



# LTE Policy Configuration Mode Commands

The LTE Policy Configuration Mode is used to create and manage the LTE policies supporting ePDG, MME, S-GW, SAEGW, SGSN, and HeNBGW configurations on the system.

## Command Modes

Exec > Global Configuration > LTE Policy Configuration

**configure > lte-policy**

Entering the above command sequence results in the following prompt:

```
[local]host_name(lte-policy)#
```



### Important

Available commands or keywords/variables vary based 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.

## Syntax Description

**monitoring-event-profile** *profile\_monte profile\_name*

**events** *<List of Supported Events>*

### **loss-of-connectivity**

Specifies Loss of connectivity.

### **ue-reachability**

Specifies reachability of UE.

### **location-reporting**

Specifies location information.

**communication-failure**

Specifies Radio connection status.

**availability-after-ddn-failure**

Specifies whether UE is active after DDN Failure.

**idle-status-indication**

Indicates that UE moves to idle status. The idle status can be either for ue-reachability or for DDN failure.

**pdn-connectivity-status**

Indicates PDN status change.

**number-of-ue-in-geo-area**

Specifies number of UEs present in a geographic area.

**external identifier**

MME updates HSS to handle the support.

If external identifier is received from HSS as part of Monitoring Event Configuration Grouped AVP it is read and the same is sent in as RIR to SCEF.

If external identifier AVP is NOT received as part of Monitoring Event Configuration AVP but received the same in Subscription Data AVP this will be read and sent in as RIR to SCEF.

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## cause-code-group

Creates a new cause code group, or specifies an existing cause code group and enters the Cause Code Group Configuration Mode.

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### Product

MME  
SGSN

---

### Privilege

Administrator

---

### Command Modes

Exec > Global Configuration > LTE Policy Configuration

**configure > lte-policy**

Entering the above command sequence results in the following prompt:

```
[local]host_name(lte-policy)#
```

---

### Syntax Description

**[ no ] cause-code-group** *group\_name* **protocol** { **bssgp** | **ranap** | **slap** }

**no**

Removes the specified cause code group with all related configuration from the LTE Policy.

#### **group\_name**

Specify a name of a cause-code-group to create, modify, or remove. This name must be an alphanumeric string of 1 through 16 characters. Each new cause-code-group must have a unique name.

A maximum of 4 cause code groups can be defined across all services (MME+GPRS+SGSN).

#### **protocol**

Specifies the protocol for the cause code group being created/accessed. Options include:

- BSSGP for 2G.
- RANAP for 3G
- S1-AP

---

### Usage Guidelines

Use this command to create or modify a group of cause codes.

Entering this command results in a prompt, with the protocol ID included, similar to the following:

```
[context_name]hostname(slap-cause-code)#
```

Depending upon the protocol you have selected, the Cause Code Group configuration commands are defined in the

- *BSSGP Cause Code Configuration Mode Commands* chapter of this guide.
- *RANAP Cause Code Configuration Mode Commands* chapter of this guide.
- *SIAP Cause Code Configuration Mode Commands* chapter of this guide.

**Example**

The following command creates an S1-AP cause code group named *move-ue-to-idle*.

```
cause-code-group move-ue-to-idle protocol slap
```

## congestion-action-profile

Creates an action profile for MME or ePDG or HeNBGW critical, major and minor congestion thresholds. The profile defines the action to be taken when these thresholds are exceeded.

**Important**

In Release 20, 21.0 and 21.1, HeNBGW is not supported. This command must not be used for HeNBGW in these releases. For more information, contact your Cisco account representative.

**Product**

ePDG  
HeNBGW  
MME

**Privilege**

Administrator

**Command Modes**

Exec > Global Configuration > LTE Policy Configuration

**configure > lte-policy**

Entering the above command sequence results in the following prompt:

```
[local]host_name(lte-policy)#
```

**Syntax Description**

**[ no ] congestion-action-profile** *profile\_name*

**no**

Removes the specified profile from the system.

**profile\_name**

Specifies the name of the action profile. If the entered name does not refer to an existing profile, a new profile is created. *profile\_name* is an alphanumeric string of 1 through 64 characters.

**-noconfirm**

Executes the command without any additional prompt and confirmation from the user.

**Usage Guidelines**

Use this command to establish MME or ePDG action profiles to be associated with critical, major and minor congestion thresholds. This command is also used to remove an existing profile.



**Note** This command is part of a licensed feature and requires a proper license to function: MME Resiliency Bundle.

For information on setting the action to be taken within this profile, see the *Congestion Action Profile Configuration Mode Commands* chapter in this guide, and the *Congestion Control* chapter in the *System Administration Guide*.

