



# 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).

- [do show](#), on page 1
- [end](#), on page 2
- [exit](#), on page 2
- [hash-value](#), on page 2
- [lac](#), on page 4

## 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.

**end****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.

<b>Product</b>	SGSN
<b>Privilege</b>	Security Administrator, Administrator
<b>Syntax Description</b>	<b>end</b>
<b>Usage Guidelines</b>	Return to the Exec mode.

## exit

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

<b>Product</b>	SGSN
<b>Privilege</b>	Security Administrator, Administrator
<b>Syntax Description</b>	<b>exit</b>
<b>Usage Guidelines</b>	Return to the previous configuration mode.

## hash-value

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

<b>Product</b>	SGSN
<b>Privilege</b>	Security Administrator, Administrator
<b>Command Modes</b>	Exec > Global Configuration > Context Configuration > Gs Service Configuration > Pool Area Configuration <b>configure</b> > <b>context</b> <i>context_name</i> > <b>gs-service</b> <i>service_name</i> > <b>pool-area</b> <i>pool_area_name</i> Entering the above command sequence results in the following prompt: <pre>[context_name]host_name(config-gs-pool-area)#</pre>

**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.

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**Product**

SGSN

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**Privilege**

Security Administrator, Administrator

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**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)#
```

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**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.

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**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.




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

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**Example**

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

```
lac 101 301 222
```