

# **PCC-QoS-Profile Configuration Mode Commands**



#### **Important**

This configuration mode is supported from StarOS Release 12.1 onward.

#### **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 qbr uplink uplink qbr

#### 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**\_name > **pcc-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