### Example

The following command creates a major congestion action profile named *mme\_major\_profile* and moves to the Congestion Action Profile Configuration mode:

```
congestion-action-profile mme_major_profile
```

### Syntax Description

```
drop | reject monitoring-event-config-request
```

#### drop|reject

Drops or rejects every new incoming Monitoring Event configuration without any reply.

### Usage Guidelines

Use this command to drop or reject the Monitoring Event Configuration Request if the system detects congestion.

## enb-group

Creates eNB Group mode.

### Product

MME

### Privilege

Administrator

### Command Modes

Exec > Global Configuration > LTE Policy Configuration

#### configure > lte-policy

Entering the above command sequence results in the following prompt:

```
[local]host_name(lte-policy)#
```

### Syntax Description

```
[ no ] enb-group enb_group_name
```



### Important

Maximum of 20 eNB groups are allowed to be configure at any given point of time.

#### no

Removes the specific eNB group.

**enb-group** *enb\_group\_name*

Creates the eNB Group. *enb\_group\_name* must be a string of 1 to 64 characters.

*bits* Must be an Integer from 1 to 28.

By entering this command you enter new mode enb-group

## foreign-plmn-guti-mgmt-db

Creates a new, or enters the existing Foreign PLMN GUTI management database.

**Product**

MME

**Privilege**

Administrator

**Command Modes**

Exec &gt; Global Configuration &gt; LTE Policy Configuration

**configure** > **lte-policy**

Entering the above command sequence results in the following prompt:

```
[local]host_name(lte-policy)#
```

**Syntax Description**

**foreign-plmn-guti-mgmt-db** *db\_name* [ **-noconfirm** ]  
**no foreign-plmn-guti-mgmt-db** *db\_name*

**no**

Remove the specified management database from the system.

**-noconfirm**

Executes the command without any additional prompt and confirmation from the user.

**db\_name**

Specifies the name of the management database. If the name does not refer to an existing database, a new database is created.

*db\_name* is an alphanumeric string of 1 through 64 characters.

**Usage Guidelines**

Use this command to create a new, or enter the existing Foreign PLMN GUTI management database. This management database allows for the optional configuration of foreign PLMNs for which Attach Requests or TAU Requests containing a GUTI from such a PLMN can either be allowed or immediately rejected.

A maximum of four separate Foreign PLMN GUTI management databases can be configured.

Entering this command results in the following prompt:

```
[context_name]hostname(foreign-plmn-guti-mgmt-db)#
```

Global MME ID management database commands are defined in the *LTE Foreign PLMN GUTI Management Database Configuration Mode Commands* chapter.

**Example**

The following command creates a Foreign PLMN GUTI management database named *fguti-db1*.

```
foreign-plmn-guti-mgmt-db fguti-db1 -noconfirm
```

# henbgw mme-pool

**Important**

In Release 20, 21.0 and 21.1, HeNB-GW is not supported. This command must not be used for HeNB-GW in these releases. For more information, contact your Cisco account representative.

Creates or configures a specified MME or MME pool to which the HeNB-GW is to communicate and enters the MME pool configuration mode.

**Product**

HeNB-GW

**Privilege**

Administrator

**Command Modes**

Exec > Global Configuration > LTE Policy Configuration

**configure > lte-policy**

Entering the above command sequence results in the following prompt:

```
[local]host_name(lte-policy)#
```

**Syntax Description**

```
[ no ] henbgw mme-pool pool_name [ -noconfirm ]
```

**no**

Removes an already configured MME or MME pool from the system.

**pool\_name**

Specifies the name of the MME pool being created or accessed. If the pool name does not refer to an existing profile, a new pool is created. *pool\_name* is an alphanumeric string of 1 through 63 characters.

**-noconfirm**

Executes the command without any additional prompt and confirmation from the user.

**Usage Guidelines**

Use this command to enter the MME Pool Configuration Mode for an existing pool or for a newly defined MME pool. This command is also used to remove an existing MME pool.

**Important**

A maximum of eight MME pools are allowed per system.

Entering this command results in the following prompt:

```
[context_name]hostname(mme-pool)#
```

MME Pool Configuration Mode commands are defined in the *MME Pool Configuration Mode Commands* chapter.

### Example

The following command helps entering the MME Pool Configuration Mode for a new or existing profile named *henb\_mme\_pool*:

```
henbgw mme-pool henb_mme_pool
```

## henbgw overload-control



### Important

In Release 20, 21.0 and 21.1, HeNBGW is not supported. This command must not be used for HeNBGW in these releases. For more information, contact your Cisco account representative.

