

PCC-QoS-Profile Configuration Mode Commands

Command Modes

The PCC-QoS-Profile Configuration Mode is used to define the QoS logic used by the operator for managing the QoS policy requirements and objectives for the network specific to a group of subscribers in the network. A QoS Profile represents a resource requirement identified by means of the corresponding QoS attributes like QCI, MBR, GBR, ARP etc.

Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC QoS Profile Configuration

configure > context context_name > pcc-service service_name > qos-profile profile_name

Entering the above command sequence results in the following prompt:

[context name]host name(config-pcc-qos-profile)#



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.

- arp-priority, on page 1
- guaranteed-bitrate, on page 3
- max-bitrate, on page 4
- qci, on page 5

arp-priority

This command is used to define the Allocation and Retention Priority (ARP) values of the QoS profile in PCC-QoS-Profile which is to use in Subscriber profile in PCC-Service instance on IPCF node.

Product

IPCF

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC QoS Profile Configuration

configure > context context_name > pcc-service service_name > qos-profile profile_name

Entering the above command sequence results in the following prompt:

```
[context name]host name(config-pcc-qos-profile)#
```

Syntax Description

```
[no] arp-priority arp_priority pre-emption {capable | not-capable}
{not-vulnerable | vulnerable}
```

no

Removes the configured ARP priority set for PCC-QoS-Profile for PCC-Service instance on IPCF node.

arp_priority

Specifies the priority value for ARP in a PCC-QoS-Profile which is to use in Subscriber profile in PCC-Service instance on IPCF node.

arp_priority must be an integer from 1 through 15.

pre-emption {capable | not-capable}

Sets the Pre-emption capability related parameters with ARP priority in PCC-QoS-Profile name which is to use in Subscriber profile in PCC-Service instance on IPCF node.

Pre-emption capability determines whether a bearer with a lower ARP priority level should be dropped to free up the required resources.

capable: This keyword indicates that the service data flow is allowed to get resources that were already assigned to another service data flow with a lower priority level.

non-capable: This keyword indicates that the service data flow is not allowed to get resources that were already assigned to another service data flow with a lower priority level.

{not-vulnerable | vulnerable}

Sets the Pre-emption vulnerability related parameters with ARP priority in PCC-QoS-Profile name which is to use in Subscriber profile in PCC-Service instance on IPCF node.

Pre-emption vulnerability determines whether a bearer is applicable for dropping by a pre-emption capable bearer with a higher ARP priority value.

not-vulnerable: This keyword indicates that the resources assigned to the service data flow shall not be pre-empted and allocated to a service data flow with a higher priority level.

vulnerable: This keyword indicates that the resources assigned to the service data flow can be pre-empted and allocated to a service data flow with a higher priority level.

Usage Guidelines

Use this command to define the ARP priority and pre-empt parameters in PCC-QoS-Profile which is to be used in Subscriber profile in PCC-Service instance on IPCF node.

ARP controls how the IPCF reacts when there are insufficient resources to establish the new RAB. Typically it manages it by; 1) Deny the RAB request and 2) Preempt an existing RAB and accept the new RAB request.

Example

Following command sets the ARP Priority 2 with preemption capability and vulnerability in PCC-QoS-Profile instance on IPCF node.

arp-priority 2 pre-emption capable vulnerable

guaranteed-bitrate

This command defines the Guaranteed Bit Rate (GBR) value in bits per second for downlink and uplink traffic in PCC-QoS-Profile which is to use for Subscriber profile in PCC-Service instance on IPCF node.

