

# Oracle® Communications

## Cloud Native Core, Converged Policy REST Specification Guide



Release 25.2.201  
G45969-01  
April 2026

ORACLE®

Copyright © 2019, 2026, Oracle and/or its affiliates.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software, software documentation, data (as defined in the Federal Acquisition Regulation), or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software," "commercial computer software documentation," or "limited rights data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle®, Java, MySQL, and NetSuite are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Inside are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Epyc, and the AMD logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

# Contents

## 1 Introduction

---

|     |                       |   |
|-----|-----------------------|---|
| 1.1 | Overview              | 1 |
| 1.2 | References            | 2 |
| 1.3 | OpenAPI Specification | 2 |

## 2 Policy REST Specifications

---

|      |                                           |     |
|------|-------------------------------------------|-----|
| 2.1  | PCF Traffic Profile ADC Rule              | 1   |
| 2.2  | PCF Predefined ADC Rule                   | 6   |
| 2.3  | PCF Predefined ADC Rule Base              | 8   |
| 2.4  | Mated Region                              | 10  |
| 2.5  | Site Fallback                             | 12  |
| 2.6  | Timer Service                             | 15  |
| 2.7  | Bulwark Congestion Migration              | 17  |
| 2.8  | Diameter Gateway Congestion Migration     | 22  |
| 2.9  | Congestion Control                        | 26  |
| 2.10 | Congestion Control Load Shedding Profiles | 42  |
| 2.11 | NRF Agent                                 | 57  |
| 2.12 | Error Configurations                      | 59  |
| 2.13 | Diameter Error Codes                      | 60  |
| 2.14 | Session Viewer                            | 63  |
| 2.15 | Policy General Settings                   | 67  |
| 2.16 | Subscriber Logging                        | 71  |
| 2.17 | Recreate Attempts Profile                 | 73  |
| 2.18 | Retry Profile                             | 82  |
| 2.19 | Timer Profile                             | 96  |
| 2.20 | Retry Profile for PCC                     | 102 |
| 2.21 | Retry Profile for ADC                     | 106 |
| 2.22 | Site Takeover                             | 110 |
| 2.23 | NF Profile                                | 111 |
| 2.24 | Session Management Service                | 120 |
| 2.25 | Session Rule                              | 145 |
| 2.26 | Session Rule Profile                      | 148 |
| 2.27 | QoS Information                           | 151 |

|      |                               |     |
|------|-------------------------------|-----|
| 2.28 | QoS Data                      | 155 |
| 2.29 | Traffic for PCC Rule          | 160 |
| 2.30 | Traffic for PCC Profile       | 167 |
| 2.31 | Traffic for Diameter QoS      | 173 |
| 2.32 | Traffic for ADC Rule          | 177 |
| 2.33 | Time Period                   | 181 |
| 2.34 | Predefined Pcc Rule Base      | 185 |
| 2.35 | Predefined Pcc Rule           | 187 |
| 2.36 | Predefined Adc Rule Base      | 190 |
| 2.37 | Predefined Adc Rule           | 192 |
| 2.38 | PCRF Presence Reporting Area  | 195 |
| 2.39 | Media Profile                 | 201 |
| 2.40 | Match List                    | 205 |
| 2.41 | Dropdown Blocks               | 207 |
| 2.42 | Custom Vendor                 | 209 |
| 2.43 | Custom Schema                 | 212 |
| 2.44 | Custom AVP                    | 213 |
| 2.45 | Charging Server               | 217 |
| 2.46 | PCRF Public Log               | 220 |
| 2.47 | User Service                  | 221 |
| 2.48 | Test Policy Projects          | 230 |
| 2.49 | Data Model                    | 231 |
| 2.50 | Policy Projects               | 233 |
| 2.51 | Policy Library                | 236 |
| 2.52 | Policy Data                   | 237 |
| 2.53 | URSP                          | 239 |
| 2.54 | UPSI                          | 243 |
| 2.55 | Traffic Control Data          | 246 |
| 2.56 | PCC Rule                      | 252 |
| 2.57 | PCC Rule Profile              | 260 |
| 2.58 | Condition Data                | 268 |
| 2.59 | Charging Data                 | 271 |
| 2.60 | Service Area Restriction      | 277 |
| 2.61 | PCF Presence Reporting Area   | 281 |
| 2.62 | Policy Table                  | 290 |
| 2.63 | Policy Counter Id             | 294 |
| 2.64 | Diameter Settings             | 297 |
| 2.65 | Diameter Routing Table        | 303 |
| 2.66 | Data Sources                  | 306 |
| 2.67 | Bulk Import Export Controller | 312 |
| 2.68 | Consistent Logging Level      | 314 |
| 2.69 | Load Shedding Profile         | 316 |

|        |                                     |     |
|--------|-------------------------------------|-----|
| 2.70   | Message Priority Profile            | 321 |
| 2.71   | Congestion Threshold                | 327 |
| 2.72   | Peer Node Sets                      | 331 |
| 2.73   | Peer Nodes                          | 332 |
| 2.74   | Access and Mobility Service         | 335 |
| 2.75   | Policy Authorization Service        | 347 |
| 2.76   | UE Policy                           | 353 |
| 2.77   | PCRF Core Service                   | 371 |
| 2.78   | Serving Gateway                     | 379 |
| 2.79   | Network for PGW                     | 382 |
| 2.80   | Network for GGSN                    | 385 |
| 2.81   | Audit Service                       | 388 |
| 2.82   | Binding Service                     | 391 |
| 2.83   | NF Communication Profiles           | 398 |
| 2.84   | PDS Settings                        | 409 |
| 2.85   | PDS Workflow                        | 418 |
| 2.86   | Policy Engine                       | 420 |
| 2.87   | NWDAF Agent                         | 421 |
| 2.88   | Notifier Service                    | 425 |
| 2.88.1 | Notifier Configurations             | 425 |
| 2.88.2 | SMS Gateway                         | 427 |
| 2.88.3 | SMSC HOST Info                      | 430 |
| 2.89   | Usage Monitoring                    | 432 |
| 2.89.1 | Usage Monitoring Service            | 432 |
| 2.89.2 | Attribute Forwarding Profile        | 449 |
| 2.89.3 | UM Data Limit Selection Profile     | 451 |
| 2.89.4 | UM Data Limit Profile               | 456 |
| 2.89.5 | Data Limit Sorting Profile          | 461 |
| 2.89.6 | Data Rollover Profile               | 463 |
| 2.90   | Acquire lock                        | 467 |
| 2.91   | Release Lock                        | 472 |
| 2.92   | Server Retry on already locked keys | 472 |
| 2.93   | Rx Reauth Profiles                  | 473 |
| 2.94   | Diameter Connector                  | 478 |
| 2.95   | PDS UE ID Configuration Settings    | 481 |
| 2.96   | Force Cleanup API                   | 486 |
| 2.97   | DNN                                 | 486 |
| 2.98   | SNSSAI                              | 487 |
| 2.99   | Service URN                         | 488 |
| 2.100  | Message Profile                     | 489 |
| 2.101  | Overload Configurations             | 493 |
| 2.102  | Yaml Schema API                     | 496 |

### 3 Common Services REST Specifications

---

|        |                                                                  |    |
|--------|------------------------------------------------------------------|----|
| 3.1    | OAuth Validator REST API Configuration                           | 1  |
| 3.2    | CCA Header Validation                                            | 4  |
| 3.3    | XFCC Header Validation                                           | 6  |
| 3.4    | Egress Gateway for SCP Health                                    | 8  |
| 3.5    | OC Policy Mapping                                                | 13 |
| 3.6    | Error Code Profiles                                              | 14 |
| 3.7    | OC Discard Policies                                              | 16 |
| 3.8    | Overload Level Threshold                                         | 18 |
| 3.8.1  | Overload Level Threshold Profiles                                | 21 |
| 3.9    | NF profile registration with NRF                                 | 29 |
| 3.10   | Server Header at Ingress Gateway                                 | 31 |
| 3.11   | Rate Limiting                                                    | 35 |
| 3.11.1 | Rate Limiting at Ingress Gateway                                 | 35 |
| 3.12   | Failure Count at Ingress Gateway                                 | 38 |
| 3.13   | Route Level Configuration                                        | 41 |
| 3.14   | Controlled Shutdown at Ingress and Diameter Gateway              | 42 |
| 3.15   | NF Scoring for a Site                                            | 49 |
| 3.16   | Configuration for User-Agent Header Generation at Egress Gateway | 53 |

### A Result Codes

---

# Preface

- [Documentation Accessibility](#)
- [Diversity and Inclusion](#)
- [Conventions](#)

## Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

### Access to Oracle Support

Oracle customer access to and use of Oracle support services will be pursuant to the terms and conditions specified in their Oracle order for the applicable services.

## Diversity and Inclusion

Oracle is fully committed to diversity and inclusion. Oracle respects and values having a diverse workforce that increases thought leadership and innovation. As part of our initiative to build a more inclusive culture that positively impacts our employees, customers, and partners, we are working to remove insensitive terms from our products and documentation. We are also mindful of the necessity to maintain compatibility with our customers' existing technologies and the need to ensure continuity of service as Oracle's offerings and industry standards evolve. Because of these technical constraints, our effort to remove insensitive terms is ongoing and will take time and external cooperation.

## Conventions

The following text conventions are used in this document:

| Convention      | Meaning                                                                                                                                |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------|
| <b>boldface</b> | Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.         |
| <i>italic</i>   | Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.                          |
| monospace       | Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter. |

# My Oracle Support

My Oracle Support (<https://support.oracle.com>) is your initial point of contact for all product support and training needs. A representative at Customer Access Support can assist you with My Oracle Support registration.

Call the Customer Access Support main number at 1-800-223-1711 (toll-free in the US), or call the Oracle Support hotline for your local country from the list at <http://www.oracle.com/us/support/contact/index.html>. When calling, make the selections in the sequence shown below on the Support telephone menu:

- For Technical issues such as creating a new Service Request (SR), select **1**.
- For Non-technical issues such as registration or assistance with My Oracle Support, select **2**.
- For Hardware, Networking and Solaris Operating System Support, select **3**.

You are connected to a live agent who can assist you with My Oracle Support registration and opening a support ticket.

My Oracle Support is available 24 hours a day, 7 days a week, 365 days a year.



# Acronyms

Below table provides information about the acronyms used in the document.

**Table    Acronyms**

| Acronym              | Definition                                                                                                                                                               |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AMF                  | Access and Mobility Management Function                                                                                                                                  |
| BSF                  | Oracle Communications Cloud Native core Binding Support Function                                                                                                         |
| CHF                  | Charging Function                                                                                                                                                        |
| CM                   | Configuration Management                                                                                                                                                 |
| CUSTOMER_REPO        | Docker registry address including the port number, if the docker registry has an associated port.                                                                        |
| IMAGE_TAG            | Image tag from release tar file. You can use any tag number. However, make sure that you use that specific tag number while pushing docker image to the docker registry. |
| MCC                  | Mobile Country code                                                                                                                                                      |
| METALLB_ADDRESS_POOL | Address pool which configured on metallb to provide external IPs .                                                                                                       |
| MNC                  | Mobile Network code                                                                                                                                                      |
| NRF                  | Network Repository Function                                                                                                                                              |
| PCF                  | Policy Control Function                                                                                                                                                  |
| REST API             | Representational State Transfer Application Program Interfaces (REST API)                                                                                                |
| CNPCRF               | Cloud Native Policy and Charging Rules Function                                                                                                                          |
| SAN                  | Subject Alternate Name                                                                                                                                                   |
| SMF                  | Session Management Function                                                                                                                                              |
| UDR                  | Unified Data Repository                                                                                                                                                  |

# What's New in This Guide

This section introduces the documentation updates for release 25.2.2xx.