Configures HeNBGW overload control parameters.

### Product

HeNBGW

### Privilege

Administrator

### Command Modes

Exec > Global Configuration > LTE Policy Configuration

**configure > lte-policy**

Entering the above command sequence results in the following prompt:

```
[local]host_name(lte-policy)#
```

### Syntax Description

```
henbgw overload-control [ load-reduction-indicator percentage_value |
ochl-guard-time minutes ]
default mme henbgw overload-control [ load-reduction-indicator |
ochl-guard-time ]
```

### default

Sets/Restores the default values assigned to HeNBGW overload control parameters. The default value of load Reduction indication is 99 percent.

### load-reduction-indicator *percentage\_value*

Designates the percentage of HeNBs to relay overload start message if traffic load Reduction indication IE is not present in the overload start message.

*percentage\_value* is the percentage value, which is an integer between 1 and 99.



**ochl-guard-time *minutes***

Designates the guard timeout value (in minutes) for sending overload stop messages if overload stop message is not received from MME to all the HeNBs in corresponding MME's overload control HeNBs list. The guard timeout value is an integer between 0 and 2147483647.

**Usage Guidelines**

Use this command to configure HeNBGW overload control parameters.

**Example**

The following command configures HeNBGW overload control parameter **ochl-guard-time** as 45 minutes:

```
hcnbgw overload-control ochl-guard-time 45
```

## hcnbgw qci-dscp-mapping-table

**Important**

In Release 20, 21.0 and 21.1, HeNBGW is not supported. This command must not be used for HeNBGW in these releases. For more information, contact your Cisco account representative.

Use this command to configure qci-dscp-mapping-table for HENBGW. The maximum limit for the tables that can be configured is 32.

**Product**

HeNB-GW

**Privilege**

Security Administrator, Administrator

**Command Modes**

Exec > Global Configuration > LTE Policy Configuration

**configure > lte-policy**

Entering the above command sequence results in the following prompt:

```
[local]host_name(lte-policy)#
```

**Syntax Description**

```
[ no ] hcnbgw qci-dscp-mapping-table table_name
```

**no**

Removes the qci-dscp-mapping-table for HENBGW.

**Important**

This command on execution will open a new mode HeNBGW QCI DSCP Mapping Table mode.

**table\_name**

It is the qci-dscp-mapping-table for HENBGW, a string of size between 1 and 63.

**Usage Guidelines**

Use this command to configure qci-dscp-mapping-table for HENBGW.

**Example**

Following command configures qci-dscp-mapping-table by name table1 for HENBGW.

```
henbgw qci-dscp-mapping-table table1
```

## henbgw s1-reset

**Important**

In Release 20, 21.0 and 21.1, HeNBGW is not supported. This command must not be used for HeNBGW in these releases. For more information, contact your Cisco account representative.

Configures option to enable/disable s1-reset/partial-reset messages sent from HeNBGW.

**Product**

HeNBGW

**Privilege**

Administrator

**Command Modes**

Exec > Global Configuration > LTE Policy Configuration

**configure > lte-policy**

Entering the above command sequence results in the following prompt:

```
[local]host_name(lte-policy)#
```

**Syntax Description**

**[ no ] henbgw s1-reset**

**no**

This command prefix disables s1-reset/partial-reset messages sent from HeNBGW.

**s1-reset**

Configures option to enable or disable sending s1-reset/partial-reset messages from HeNBGW.

**Example**

The following command configures HeNBGW **s1-reset** messages:

```
henbgw s1-reset
```

## henbgw session-recovery idle-timeout

**Important**

In Release 20, 21.0 and 21.1, HeNBGW is not supported. This command must not be used for HeNBGW in these releases. For more information, contact your Cisco account representative.

Configures HENBGW session recovery. The HENBGW session recovery is valid only when require session recovery is configured. Base session recovery feature will enable recovery of IP-Sec tunnels when integrated IP-Sec is used. Enhanced HENBGW session recovery feature will enable recovery of SCTP/UE sessions in HENBGW. This feature should be enabled if henb(s) have the capability to retain UE S1AP state across SCTP connection restarts.

