

P-GW Buffering Mechanism

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Feature Summary and Revision History

Summary Data

Applicable Product(s) or Functional Area	P-GW
Applicable Platform(s)	• ASR 5500 • VPC - DI • VPC - SI
Feature Default	Enabled - Configuration Required
Related Changes in This Release	Not Applicable
Related Documentation	• *Command Line Interface Reference* • *P-GW Administration Guide*

Revision History

Revision Details	Release
In this release, P-GW supports Buffering Mechanism feature.	21.23
First introduced.	21.14

Feature Description

The P-GW can buffer a maximum of two policy (PCRF) messages when the Default-Bearer-QoS change is in pending state. With Presence Reporting Area (PRA) related call flows, two or more messages can be received when the Update Bearer Response (UBResp) is in pending state.

The P-GW Buffering Mechanism feature enables the P-GW to gracefully handle the RAR or CCA-U received from the PCRF when P-GW waits for the UBResp. Once the UBResp is received, the pending messages are fetched from the P-GW Buffer Queue for further processing.

How It Works

Under Active Charging Service (ACS) mode, a CLI command - **pending-buffer-size**, is added to increase the buffer size. The PCRF messages are buffered until the P-GW receives a UBResp message while the Default-Bearer-QoS change is in pending state.

Configuring the P-GW Buffering Mechanism Feature

Use the following configuration to increase the buffer size for storing PCRF messages when the Default-Bearer-QoS change status is in pending.

```
configure
  active-charging service service_name
    policy control def-bearer-qos-change pending-buffer-size buffer_size
    end
```

NOTES:

- **def-bearer-qos-change**: Sets the Default-Bearer-QoS change parameters.
- **pending-buffer-size** *buffer_size*: Specifies the buffer size for storing the PCRF messages when Default-Bearer-QoS change is pending. The buffer_size is an integer ranging from 2 through 4.

  The minimum configured value is 2 and maximum is 4.
- The **no policy control def-bearer-qos-change** configures the command with its default setting. Default = 2.
- The default value suffices for most use-cases. However, higher values must be configured based on the use-case basis and by considering the memory usage.
- The CLI command takes effect for new calls.