## Release 25.2.201 - G45969-01, April 2026

- Added `amfResubscriptionCondition` parameter to [UE Policy](#), which is used to configure Policy Support for Dynamic AMF Subscription and N1N2 Message Routing on GUAMI Update.
- Updated the default value for `enableLateArrival` and `enableLateProcessing` parameters to true in the [Diameter Connector](#) section.
- Added the following parameters to [PDS Settings](#), which are used to configure audit registration and notification for Policy Data Subscription Expiry:
  - `audit.policyDataSubscriptionExpiry.policyDataSubsEnabled`
  - `audit.policyDataSubscriptionExpiry.policyDataSubsPreExpiryPeriod`
  - `audit.policyDataSubscriptionExpiry.policyDataSubsExpiryAuditNotificationRate`
  - `audit.policyDataSubscriptionExpiry.policyDataSubsExpiryMaxAge`
  - `audit.policyDataSubscriptionExpiry.policyDataSubsExpiryMinAuditPassInterval`
- Added the following APIs:
  - [DNN](#) describes how to create DNN profiles.
  - [Service URN](#) describes how to create Service URN.
  - [SNSSAI](#) describes how to create S-NSSAI profiles.
  - [Message Profile](#) describes how to create Message profiles.
  - [Overload Configurations](#) describes how to perform advanced overload control configurations.
  - [Yaml Schema API](#) describes how to create, import, and export Yaml schema.
  - [HTTP Server API](#) describes how to add and manage HTTP server.
- Updated [Session Management Service](#) with the following parameters for Overload configurations:
  - `overloadConfiguration.enhancedOverloadControlLevel`
  - `overloadConfiguration.overloadConfigurationProfile`
- Edited description of `overrideSupportedFeatures` parameter under System section in [Access and Mobility Service](#) to include support for `DNNReplacementControl` and `SliceSupport`.
- Edited description of `defaultTriggers` parameter under *Rules* section in [Access and Mobility Service](#) to include support for `ALLOWED_NSSAI_CH` and `SMF_SELECT_CH`.
- Updated description of the parameters in [Mated Region](#) and [Site Fallback](#).

# 1

## Introduction

This document provides information about how to configure the services and manageable objects in Oracle Communications Cloud Native Core Converged Policy using Representational State Transfer Application Program Interfaces (REST API).

### 1.1 Overview

The Policy solution provides a standard policy design experience and a consistent user experience. This solution supports both 4G and 5G networks. In addition, there is an overlap in PCF and PCRF functionalities, such as need for a policy engine, policy design, Rx, similarity between Sy and Nchf\_Spending LimitControl, and so on. Policy utilizes this overlap to build microservices that can be used for providing PCRF and PCF functionalities. Although, it is a unified policy solution, you can deploy PCF and PCRF independently.

Policy is a functional element for policy control decision and flow based charging control functionality. It provides the following functions:

- Policy rules for application and service data flow detection, gating, QoS, and flow based charging to the Session Management Function (SMF)
- Access and Mobility Management related policies to the Access and Mobility Management Function (AMF)
- UE Route Selection Policies (URSP) rules to User Equipment (UE) through AMF
- Access to subscription information relevant for policy decisions in a Unified Data Repository (UDR)
- Network control for service data flow detection, gating, and Quality of Service (QoS)
- Flow based charging towards the Policy and Charging Enforcement Function (PCEF)
- Receiving session and media related information from Application Function (AF) and informing AF of traffic plane events
- Provision of PCC Rules to PCEF through the Gx reference point

The CNC Policy supports the above functions through the following services:

- Session Management Service
- Access and Mobility Service
- Policy Authorization Service
- User Equipment (UE) Policy Service
- PCRF Core Service
- Binding Service
- Policy Data Source Service
- Usage Monitoring Service
- Notifier Service
- NWDAF Agent

**Note**

The performance and capacity of the Policy system may vary based on the Call model, Feature/Interface configuration, underlying CNE and hardware environment, including but not limited to the complexity of deployed policies, policy table size , object expression and custom json usage in policy design.

For more information about the Policy supported services, see *Oracle Communications Cloud Native Core, Converged Policy User's Guide*.

## 1.2 References

Refer the following documents for more information about Policy:

- *Oracle Communications Cloud Native Core, Converged Policy User's Guide*
- *Oracle Communications Cloud Native Core, Converged Policy Installation, Upgrade and Fault Recovery Guide*

## 1.3 OpenAPI Specification

Policy supports the OpenAPI version 1.0.0.

# 2

## Policy REST Specifications

This chapter provides information about REST specifications used in Oracle Communications Cloud Native Core, Converged Policy (Policy).

### Note

**action** is a query parameter that has been provided for each individual import api, which can either have **replace** or **ignore** value. If the **action** parameter is not provided, then the default value is **ignore**.

## 2.1 PCF Traffic Profile ADC Rule

Table 2-1 PCF traffic for adc rule APIs

| Description             | HTTP Method or Custom Operation | Resource URI                                                                                | Possible Result Code          |
|-------------------------|---------------------------------|---------------------------------------------------------------------------------------------|-------------------------------|
| Get Traffic ADC Rule    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/adctrfficrules/{trafficAdcRuleName} | See <a href="#">Table A-1</a> |
| Update Traffic Adc Rule | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/adctrfficrules/{trafficAdcRuleName} | See <a href="#">Table A-2</a> |
| Delete Traffic ADC Rule | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/adctrfficrules/{trafficAdcRuleName} | See <a href="#">Table A-4</a> |
| Create Traffic ADC Rule | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/adctrfficrules                      | See <a href="#">Table A-3</a> |

### Get and Update Operations

Table 2-2 TrafficAdcRule Request/Response Body Parameters

| Field Name | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                  |
|------------|-----------|-------------------------------------------|------------------------------|
| name       | string    | M                                         | Name of the Traffic Profile. |

Table 2-2 (Cont.) TrafficAdcRule Request/Response Body Parameters

| Field Name                                      | Data Type    | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                               |
|-------------------------------------------------|--------------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| description                                     | string       | O                                               | Description of the profile.                                                                                                                                                                                                                                               |
| param.diameter.adcRule.name                     | string       | O                                               | Uniquely identifies the ADC rule. Used to reference an ADC rule in communication between the CNC Policy and a PCEF within one IP-CAN session.                                                                                                                             |
| param.diameter.adcRule.maxAuthUL                | string       | O                                               | Maximum authorized bandwidth in bits per second for uplinks (user equipment to network). Provide a valid numerical value.                                                                                                                                                 |
| param.diameter.adcRule.maxAuthDL                | string       | O                                               | Maximum authorized bandwidth in bits per second for downlinks (network to user equipment). Provide a valid numerical value.                                                                                                                                               |
| param.diameter.adcRule.MonitoringKey            | string       | O                                               | Monitoring key that may apply to the ADC rule.                                                                                                                                                                                                                            |
| param.diameter.adcRule.FlowStatus               | string: Enum | O                                               | Indicates whether the application traffic is enabled or disabled in either the uplink or downlink direction.<br>Allowed values: <ul style="list-style-type: none"> <li>0: ENABLED_UPLINK</li> <li>1: ENABLED_DOWNLINK</li> <li>2: ENABLED</li> <li>3: DISABLED</li> </ul> |
| param.diameter.adcRule.tdfApplicationIdentifier | string       | O                                               | Identifies the traffic that belongs to the application to which the rule applies.                                                                                                                                                                                         |
| param.diameter.adcRule.tdfRedirectSupport       | string: Enum | O                                               | Indicates whether the application traffic should be redirected to another controlled address.<br>Allowed values: <ul style="list-style-type: none"> <li>0: REDIRECTION_DISABLED</li> <li>1: REDIRECTION_ENABLED</li> </ul>                                                |

Table 2-2 (Cont.) TrafficAdcRule Request/Response Body Parameters

| Field Name                                           | Data Type     | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                 |
|------------------------------------------------------|---------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| param.diameter.adcRule.<br>.tdfRedirectAddressType   | string : Enum | O                                               | Specifies the format for the redirect address.<br>Allowed values: <ul style="list-style-type: none"> <li>• 0: IPv4</li> <li>• 1: IPv6</li> <li>• 2: URL</li> <li>• 3: SIP_URI</li> </ul>                                    |
| param.diameter.adcRule.<br>.tdfRedirectServerAddress | string        | O                                               | The address of the TDF redirect server in the specified address type.                                                                                                                                                       |
| param.diameter.adcRule.<br>.tdfMuteNotification      | string : Enum | O                                               | Notification to disable application detection notifications from the TDF device.<br>By default, mute remains disabled. <ul style="list-style-type: none"> <li>• 0: Mute is Disabled.</li> <li>• 1: MUTE_REQUIRED</li> </ul> |
| param.diameter.adcRule.<br>.ServiceIdentifier        | string : Enum | O                                               | Credit-control service identifier associated with the traffic defined by this rule. Only applicable if online charging is enabled. Provide a valid numerical value.                                                         |
| param.diameter.adcRule.<br>.RatingGroup              | string : Enum | O                                               | Credit-control rating group associated with the traffic defined by this profile. Only applicable if online charging is enabled. Provide a valid numerical value.                                                            |
| param.diameter.adcRule.<br>.ReportingLevel           | string : Enum | O                                               | Allowed values: <ul style="list-style-type: none"> <li>• 0: SERVICE_IDENTIFIER_LEVEL</li> <li>• 1: RATING_GROUP_LEVEL</li> </ul>                                                                                            |
| param.diameter.adcRule.<br>.Online                   | string : Enum | O                                               | Specifies whether or not online charging is enabled in this profile.<br>Allowed values: <ul style="list-style-type: none"> <li>• 0: DISABLE_ONLINE</li> <li>• 1: ENABLE_ONLINE</li> </ul>                                   |

Table 2-2 (Cont.) TrafficAdcRule Request/Response Body Parameters

| Field Name                                 | Data Type     | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                           |
|--------------------------------------------|---------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| param.diameter.adcRule.<br>.Offline        | string : Enum | O                                               | Specifies whether or not offline charging is enabled in this profile. Allowed values: <ul style="list-style-type: none"> <li>0: DISABLE_OFFLINE</li> <li>1: ENABLE_OFFLINE</li> </ul>                                 |
| param.diameter.adcRule.<br>.MeteringMethod | string : Enum | O                                               | Defines how service data-flow traffic is metered for offline charging. Allowed values: <ul style="list-style-type: none"> <li>0: DURATION</li> <li>1: VOLUME</li> <li>2: DURATION_VOLUME</li> <li>3: EVENT</li> </ul> |
| param.diameter.adcRule.<br>.Precedence     | string        | O                                               | Precedence value of the profile. The lower the precedence, the higher the priority. Provide a valid numerical value.                                                                                                  |

A sample of the request or response body:

```
{
  "name": "string",
  "description": "string",
  "param.diameter.adcRule.name": "string",
  "param.diameter.adcRule.maxAuthUL": "4292566642",
  "param.diameter.adcRule.maxAuthDL": "4294206946",
  "param.diameter.adcRule.MonitoringKey": "string",
  "param.diameter.adcRule.FlowStatus": "0",
  "param.diameter.adcRule.tdfApplicationIdentifier": "string",
  "param.diameter.adcRule.tdfRedirectSupport": "0",
  "param.diameter.adcRule.tdfRedirectAddressType": "0",
  "param.diameter.adcRule.tdfRedirectServerAddress": "string",
  "param.diameter.adcRule.tdfMuteNotification": "0",
  "param.diameter.adcRule.ServiceIdentifier": "56562570273140140",
  "param.diameter.adcRule.RatingGroup":
  "834230701429507004586357990032488266149954030625803028841937860169",
  "param.diameter.adcRule.ReportingLevel": "0",
  "param.diameter.adcRule.Online": "0",
  "param.diameter.adcRule.Offline": "0",
  "param.diameter.adcRule.MeteringMethod": "0",
  "param.diameter.adcRule.Precedence":
```



```
"982282151896732255224072394658191119482788772631487340307602311123858135"
}
```

### Import or Export PCF traffic profile ADC rule APIs

**Table 2-3 Import or Export PCF traffic profile ADC rule APIs**

| API Name                | Request Type | Request Url                                                            | Possible Result Code          |
|-------------------------|--------------|------------------------------------------------------------------------|-------------------------------|
| Import Traffic Adc Rule | POST         | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/adcrules/import | See <a href="#">Table A-3</a> |
| Export Traffic Adc Rule | GET          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/adcrules/export | See <a href="#">Table A-1</a> |

**Table 2-4 Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory/Optional/Conditional | Description                                |
|---------------|-----------|--------------------------------|--------------------------------------------|
| topic         | String    | M                              |                                            |
| sourceVersion | String    | M                              | Build version                              |
| date          | String    | M                              | Date in pattern "yyyy-MM-dd'T'HH:mm:ss'Z'" |
| exportData    |           | M                              |                                            |
| errors        |           |                                |                                            |

