

# **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.

**SGSN Product** 

Security Administrator, Administrator **Privilege** 

**Syntax Description** 

**Usage Guidelines** 

Return to the Exec mode.

# exit

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

**SGSN Product** 

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exit **Syntax Description** 

Return to the previous configuration mode. **Usage Guidelines** 

# hash-value

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

**SGSN Product** 

Security Administrator, Administrator **Privilege** 

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

configure > 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