.

port ***source_port_num***

Specifies the source port on the S-GW to use for Separate Paging for IMS. Must be an integer from 1 to 65535.

protocol ***tcp | udp***

Specifies the protocol type to which this SGW paging profile applies. Must be either **tcp** or **udp**.

paging-identifier ***integer***

Specifies a service identifier for this SGW paging profile (for example, Data 0, VoLTE 1, RCS 2, and so on). Must be an integer from 0 to 255.

Usage Guidelines

Use this command to identify an IMS specific paging procedure by performing a 3-tuple lookup (source IP address, Source Port and Protoco [TCP/UDP]) on the inner IP packet of the GTPU data packet at Serving Gateway. The Downlink Data Notification (DDN) message from the S-GW would carry a private extension IE with an identifier, which would denote if the paging procedure is for a data, Volte or RCS packet. This identifier helps the MME to apply different paging policies.

This configuration must be associated with an APN Profile by using the **associate** command in APN Profile Configuration Mode.

Example

The following example configures a paging procedure consisting of an IPv4 address, source port, protocol, and paging identifier.

```
ipv4  209.165.200.225 port  10 protocol tcp paging-identifier 0
```

ipv4 | ipv6