A sample of the import or export request:

```
{
  "topic": "string",
  "sourceVersion": "string",
  "date": "string",
  "exportData": [
    {
      "name": "string",
      "description": "string",
      "param.diameter.adcRule.name": "string",
      "param.diameter.adcRule.maxAuthUL": "4264534498",
      "param.diameter.adcRule.maxAuthDL": "4293625992",
      "param.diameter.adcRule.MonitoringKey": "string",
      "param.diameter.adcRule.FlowStatus": "0",
      "param.diameter.adcRule.tdfApplicationIdentifier": "string",
      "param.diameter.adcRule.tdfRedirectSupport": "0",
      "param.diameter.adcRule.tdfRedirectAddressType": "0",
      "param.diameter.adcRule.tdfRedirectServerAddress": "string",
      "param.diameter.adcRule.tdfMuteNotification": "0",
      "param.diameter.adcRule.ServiceIdentifier": "27725208328769",
      "param.diameter.adcRule.RatingGroup": "50423799",
      "param.diameter.adcRule.ReportingLevel": "0",
      "param.diameter.adcRule.Online": "0",
    }
  ]
}
```

```

        "param.diameter.adcRule.Offline": "0",
        "param.diameter.adcRule.MeteringMethod": "0",
        "param.diameter.adcRule.Precedence":
"616801263210908668475153217630024988"
    }
  ],
  "errors": [
    {
      "name": "string",
      "message": "string"
    }
  ]
}

```

## 2.2 PCF Predefined ADC Rule

**Table 2-5 PCF Predefined ADC Rule APIs**

| Description                | HTTP Method or Custom Operation | Resource URI                                                                                       | Possible Result Code          |
|----------------------------|---------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------|
| Get Predefined Adc Rule    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/predefinedadcrules/{predefinedAdcRuleName} | See <a href="#">Table A-1</a> |
| Update Predefined Adc Rule | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/predefinedadcrules/{predefinedAdcRuleName} | See <a href="#">Table A-2</a> |
| Delete Predefined Adc Rule | DELETE                          | /oc-cnpolicy-configuration/v1/policydata/pcfsm/predefinedadcrules/{predefinedAdcRuleName}          | See <a href="#">Table A-4</a> |
| Create Predefined Adc Rule | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/predefinedadcrules                         | See <a href="#">Table A-3</a> |

### Get and Update Operations

**Table 2-6 Request/Response Body Parameters**

| Field Name                                | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description |
|-------------------------------------------|-----------|-----------------------------------------|-------------|
| diameter predefined ADC rule profile name | string    | O                                       |             |
| diameter predefined ADC rule name         | string    | O                                       |             |

**Table 2-6 (Cont.) Request/Response Body Parameters**

| Field Name                                             | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|--------------------------------------------------------|-----------|-------------------------------------------------|-------------|
| diameter predefined<br>ADC rule profile<br>description | string    | O                                               |             |

A sample of the request or response body:

```
{
  "diameter predefined ADC rule profile name": "string",
  "diameter predefined ADC rule name": "string",
  "diameter predefined ADC rule profile description": "string"
}
```

### Import or Export PCF predefined ADC rule APIs

**Table 2-7 Import or Export PCF predefined ADC rule APIs**

| API Name                   | Request Type | Request Url                                                                       | Possible Result Code          |
|----------------------------|--------------|-----------------------------------------------------------------------------------|-------------------------------|
| Import Predefined Adc Rule | POST         | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/predefinedadcrules/import | See <a href="#">Table A-3</a> |
| Export Predefined Adc Rule | GET          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/predefinedadcrules/export | See <a href="#">Table A-1</a> |

**Table 2-8 Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory/Optional/<br>Conditional | Description                                |
|---------------|-----------|------------------------------------|--------------------------------------------|
| topic         | String    | M                                  |                                            |
| sourceVersion | String    | M                                  | Build version                              |
| date          | String    | M                                  | Date in pattern "yyyy-MM-dd'T'HH:mm:ss'Z'" |
| exportData    |           | M                                  |                                            |
| errors        |           |                                    |                                            |

A sample of the import or export request:

```
{
  "topic": "string",
  "sourceVersion": "string",
  "date": "string",
}
```

```

"exportData": [
  {
    "diameter predefined ADC rule profile name": "string",
    "diameter predefined ADC rule name": "string",
    "diameter predefined ADC rule profile description": "string"
  }
],
"errors": [
  {
    "name": "string",
    "message": "string"
  }
]
}

```

## 2.3 PCF Predefined ADC Rule Base

**Table 2-9 PCF predefined adc rule base APIs**

| Description                     | HTTP Method or Custom Operation | Resource URI                                                                                               | Possible Result Code          |
|---------------------------------|---------------------------------|------------------------------------------------------------------------------------------------------------|-------------------------------|
| Get Predefined Adc Rule Base    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/predefinedadcrulebases/{predefinedAdcRuleBaseName} | See <a href="#">Table A-1</a> |
| Update Predefined Adc Rule Base | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/predefinedadcrulebases/{predefinedAdcRuleBaseName} | See <a href="#">Table A-2</a> |
| Delete Predefined Adc Rule Base | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/predefinedadcrulebases/{predefinedAdcRuleBaseName} | See <a href="#">Table A-4</a> |
| Create Predefined Adc Rule Base | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/predefinedadcrulebases                             | See <a href="#">Table A-3</a> |

## Get and Update Operations

Table 2-10 Request/Response Body Parameters

| Field Name                                       | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|--------------------------------------------------|-----------|-------------------------------------------------|-------------|
| name                                             | string    | O                                               |             |
| diameter predefined<br>ADC rule base name        | string    | O                                               |             |
| param.diameter.adcPred<br>efBaseRule.description | string    | O                                               |             |

A sample of the request or response body:

```
{
  "name": "string",
  "diameter predefined ADC rule base name": "string",
  "param.diameter.adcPredBaseRule.description": "string"
}
```

## Import or Export PCF predefined ADC rule APIs

Table 2-11 Import or Export PCF predefined ADC rule APIs

| API Name                           | Request Type | Request Url                                                                                           | Possible Result Code          |
|------------------------------------|--------------|-------------------------------------------------------------------------------------------------------|-------------------------------|
| Import Predefined Adc<br>Rule Base | POST         | {apiRoot}/oc-cnpolicy-<br>configuration/v1/<br>policydata/pcfsm/<br>predefinedadcrulebases/<br>import | See <a href="#">Table A-3</a> |
| Export Predefined Adc<br>Rule Base | GET          | {apiRoot}/oc-cnpolicy-<br>configuration/v1/<br>policydata/pcfsm/<br>predefinedadcrulebases/<br>export | See <a href="#">Table A-1</a> |

Table 2-12 Request/Response Body Parameters

| Field Name    | Data Type | Mandatory/Optional/<br>Conditional | Description                                   |
|---------------|-----------|------------------------------------|-----------------------------------------------|
| topic         | String    | M                                  |                                               |
| sourceVersion | String    | M                                  | Build version                                 |
| date          | String    | M                                  | Date in pattern "yyyy-<br>MM-dd'T'HH:mm:ss'Z" |
| exportData    |           | M                                  |                                               |
| errors        |           |                                    |                                               |

A sample of the import or export request:

```
{
  "topic": "string",
  "sourceVersion": "string",
  "date": "string",
  "exportData": [
    {
      "name": "string",
      "diameter predefined ADC rule base name": "string",
      "param.diameter.adcPredefBaseRule.description": "string"
    }
  ],
  "errors": [
    {
      "name": "string",
      "message": "string"
    }
  ]
}
```

## 2.4 Mated Region

**Table 2-13 Policy Mated Region APIs**

| API Name            | HTTP Method or Custom Operation | Resource URI                                                                 | Possible Result Code          |
|---------------------|---------------------------------|------------------------------------------------------------------------------|-------------------------------|
| Get Mated Region    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/general/matedRegion/{matedRegionName} | See <a href="#">Table A-1</a> |
| Update Mated Region | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/general/matedRegion/{matedRegionName} | See <a href="#">Table A-2</a> |
| Delete Mated Region | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/general/matedRegion/{matedRegionName} | See <a href="#">Table A-4</a> |
| Create Mated Region | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/general/matedRegion                   | See <a href="#">Table A-3</a> |

## Get and Update Operations

Table 2-14 Request/Response Body Parameters

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                         |
|------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name       | string    | M                                               | The unique name for the site. This name is used to refer to the site in Site Fallback configuration as explained in <a href="#">Site Fallback</a> .<br><br>The name can only contain the characters A–Z, a–z, 0–9, period (.), hyphen (-), and underline (_). The maximum length is 255 characters. |
| siteId     | string    | O                                               | The UUID of the site.                                                                                                                                                                                                                                                                               |

A sample of the request or response body:

```
{
  "name": "string",
  "siteId": "string"
}
```

## Import or Export Mated Region APIs

Table 2-15 Import or Export Mated Region APIs

| API Name            | Request Type | Request Url                                                       | Possible Result Code          |
|---------------------|--------------|-------------------------------------------------------------------|-------------------------------|
| Import Mated Region | POST         | {apiRoot}/oc-cnpolicy-configuration/v1/general/matedRegion/import | See <a href="#">Table A-3</a> |
| Export Mated Region | GET          | {apiRoot}/oc-cnpolicy-configuration/v1/general/matedRegion/export | See <a href="#">Table A-1</a> |

Table 2-16 Request/Response Body Parameters

| Field Name    | Data Type | Mandatory/Optional/<br>Conditional | Description                                |
|---------------|-----------|------------------------------------|--------------------------------------------|
| topic         | String    | M                                  |                                            |
| sourceVersion | String    | M                                  | Build version                              |
| date          | String    | M                                  | Date in pattern "yyyy-MM-dd'T'HH:mm:ss'Z'" |
| exportData    |           | M                                  |                                            |
| errors        |           |                                    |                                            |

A sample of the import or export request:

```
{
  "topic": "string",
  "sourceVersion": "string",
  "date": "string",
  "exportData": [
    {
      "name": "string",
      "siteId": "string"
    }
  ],
  "errors": [
    {
      "name": "string",
      "message": "string"
    }
  ]
}
```

## 2.5 Site Fallback

**Table 2-17 Policy Site Fallback APIs**

| API Name             | HTTP Method or Custom Operation | Resource URI                                                                   | Possible Result Code          |
|----------------------|---------------------------------|--------------------------------------------------------------------------------|-------------------------------|
| Get Site Fallback    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/general/siteFallback/{siteFallbackName} | See <a href="#">Table A-1</a> |
| Update Site Fallback | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/general/siteFallback/{siteFallbackName} | See <a href="#">Table A-2</a> |
| Delete Site Fallback | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/general/siteFallback/{siteFallbackName} | See <a href="#">Table A-4</a> |
| Create Site Fallback | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/general/siteFallback                    | See <a href="#">Table A-3</a> |



## Get and Update Operations

Table 2-18 Request/Response Body Parameters

| Field Name   | Data Type    | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                               |
|--------------|--------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name         | string       | O                                               | Name of the site for which the fallback sites must be configured. The fallback site can be selected from the drop-down list of sites that are created on <b>Policy Mated Region</b> page.<br><br>The name can only contain the characters A–Z, a–z, 0–9, period (.), hyphen (-), and underline (_). The maximum length is 255 characters. |
| fallbackList | FallbackList | O                                               | Click Add to configure <b>Fallback List</b> , this opens the <b>Add Site Fallback List</b> pop-up window. In the <b>Add Site Fallback List</b> window configure the following fields:                                                                                                                                                     |

Table 2-19 FallbackList

| Field Name       | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                        |
|------------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| fallbackSiteName | string    | O                                               | The drop down list of fallback site names. This list is populated from <b>Policy Mated Region</b> Configurations. Select the sites that must be considered for fallback. Timer adoption for Audit service is considered based on the configured fallback priority. |
| preferenceOrder  | integer   | O                                               | The preference order of the selected sites.<br><br>Site with highest priority is considered for timer adoption. If the site with higher priority is unavailable, site with next priority takes over the timer adoption.                                            |

A sample of the request or response body:

```
{
  "name": "string",
  "fallbackList": [
    {
      "fallbackSiteName": "string",
      "preferenceOrder": 0
    }
  ]
}
```

## Import or Export Site Fallback APIs

**Table 2-20 Import or Export Site Fallback APIs**

| API Name             | Request Type | Request Url                                                        | Possible Result Code          |
|----------------------|--------------|--------------------------------------------------------------------|-------------------------------|
| Import Site Fallback | POST         | {apiRoot}/oc-cnpolicy-configuration/v1/general/siteFallback/import | See <a href="#">Table A-3</a> |
| Export Site Fallback | GET          | {apiRoot}/oc-cnpolicy-configuration/v1/general/siteFallback/export | See <a href="#">Table A-1</a> |

