



UPF Usage Monitoring over PCF

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Feature Summary and Revision History

Summary Data

Table 1: Summary Data

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|--|---|
| Applicable Product(s) or Functional Area | 5G-UPF |
| Applicable Platform(s) | VPC-SI SMI |
| Feature Default Setting | Enabled - Always-on |
| Related Changes in This Release: | Not Applicable |
| Related Documentation | <ul style="list-style-type: none">• <i>UCC 5G SMF Configuration and Administration Guide</i>• <i>UCC 5G UPF Configuration and Administration Guide</i> |

Revision History

| Revision Details | Release |
|-------------------|-----------|
| First introduced. | 2022.01.0 |

Feature Description

UPF supports usage monitoring control over the existing N4 interface to report usage thresholds that are provided from PCF over the N7 interface through SMF for both 4G and 5G sessions. UPF reports the usage threshold breach to SMF through Session Report Request and SMF sends the data to PCF. UPF supports the modification of usage monitoring parameters, such as Total Volume, Uplink Volume, or Downlink Volume thresholds and the disabling of usage monitoring based on non-reception of usage monitoring threshold or related triggers from PCF.

Usage Reporting

UPF measures the volume and the time usage of all traffic for the PDU session or the corresponding service data flows. UPF sends the accumulated usage report in either the PFCP Session Report Request or the PFCP Session Modification Response to SMF. SMF includes one or multiple accumulated usage reports in the "accuUsageReports" attribute towards PCF.



Note The *Usage Monitoring over PCF* feature is enabled from SMF.

NOTE: To know more about how SMF handles this functionality, refer to the *Usage Monitoring over PCF* section in the *Policy and User Plane Management* chapter of *UCC 5G SMF Configuration and Administration Guide*.