<b>Product</b>	HeNBGW
<b>Privilege</b>	Administrator
<b>Command Modes</b>	Exec > Global Configuration > LTE Policy Configuration <b>configure &gt; lte-policy</b> Entering the above command sequence results in the following prompt: [local]host_name(lte-policy)#
<b>Syntax Description</b>	<b>henbgw session-recovery [ idle-timeout <i>timeout_value</i> ]</b> <b>no henbgw session-recovery</b>  <b>no</b> Removes the HENBGW session recovery configuration.  <b>idle-timeout <i>timeout_value</i></b> Configures the idle timeout. Designates the maximum duration of the session recovered without any activity, in seconds, before system automatically terminates the session. Zero indicates function is disabled. The <i>timeout_value</i> specifies the idle timeout in seconds (0 is disabled). It is an integer between 0 through 2147483647.
<b>Usage Guidelines</b>	Use this command to configure HENBGW session recovery with idle timeout.

#### Example

The following command configures HeNBGW session recovery with idle timeout 45 seconds:

```
henbgw session-recovery idle-timeout 45
```

## ho-restrict-list

Creates a handover (HO) restriction list or specifies an existing HO restriction list and enters the Handover Restriction List Configuration Mode.

<b>Product</b>	MME ePDG SAEGW
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S-GW

**Privilege**

Administrator

**Command Modes**

Exec &gt; Global Configuration &gt; LTE Policy Configuration

**configure > lte-policy**

Entering the above command sequence results in the following prompt:

```
[local]host_name(lte-policy)#
```

**Syntax Description****[ no ] ho-restrict-list list\_name [ -noconfirm ]****no**

Removes the specified restriction list from the system.

**-noconfirm**

Executes the command without any additional prompt and confirmation from the user.

**list\_name**Specifies the name of the HO restriction list. If the entered list name does not refer to an existing list, a new list is created. *list\_name* is an alphanumeric string of 1 through 64 characters.**Usage Guidelines**

Use this command to enter the Handover Restriction List Configuration Mode for an existing list or for a newly defined list. This command is also used to remove an existing list.

Entering this command results in the following prompt:

```
[context_name]hostname(ho-restrict-list)#
```

Handover Restriction List Configuration Mode commands are defined in the *LTE Handover Restriction List Configuration Mode Commands* chapter.**Example**The following command enters the Handover Restriction List Configuration Mode for a new or existing list named *ho\_restrict\_list1*:

```
ho-restrict-list ho_restrict_list1
```

## imei-tac-group

Creates an IMEI-TAC group and provides commands to configure up to 25,000 IMEI-TACs (international mobile equipment identity - type allocation code (IMEI-TAC) that can be used as the filtering criteria for Operator Policy selection.

**Important**

This functionality is available on releases 18.6, 19.4, and 20.0 and higher.

---

**Product** MME

---

**Privilege** Administrator

---

**Command Modes** Exec > Global Configuration > LTE Policy Configuration

**configure > lte-policy**

Entering the above command sequence results in the following prompt:

```
[local]host_name(lte-policy)#
```

---

**Syntax Description** [ no ] **imei-tac-group** *group\_name*

**no**

Removes the specified IMEI-TAC group with all related configuration from the LTE Policy.

***group\_name***

Specify a name for the IMEI-TAC group to create, modify, or remove the group. This name must be an alphanumeric string of 1 through 64 characters. Each new IMEI-TAC group must have a unique name.

A maximum of 50 IMEI-TAC groups can be defined on the MME.

---

**Usage Guidelines**

Use this command to create, modify, or delete an IMEI-TAC group. Create up to 50 IMEI-TAC groups. Each group can contain up to 500 unique IMEI-TAC values and/or up to 20 IMEI-TAC ranges, which can be overlapping.

This command is used as part of the configuration required to enable operator policy selection based on IMEI-TAC. Including the type allocation code (TAC) in the operator policy selection process supports network access restrictions being applied to UEs based on the type of wireless device identified by the IMEI-TAC. For details about this feature and all the other commands required for its configuration, refer to the *Operator Policy Selection Based on IMEI-TAC* chapter in the *MME Administration Guide*.

**Example**

The following command creates an S1-AP cause code group named *move-ue-to-idle*.

```
cause-code-group move-ue-to-idle protocol slap
```

## imsi-group

This command configures the International Mobile Subscriber Identity (IMSI) group.

---

**Product** MME

SGSN

---

**Privilege** Administrator

---

**Command Modes** Exec > Global Configuration > LTE Policy Configuration

**configure > lte-policy**

Entering the above command sequence results in the following prompt:

```
[local]host_name(lte-policy)#
```

---

**Syntax Description**

**imsi-group** *group\_name*

**imsi-group** *group\_name*

Specifies the IMSI group name. *group\_name* must be an alphanumeric string of 1 through 64 characters. It can have a maximum of 50 groups.

---

**Usage Guidelines**

Use this command to create the IMSI group. An IMSI group can contain up to 500 elements of either individual IMSI or range of IMSI numbers. Once an IMSI group is created, each group can be configured with up to 500 unique IMSI values. Multiple lines of IMSI and IMSI-range can be up to 20 lines per group.