**Table 2-21 Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory/Optional/Conditional | Description                               |
|---------------|-----------|--------------------------------|-------------------------------------------|
| topic         | String    | M                              |                                           |
| sourceVersion | String    | M                              | Build version                             |
| date          | String    | M                              | Date in pattern "yyyy-MM-dd'T'HH:mm:ss'Z" |
| exportData    |           | M                              |                                           |
| errors        |           |                                |                                           |

A sample of the import or export request:

```
{
  "topic": "string",
  "sourceVersion": "string",
  "date": "string",
  "exportData": [
    {
      "name": "string",
      "fallbackList": [
        {
          "fallbackSiteName": "string",
          "preferenceOrder": 0
        }
      ]
    }
  ]
}
```

```

    ],
    "errors": [
      {
        "name": "string",
        "message": "string"
      }
    ]
  }
}

```

## 2.6 Timer Service

**Table 2-22 Policy Timer Service APIs**

| API Name                                   | HTTP Method or Custom Operation | Resource URI                                                 | Possible Result Code          |
|--------------------------------------------|---------------------------------|--------------------------------------------------------------|-------------------------------|
| Get Individual Timer Service Configuration | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/timerService | See <a href="#">Table A-1</a> |
| Update Timer Service Configuration.        | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/timerService | See <a href="#">Table A-2</a> |

### Get and Update Operations

**Table 2-23 Request/Response Body Parameters**

| Field Name       | Data Type        | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                               |
|------------------|------------------|-------------------------------------------|-----------------------------------------------------------|
| timerEnabled     | boolean          | O                                         | Enable or Disable the timer service.                      |
| advancedSettings | AdvancedSettings | O                                         | To add additional advanced settings keys to the settings. |

**Table 2-24 AdvancedSettings**

| Field Name | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                     |
|------------|-----------|-------------------------------------------|---------------------------------|
| key        | string    | O                                         | Specifies the key name.         |
| value      | string    | O                                         | Specifies the value of the key. |

Sample body request for Put operation for timer service:

```

{
  "timerEnabled": true,
  "advancedSettings": [
    {
      "key": "string",

```

```

    "value": "string"
  }
]
}

```

**Table 2-25 Import/Export Timer Service**

| API Name                           | Request Type | Request Url                                                         | Possible Result Code          |
|------------------------------------|--------------|---------------------------------------------------------------------|-------------------------------|
| Export Timer Service Configuration | GET          | {apiRoot}/oc-cnpolicy-configuration/v1/services/timerService/export | See <a href="#">Table A-1</a> |
| Import Timer Service Configuration | POST         | {apiRoot}/oc-cnpolicy-configuration/v1/services/timerService/import | See <a href="#">Table A-3</a> |

**Table 2-26 Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory/Optional/Conditional | Description                                |
|---------------|-----------|--------------------------------|--------------------------------------------|
| topic         | String    | M                              |                                            |
| sourceVersion | String    | M                              | Build version                              |
| date          | String    | M                              | Date in pattern "yyyy-MM-dd'T'HH:mm:ss'Z'" |
| exportData    |           | M                              |                                            |

**Sample Request Body structure for Import and Export operations:**

```

{
  "topic": "string",
  "sourceVersion": "string",
  "date": "string",
  "exportData": {
    "timerEnabled": true,
    "advancedSettings": [
      {
        "key": "string",
        "value": "string"
      }
    ]
  }
}

```

## 2.7 Bulwark Congestion Migration

### Bulwark Service Congestion Control Data Migration

**Table 2-27 Bulwark Congestion Migration APIs**

| API Description                                                                           | HTTP Method or Custom Operation | Resource URI                                                               | Description                                                                                                                                                                                                                           | Possible Result Code          |
|-------------------------------------------------------------------------------------------|---------------------------------|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Get Bulwark Congestion Migration Details                                                  | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/congestioncontrol/bulwark/migration | To get the status of data migration details when the systems is upgraded from the older version to current version.                                                                                                                   | See <a href="#">Table A-1</a> |
| Migrate bulwark congestion control previous version configuration data to current version | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/congestioncontrol/bulwark/migration | Migrate congestion control previous version configuration data to current version by taking some required inputs from the user and this migration is the one-time activity after version upgrade from old version to current version. | See <a href="#">Table A-3</a> |

**Table 2-28 Request/Response Congestion Migration Data**

| Field Name                | Data Type                     | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                                                                      |
|---------------------------|-------------------------------|-------------------------------------------|--------------------------------------------------------------------------------------------------|
| enabled                   | boolean                       | M                                         | This enables the congestion control feature after successful migration.                          |
| activeThresholdProfile    | string                        | M                                         | The name of the active threshold profile.                                                        |
| thresholdProfiles         | CongestionThresholdsProfile   | M                                         | This new thresholds profile will be created with this profile data.                              |
| activeLoadSheddingProfile | string                        | M                                         | The active load shedding rule.                                                                   |
| loadSheddingRules         | CongestionControlLoadShedding | M                                         | This load shedding profile will configure as default profile for congestion load shedding rules. |

**Table 2-29 Request/Response CongestionThresholdsProfile**

| Field Name      | Field Type              | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                 |
|-----------------|-------------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| name            | string                  | M                                               | A new thresholds profile will be created with this profile name to migrate the old version thresholds data. |
| value           | CongestionThresholdData | M                                               | This queue data will be applied for different congestion states to migrate the old version threshold data.  |
| isCustomProfile | boolean                 | M                                               | This CPU data will be applied for congestion states to migrate the old version thresholds data.             |

**Table 2-30 Request/Response CongestionControlLoadShedding**

| Field Name      | Field Type                  | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                    |
|-----------------|-----------------------------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name            | string                      | M                                               | The provided load shedding profile will become the default profile for congestion load shedding rules.<br><b>Value:</b> Provide previous version profile name. |
| value           | CongestionLoadSheddingState | M                                               | This Respective Discard Priority data will be applied for congestion states to migrate the old version thresholds data.                                        |
| isCustomProfile | boolean                     | M                                               | Is this custom profile.                                                                                                                                        |

**Table 2-31 Request/Response CongestionThresholdState**

| Field Name         | Field Type                   | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                          |
|--------------------|------------------------------|-------------------------------------------------|--------------------------------------------------------------------------------------|
| state              | string                       | M                                               | The congestion state: DANGER_OF_CONGESTION, CONGESTION_L1, CONGESTION_L2, CONGESTED. |
| resourceUsageLimit | CongestionResourceUsageLimit | M                                               | The congestion state resource values.                                                |

**Table 2-32 Request/Response CongestionResourceUsageLimit**

| Field Name | Field Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                  |
|------------|------------|-------------------------------------------------|----------------------------------------------------------------------------------------------|
| cpu        | integer    | M                                               | The congestion resource threshold limit for CPU. This value can be in the range of 1 - 100.  |
| queue      | integer    | M                                               | The congestion resource threshold limit for Queue. This value can be in the range of 1 - 40. |

**Table 2-33 Request/Response CongestionLoadSheddingState**

| Field Name                | Field Type                | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|---------------------------|---------------------------|-------------------------------------------------|-------------|
| state                     | string                    | M                                               |             |
| discardPriority           | integer                   | M                                               |             |
| discardPriorityPercentage | DiscardPriorityPercentage | O                                               |             |

**Table 2-34 Request/Response DiscardPriorityPercentage**

| Field Name | Field Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|------------|------------|-------------------------------------------------|-------------|
| range      | string     | M                                               |             |
| percentage | integer    | M                                               |             |

Sample for GET Congestion migration details:

```
{
  "migrated": true,
  "attempts": 0,
  "cause": "string"
}
```

Sample for add (POST) migration details from previous version configuration data to current version:

```
{
  "enabled": true,
  "activeThresholdProfile": "string",
  "thresholdProfiles": [
    {
      "name": "profileName",
      "value": [
```

```

        {
          "state": "CONGESTED",
          "resourceUsageLimit": {
            "cpu": 45,
            "queue": 40
          }
        }
      ],
      "isCustomProfile": true
    }
  ],
  "activeLoadSheddingProfile": "string",
  "loadSheddingRules": [
    {
      "name": "ruleName",
      "value": [
        {
          "state": "CONGESTED",
          "discardPriority": 5,
          "discardPriorityPercentage": [
            {
              "range": "1 or 11-13",
              "percentage": 23
            }
          ]
        }
      ]
    }
  ],
  "isCustomProfile": true
}
]
}

```



**Note**

When Policy 25.1.200 or any of the later versions is fresh installed or when Policy is upgraded from any of the previous versions to Policy 25.1.200 or later versions, after the Bulwark congestion migration is completed, the updated Congestion Control REST API does not accept the configuration of `activeThresholdProfile` parameter in the request body. This is inline with all services congestion control behaviour.

Sample REST API:

```
Method: PUT
URL: ../oc-cnpolicy-configuration/v1/congestionConfigurations/bulwark
Header:
  Content-Type: application/json
  Accept: application/json
Body:
{
  "enable":true,
  "stateChangeSampleCount":5,
  "stateCalculationInterval":5000
}
```

When Policy is upgraded from any of the previous versions to 25.1.200 or later versions, before the Bulwark congestion migration completed, the updated Congestion Control REST API accepts the `activeThresholdProfile` parameter in the Request Body as this is old Bulwark congestion behaviour and is not inline with all services congestion control behaviour.

Sample REST API:

```
Method: PUT
URL: ../oc-cnpolicy-configuration/v1/congestionConfigurations/bulwark
Header:
  Content-Type: application/json
  Accept: application/json
Body:
{
  "activeThresholdProfile":"DEFAULT",
  "enable":true,
  "stateChangeSampleCount":5,
  "stateCalculationInterval":5000
}
```

## 2.8 Diameter Gateway Congestion Migration

**Table 2-35 Diameter Gateway Congestion Migration APIs**

| API Name                                                                          | HTTP Method or Custom Operation | Resource URI                                                                        | Description                                                                                                                                                                                                                           | Possible Result Code          |
|-----------------------------------------------------------------------------------|---------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Get Diameter-Gateway Congestion Migration Details                                 | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/congestioncontrol/diameter-gateway/migration | To get the status of data migration details when the systems is upgraded from the older version to current version.                                                                                                                   | See <a href="#">Table A-1</a> |
| Migrate congestion control previous version configuration data to current version | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/congestioncontrol/diameter-gateway/migration | Migrate congestion control previous version configuration data to current version by taking some required inputs from the user and this migration is the one-time activity after version upgrade from old version to current version. | See <a href="#">Table A-3</a> |

**Table 2-36 Request/Response Congestion Migration Data**

| Field Name                 | Data Type                  | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                         |
|----------------------------|----------------------------|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enable                     | boolean                    | M                                       | This enables the congestion control feature after successful migration.                                                                                                             |
| thresholdsProfileData      | ThresholdsProfileData      | M                                       | This new thresholds profile will be created with this profile data.                                                                                                                 |
| loadSheddingProfileData    | LoadSheddingProfileData    | M                                       | This load shedding profile will configure as default profile for congestion load shedding rules.                                                                                    |
| messagePriorityProfileData | MessagePriorityProfileData | M                                       | This message priority profile will configure as default profile for message priority profile, and this will be the common profile for both overload and congestion control feature. |

**Table 2-37 Request/Response ThresholdsProfileData**

| Field Name  | Field Type          | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                 |
|-------------|---------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| profileName | string              | M                                               | A new thresholds profile will be created with this profile name to migrate the old version thresholds data. |
| queueData   | CongestionStateData | M                                               | This queue data will be applied for different congestion states to migrate the old version threshold data.  |
| cpuData     | CongestionStateData | M                                               | This CPU data will be applied for congestion states to migrate the old version thresholds data.             |

**Table 2-38 Request/Response LoadSheddingProfileData**

| Field Name                        | Field Type                            | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                               |
|-----------------------------------|---------------------------------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| profileName                       | string                                | M                                               | The provided load shedding profile will become the default profile for congestion load shedding rules.<br><b>Value:</b> Provide previous version profile name.                                            |
| ruleDiscardPriorityData           | CongestionStateData                   | M                                               | This Respective Discard Priority data will be applied for congestion states to migrate the old version thresholds data.                                                                                   |
| loadSheddingResponseCodeData      | LoadSheddingResponseCodeData          | M                                               | This congestion response result code will configure as common response code for all congestion discards in advance settings configurations.                                                               |
| ruleDiscardPriorityPercentageData | CongestionStatePriorityPercentageData | M                                               | This is to decide the result code is the general result code or experimental result code, so if this value is greater than then the congestionResponseResultCode is consider as experimental result code. |