Product

IPCF

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC QoS Profile Configuration

configure > **context** context_name > **pcc-service** service_name > **qos-profile** profile_name

Entering the above command sequence results in the following prompt:

[context name]host name(config-pcc-qos-profile)#

Syntax Description

[no] quaranteed-bitrate downlink downlink gbr uplink uplink gbr

no

Removes the configured GBR value set for PCC-QoS-Profile for PCC-Service instance on IPCF node.

downlink downlink_gbr

Sets the Guaranteed Bit Rate allowed in downlink direction (from PCEF to UE) in bits per second for a PCC-QoS-Profile which is to use for Subscriber profile in PCC-Service instance on IPCF node.

downlink_gbr must be an integer from 0 through 104857600. A 'zero' value disables the downlink in specified PCC-QoS-Profile.

uplink *uplink_gbr*

Sets the Guaranteed Bit Rate allowed in uplink direction (from PCEF to PDN) in bits per second for a PCC-QoS-Profile which is to use for Subscriber profile in PCC-Service instance on IPCF node.

uplink_gbr must be an integer from 0 through 104857600. A 'zero' value disables the uplink in specified PCC-QoS-Profile.

Usage Guidelines

Use this command to define the Guaranteed Bit Rate value in bits per second for downlink and uplink traffic in PCC-QoS-Profile which is to use for Subscriber profile in PCC-Service instance on IPCF node.

Example

Following command sets the 1024 bits per seconds as uplink GBR and 2048 bits per second as downlink GBR in PCC-QoS-Profile instance on IPCF node.

guaranteed-bitrate downlink 2048 uplink 1024

max-bitrate

This command defines the Maximum Bit Rate (MBR) value in bits per second for downlink and uplink traffic in PCC-QoS-Profile which is to use for Subscriber profile in PCC-Service instance on IPCF node.

Product

IPCF

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC QoS Profile Configuration

configure > **context** context_name > **pcc-service** service_name > **qos-profile** profile_name

Entering the above command sequence results in the following prompt:

[context name]host name(config-pcc-qos-profile)#

Syntax Description

[no] max-bitrate downlink downlink_mbr uplink uplink_mbr

no

Removes the configured Maximum Bit Rate value set for PCC-QoS-Profile for PCC-Service instance on IPCF node.

downlink downlink_mbr

Sets the Maximum Bit Rate allowed in downlink direction (from PCEF to UE) in bits per second for a PCC-QoS-Profile which is to use for Subscriber profile in PCC-Service instance on IPCF node.

downlink_mbr must be an integer from 0 through 104857600. A 'zero' value disables the downlink in specified PCC-QoS-Profile.

uplink uplink_mbr

Sets the Maximum Bit Rate allowed in uplink direction (from PCEF to PDN) in bits per second for a PCC-QoS-Profile which is to use for Subscriber profile in PCC-Service instance on IPCF node.

uplink_mbr must be an integer from 0 through 104857600. A 'zero' value disables the uplink in specified PCC-QoS-Profile.

Usage Guidelines

Use this command to define the Maximum Bit Rate value in bits per second for downlink and uplink traffic in PCC-QoS-Profile which is to use for Subscriber profile in PCC-Service instance on IPCF node.

Example

Following command sets the 1024 bits per seconds as uplink MBR and 2048 bits per second as downlink MBR in PCC-QoS-Profile instance on IPCF node.

max-bitrate downlink 2048 uplink 1024

qci

This command sets the QoS Class Identifier (QCI) for PCC-QoS-Profile which is to use for Subscriber profile in PCC-Service instance on IPCF node.

Product

IPCF

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC QoS Profile Configuration

configure > context context_name > pcc-service service_name > qos-profile profile_name

Entering the above command sequence results in the following prompt:

[context name]host name(config-pcc-qos-profile)#

Syntax Description

[no] qci qci_id

no

Removes the configured QCI value set for PCC-QoS-Profile for PCC-Service instance on IPCF node.

qci *qci_id*

Sets the QoS Class Identifier for a PCC-QoS-Profile which is to use for Subscriber profile in PCC-Service instance on IPCF node.

qci_id must be an integer from 1 through 255.

Usage Guidelines

Use this command to set the QoS Class Identifier for PCC-QoS-Profile which is to use for Subscriber profile in PCC-Service instance on IPCF node.

Example

Following command sets the QCI 101 for PCC-QoS-Profile instance on IPCF node.

qci 101

qci