This command allows you to enter the IMSI Group Configuration Mode.

Entering this command results in the following prompt:

```
[context_name]hostname(config-imsi-group)#
```

IMSI Group Configuration Mode commands are defined in the *IMSI Group Configuration Mode Commands* chapter.

## lte-emergency-profile

Creates an LTE emergency profile or specifies an existing emergency profile and enters the LTE Emergency Profile Configuration Mode.

---

**Product**

MME  
ePDG  
SAEGW  
S-GW

---

**Privilege**

Administrator

---

**Command Modes**

Exec > Global Configuration > LTE Policy Configuration

**configure** > **lte-policy**

Entering the above command sequence results in the following prompt:

```
[local]host_name(lte-policy)#
```

---

**Syntax Description**

[ **no** ] **lte-emergency-profile** *profile\_name* [ **-noconfirm** ]

**no**

Removes an LTE emergency profile from the system.

***profile\_name***

Specifies the name of the LTE emergency profile being created or accessed. If the profile name does not refer to an existing profile, a new profile is created. *profile\_name* is an alphanumeric string of 1 through 64 characters.

**-noconfirm**

Executes the command without any additional prompt and confirmation from the user.

**Usage Guidelines**

Use this command to enter the LTE Emergency Profile Configuration Mode for an existing profile or for a newly defined profile. This command is also used to remove an existing profile.

**Important**

A maximum of four LTE emergency profiles are allowed per system.

Entering this command results in the following prompt:

```
[context_name]hostname(lte-emergency-profile)#
```

LTE Emergency Profile Configuration Mode commands are defined in the *LTE Emergency Profile Configuration Mode Commands* chapter.

**Example**

The following command enters the LTE Emergency Profile Configuration Mode for a new or existing profile named *emergency\_profile3*:

```
lte-emergency-profile emergency_profile3
```

## mec-tai-grp

Creates a MEC TAI Group and enters the MEC TAI Group Configuration Mode.

**Product**

MME

**Privilege**

Administrator

**Command Modes**

Exec > Global Configuration > LTE Policy Configuration

**configure > lte-policy**

Entering the above command sequence results in the following prompt:

```
[local]host_name(lte-policy)#
```

**Syntax Description**

[ no ] **mec-tai-grp** *grp\_name*

**no**

Removes the MEC TAI Group from the system.

***mec\_tai\_grp\_name grp\_name***

Specifies the name of the MEC TAI Group being created. *grp\_name* is an alphanumeric string of 1 through 64 characters.

**Usage Guidelines**

Use this command to enter the MEC TAI Group Configuration Mode.

MEC TAI Group Configuration Mode commands are defined in the *MEC TAI Group Configuration Mode Commands* chapter.

**Example**

The following command enters the MEC TAI Group Configuration Mode:

```
mec-tai-grp mgrp1
```

## mme henbgw mgmt-db

Creates an MME HeNB-GW Management Database or specifies an existing database and enters the HeNB-GW Management Database Configuration mode.

**Important**

In Release 20, 21.0 and 21.1, HeNBGW is not supported. This command must not be used for HeNBGW in these releases. For more information, contact your Cisco account representative.

**Product**

MME

**Privilege**

Administrator

**Command Modes**

Exec > Global Configuration > LTE Policy Configuration

**configure > lte-policy**

Entering the above command sequence results in the following prompt:

```
[local]host_name(lte-policy)#
```

**Syntax Description**

**[ no ] mme henbgw mgmt-db db\_name [ -noconfirm ]**

**no**

Removes the specified management database from the system.

**[ -noconfirm ]**

Executes the command without any additional prompt and confirmation from the user.

**db\_name**

Specifies the name of the management database. If the name does not refer to an existing database, a new database is created. *db\_name* is an alphanumeric string of 1 through 64 characters.



**Usage Guidelines**

Use this command to create a new, or enter the existing MME HeNB-GW management database. This command enables configuration for the MME to distinguish between an HeNB-GW and an eNodeB.

In case of S1-based handovers to Home eNodeBs served by a HeNB-GW, the lookup at the MME for the target eNodeB based on global eNodeB id cannot be completed, as the MME is aware of only the HeNB-GW. In those cases, an additional lookup needs to be performed based on the TAI, in order to find the HeNB-GW serving the Home eNodeB. The S1 Handover request message will then be sent to the HeNB-GW and forwarded to the correct Home eNodeB in order to prepare the target RAN node for handover.

One HeNB-GW management database is allowed per LTE Policy.