**Table 2-39 Request/Response CongestionStateData**

| Field Name                    | Field Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                          |
|-------------------------------|------------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| queueData.state               | string     | M                                               | Specify different congestion states. The allowed values are: <ul style="list-style-type: none"> <li>DANGER_OF_CONGESTION</li> <li>CONGESTION_L1</li> <li>CONGESTION_L1</li> <li>CONGESTED</li> </ul> |
| queueData.value               | integer    | M                                               | Provide a numerical value in the range of 1-2147483647.                                                                                                                                              |
| cpuData.state                 | string     | M                                               | Specify different congestion states. The allowed values are: <ul style="list-style-type: none"> <li>CONGESTION_L1</li> <li>CONGESTION_L1</li> </ul>                                                  |
| cpuData.value                 | integer    | M                                               | Provide a numerical value in the range of 1-100.                                                                                                                                                     |
| ruleDiscardPriorityData.state | string     | M                                               | Specify different congestion states. The allowed values are: <ul style="list-style-type: none"> <li>CONGESTION_L1</li> <li>CONGESTION_L1</li> </ul>                                                  |
| ruleDiscardPriorityData.value | integer    | M                                               | Provide a numerical value in the range of 1-31.                                                                                                                                                      |

**Table 2-40 Request/Response CongestionStatePriorityPercentageData**

| Field Name                    | Field Type                | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|-------------------------------|---------------------------|-------------------------------------------------|-------------|
| state                         | string                    | M                                               |             |
| discardPriorityPercentageData | DiscardPriorityPercentage | M                                               |             |

**Table 2-41 Request/Response DiscardPriorityPercentage**

| Field Name | Field Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|------------|------------|-------------------------------------------------|-------------|
| range      | string     | M                                               |             |
| percentage | integer    | M                                               |             |

**Table 2-42 Request/Response LoadSheddingResponseCodeData**

| Field Name                   | Field Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                            |
|------------------------------|------------|-------------------------------------------------|--------------------------------------------------------|
| congestionResponseResultCode | integer    | M                                               | Provide a numerical value in the range of 1001-5999.   |
| congestionResponseVendorId   | integer    | O                                               | Provide a numerical value in the range of 0-4294967295 |

**Table 2-43 Request/Response MessagePriorityProfileData**

| Field Name  | Field Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                |
|-------------|------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| profileName | string     | M                                               | This message priority profile will configure as default profile for message priority profile, and this will be the common profile for both overload and congestion control feature<br><b>Value:</b> Provide previous version profile name. |

Sample for GET Congestion migration details:

```
{
  "migrated": true,
  "attempts": 0,
  "cause": "string"
}
```

Sample for add (POST) migration details from previous version configuration data to current version:

```
{
  "enable": true,
  "thresholdsProfileData": {
    "profileName": "string",
    "queueData": [
      {
        "state": "string",
        "value": 0
      }
    ],
    "cpuData": [
      {
```

```

        "state": "string",
        "value": 0
    }
]
},
"loadSheddingProfileData": {
    "profileName": "string",
    "ruleDiscardPriorityData": [
        {
            "state": "string",
            "value": 0
        }
    ],
    "ruleDiscardPriorityPercentageData": [
        {
            "state": "string",
            "discardPriorityPercentagesData": [
                {
                    "range": "1 or 11-13",
                    "percentage": 23
                }
            ]
        }
    ],
    "loadSheddingResponseCodeData": {
        "congestionResponseResultCode": 0,
        "congestionResponseVendorId": 0
    }
},
"messagePriorityProfileData": {
    "profileName": "string"
}
}

```

## 2.9 Congestion Control

### Note

The default Congestion Control Threshold profile cannot be updated by the User.

The Pod Congestion Control PCF services, resource URI parameter {serviceName} values can be:

- bulwark
- binding
- usage-mon
- policy-ds
- pcf-sm
- pcrf-core
- pcf-ue

- oc-diam-gateway
- diam-connector
- udr-connector
- chf-connector
- pcf-am
- notifier

**Table 2-44 Congestion Control Configurations**

| API Description                           | HTTP Method or Custom Operation | Resource URI                                                                  | Description                                                           | Possible Result Code          |
|-------------------------------------------|---------------------------------|-------------------------------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------|
| Get congestion control configurations.    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/congestionConfigurations/{serviceName} | To get enable, stateChangeSampleCount and stateCalculationInterval    | See <a href="#">Table A-1</a> |
| Update congestion control configurations. | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/congestionConfigurations/{serviceName} | To update enable, stateChangeSampleCount and stateCalculationInterval | See <a href="#">Table A-2</a> |

**Get and Update Operations****Table 2-45 Request/Response Body Parameters**

| Field Name               | Data Type        | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                     |
|--------------------------|------------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| enable                   | boolean          | M                                       | Enable or Disable the Pod Congestion Control feature.                                                                           |
| stateChangeSampleCount   | integer          | M                                       | After how many continuous intervals, state can be changed. The count can range from 1 to 2147483647.<br><b>Default value:</b> 5 |
| stateCalculationInterval | integer          | M                                       | Number of interval in milliseconds, after which the pod congestion state will be re-verified.<br><b>Default value:</b> 200ms    |
| advancedSettings         | AdvancedSettings | O                                       | To add additional advanced settings keys to the settings.                                                                       |

**Table 2-46 AdvancedSettings**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                     |
|------------|-----------|-------------------------------------------------|---------------------------------|
| key        | string    | O                                               | Specifies the key name.         |
| value      | string    | O                                               | Specifies the value of the key. |

**Sample body request for PUT operation for Congestion Control Settings:**

```
{
  "stateChangeSampleCount": 5,
  "stateCalculationInterval": 200,
  "enable": true,
  "advancedSettings": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}
```

**Table 2-47 Congestion Control Threshold Profile**

| API Description                                    | HTTP Method or<br>Custom<br>Operation | Resource URI                                                                                   | Description                                                                                                                                     | Possible Result<br>Code       |
|----------------------------------------------------|---------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Update congestion control active threshold profile | PUT                                   | {apiRoot}/oc-cnpolicy-configuration/v1/congestionActiveThresholdProfile/{serviceName}/         | To update the active threshold profile.                                                                                                         | See <a href="#">Table A-2</a> |
| Get congestion control active threshold profile    | GET                                   | {apiRoot}/oc-cnpolicy-configuration/v1/congestionThresholdProfiles/{serviceName}               | To get the CPU and Queue threshold of DANGER_OF_CONGESTION, CONGESTION_L1, CONGESTION_L2 and CONGESTED states for all threshold profiles        | See <a href="#">Table A-1</a> |
| Update congestion control threshold profile.       | PUT                                   | {apiRoot}/oc-cnpolicy-configuration/v1/congestionThresholdProfiles/{serviceName}/{profileName} | To update the CPU and Queue threshold of DANGER_OF_CONGESTION, CONGESTION_L1, CONGESTION_L2 and CONGESTED states of specific threshold profile. | See <a href="#">Table A-2</a> |



Table 2-47 (Cont.) Congestion Control Threshold Profile

| API Description                              | HTTP Method or Custom Operation | Resource URI                                                                                   | Description                                                           | Possible Result Code          |
|----------------------------------------------|---------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------|
| Get Congestion Control Threshold Profiles    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/congestionThresholdProfiles/{serviceName}               | Get the configured threshold profile for the selected policy service. | See <a href="#">Table A-1</a> |
| Add congestion control threshold profile.    | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/congestionThresholdProfiles/{serviceName}/{profileName} | To add new congestion threshold profile with specified name           | See <a href="#">Table A-3</a> |
| Delete congestion control threshold profile. | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/congestionThresholdProfiles/{serviceName}/{profileName} | To delete new congestion threshold profile with specified name        | See <a href="#">Table A-4</a> |

## GET, PUT, and POST Operations

Table 2-48 Request/Response Body Parameters

| Field Name      | Data Type                | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                          |
|-----------------|--------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| name            | String                   | M                                       | This value should be same as the profileName in path variable.                                                                                       |
| value           | CongestionThresholdState | M                                       | Provide the congestion state.                                                                                                                        |
| isCustomProfile | Boolean                  | M                                       | Denotes that this profile is custom created.<br><b>Note:</b> Currently user can create custom profiles only. Hence this value should be set to true. |

Table 2-49 CongestionThresholdState

| Field Name         | Data Type                    | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                    |
|--------------------|------------------------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| state              | String                       | M                                               | The value can be following pod Congestion states: <ul style="list-style-type: none"> <li>• DANGER_OF_CONGESTION</li> <li>• CONGESTION_L1</li> <li>• CONGESTION_L2</li> <li>• CONGESTED</li> </ul> Bulwark service supports only two states DANGER_OF_CONGESTION and CONGESTED. |
| resourceUsageLimit | CongestionResourceUsageLimit | M                                               | The Threshold profiles resource usage limits for CPU & Queue.                                                                                                                                                                                                                  |

Table 2-50 CongestionResourceUsageLimit

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                            |
|------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| cpu        | integer   | M                                               | Specifies the Queue percentage for Bulwark and Queue (pending requests) for all other Policy services across all the congestion levels. For Bulwark the range is 1 to 100 and for other services the range is between 1 to 2147483647. |
| queue      | integer   | M                                               | Specifies the CPU percentage across all the congestion levels. The number can be between 1 to 100.                                                                                                                                     |

Sample body request for PUT and POST operations for Bulwark Service:

```
{
  "name": "profileName",
  "isCustomProfile": true,
  "value": [
    {
      "state": "DANGER_OF_CONGESTION",
      "resourceUsageLimit": {
        "cpu": 80,
```

```

        "queue": 75
      }
    },
    {
      "state": "CONGESTED",
      "resourceUsageLimit": {
        "cpu": 90,
        "queue": 85
      }
    }
  ]
}

```

**Sample body request for PUT and POST operations for Congestion Threshold Profiles:**

```

{
  "name": "profileName",
  "isCustomProfile": true,
  "value": [
    {
      "state": "DANGER_OF_CONGESTION",
      "resourceUsageLimit": {
        "cpu": 70,
        "queue": 30
      }
    },
    {
      "state": "CONGESTION_L1",
      "resourceUsageLimit": {
        "cpu": 75,
        "queue": 36
      }
    },
    {
      "state": "CONGESTION_L2",
      "resourceUsageLimit": {
        "cpu": 80,
        "queue": 42
      }
    },
    {
      "state": "CONGESTED",
      "resourceUsageLimit": {
        "cpu": 85,
        "queue": 48
      }
    }
  ]
}

```

**Table 2-51 Import/Export Congestion Control Settings**

| API Name                           | Request Url                                                                            | Request Type | Description                           |
|------------------------------------|----------------------------------------------------------------------------------------|--------------|---------------------------------------|
| Export Congestion Control Settings | {apiRoot}/oc-cnpolicy-configuration/v1/congestionConfigurations/export                 | GET          | To export congestion control settings |
| Import Congestion Control Settings | {apiRoot}/oc-cnpolicy-configuration/v1/congestionConfigurations/import?action={action} | POST         | To import congestion control settings |

