



# 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.

<b>Product</b>	IPCF
<b>Privilege</b>	Security Administrator, Administrator
<b>Command Modes</b>	Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC QoS Profile Configuration  <b>configure &gt; context</b> <i>context_name</i> > <b>pcc-service</b> <i>service_name</i> > <b>qos-profile</b> <i>profile_name</i>  Entering the above command sequence results in the following prompt: <pre>[context_name]host_name(config-pcc-qos-profile)#</pre>
<b>Syntax Description</b>	<pre>[no] <b>arp-priority</b> <i>arp_priority</i> <b>pre-emption</b> {<b>capable</b>   <b>not-capable</b>}  {<b>not-vulnerable</b>   <b>vulnerable</b>}</pre> <p><b>no</b></p> <p>Removes the configured ARP priority set for PCC-QoS-Profile for PCC-Service instance on IPCF node.</p> <p><b>arp_priority</b></p> <p>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.</p> <p><i>arp_priority</i> must be an integer from 1 through 15.</p> <p><b>pre-emption {capable   not-capable}</b></p> <p>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.</p> <p>Pre-emption capability determines whether a bearer with a lower ARP priority level should be dropped to free up the required resources.</p> <p><b>capable:</b> 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.</p> <p><b>non-capable:</b> 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.</p> <p><b>{not-vulnerable   vulnerable}</b></p> <p>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.</p> <p>Pre-emption vulnerability determines whether a bearer is applicable for dropping by a pre-emption capable bearer with a higher ARP priority value.</p> <p><b>not-vulnerable:</b> 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.</p> <p><b>vulnerable:</b> 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.</p>
<b>Usage Guidelines</b>	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.

<b>Product</b>	IPCF
<b>Privilege</b>	Security Administrator, Administrator
<b>Command Modes</b>	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)#
```

<b>Syntax Description</b>	[no] <b>guaranteed-bitrate</b> <b>downlink</b> <i>downlink_gbr</i> <b>uplink</b> <i>uplink_gbr</i>
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**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.

<b>Usage Guidelines</b>	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.
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**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.

<b>Product</b>	IPCF
<b>Privilege</b>	Security Administrator, Administrator
<b>Command Modes</b>	Exec > Global Configuration > Context Configuration > PCC Service Configuration > PCC QoS Profile Configuration  <b>configure</b> > <b>context</b> <i>context_name</i> > <b>pcc-service</b> <i>service_name</i> > <b>qos-profile</b> <i>profile_name</i>  Entering the above command sequence results in the following prompt:  [ <i>context_name</i> ] <i>host_name</i> (config-pcc-qos-profile)#
<b>Syntax Description</b>	[ <b>no</b> ] <b>max-bitrate</b> <b>downlink</b> <i>downlink_mbr</i> <b>uplink</b> <i>uplink_mbr</i>  <b>no</b>  Removes the configured Maximum Bit Rate value set for PCC-QoS-Profile for PCC-Service instance on IPCF node.  <b>downlink</b> <i>downlink_mbr</i>  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.  <i>downlink_mbr</i> must be an integer from 0 through 104857600. A 'zero' value disables the downlink in specified PCC-QoS-Profile.  <b>uplink</b> <i>uplink_mbr</i>  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.  <i>uplink_mbr</i> must be an integer from 0 through 104857600. A 'zero' value disables the uplink in specified PCC-QoS-Profile.
<b>Usage Guidelines</b>	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.

<b>Product</b>	IPCF
<b>Privilege</b>	Security Administrator, Administrator
<b>Command Modes</b>	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) #
```

<b>Syntax Description</b>	[no] <b>qci</b> <i>qci_id</i>
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**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.

<b>Usage Guidelines</b>	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.
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**Example**

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

```
qci 101
```

qci