A maximum of 8 HeNB-GWs can be configured within this management database.

Entering this command results in the following prompt:

```
[context_name]hostname(henbgw-mgmt-db) #
```

MME HeNB-GW management database commands are defined in the *LTE MME HeNB-GW Management Database Configuration Mode Commands* chapter.

**Example**

The following command enters the existing LTE MME HeNB-GW Management Database Configuration Mode (or creates it if it does not already exist) for the database named `henbgw_db1`:

```
mme henbgw mgmt-db henbgw_db1
```

## mme paging cache

Enable or disables caching of the MME's paging and provides the operator configurable paging cache controls.

**Product**

MME

**Privilege**

Security Administrator, Administrator

**Command Modes**

Exec > Global Configuration > LTE Policy Configuration

**configure > lte-policy**

Entering the above command sequence results in the following prompt:

```
[local]host_name(lte-policy) #
```

**Syntax Description**

```
mme paging cache { size cache_size | timeout time }  
default mme paging cache { size | timeout }
```

**default**

Resets either the paging cache size or the paging cache timer to default settings.

**size cache\_size**

*cache\_size*: Enter an integer from 0 to 10000 to specify the maximum number of Tracking Area Code (TAC) entries to be cached.

Entering the '0' value disables caching and should be followed by use of the **mme paging cache clear** command (in the Exec mode). See the *Example* section.

Default cache size = 5000 TAC entries per SessMgr.

#### **timeout** *time*

*time*: Enter an integer from 1 to 1440 to specify the number of minutes that each Tracking Area Code (TAC) entry remains valid.

A lower cache timeout helps to refresh the cache frequently and enables this functionality to quickly adapt to changes in the network. We recommend the **timeout** value be less than the expected eNodeB flap frequency; for example, if the eNodeBs connected to the MME are expected to disconnect and reconnect every 10 minutes (due to network issues), then the timeout configuration should be less than 10 minutes.

Default timeout = 5 minutes.

#### **Usage Guidelines**

Both size and timeout must be configured to enable paging cache optimization. The **mme paging cache** command must be entered twice, once for each parameter.

#### **Example**

Use the following configuration to set the paging cache timeout to match the eNodeB flap frequency of 10 minutes:

```
mme paging cache timeout 10
```

Use the following configuration to set the paging cache size to 100:

```
mme paging cache size 100
```

Use the following configuration to set the paging cache size to 0 (to disable caching):

```
mme paging cache size 0  
end  
mme paging cache clear { all | instance sessmgr_instance }
```

## network-global-mme-id-mgmt-db

Creates a new, or enters the existing MME group ID management database.

#### **Product**

MME  
ePDG  
SAEGW  
S-GW  
SGSN

#### **Privilege**

Administrator

#### **Command Modes**

Exec > Global Configuration > LTE Policy Configuration  
**configure > lte-policy**

Entering the above command sequence results in the following prompt:

```
[local]host_name(lte-policy)#
```

### Syntax Description

[ no ] **network-global-mme-id-mgmt-db**

**no**

Remove the global MME ID management database from the system.

### Usage Guidelines

Use this command to create a new, or enter the existing MME group ID management database. The MME group ID management database is used to create associations between PLMN IDs and ranges of MME group IDs.

On the S4-SGSN, this command enables operators to create a MME group ID management database that can be associated with an SGSN service.



### Important

Only one MME group ID management database can be created per system.

Entering this command results in the following prompt:

```
[context_name]hostname(network-global-mme-id-mgmt-db)#
```

**plmn mcc** [mcc-value] **mnc** [mnc-value] **mme-group-id-range** [First id ] [last id]

Global MME ID management database commands are defined in the *LTE Network Global MME ID Management Database Configuration Mode Commands* chapter.

## paging-map

Creates a paging map or specifies an existing paging map and enters the Paging Map Configuration Mode.

### Product

MME  
ePDG

### Privilege

Administrator

### Command Modes

Exec > Global Configuration > LTE Policy Configuration

**configure > lte-policy**

Entering the above command sequence results in the following prompt:

```
[local]host_name(lte-policy)#
```

### Syntax Description

[ no ] **paging-map** *paging\_map\_name* [ **-noconfirm** ]

**no**

Remove the paging map from the system.

***paging\_map\_name***

Specifies the name of the paging map being created or accessed. If the map name does not refer to an existing map, a new map is created. *paging\_map\_name* must be an alphanumeric string of 1 through 64 characters.

**-noconfirm**

Executes the command without any additional prompt and confirmation from the user.

**Usage Guidelines**

Enter the Paging Map Configuration Mode for an existing or newly defined map. This command is also used to remove an existing map.

