

MME MSC Pool Area Configuration Mode

The MME MSC Pool Area Configuration Mode is used to create and manage the MSC Pool Areas used by the MME for communicating with the Mobile Switching Center (MSC) for Single Radio Voice Call Continuity (SRVCC).

Command Modes

Exec > Global Configuration > Context Configuration > MME Service Configuration > Pool Area Configuration configure > context context_name > mme-service service_name > pool-area pool_area_name type hash-value Entering the above command sequence results in the following prompt:

[context name]host name(config-mme-pool-area-hash-value)#



Important

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



Important

For information on common commands available in this configuration mode, refer to the Common Commands chapter.

- hash-value, on page 1
- plmn-id, on page 2
- use-msc, on page 4

hash-value

Configures the selection of MSC in a MSC pool area based on the hash value derived from the IMSI.

Product

MME

Privilege

Administrator

Command Modes

Exec > Global Configuration > Context Configuration > MME Service Configuration > Pool Area Configuration configure > context context_name > mme-service service_name > pool-area pool_area_name type hash-value Entering the above command sequence results in the following prompt:

[context name]host name(config-mme-pool-area-hash-value)#

Syntax Description

```
hash-value { hash_value | range start_value to end_value } use-msc msc_name no hash-value { hash_value | range start_value to end_value }
```

no

Removes the configured hash value for this pool area.

hash-value

Specifies the specific hash value for this pool area.

hash_value must be an integer from 0 through 999.

range start_value to end_value

Specifies the range of hash values for this pool area.

start_value specifies the start value for range of hash and is an integer value from 0 through 999.

end_value specifies the end value for range of hash and is an integer value from 0 through 999.

The *start_value* must be lower than the *end_value*.

use-msc msc_name

Specifies the MSC to use when this pool area is selected.

msc_name is the name of the MSC as configured in the MME Service using the **msc** command; *msc_name* must be an alphanumeric string of 1 to 39 characters.

Usage Guidelines

This command associates an MSC with this pool. It also assigns the MSC to use based on the hash value as computed from the IMSI digits [(IMSI div 10) modulo 1000].

A maximum of 24 hash values can be configured within each pool area.

If no matching MSC is found, the SRVCC handover fails.

Example

The following command configures hash values from 111 to 222 to use the MSC named mscwest1 in this pool.

hash-value range 111 to 222 use-msc mscwest1

plmn-id

Associates a Public Land Mobile Network (PLMN) identifier with a Mobile Switching Center (MSC) pool area.

Product

MME

Privilege

Administrator

Command Modes

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

 ${\bf configure > context}\ {\it context_name > mme-service}\ {\it service_name > pool_area_name}\ {\bf type}\ {\bf hash-value}$

or

configure > context context_name > mme-service service_name > pool-area pool_area_name type
round-robin

Entering the above command sequences result in the following prompts, respectively:

```
[context_name]host_name(config-mme-pool-area-hash-value)#
[context_name]host_name(config-mme-pool-area-round-robin)#
```

Syntax Description

```
plmn-id mcc code mnc code
no plmn-id
```

no

Removes the configured plmn-id assigned to this MSC pool area.

mcc code

Specifies the Mobile Country Code for this mobile access network. *code* must be a three-digit integer from 200 to 999.

mnc code

Specifies the Mobile Network Code for this mobile access network. *code* must be a two- or three-digit integer from 00 to 999.

Usage Guidelines

Use this command to associate a PLMN with an MSC pool area. This PLMN is used to select an MSC pool area based on the target PLMN as specified in the SRVCC handover request.

When configured, the MME attempts to select an MSC using the following selection order:

- 1. Pool area that matches the PLMN and of type hash.
- 2. Pool area that matches the PLMN and of type round-robin.
- 3. Pool area that does not have PLMN associated and of type hash.
- **4.** Pool area that does not have PLMN associated and of type round-robin.

When this command is used, only one PLMN can be assigned per pool area of the same type (either hash-value or round-robin). A hash value pool area and a separate round robin pool area can be configured with the same PLMN. In this case, the hash value pool has the higher priority.

If no matching MSC is found, the SRVCC handover fails.

Example

The following command identifies the mobile network with MCC of 123 and MNC of 12.

```
plmn-id mcc 123 mnc 12
```

use-msc

Associates a Mobile Switching Center (MSC) with the pool area.

Product

MME

Privilege

Administrator

Command Modes

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

configure > context conext_name > mme-service service_name > pool-area pool_area_name type
round-robin

Entering the above command sequence results in the following prompt:

[context name]host name(config-mme-pool-area-round-robin)#

Syntax Description

[no] use-msc msc name

no

Removes the associated MSC name from this pool area.

use-msc msc_name

Associates an MSC name with this pool area.

msc_name is the name of the MSC as configured in the MME Service using the **msc** command. *msc_name* must be an alphanumeric string of 1 to 39 characters.

Usage Guidelines

This command associates an MSC with this pool area. With a round-robin pool area selection, the MME selects the next MSC within the pool based on a round-robin scheme.

A maximum of 24 MSC associations can be defined within each round-robin pool area.

Example

The following command associates the MSC named *mscsouth1* to this pool.

use-msc mscsouth1