**Table 2-52 Request/Response Body Parameters**

| Field Name    | Data Type                        | Mandatory/Optional/Conditional | Description                                                                                                                        |
|---------------|----------------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| topic         | String                           | M                              | It should be commonconfig.congestionControlSettings                                                                                |
| sourceVersion | String                           | M                              | Build version                                                                                                                      |
| date          | String                           | M                              | Date in pattern "yyyy-MM-dd'T'HH:mm:ss'Z"                                                                                          |
| exportData    | Congestion Control Settings Data | M                              | Array for Congestion Control Settings. This array contains JSON objects for each service that supports congestion control feature. |

```
{
  "topic": "commonconfig.congestionControlSettings",
  "sourceVersion": "24.3.0-beta.5",
  "date": "2024-08-29T07:15:09Z",
  "exportData": [
    {
      "serviceName": "binding",
      "stateChangeSampleCount": 5,
      "stateCalculationInterval": 200,
      "enable": false
    },
    {
      "serviceName": "diameter-gateway",
      "stateChangeSampleCount": 10,
      "stateCalculationInterval": 1000,
      "enable": true
    },
    {
      "serviceName": "pcf-sm",
      "stateChangeSampleCount": 2,
      "stateCalculationInterval": 5000,
      "enable": false
    }
  ],
}
```

```

    {
      "serviceName": "usage-mon",
      "stateChangeSampleCount": 5,
      "stateCalculationInterval": 200,
      "enable": false
    },
    {
      "serviceName": "pcrf-core",
      "stateChangeSampleCount": 5,
      "stateCalculationInterval": 200,
      "enable": true
    },
    {
      "serviceName": "policy-ds",
      "stateChangeSampleCount": 5,
      "stateCalculationInterval": 200,
      "enable": false
    },
    {
      "serviceName": "pcf-ue",
      "stateChangeSampleCount": 5,
      "stateCalculationInterval": 200,
      "enable": false
    },
    {
      "serviceName": "udr-connector",
      "stateChangeSampleCount": 2,
      "stateCalculationInterval": 5000,
      "enable": true
    },
    {
      "serviceName": "chf-connector",
      "stateChangeSampleCount": 2,
      "stateCalculationInterval": 5000,
      "enable": true
    },
    {
      "serviceName": "bulwark",
      "stateChangeSampleCount": 2,
      "stateCalculationInterval": 5000,
      "enable": true
    }
  ]
}

```

**Table 2-53 Import/Export Congestion Control Threshold Profiles**

| API Name                                     | Request Url                                                                | Request Type | Description                                     |
|----------------------------------------------|----------------------------------------------------------------------------|--------------|-------------------------------------------------|
| Export Congestion Control Threshold Profiles | {apiRoot}/oc-cnppolicy-configuration/v1/congestionThresholdProfiles/export | GET          | To export congestion control threshold profiles |

**Table 2-53 (Cont.) Import/Export Congestion Control Threshold Profiles**

| API Name                                     | Request Url                                                                               | Request Type | Description                                     |
|----------------------------------------------|-------------------------------------------------------------------------------------------|--------------|-------------------------------------------------|
| Import Congestion Control Threshold Profiles | {apiRoot}/oc-cnpolicy-configuration/v1/congestionThresholdProfiles/import?action={action} | POST         | To import congestion control threshold profiles |

**Table 2-54 Request/Response Body Parameters**

| Field Name    | Data Type                          | Mandatory/Optional/Conditional | Description                                                                                                                                 |
|---------------|------------------------------------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| topic         | String                             | M                              | It should be commonconfig.congestionThresholdProfiles                                                                                       |
| sourceVersion | String                             | M                              | Build version                                                                                                                               |
| date          | String                             | M                              | Date in pattern "yyyy-MM-dd'T'HH:mm:ss'Z"                                                                                                   |
| exportData    | Congestion Threshold Profiles Data | M                              | Array for Congestion Control Threshold Profiles. This array contains JSON objects of each service that supports congestion control feature. |

```
{
  "topic": "commonconfig.congestionThresholdProfiles",
  "sourceVersion": "24.3.0-beta.5",
  "date": "2024-08-29T07:17:37Z",
  "exportData": [
    {
      "congestionThresholdProfiles": [
        {
          "name": "DEFAULT",
          "value": [
            {
              "state": "DANGER_OF_CONGESTION",
              "resourceUsageLimit": {
                "cpu": 70,
                "queue": 120
              }
            },
            {
              "state": "CONGESTION_L1",
              "resourceUsageLimit": {
                "cpu": 75,
                "queue": 150
              }
            }
          ]
        }
      ]
    }
  ]
}
```

```

        "state": "CONGESTION_L2",
        "resourceUsageLimit": {
            "cpu": 80,
            "queue": 180
        }
    },
    {
        "state": "CONGESTED",
        "resourceUsageLimit": {
            "cpu": 85,
            "queue": 200
        }
    }
],
"isCustomProfile": false
}
],
"serviceName": "binding"
},
{
    "activeThresholdProfile": "DEFAULT",
    "congestionThresholdProfiles": [
        {
            "name": "DEFAULT",
            "value": [
                {
                    "state": "DANGER_OF_CONGESTION",
                    "resourceUsageLimit": {
                        "cpu": 60,
                        "queue": 20
                    }
                }
            ],
            {
                "state": "CONGESTION_L1",
                "resourceUsageLimit": {
                    "cpu": 70,
                    "queue": 30
                }
            },
            {
                "state": "CONGESTION_L2",
                "resourceUsageLimit": {
                    "cpu": 75,
                    "queue": 40
                }
            },
            {
                "state": "CONGESTED",
                "resourceUsageLimit": {
                    "cpu": 80,
                    "queue": 50
                }
            }
        ]
    },
    "isCustomProfile": false
}
}

```

```

    ],
    "serviceName": "diameter-gateway"
  },
  {
    "congestionThresholdProfiles": [
      {
        "name": "DEFAULT",
        "value": [
          {
            "state": "DANGER_OF_CONGESTION",
            "resourceUsageLimit": {
              "cpu": 77,
              "queue": 140
            }
          },
          {
            "state": "CONGESTION_L1",
            "resourceUsageLimit": {
              "cpu": 78,
              "queue": 160
            }
          },
          {
            "state": "CONGESTION_L2",
            "resourceUsageLimit": {
              "cpu": 79,
              "queue": 180
            }
          },
          {
            "state": "CONGESTED",
            "resourceUsageLimit": {
              "cpu": 80,
              "queue": 200
            }
          }
        ]
      },
      {
        "isCustomProfile": false
      }
    ],
    "serviceName": "pcf-sm"
  },
  {
    "congestionThresholdProfiles": [
      {
        "name": "DEFAULT",
        "value": [
          {
            "state": "DANGER_OF_CONGESTION",
            "resourceUsageLimit": {
              "cpu": 70,
              "queue": 80
            }
          },
          {
            "state": "CONGESTION_L1",

```



```

        "resourceUsageLimit": {
            "cpu": 75,
            "queue": 100
        }
    },
    {
        "state": "CONGESTION_L2",
        "resourceUsageLimit": {
            "cpu": 80,
            "queue": 120
        }
    },
    {
        "state": "CONGESTED",
        "resourceUsageLimit": {
            "cpu": 85,
            "queue": 140
        }
    }
],
"isCustomProfile": false
}
],
"serviceName": "usage-mon"
},
{
    "congestionThresholdProfiles": [
        {
            "name": "DEFAULT",
            "value": [
                {
                    "state": "DANGER_OF_CONGESTION",
                    "resourceUsageLimit": {
                        "cpu": 60,
                        "queue": 250
                    }
                }
            ],
            {
                "state": "CONGESTION_L1",
                "resourceUsageLimit": {
                    "cpu": 65,
                    "queue": 300
                }
            },
            {
                "state": "CONGESTION_L2",
                "resourceUsageLimit": {
                    "cpu": 75,
                    "queue": 350
                }
            },
            {
                "state": "CONGESTED",
                "resourceUsageLimit": {
                    "cpu": 85,
                    "queue": 400
                }
            }
        ]
    }
]

```

```

        }
      },
      "isCustomProfile": false
    },
    {
      "name": "p1",
      "value": [
        {
          "state": "DANGER_OF_CONGESTION",
          "resourceUsageLimit": {
            "cpu": 96,
            "queue": 50
          }
        },
        {
          "state": "CONGESTION_L1",
          "resourceUsageLimit": {
            "cpu": 97,
            "queue": 100
          }
        },
        {
          "state": "CONGESTION_L2",
          "resourceUsageLimit": {
            "cpu": 98,
            "queue": 150
          }
        },
        {
          "state": "CONGESTED",
          "resourceUsageLimit": {
            "cpu": 99,
            "queue": 200
          }
        }
      ],
      "isCustomProfile": true
    }
  ],
  "serviceName": "pcrf-core"
},
{
  "congestionThresholdProfiles": [
    {
      "name": "DEFAULT",
      "value": [
        {
          "state": "DANGER_OF_CONGESTION",
          "resourceUsageLimit": {
            "cpu": 65,
            "queue": 50
          }
        },
        {
          "state": "CONGESTION_L1",

```

```

        "resourceUsageLimit": {
            "cpu": 70,
            "queue": 100
        }
    },
    {
        "state": "CONGESTION_L2",
        "resourceUsageLimit": {
            "cpu": 75,
            "queue": 150
        }
    },
    {
        "state": "CONGESTED",
        "resourceUsageLimit": {
            "cpu": 80,
            "queue": 200
        }
    }
],
"isCustomProfile": false
}
],
"serviceName": "policy-ds"
},
{
    "congestionThresholdProfiles": [
        {
            "name": "DEFAULT",
            "value": [
                {
                    "state": "DANGER_OF_CONGESTION",
                    "resourceUsageLimit": {
                        "cpu": 77,
                        "queue": 140
                    }
                }
            ],
            {
                "state": "CONGESTION_L1",
                "resourceUsageLimit": {
                    "cpu": 78,
                    "queue": 160
                }
            },
            {
                "state": "CONGESTION_L2",
                "resourceUsageLimit": {
                    "cpu": 79,
                    "queue": 180
                }
            },
            {
                "state": "CONGESTED",
                "resourceUsageLimit": {
                    "cpu": 80,
                    "queue": 200
                }
            }
        ]
    }
}

```

```

        }
      },
      "isCustomProfile": false
    },
    {
      "serviceName": "pcf-ue"
    },
    {
      "congestionThresholdProfiles": [
        {
          "name": "DEFAULT",
          "value": [
            {
              "state": "DANGER_OF_CONGESTION",
              "resourceUsageLimit": {
                "cpu": 55,
                "queue": 60
              }
            },
            {
              "state": "CONGESTION_L1",
              "resourceUsageLimit": {
                "cpu": 65,
                "queue": 70
              }
            },
            {
              "state": "CONGESTION_L2",
              "resourceUsageLimit": {
                "cpu": 75,
                "queue": 80
              }
            },
            {
              "state": "CONGESTED",
              "resourceUsageLimit": {
                "cpu": 85,
                "queue": 90
              }
            }
          ]
        },
        {
          "name": "DEFAULT",
          "value": [
            {
              "state": "DANGER_OF_CONGESTION",
              "resourceUsageLimit": {
                "cpu": 55,

```

```

        "queue": 60
      }
    },
    {
      "state": "CONGESTION_L1",
      "resourceUsageLimit": {
        "cpu": 65,
        "queue": 70
      }
    },
    {
      "state": "CONGESTION_L2",
      "resourceUsageLimit": {
        "cpu": 75,
        "queue": 80
      }
    },
    {
      "state": "CONGESTED",
      "resourceUsageLimit": {
        "cpu": 85,
        "queue": 90
      }
    }
  ],
  "isCustomProfile": false
},
{
  "serviceName": "chf-connector"
},
{
  "congestionThresholdProfiles": [
    {
      "name": "DEFAULT",
      "value": [
        {
          "state": "DANGER_OF_CONGESTION",
          "resourceUsageLimit": {
            "cpu": 80,
            "queue": 75
          }
        },
        {
          "state": "CONGESTED",
          "resourceUsageLimit": {
            "cpu": 90,
            "queue": 85
          }
        }
      ],
      "isCustomProfile": false
    }
  ],
  "serviceName": "bulwark"
}

```

```
} ]
```

## 2.10 Congestion Control Load Shedding Profiles

### Congestion Control Load Shedding Rules APIs

#### Note

The default Congestion Control Load Shedding Rule cannot be updated by the User.