Entering this command results in the following prompt:

```
hostname(paging-map) #
```

Paging Map Configuration Mode commands are defined in the *LTE Paging Map Configuration Mode Commands* chapter.

Refer to the *Heuristic and Intelligent Paging* chapter in the *MME Administration Guide* for more information about Paging Maps.

**Example**

The following command enters the existing Paging Map Configuration Mode (or creates it if it does not already exist) for the map named *map1*:

```
paging-map map1
```

## paging-profile

Creates a paging profile or specifies an existing paging profile and enters the Paging Profile Configuration Mode.

**Product**

MME  
ePDG

**Privilege**

Administrator

**Command Modes**

Exec > Global Configuration > LTE Policy Configuration

**configure > lte-policy**

Entering the above command sequence results in the following prompt:

```
[local]host_name(lte-policy) #
```

**Syntax Description**

```
[ no ] paging-profile paging_profile_name [ -noconfirm ]
```

**no**

Remove the paging map from the system.

***paging\_profile\_name***

Specifies the name of the paging profile being created or accessed. If the profile name does not refer to an existing profile, a new profile is created. *paging\_profile\_name* must be an alphanumeric string of 1 through 64 characters.

**-noconfirm**

Executes the command without any additional prompt and confirmation from the user.

**Usage Guidelines**

Enter the Paging Profile Configuration Mode for an existing or newly defined paging profile. This command is also used to remove an existing profile.

Entering this command results in the following prompt:

```
hostname (paging-profile) #
```

Paging Profile Configuration Mode commands are defined in the *LTE Paging Profile Configuration Mode Commands* chapter.

Refer to the *Heuristic and Intelligent Paging* chapter in the *MME Administration Guide* for more information about Paging Profiles.

**Example**

The following command enters the existing Paging Profile Configuration Mode (or creates it if it does not already exist) for the profile named *profile1*:

```
paging-profile profile1
```

## peer-map

Creates a peer map and enters the LTE Peer Map Configuration mode.

**Product**

P-GW  
SAEGW  
S-GW

**Privilege**

Administrator

**Command Modes**

Exec > Global Configuration > LTE Policy Configuration  
**configure > lte-policy**

Entering the above command sequence results in the following prompt:

```
[local]host_name(lte-policy) #
```

**Syntax Description**

```
peer-map map_name [ -noconfirm ]  
no peer-map map_name
```

**no**

Removes the specified peer map from the LTE policy.

**map\_name**

Specify a name of a peer map to create, modify, or remove. This name must be an alphanumeric string of 1 through 64 characters. Each new peer map must have a unique name.

**-noconfirm**

Executes the command without any additional prompt and confirmation from the user.

**Usage Guidelines**

Use this command to create or modify a peer map.

Entering this command results in the following prompt:

```
[local]host_name(peer-map) #
```

LTE Peer Map Configuration Mode commands are defined in the *LTE Peer Map Configuration Mode Commands* chapter of this guide.

**Example**

The following command creates a peer map named map5 and enters the LTE Peer Map Configuration mode:

```
peer-map map5
```

## sgsn-mme

This command is used to enable or disable subscriber data optimization in a SGSN-MME combo node.

**Product**

SGSN

MME

**Privilege**

Administrator

**Command Modes**

Exec > Global Configuration > LTE Policy Configuration

**configure > lte-policy**

Entering the above command sequence results in the following prompt:

```
[local]host_name(lte-policy) #
```

**Syntax Description**

```
[ no ] sgsn-mme subscriber-data-optimization
```

**no**

Disables the configured optimization in a SGSN-MME combo node.

**subscriber-data-optimization**

Enables subscriber data optimization in a SGSN-MME combo node.

**Usage Guidelines**

This command is used to configure data optimization in a SGSN-MME combo node. When this command is configured in a co-located SGSN and MME node, lower memory or CPU utilization and reduced signaling towards other nodes in network is achieved. This feature is supported by both the S4-SGSN and the Gn-SGSN. For the feature to apply to a Gn-SGSN, the Gn-SGSN must be configured to connect to an HSS. This is a licensed Cisco feature. A separate feature license is required. Contact your Cisco account representative for detailed information on specific licensing requirements. For information on installing and verifying licenses, refer to the *Managing License Keys section of the Software Management Operations chapter in the System Administration Guide*

**Example**

The following command is used to enable subscriber data optimization in a SGSN-MME combo node.

```
sgsn-mme subscriber-data-optimization
```

# subscriber-map

Creates a subscriber map or specifies an existing subscriber map and enters the Subscriber Map Configuration Mode.

