

Location Service Configuration Mode Commands

The Location Service Configuration Mode is used to manage LoCation Services (LCS). Using LCS, the system (MME or SGSN) can collect and use or share location (geographical position) information for connected UEs in support of a variety of location services.

Command Modes

Exec > Global Configuration > Context Configuration > Location Service Configuration

configure > context *context_name* **> location-service** *service_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-location-service)#
```

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.

- associate, on page 1
- destination-host, on page 3
- pla, on page 4
- slr, on page 4
- timeout, on page 5

associate

Associates or disassociates supportive interfaces or services with this location service instance.

Product

MME

SGSN

Privilege

Administrator

Command Modes

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Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-location-service)#
```

Syntax Description

```
associate { diameter { dictionary standard | endpoint endpoint_name } |
map-service map_svc_name | sls-service sls_svc_name  }
default associate diameter dictionary
no associate { diameter endpoint | map-service | sls-service }
```

default

Returns the command to its default value of 'standard'.

no

Disassociates a previously associated interface or service with this location service.

diameter dictionary standard

Associates a Diameter dictionary with this location service. The standard dictionary contains definitions per the 3GPP definition.

diameter endpoint *endpoint_name*

Specifies the Diameter endpoint for this location service, which includes the hostname, peer configuration, and other Diameter base configuration.

map-service *map_svc_name*

Associates a Mobile Application Part (MAP) service with this location service.

This keyword is applicable for SGSN only.

map_sv_svc_name specifies the name for a pre-configured MAP service to associate with this location service.

sls-service *sls_svc_name*

Associates an SLs service with this location service. The SLs service provides an interface between the MME and Evolved Serving Mobile Location Center (E-SMLC).

This keyword is applicable for MME only.

sls_svc_name specifies the name for a pre-configured SLs service to associate with this location service.

Usage Guidelines

Use this command to specify the Diameter dictionary and endpoint to be used for this location service, or associate supportive services with this location service.

The location service provides SLg (MME) interface support or Lg (SGSN) interface support via the Diameter protocol between the MME or SGSN and the GLMC.

Example

The following command associates a pre-configured Diameter endpoint named *test12* to this location service:

```
associate diameter endpoint test12
```

destination-host

Configures the host name of the GLMC to be used for this Location service. When defined, this host name is populated in the destination-host AVP.

Product

MME

Privilege

Administrator

Command Modes

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configure > context *context_name* **> location-service** *service_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-location-service)#
```

Syntax Description

destination-host *destination_host*
no destination-host

no

Removes the configured destination host.

destination_host

Defines the host name to be used, as an alphanumeric string from 1 to 63 characters.

Usage Guidelines

To comply with 3GPP TS29.172, the Destination-Host AVP is sent to the GMLC for all the Location Report Request (LRR) messages initiated by MME.

Use this command to configure the destination-host AVP for this Location service.

If this command is not configured, the peer host name configured in the diameter endpoint is encoded as Destination-Host AVP. Refer to the **peer** command in the Diameter Endpoint Configuration Mode.

Example

The following command specifies a destination host named *host123* for the location service:

```
destination-host host123
```

pla

Configures the experimental result code for pla.

Product

MME

Privilege

Administrator

Command Modes

Exec > Global Configuration > Context Configuration > Location Service Configuration

configure > context *context_name* **> location-service** *service_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-location-service)#
```

Syntax Description

pla ue-state [detached | not-reachable]send experimental-result-code*experimental_result_code*
[no] pla ue-state [detached | not-reachable]send experimental-result-code

no

Disables the experimental result code for pla.

ue-state

Specifies that the pla can be either not-reachable (No paging Response) or detached.

detached

Specifies the UE disconnecting.

not-reachable

Specifies no paging response.

send

Specifies sending of ue-state.

experimental-result-code *experimental_result_code*

Specifies the result code value to be encoded in PLA depending on ue-state when PLR is received with GMLC Location type set to Current or Last Known Location.

experimental_result_code must be an integer between 1000 and 6000.

slr

Controls the Subscriber Location Report (SLR) trigger generated from MME towards GMLC for emergency calls, based on the dedicated bearer states either creation or deletion.

Product MME

Privilege Administrator

Command Modes Exec > Global Configuration > Context Configuration > Location Service Configuration

configure > context *context_name* **> location-service** *service_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-location-service)#
```

Syntax Description **`[ no ] slr emergency dedicated-bearer-only`**

no

Disables the SLR trigger for dedicated bearer states.

slr

Specifies the SLR message from MME.

emergency

Specifies the trigger for sending the SLR message for emergency calls.

dedicated-bearer-only

Specifies the MME to trigger SLR towards GMLC upon dedicated bearer creation and deletion.

Usage Guidelines Use this command to enable or disable the Subscriber Location Report (SLR) message trigger for emergency calls based on the dedicated bearer states either creation or deletion. In case of multiple dedicated bearers, SLR message with Call-Origination is sent upon the creation of first dedicated bearer and Call-Release is sent upon the deletion of last dedicated bearer irrespective of QCI. This command will override the current/default behavior of MME which initiates the SLR towards GMLC only upon Emergency Attach/PDN creation/PDN deletion and Detach.

By default, MME triggers the SLR message towards GMLC upon successful Emergency Attach/PDN creation/PDN deletion and Detach with appropriate event type (Call-Origination/Call-Release/Call-Handover).

timeout

Configures the timers used to control various location service procedures.

Product SGSN

Privilege Administrator

Command Modes Exec > Global Configuration > Context Configuration > Location Service Configuration

configure > context *context_name* **> location-service** *service_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-location-service)#
```

Syntax Description

timeout { area-event-invoke-timer *area_event_timer* **| lcsn** *lcsn_seconds* **| periodic-event-invoke-timer** *period_event_timer* **| ue-available-guard-timer** *ue_guard_timer* **}**
default timeout { area-event-invoke-timer | lcsn | periodic-event-invoke-timer | ue-available-guard-timer }

default

Resets the specified timer to the default value.

area-event-invoke-timer *area_event_timer*

This timer, set in seconds, is used to guard the area event invoke procedure.

area_evt_timer is an integer from 10 through 20. Default is 15.

lcsn *lcsn_seconds*

Sets the NAS location service notification timer defining how long the SGSN will wait (in seconds) before aborting the Location Service Request, and release all resources allocated for the transaction.

lcsn_seconds is an integer from 10 through 20. Default is 15.

periodic-event-invoke-timer *period_event_timer*

Thi timer, set in seconds, is used to guard the period location invoke procedure.

period_evt_timer is an integer from 10 to 20. Default is 15.

ue-available-guard-timer *ue_guard_timer*

This timer, set in seconds, is used to guard the packet-switched deferred location request (UE available event) procedures.

ue_guard_timer is an integer from 10 to 600. Default is 600.

Usage Guidelines

Use this command to set the amount of time the SGSN waits to perform various location service procedures.

Example

The following command is used to set the time the SGSN will wait, for example *12* seconds, before aborting the Location Service Request:

```
timeout lcns 12
```

The following command is used to set the timeout for the UE available guard timer to *460* seconds:

```
timeout ue-available-guard-timer 460
```