DSCP Template Configuration Mode Commands

Command Modes

The DSCP Template Configuration Mode provides the commands to configure DSCP marking for control packets and data packets for Gb over IP. Any number of DSCP templates can be generated in the SGSN Global configuration mode and then a template can be associated with one or more GPRS Services via the commands in the GPRS Service configuration mode.

Exec > Global Configuration > SGSN Global Configuration > DSCP Template Configuration

configure > **context** *context_name* > **sgsn-global** > **dscp-template** *template_name*

Entering the above command sequence results in the following prompt:

`[local]host_name(config-dscp-template-template_name)#`

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

control-packet

Configures the diffserv code point marking (DSCP) value for 3GPP quality of service (QoS) class downlink control packets.

Important In Release 20 and later, HNBGW is not supported. This command must not be used for HNBGW in Release 20 and later. For more information, contact your Cisco account representative.

Product

HNB-GW

SGSN

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > SGSN Global Configuration > DSCP Template Configuration

configure > **context** *context_name* > **sgsn-global** > **dscp-template** *template_name*

Entering the above command sequence results in the following prompt:

`[local]host_name(config-dscp-template-template_name)#`

Syntax Description

```
control-packet qos-dscp { af11 | af12 | af13 | af21 | af22 | af23 | af31
 | af32 | af33 | af41 | af42 | af43 | be | cs1 | cs2 | cs3 | cs4 | cs5 |
 cs6 | cs7 | ef }
 default control-packet
```

default

Resets the quality of service (QoS) DSCP setting to the 'BE' (best effort) default value.

DSCP marking option

Select one of the following downlink DSCP options for the control packets:

• **af11:** Assured Forwarding 11 per-hop-behavior (PHB)	• **be:** Best Effort for Forwarding
• **af12:** Assured Forwarding 12 PHB	• **cs1:** Class Selector 1 PHB
• **af13:** Assured Forwarding 13 PHB	• **cs2:** Class Selector 2 PHB
• **af21:** Assured Forwarding 21 PHB	• **cs3:** Class Selector 3 PHB
• **af22:** Assured Forwarding 22 PHB	• **cs4:** Class Selector 4 PHB
• **af23:** Assured Forwarding 23 PHB	• **cs5:** Class Selector 5 PHB
• **af31:** Assured Forwarding 31 PHB	• **cs6:** Class Selector 6 PHB
• **af32:** Assured Forwarding 32 PHB	• **cs7:** Class Selector 7 PHB
• **af33:** Assured Forwarding 33 PHB	• **ef:** Expedited forwarding PHB
• **af41:** Assured Forwarding 41 PHB	
• **af42:** Assured Forwarding 42 PHB	
• **af43:** Assured Forwarding 43 PHB	

Usage Guidelines

This command configures the QoS DSCP marking type for downlink control packets.

Related commands for SGSN:

- To create/delete a DSCP template, use the **dscp-template** in the SGSN Global configuration mode (see the *SGSN Global Configuration Mode Commands* section).
- To associated a specpific DSCP template with a specific GPRS service configuration, use the **associate-dscp-template downlink** documented in the *GPRS Service Configuration Mode Commands* section.
- To check values configured for DSCP templates, use the **show sgsn-mode** command documented in the *Exec Mode Commands* section.

Related commands for HNB-GW:

- To create/delete a DSCP template, use the **dscp-template** in the *SGSN Global Configuration Mode*.
- To associated a specpific DSCP template with a system for a PSP instance in SS7 routing domain, use **associate-dscp-template downlink** documented in the *SGSN PSP Configuration Mode Commands* section.

Example

Use a command similar to the following to set expedited forward per-hop behavior for the downlink control packets:

```
control-packet qos-dscp ef
```

Use the following command to reset the default best effort per-hop behavior:

```
default control-packet
```

end

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

Product

All

Privilege

Security Administrator, Administrator

Syntax Description

```
end
```

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.

data-packet

Configures the diffserv code point marking (DSCP) value for 3GPP quality of service (QoS) class downlink data packets.

Product

SGSN

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > SGSN Global Configuration > DSCP Template Configuration

configure > **context** *context_name* > **sgsn-global** > **dscp-template** *template_name*

Entering the above command sequence results in the following prompt:

`[local]host_name(config-dscp-template-template_name)#`

Syntax Description

```
control-packet { background | conversationa | interactive { priority1 |
priority2 | priority3 } | streaming } qos-dscp { af11 | af12 | af13 |
af21 | af22 | af23 | af31 | af32 | af33 | af41 | af42 | af43 | be | cs1
| cs2 | cs3 | cs4 | cs5 | cs6 | cs7 | ef }
default data-packet { background | conversationa | interactive { priority1
 | priority2 | priority3 } | streaming }
```

default

Resets the quality of service (QoS) DSCP setting to the **be** (best effort) default value.

background | conversationa | interactive | streaming

Select the QoS traffic class of service for the downlink data packets.

priority1 | priority2 | priority3

Select the traffic handling priority to be applied to the specified traffic class.

DSCP option

Select one of the following DSCP settings for the selected traffic class. Default is best effort (**be**) for all traffic classes settings.

• **af11:** Assured Forwarding 11 per-hop-behavior (PHB)	• **be:** Best Effort for Forwarding
• **af12:** Assured Forwarding 12 PHB	• **cs1:** Class Selector 1 PHB
• **af13:** Assured Forwarding 13 PHB	• **cs2:** Class Selector 2 PHB
• **af21:** Assured Forwarding 21 PHB	• **cs3:** Class Selector 3 PHB
• **af22:** Assured Forwarding 22 PHB	• **cs4:** Class Selector 4 PHB

• **af23:** Assured Forwarding 23 PHB	• **cs5:** Class Selector 5 PHB
• **af31:** Assured Forwarding 31 PHB	• **cs6:** Class Selector 6 PHB
• **af32:** Assured Forwarding 32 PHB	• **cs7:** Class Selector 7 PHB
• **af33:** Assured Forwarding 33 PHB	• **ef:** Expedited forwarding PHB
• **af41:** Assured Forwarding 41 PHB	
• **af42:** Assured Forwarding 42 PHB	
• **af43:** Assured Forwarding 43 PHB	

Usage Guidelines

This command configures the QoS DSCP marking type for downlink data packets. DSCP levels indicate how packets are to be handled

Related commands:

- To create/delete a DSCP template, use the **dscp-template** in the SGSN Global configuration mode (see the *SGSN Global Configuration Mode Commands* section).
- To associated a specpific DSCP template with a specific GPRS service configuration, use the **associate-dscp-template downlink** documented in the *GPRS Service Configuration Mode Commands* section.
- To check values configured for DSCP templates, use the **show sgsn-mode** command documented in the *Exec Mode Commands* section.

Example

Use a command similar to the following to set expedited forward per-hop behavior for the downlink control packets:

```
control-packet qos-dscp ef
```

Use the following command to reset the default best effort per-hop behavior:

```
default control-packet
```