The Pod Congestion Control PCF services, resource URI parameter {serviceName} values can be:

- bulwark
- binding
- usage-mon
- policy-ds
- pcf-sm
- pcrf-core
- pcf-ue
- oc-diam-gateway
- diam-connector
- udr-connector
- chf-connector
- pcf-am
- notifier

**Table 2-55 Congestion Control Load Shedding Rules APIs**

| API Description                               | HTTP Method or Custom Operation | Resource URI                                                                               | Description                                                                                                                                                                                       | Possible Result Code          |
|-----------------------------------------------|---------------------------------|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Get Congestion Control Load Shedding Rules    | GET                             | /oc-cnpolicy-configuration/v1/congestionLoadSheddingRule/{serviceName}                     | Gets the load shedding rules for bulwark, binding, usage-mon, policy-ds, pcf-sm, pcrf-core, pcf-ue, oc-diam-gateway, diam-connector, udr-connector, chf-connector, pcf-am, and notifier services. | See <a href="#">Table A-1</a> |
| Update congestion control load shedding rule. | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/congestionLoadSheddingRule/{serviceName}/{ruleName} | To update the discard priority of DANGER_OF_CONGESTION, CONGESTION_L1, CONGESTION_L2 and CONGESTED states of specific threshold rule.                                                             | See <a href="#">Table A-2</a> |
| Add congestion control load shedding rule.    | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/congestionLoadSheddingRule/{serviceName}/{ruleName} | To add new congestion load shedding rule with specified name                                                                                                                                      | See <a href="#">Table A-3</a> |
| Delete congestion control load shedding rule. | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/congestionLoadSheddingRule/{serviceName}/{ruleName} | To delete congestion load shedding rule with specified name                                                                                                                                       | See <a href="#">Table A-4</a> |

**Table 2-56 Request/Response Body Parameters**

| Field Name | Data Type                   | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                 |
|------------|-----------------------------|-----------------------------------------|-------------------------------------------------------------|
| name       | String                      | M                                       | This value should be same as the ruleName in path variable. |
| value      | CongestionLoadSheddingState | M                                       | This value should be different congestion states.           |

Table 2-56 (Cont.) Request/Response Body Parameters

| Field Name      | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                           |
|-----------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| isCustomProfile | Boolean   | M                                               | Denotes that the rule is custom created by user.<br><b>Note:</b> Currently user can create custom rules only. Hence this value should be set to true. |

Table 2-57 CongestionLoadSheddingState

| Field Name                | Data Type                 | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                    |
|---------------------------|---------------------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| state                     | String                    | M                                               | The value can be following pod Congestion states: <ul style="list-style-type: none"> <li>• DANGER_OF_CONGESTION</li> <li>• CONGESTION_L1</li> <li>• CONGESTION_L2</li> <li>• CONGESTED</li> </ul> Bulwark service supports only two states DANGER_OF_CONGESTION and CONGESTED. |
| discardPriority           | integer                   | M                                               | The discard priority value for the requests. The minimum value is 0 and maximum value is 31.<br><b>Default Value:</b> 5                                                                                                                                                        |
| discardPriorityPercentage | DiscardPriorityPercentage | O                                               | The discard priority range or percentage for the requests.<br><b>Note:</b> This is applicable only to Diameter Gateway service.                                                                                                                                                |



Table 2-58 DiscardPriorityPercentage

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                         |
|------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| range      | string    | M                                               | The discard priority value or range for the requests.<br><br>The values allowed is a number such as 1 or a pattern like 11-13.<br><b>Note:</b> This is applicable only to Diameter Gateway service. |
| percentage | integer   | M                                               | The percentage of requests that needs to be discarded. The minimum value is 1 and maximum value is 100.<br><b>Example:</b> 23<br><b>Note:</b> This is applicable only to Diameter Gateway service.  |

**Sample body request for Put and Post operations for Priority Based Load Shedding for Bulwark Service:**

```
{
  "name": "ruleName",
  "value":
  [
    {
      "state": "CONGESTED",
      "discardPriority": 10
    },
    {
      "state": "DANGER_OF_CONGESTION",
      "discardPriority": 20
    }
  ],
  "isCustomProfile": true
}
```

**Sample body request for Put and Post operations for Priority Based Load Shedding for Other Policy Services :**

```
{
  "name": "ruleName",
  "value":
  [
    {
```

```

        "state": "CONGESTED",
        "discardPriority": 20
    },
    {
        "state": "CONGESTION_L2",
        "discardPriority": 24
    },
    {
        "state": "CONGESTION_L1",
        "discardPriority": 27
    },
    {
        "state": "DANGER_OF_CONGESTION",
        "discardPriority": 30
    }
],
"isCustomProfile": true
}

```

**Sample body request for Put and Post operations for Priority and Percentage based Load Shedding for Diameter Gateway Services:**

```

{
  "name": "ruleName",
  "value": [
    {
      "state": "CONGESTED",
      "discardPriorityPercentage": [
        {
          "range": 11
          "percentage": 20
        }
      ]
    },
    {
      "state": "CONGESTION_L2",
      "discardPriorityPercentage": [
        {
          "range": 1-3
          "percentage": 30
        },
        {
          "range": 5
          "percentage": 60
        }
      ]
    },
    {
      "state": "CONGESTION_L1",
      "discardPriorityPercentage": [
        {
          "range": 5-10
          "percentage": 60
        }
      ]
    }
  ]
}

```

```

    },
    {
      "range": 1-3
      "percentage": 30
    },
    {
      "range": 12
      "percentage": 70
    }
  ]
},
{
  "state": "DANGER_OF_CONGESTION",
  "discardPriorityPercentage": [
    {
      "range": 6
      "percentage": 70
    }
  ]
}
],
"isCustomProfile": true
}

```

## Congestion Control Load Shedding Profile APIs

**Table 2-59 Congestion Control Load Shedding Profiles**

| API Description                                 | HTTP Method or Custom Operation | Resource URI                                                                       | Description                                          | Possible Result Code          |
|-------------------------------------------------|---------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------|-------------------------------|
| Get Congestion Control Load Shedding Profiles   | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/congestionLoadSheddingProfile/{serviceName} | To get the name, type and active load shedding rule. | See <a href="#">Table A-1</a> |
| Update Congestion Control Load Shedding Profile | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/congestionLoadSheddingProfile/{serviceName} | To update name and loadSheddingRule Name             | See <a href="#">Table A-2</a> |

**Table 2-60 Request/Response Body Parameters**

| Field Name           | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                     |
|----------------------|-----------|-----------------------------------------|-------------------------------------------------|
| name                 | String    | M                                       | Name of the load shedding profile.              |
| loadSheddingRuleName | String    | M                                       | Name of profile name which we want to activate. |

Table 2-60 (Cont.) Request/Response Body Parameters

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                           |
|------------|-----------|-------------------------------------------------|---------------------------------------|
| type       | String    | M                                               | This value will be congestion always. |

Sample body request for Get operations for Load Shedding Profiles:

```
{
  "name": "loadSheddingProfile",
  "loadSheddingRuleName": "DEFAULT",
  "type": "congestion"
}
```

Sample body request for Put operations for Load Shedding Profiles:

```
{
  "name": "loadSheddingProfile",
  "loadSheddingRuleName": "loadSheddingRule",
  "type": "congestion"
}
```

### Import or Export Congestion Control Load Shedding Rules

Table 2-61 Import/Export Congestion Control Load Shedding Rules

| API Name                                      | Request Url                                                                              | Request Type | Description                                      |
|-----------------------------------------------|------------------------------------------------------------------------------------------|--------------|--------------------------------------------------|
| Export Congestion Control Load Shedding Rules | {apiRoot}/oc-cnpolicy-configuration/v1/congestionLoadSheddingRule/export                 | GET          | To export congestion control load shedding rules |
| Import Congestion Control Load Shedding rules | {apiRoot}/oc-cnpolicy-configuration/v1/congestionLoadSheddingRule/import?action={action} | POST         | To import congestion control load shedding rules |

Table 2-62 Request/Response Body Parameters

| Field Name    | Data Type | Mandatory/Optional/<br>Conditional | Description                               |
|---------------|-----------|------------------------------------|-------------------------------------------|
| topic         | String    | M                                  | commonconfig.congestionLoadSheddingRules  |
| sourceVersion | String    | M                                  | Build version                             |
| date          | String    | M                                  | Date in pattern "yyyy-MM-dd'T'HH:mm:ss'Z" |

Table 2-62 (Cont.) Request/Response Body Parameters

| Field Name | Data Type                     | Mandatory/Optional/Conditional | Description                                                                                                                        |
|------------|-------------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| exportData | Congestion Load Shedding Data | M                              | Array for Congestion Control Settings. This array contains JSON objects for each service that supports congestion control feature. |

```
{
  "topic": "commonconfig.congestionLoadSheddingRules",
  "sourceVersion": "25.1.100",
  "date": "2025-01-03T09:29:46Z",
  "exportData": [
    {
      "congestionLoadSheddingProfiles": [
        {
          "name": "loadSheddingProfile",
          "loadSheddingRuleName": "DEFAULT",
          "type": "congestion"
        }
      ],
      "congestionLoadSheddingRules": [
        {
          "name": "DEFAULT",
          "value": [
            {
              "state": "DANGER_OF_CONGESTION",
              "discardPriority": 27
            },
            {
              "state": "CONGESTION_L1",
              "discardPriority": 19
            },
            {
              "state": "CONGESTION_L2",
              "discardPriority": 17
            },
            {
              "state": "CONGESTED",
              "discardPriority": 15
            }
          ],
          "isCustomProfile": false
        }
      ],
      {
        "name": "DEFAULT_PRIORITY_AND_PERCENTAGE",
        "value": [
          {
            "state": "DANGER_OF_CONGESTION",
            "discardPriorityPercentage": [
```

```

        {
          "range": "27-31",
          "percentage": 50
        }
      ]
    },
    {
      "state": "CONGESTION_L1",
      "discardPriorityPercentage": [
        {
          "range": "19-26",
          "percentage": 50
        },
        {
          "range": "27-31",
          "percentage": 75
        }
      ]
    },
    {
      "state": "CONGESTION_L2",
      "discardPriorityPercentage": [
        {
          "range": "17-18",
          "percentage": 50
        },
        {
          "range": "19-26",
          "percentage": 75
        },
        {
          "range": "27-31",
          "percentage": 100
        }
      ]
    },
    {
      "state": "CONGESTED",
      "discardPriorityPercentage": [
        {
          "range": "15-31",
          "percentage": 100
        }
      ]
    }
  ],
  "isCustomProfile": false
},
{
  "serviceName": "oc-diam-gateway"
},
{
  "congestionLoadSheddingProfiles": [
    {
      "name": "loadSheddingProfile",
      "loadSheddingRuleName": "DEFAULT",

```

```

        "type": "congestion"
    }
],
"congestionLoadSheddingRules": [
    {
        "name": "DEFAULT",
        "value": [
            {
                "state": "DANGER_OF_CONGESTION",
                "discardPriority": 29
            },
            {
                "state": "CONGESTION_L1",
                "discardPriority": 23
            },
            {
                "state": "CONGESTION_L2",
                "discardPriority": 17
            },
            {
                "state": "CONGESTED",
                "discardPriority": 15
            }
        ],
        "isCustomProfile": false
    }
],
"serviceName": "udr-connector"
},
{
    "congestionLoadSheddingProfiles": [
        {
            "name": "loadSheddingProfile",
            "loadSheddingRuleName": "DEFAULT",
            "type": "congestion"
        }
    ],
    "congestionLoadSheddingRules": [
        {
            "name": "DEFAULT",
            "value": [
                {
                    "state": "DANGER_OF_CONGESTION",
                    "discardPriority": 28
                },
                {
                    "state": "CONGESTION_L1",
                    "discardPriority": 25
                },
                {
                    "state": "CONGESTION_L2",
                    "discardPriority": 20
                },
                {
                    "state": "CONGESTED",
                    "discardPriority": 17
                }
            ]
        }
    ]
}

```

```

        }
      ],
      "isCustomProfile": false
    }
  ],
  "serviceName": "diam-connector"
},
{
  "congestionLoadSheddingProfiles": [
    {
      "name": "loadSheddingProfile",
      "loadSheddingRuleName": "DEFAULT",
      "type": "congestion"
    }
  ],
  "congestionLoadSheddingRules": [
    {
      "name": "DEFAULT",
      "value": [
        {
          "state": "DANGER_OF_CONGESTION",
          "discardPriority": 30
        },
        {
          "state": "CONGESTION_L1",
          "discardPriority": 27
        },
        {
          "state": "CONGESTION_L2",
          "discardPriority": 24
        },
        {
          "state": "CONGESTED",
          "discardPriority": 20
        }
      ]
    }
  ],
  "isCustomProfile": false
}
],
"serviceName": "binding"
},
{
  "congestionLoadSheddingProfiles": [
    {
      "name": "loadSheddingProfile",
      "loadSheddingRuleName": "DEFAULT",
      "type": "congestion"
    }
  ],
  "congestionLoadSheddingRules": [
    {
      "name": "DEFAULT",
      "value": [
        {
          "state": "DANGER_OF_CONGESTION",
          "discardPriority": 27
        }
      ]
    }
  ]
}