**Product**

MME  
ePDG  
SAEGW  
S-GW

**Privilege**

Administrator

**Command Modes**

Exec > Global Configuration > LTE Policy Configuration

**configure > lte-policy**

Entering the above command sequence results in the following prompt:

```
[local]host_name(lte-policy)#
```

**Syntax Description**

**[ no ] subscriber-map** *map\_name* **[ -noconfirm ]**

**no**

Removes the specified subscriber map from the system.

**-noconfirm**

Executes the command without any additional prompt and confirmation from the user.

**map\_name**

Specifies the name of the subscriber map. If the map name does not refer to an existing map, a new map is created. *map\_name* must be an alphanumeric string of 1 through 64 characters.

**Usage Guidelines**

Enter the Subscriber Map Configuration Mode for an existing or newly defined map. This command is also used to remove an existing map.

Entering this command results in the following prompt:

```
hostname(subscriber-map) #
```

Subscriber Map Configuration Mode commands are defined in the *LTE Subscriber Map Configuration Mode Commands* chapter.

**Example**

The following command enters the existing Subscriber Map Configuration Mode (or creates it if it does not already exist) for the map named *map1*:

```
subscriber-map map1
```

# tai-list-db

**Important**

In Release 20, 21.0 and 21.1, HeNB-GW is not supported. This command must not be used for HeNB-GW in these releases. For more information, contact your Cisco account representative.

Creates or configures a list of Tracking Area Information (TAI). This list is called TAI List Database.

**Product**

HeNB-GW

**Privilege**

Administrator

**Command Modes**

Exec > Global Configuration > LTE Policy Configuration

```
configure > lte-policy
```

Entering the above command sequence results in the following prompt:

```
[local]host_name(lte-policy) #
```

**Syntax Description**

```
[ no ] tai-list-db db_name [ -noconfirm ]
```

**no**

Removes the specified TAI list database from the system.

**-noconfirm**

Executes the command without any additional prompt and confirmation from the user.



***db\_name***

Specifies the name of the TAI list database. If the name does not refer to an existing database, a new database is created. *db\_name* is an alphanumeric string of 1 through 64 characters.

**Usage Guidelines**

Enters the TAI List Database Configuration Mode for an existing or newly defined database. This command is also used to remove an existing database.

**Important**

Maximum of eight TAI List Database instances can be created in a system.

Entering this command results in the following prompt:

```
[context_name]hostname(tai-list-db) #
```

TAI List Database Configuration Mode commands are defined in the *TAI List Database Configuration Mode Commands* chapter.

**Example**

The following command enters the existing TAI List Database configuration mode (or creates it if it does not already exist) for the database named *tai\_db1*:

```
tai-list-db tai_db1
```

## tai-mgmt-db

Creates a Tracking Area Identifier (TAI) Management Database or specifies an existing database and enters the TAI Management Database Configuration mode. On an S4-SGSN, this command is used as part of configuring S-GWs and their associated RAIs to bypass DNS resolution of RAI FQDN for obtaining the S-GW address.

**Product**

MME  
ePDG  
SAEGW  
S-GW  
SGSN

**Privilege**

Administrator

**Command Modes**

Exec > Global Configuration > LTE Policy Configuration  
**configure > lte-policy**

Entering the above command sequence results in the following prompt:

```
[local]host_name(lte-policy) #
```

**Syntax Description**

```
[ no ] tai-mgmt-db db_name [ -noconfirm ]
```

**no**

Removes the specified management database from the system.

**-noconfirm**

Executes the command without any additional prompt and confirmation from the user.

***db\_name***

Specifies the name of the management database. If the name does not refer to an existing database, a new database is created. *db\_name* is an alphanumeric string of 1 through 64 characters.

**Usage Guidelines**

Enter the TAI Management Database Configuration Mode for an existing or newly defined database. This command is also used to remove an existing database.

On the S4-SGSN, once you have created a new, or accessed an existing, TAI Management database, a TAI Management Object must be created or accessed and the S-GWs and their associated RAIs configured using the **rai** and **sgw-address** commands. Refer to the *LTE TAI Object Configuration Mode* chapter for details on these two commands.

A maximum number of 32 TAI-DBs is supported in this release.

Entering this command results in the following prompt:

```
[context_name]hostname(tai-mgmt-db) #
```

TAI Management Database Configuration Mode commands are defined in the *TAI Management Database Configuration Mode Commands* chapter.

**Example**

The following command enters the existing TAI Management Database configuration mode (or creates it if it does not already exist) for the database named *tai\_db1*:

```
tai-mgmt-db tai_db1
```