

SGSN Pool Area Configuration Mode Commands

Command Modes

The Pool Area configuration mode configures the parameters used to setup the VLRs to use with a pool area in a Gs service.

Exec > Global Configuration > Context Configuration > Gs Service Configuration > Pool Area Configuration

configure > context *context_name* **> gs-service** *service_name* **> pool-area** *pool_area_name*

Entering the above command sequence results in the following prompt:

`[context_name]host_name(config-gs-pool-area)#`

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 SGSN

Privilege Security Administrator, Administrator

Syntax Description **end**

Usage Guidelines Return to the Exec mode.

exit

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

Product SGSN

Privilege Security Administrator, Administrator

Syntax Description **exit**

Usage Guidelines Return to the previous configuration mode.

hash-value

This command configures the load distribution for the VLRs that service this pool area.

Product SGSN

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > Context Configuration > Gs Service Configuration > Pool Area Configuration

configure > context *context_name* **> gs-service** *service_name* **> pool-area** *pool_area_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-gs-pool-area)#
```

Syntax Description

hash-value { *hash_value* | non-configured-values | range *start_value* to *end_value* } use-vlr *vlr_name*
no hash-value { *hash_value* | non-configured-values | range *start_value* to *end_value* }

no

Removes the configured Gs procedures from this Gs service.

hash_value

Specifies the specific hash value for VLR(s).

hash_value must be an integer value from 0 through 999.

range *start_value* to *end_value*

Specifies the range of hash values for a VLR.

start_value specifies the start value for range of hash and is an integer value from 0 through 999. *start_value* must be lower than *end_value.*

end_value specifies the end value for range of hash and is an integer value from 0 through 999. *end_value* must be higher than *start_value*.

non-configured-values

This keyword assign all non-configured hash values to use the named VLR.

use-vlr *vlr_name*

Specifies the name of the VLR to be associated with this pool area.

vlr_name is the name of VLR and must be an alpha and/or numeric string of 1 to 63 characters.

Usage Guidelines

Use this command to command configures the load distribution for the VLRs that service this pool area as defined in TS 23.236.

The algorithm for selection of VLR from a pool area is based on the hash value computed on the IMSI digits. The SGSN derives a hash value (V) using procedure as defined in TS 23.236. Every hash value from the range 0 to 999 corresponds to a single MSC/VLR node. Typically many hash values may point to the same MSC/VLR node.

This command can be entered multiple times for different hash value.

Example

Following command configure the all non configured hash values to use VLR named *starvlr1* in this pool area:

hash-value non-configured-values use-vlr *starvlr1*

lac

This command defines a set of location area code (LAC) values for a pool area.

Product

SGSN

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > Context Configuration > Gs Service Configuration > Pool Area Configuration

configure > **context** *context_name* > **gs-service** *service_name* > **pool-area** *pool_area_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-gs-pool-area)#
```

Syntax Description

lac *lac_id* **+**
no lac *lac_id*

no

Removes the configured LAC value from this pool area configuration.

lac *lac_id*

Specifies the subscribers' location area code (LAC) to be associated with this pool area and a specific VLR. This LAC is obtained from the radio area identity (RAI).

lac_id: Must be an integer from 1 through 65535.

+

More than one *lac_id*, separated by a space, can be entered within a single command.

Usage Guidelines

Use this command to specify a set of LACs to use for a pool area.

This command can be entered multiple times, subject to a limit of 32 LAC definitions (total for **non-pool-area** and **pool-area** configuration) per Gs service.



Important LAC values across multiple pool areas and non-pool-areas must be unique within the Gs service.

Example

The following command configures LACs *101*, *301*, and *222* for the pool area.

lac *101 301 222*