SGSN Congestion Action Profile Configuration Mode

- active calls
- new calls
- SM messages

For more information about the SGSN's MTC congestion control functionality, refer to the *MTC Congestion Control* section in the *SGSN Administration Guide.*

Command Modes

This mode provides the commands to configure the congestion-action-profile, which incorporates the actions to be taken by the SGSN during specified congestion scenario as part of the SGSN's machine type communications (MTC) congestion control reponses for the call/messages events.

Exec > Global Configuration > SGSN Global Configuration > Congestion Control Configuration > Congestion Action Profile Configuration

configure > sgsn-global > congestion-control > congestion-action-profile *act_prof_name*

Entering the above command sequence results in the following prompt:

`[local]host_name(config-cong-act-prof-act_prof_name)#`

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Important

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

active-call-policy

This command instructs the SGSN to drop or reject any active call messages when congestion occurs during an active call. The active call instructions in the congestion-action-profile can be refined to only drop or reject active call messages with LAPI.

Product	SGSN
Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > SGSN Global Configuration > Congestion Control Configuration > Congestion Action Profile Configuration

configure > sgsn-global > congestion-control > congestion-action-profile *act_prof_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-cong-act-prof-act_prof_name)#
```

Syntax Description

```
active-call-policy { rau | service-req } { drop | reject } [
low-priority-ind-ue ]
no active-call-policy { rau | service-req }
```

no

When this filter is added to the command, the SGSN deletes the active call policy definitions from the congestion-action-profile.

rau

Defines the action, either drop or reject, to be taken when the SGSN receives a Routing Area Update (RAU) message during congestion.

service-req

Defines the action, either drop or reject, to be taken when the SGSN receives a Service Request message during congestion.

drop

Instructs the SGSN to drop the defined message type as the congestion control response.

reject

Instructs the SGSN to reject the defined message type as the congestion control response.

low-priority-ind-ue

Instructs the SGSN to only take defined action if messages from the UE include a low priority access indicator (LAPI). This keyword can be use with either message type: RAU or Service Request.

Usage Guidelines

Use the **show sgsn-mode** command to display the SGSN's congestion control configuration defined with the command listed above. .

This command defines some of the congestion responses for the congestion-action-profile. These responses are a part of the overall SGSN machine type communication (MTC) congestion control functionality. For more information about the SGSN's MTC congestion control functionality, refer to the *MTC Congestion Control* section in the *SGSN Administration Guide.*

Example

Use a command similar to the following to instruct the SGSN to drop RAU Requests received during an active call if LAPI is set in the request:

active-call-policy rau drop low-priority-ind-ue

Use a command similar to the following to remove all active-call congestion response definitions, for Service Requests, from the congestion-action-profile :

no active-call-policy service-req

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.

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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.

Product	All
Privilege	Security Administrator, Administrator
Syntax Description	**end**

■ **exit**

Usage Guidelines Use this command to return to the Exec mode.

exit

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

Product	All
Privilege	Security Administrator, Administrator
Syntax Description	`exit`
Usage Guidelines	Use this command to return to the parent configuration mode.

new-call-policy

This command instructs the SGSN to drop or reject any new calls (Attach Request messages or new Inter SGSN RAU messages) if new call messages are received during congestion. The new call instructions in the congestion-action-profile can be refined to only drop or reject new call messages with low access priority indicator (LAPI).

Product	SGSN
Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration > SGSN Global Configuration > Congestion Control Configuration > Congestion Action Profile Configuration

configure > sgsn-global > congestion-control > congestion-action-profile *act_prof_name*

Entering the above command sequence results in the following prompt:

`[local]`*host_name*`(config-cong-act-prof-`*act_prof_name*`)#`

Syntax Description
```
new-call-policy { drop | reject } [ apn-based ] [ low-priority-ind-ue ]
no new-call-policy
```

no

When this filter is added to the command, the SGSN deletes the new call policy definitions from the congestion-action-profile.

drop

Instructs the SGSN to drop the any new call messages (Attach Request or new RAU) if the new call messages are received during congestion.

reject

Instructs the SGSN to reject any new call messages (Attach Request or new RAU) if the new call messages are received during congestion.

apn-based

Instructs the SGSN to reject a new call request based on the APN if congestion control is configured for that APN under an applicable Operator Policy.

low-priority-ind-ue

Instructs the SGSN to only take defined action if messages from the UE include a low priority access indicator (LAPI).

Usage Guidelines

Use the **show operator-policy full name** *policy_name* command to display whether congestion control has been implemented for a specific APN.

Use the **show sgsn-mode** command to display the SGSN's congestion control configuration defined with the command listed above. .

This command defines some of the congestion responses for the congestion-action-profile. These responses are a part of the overall SGSN machine type communication (MTC) congestion control functionality. For more information about the SGSN's MTC congestion control functionality, refer to the *MTC Congestion Control* section in the *SGSN Administration Guide.*

Example

Use a command similar to the following to instruct the SGSN to drop new call messages that include LAPI :

```
new-call-policy drop low-priority-ind-ue
```

Use a command similar to the following to instruct the SGSN to reject new call messages only if the messages includes a LAPI and the APN is configured for congestion-control in an applicable operator policy :

```
new-call-policy reject apn-based low-priority-ind-ue
```

Use a command similar to the following to remove all new-call congestion response definitions from the congestion-action-profile :

```
no new-call-policy
```

sm-messages

This command instructs the SGSN to reject any SM signaling messages (activation or modification) as a response to congestion. This congestion-action-profile parameter can be refined to only reject SM signaling messages when the low access priority indicator (LAPI) is included in the message.

Product

SGSN

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > SGSN Global Configuration > Congestion Control Configuration > Congestion Action Profile Configuration

configure > sgsn-global > congestion-control > congestion-action-profile *act_prof_name*

Entering the above command sequence results in the following prompt:

`[local]`*host_name*`(config-cong-act-prof-`*act_prof_name*`)#`

Syntax Description

```
sm-messages reject [ apn-based] [ low-priority-ind-ue ]
no sm-messages
```

no

When this filter is added to the command, the SGSN deletes the sm-messages definition from the congestion-action-profile.

reject

Instructs the SGSN to reject any sm-messages received during congestion.

apn-based

Instructs the SGSN to reject sm-messages only if congestion control is configured for that APN under an applicable Operator Policy.

low-priority-ind-ue

Instructs the SGSN to reject sm-messages from the UE only if the messages includes a low priority access indicator (LAPI).

Usage Guidelines

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Important   For SM congestion to work, the **apn-based** option must be configured with the **sm-messages reject** command.

If both the LAPI and APN-based options are included in the action-profile, then the sm-messages will only be rejected if both conditions are matched.

Use the **show operator-policy full name** *policy_name* command to display whether congestion control has been implemented for a specific APN.

Use the **show sgsn-mode** command to display the SGSN's congestion control configuration defined with the command listed above. .

This command defines some of the congestion responses for the congestion-action-profile. These responses are a part of the overall SGSN machine type communication (MTC) congestion control functionality. For more information about the SGSN's MTC congestion control functionality, refer to the *MTC Congestion Control* section in the *SGSN Administration Guide.*

Example

Use a command similar to the following to instruct the SGSN to reject sm-messages that include LAPI :

sm-messages reject low-priority-ind-ue

Use a command similar to the following to instruct the SGSN to reject sm-messages only if the messages includes a LAPI and the APN is configured for congestion-control in an applicable operator policy :

```
sm-messages reject apn-based low-priority-ind-ue
```

Use a command similar to the following to remove all congestion response definitions related to sm-messages from the congestion-action-profile :

```
no sm-messages
```