

Troubleshoot Update PDP Context Reject due to Service Not Supported, Cause-Code 200

Contents

[Introduction](#)

[Problem](#)

[Symptoms](#)

[Problem Details and Solutions](#)

[Related Information](#)

Introduction

This document describes some of the reasons why the Gateway General Packet Radio Service (GPRS) Support Node (GGSN) rejects Update Packet Data Protocol (PDP) Context Request messages with the cause of Service Not Supported.

Problem

Update PDP Context Request is rejected by GGSN if the negotiated Bearer Control Mode (BCM) is set to Mixed (User Equipment (UE)+Network (NW)) and if the UE attempts to upgrade certain QoS values with no existing Traffic Flow Template (TFT) packet filters.

Symptoms

1. GGSN rejection of Update PDP Context Request messages with the Cause Code 200 Service Not Supported.
2. The Syslog message printed when such a problem is encountered by the GGSN:

```
[sessmgr 12861 error] [3/0/7812 <sessmgr:168> smgr_fsm_func.c:9995] [callid 31d6dc65] [software internal system syslog] UPC Rejected for ctxt with nsapi <5>, due to <NCQOS: QOS change in UE initiated UPC for a Mixed mode BCM general purpose ctxt.>
```

Problem Details and Solutions

From StarOS release 18, a new condition is added to ensure the existing PDP context has a TFT with the packet filters set-by-Mobile Station (MS) present before GGSN allows MS to modify the QoS of the existing context. See [CSCut09653](#) for details.

This condition is added in compliance with 3GPP 23.060 Section 9.2 which states:

The MS shall not modify the QoS of a PDP context until this PDP context is associated with a TFT containing packet filters set by the MS. If the TFT also contains packet filters set by the P GW/GGSN, the MS is only allowed to modify the bit rate parameters in the QoS profile of that PDP Context.

With this GGSN change, for the Update PDP Context Request to be successful, one of these actions can be taken:

1. If BCM is set to Mixed, TFT must be sent in UE initiated Update PDP Context (UPC) for a general-purpose PDP context.
2. If TFT cannot be sent by UE, avoid negotiating the BCM to Mixed and use BCM of UE-Only. Since BCM is negotiated between UE, SGSN, GGSN, and PCRF, BCM can be set to UE-Only by any of these network elements so that the negotiated BCM value becomes UE-Only.
3. Upgrade StarOS to the latest release containing the behavioral change of [CSCvc21496](#) and update the StarOS configuration in order to allow QoS changes. With the extra configuration, StarOS now allows the QoS downgrades when there is no existing TFT present that is set-by-MS. Although this behavior is against the specs, it can be enabled the configuration under the GGSN service.

```
config
context PGW
ggsn-service GGSN_SVC
gtpc support-access-side traffic-class downgrade
end
```

Related Information

- See [Release Change Reference, StarOS Release 19](#) section 'MS to Change QoS Parameters' for details on this behavior change and the configuration options.
- [Technical Support & Documentation - Cisco Systems](#)