```



```

        },
        {
            "state": "CONGESTION_L1",
            "discardPriority": 19
        },
        {
            "state": "CONGESTION_L2",
            "discardPriority": 17
        },
        {
            "state": "CONGESTED",
            "discardPriority": 15
        }
    ],
    "isCustomProfile": false
}
],
"serviceName": "pcf-sm"
},
{
    "congestionLoadSheddingProfiles": [
        {
            "name": "loadSheddingProfile",
            "loadSheddingRuleName": "DEFAULT",
            "type": "congestion"
        }
    ],
    "congestionLoadSheddingRules": [
        {
            "name": "DEFAULT",
            "value": [
                {
                    "state": "DANGER_OF_CONGESTION",
                    "discardPriority": 30
                },
                {
                    "state": "CONGESTION_L1",
                    "discardPriority": 27
                },
                {
                    "state": "CONGESTION_L2",
                    "discardPriority": 24
                },
                {
                    "state": "CONGESTED",
                    "discardPriority": 20
                }
            ],
            "isCustomProfile": false
        }
    ],
    "serviceName": "usage-mon"
},
{
    "congestionLoadSheddingProfiles": [
        {

```

```

        "name": "loadSheddingProfile",
        "loadSheddingRuleName": "DEFAULT",
        "type": "congestion"
    }
],
"congestionLoadSheddingRules": [
    {
        "name": "DEFAULT",
        "value": [
            {
                "state": "DANGER_OF_CONGESTION",
                "discardPriority": 29
            },
            {
                "state": "CONGESTION_L1",
                "discardPriority": 23
            },
            {
                "state": "CONGESTION_L2",
                "discardPriority": 17
            },
            {
                "state": "CONGESTED",
                "discardPriority": 15
            }
        ],
        "isCustomProfile": false
    }
],
"serviceName": "pcrf-core"
},
{
    "congestionLoadSheddingProfiles": [
        {
            "name": "loadSheddingProfile",
            "loadSheddingRuleName": "DEFAULT",
            "type": "congestion"
        }
    ],
    "congestionLoadSheddingRules": [
        {
            "name": "DEFAULT",
            "value": [
                {
                    "state": "DANGER_OF_CONGESTION",
                    "discardPriority": 28
                },
                {
                    "state": "CONGESTION_L1",
                    "discardPriority": 20
                },
                {
                    "state": "CONGESTION_L2",
                    "discardPriority": 17
                }
            ],
            {

```

```

        "state": "CONGESTED",
        "discardPriority": 15
      }
    ],
    "isCustomProfile": false
  }
],
"serviceName": "policy-ds"
},
{
  "congestionLoadSheddingProfiles": [
    {
      "name": "loadSheddingProfile",
      "loadSheddingRuleName": "DEFAULT",
      "type": "congestion"
    }
  ],
  "congestionLoadSheddingRules": [
    {
      "name": "DEFAULT",
      "value": [
        {
          "state": "DANGER_OF_CONGESTION",
          "discardPriority": 29
        },
        {
          "state": "CONGESTION_L1",
          "discardPriority": 23
        },
        {
          "state": "CONGESTION_L2",
          "discardPriority": 17
        },
        {
          "state": "CONGESTED",
          "discardPriority": 15
        }
      ],
      "isCustomProfile": false
    }
  ],
  "serviceName": "chf-connector"
},
{
  "congestionLoadSheddingProfiles": [
    {
      "name": "loadSheddingProfile",
      "loadSheddingRuleName": "DEFAULT",
      "type": "congestion"
    }
  ],
  "congestionLoadSheddingRules": [
    {
      "name": "DEFAULT",
      "value": [
        {

```

```

        "state": "DANGER_OF_CONGESTION",
        "discardPriority": 28
    },
    {
        "state": "CONGESTION_L1",
        "discardPriority": 25
    },
    {
        "state": "CONGESTION_L2",
        "discardPriority": 20
    },
    {
        "state": "CONGESTED",
        "discardPriority": 17
    }
],
"isCustomProfile": false
}
],
"serviceName": "pcf-ue"
},
{
    "congestionLoadSheddingProfiles": [
        {
            "name": "loadSheddingProfile",
            "loadSheddingRuleName": "DEFAULT",
            "type": "congestion"
        }
    ],
    "congestionLoadSheddingRules": [
        {
            "name": "DEFAULT",
            "value": [
                {
                    "state": "DANGER_OF_CONGESTION",
                    "discardPriority": 20
                },
                {
                    "state": "CONGESTED",
                    "discardPriority": 10
                }
            ],
            "isCustomProfile": false
        }
    ],
    "serviceName": "bulwark"
}
]
}

```

## 2.11 NRF Agent

**Table 2-63 Policy General Settings APIs Schema updated for supporting Sbi-correlation:**

| Description              | HTTP Method | Resource URI                                                    | Application Type | Response Status               |
|--------------------------|-------------|-----------------------------------------------------------------|------------------|-------------------------------|
| Get NRF Agent Service    | GET         | {apiRoot}/oc-cnpolicy-configuration/v1/services/nrfAgent        | application/json | See <a href="#">Table A-1</a> |
| Update NRF Agent Service | PUT         | {apiRoot}/oc-cnpolicy-configuration/v1/services/nrfAgent        | application/json | See <a href="#">Table A-2</a> |
| Import NRF agent service | POST        | {apiRoot}/oc-cnpolicy-configuration/v1/services/nrfAgent/export | application/json |                               |
| Export NRF agent service | GET         | {apiRoot}/oc-cnpolicy-configuration/v1/services/nrfAgent/import | application/json |                               |

**Table 2-64 Request/Response Body Parameters**

| Field Name                             | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                                                                                                                  |
|----------------------------------------|-----------|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| nrfAgentNfCommProfile                  | String    | O                                         | NRF Agent Communication Profile                                                                                                              |
| onDemandDiscoveryCaching.enableFeature | Boolean   | O                                         | Indicates NRF Client to cache the profile data and use it to process the future discovery on-demand requests.<br><b>Default value:</b> false |

Table 2-64 (Cont.) Request/Response Body Parameters

| Field Name                                       | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------------------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| onDemandDiscoveryCaching.queryParameters         | String    | O                                               | Accepts the list of parameters that NRF Client uses to fetch the profile data from cache.<br><br><b>Note:</b> The query parameters in the request from SM service, AM service, UE Policy service must match and must be in the same order as the data received from NRF. Otherwise, NRF Client can not process the request.<br><br>Supported values: <ul style="list-style-type: none"> <li>• target-nf-type</li> <li>• requester-nf-type</li> <li>• target-nf-set-id</li> <li>• service-names</li> <li>• amf-region-id</li> <li>• amf-set-id</li> <li>• GUAMI</li> </ul> |
| onDemandDiscoveryCaching.refreshBeforeExpiryTime | String    | O                                               | Indicates the time in milliseconds before expiration when a rediscovery must be performed for the requested discovery parameters.<br><br><b>Default value:</b> 4500                                                                                                                                                                                                                                                                                                                                                                                                       |
| onDemandDiscoveryCaching.limitCacheEntries       | String    | O                                               | Parameter to set the upper bound of cache registries allowed to be retained.<br><br><b>Default value:</b> 2000                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| onDemandDiscoveryCaching.retentionPeriod         | String    | O                                               | Indicates the time a record is allowed to stay in database after expiry and before any clean process is executed.<br><br><b>Default value:</b> 864000000<br><br><b>Note:</b> Retention Period value is ignored when force discovery is enabled                                                                                                                                                                                                                                                                                                                            |

**Table 2-64 (Cont.) Request/Response Body Parameters**

| Field Name                                        | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                         |
|---------------------------------------------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| onDemandDiscoveryCaching.auditorSchedulerInterval | String    | O                                               | Parameter to set time in milliseconds to activate the Discovery Cache auditor service to clean stale records.<br><b>Default value:</b> 1800000      |
| onDemandDiscoveryCaching.auditorPurgePercentage   | String    | O                                               | Parameter to set the percentage of the cached DiscoveryRequests that will be pruned once the threshold has been passed.<br><b>Default value:</b> 20 |

Sample Response/Request body structure for GET and PUT operations respectively:

```
{
  "nrfAgentNfCommProfile": "string"
  "onDemandDiscoveryCaching":
    {
      "enableFeature": false,
      "queryParameters": [],
      "refreshBeforeExpiryTime": 4500,
      "limitCacheEntries": 2000,
      "retentionPeriod": 864000000,
      "auditorSchedulerInterval": 1800000,
      "auditorPurgePercentage": 20
    }
}
```

## 2.12 Error Configurations

API support is available for EXPORT/IMPORT of error handler configurations.

**Table 2-65 Supported REST APIs**

| Description                | HTTP Method or Custom Operation | Resource URI                                                                           | Media Type       | Possible Result Code          |
|----------------------------|---------------------------------|----------------------------------------------------------------------------------------|------------------|-------------------------------|
| Export Error Configuration | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/errorHandler/errorConfiguration/export | application/json | See <a href="#">Table A-1</a> |

Table 2-65 (Cont.) Supported REST APIs

| Description                | HTTP Method or Custom Operation | Resource URI                                                                                           | Media Type       | Possible Result Code          |
|----------------------------|---------------------------------|--------------------------------------------------------------------------------------------------------|------------------|-------------------------------|
| Import Error Configuration | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/services/errorHandler/errorConfiguration/import?action=replace* | application/json | See <a href="#">Table A-3</a> |

This section describes the body parameters for Error Import or Export Configurations.

Table 2-66 Request/Response Body Parameters

| Field Name    | Data Type | Mandatory( M)/Optional(O)/Conditional( C) | Description                                           |
|---------------|-----------|-------------------------------------------|-------------------------------------------------------|
| topic         | string    | M                                         | Topic of each managed object                          |
| sourceVersion | string    | O                                         | System version of product from which data is exported |
| date          | string    | O                                         | Current Timestamp                                     |
| exportData    | array     | O                                         | Exported list of error rules configurations           |

## 2.13 Diameter Error Codes

Table 2-67 Supported REST APIs - Diameter Error Codes

| Description                 | HTTP Method or Custom Operation | Resource URI                                                      | Possible Result Code                                                                                    |
|-----------------------------|---------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Get Diameter Error Codes    | GET                             | /oc-cnpolicy-configuration/v1/diameter/diameterErrorCodes/{appId} | 200: OK<br>400: Bad request<br>404: Not Found<br>500: Internal Server Error<br>503: Service Unavailable |
| Update Diameter Error Codes | PUT                             | /oc-cnpolicy-configuration/v1/diameter/diameterErrorCodes/{appId} | 200: OK<br>400: Bad request<br>404: Not Found<br>500: Internal Server Error<br>503: Service Unavailable |



**Table 2-67 (Cont.) Supported REST APIs - Diameter Error Codes**

| Description                 | HTTP Method or Custom Operation | Resource URI                                                     | Possible Result Code                                                                                    |
|-----------------------------|---------------------------------|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Export Diameter Error Codes | GET                             | /oc-cnpolicy-configuration/v1/diameter/diameterErrorCodes/export | 200: OK<br>400: Bad request<br>404: Not Found<br>500: Internal Server Error<br>503: Service Unavailable |
| Import Diameter Error Codes | POST                            | /oc-cnpolicy-configuration/v1/diameter/diameterErrorCodes/import | 200: OK<br>400: Bad request<br>404: Not Found<br>500: Internal Server Error<br>503: Service Unavailable |

**Get and Update Diameter Error Codes****Table 2-68 Request/Response Body Parameters**

| Field Name                | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                                                                                                      |
|---------------------------|-----------|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| appld                     | string    | Mandatory                                 | Specifies the application ID.                                                                                                    |
| errorCodes                | array     | Mandatory                                 | Specifies the error parameters.                                                                                                  |
| conditionName             | string    | Mandatory                                 | Specifies the system defined name for a given condition.                                                                         |
| useExperimentalResultCode | boolean   | Optional                                  | Indicates whether to use the Result Code AVP (268) or Experimental Result AVP (297) when an error result is generated by Policy. |
| errorMessage              | string    | Optional                                  | Specifies the description for a defined condition. It is recommended to use descriptions that clearly explain the condition.     |
| diameterResultCode        | string    | Conditional                               | Specifies the Diameter result code for a defined condition.                                                                      |
| experimentalResultCode    | string    | Conditional                               | Specifies the custom Diameter result code for a defined condition.                                                               |

**Sample Request body for Diameter Error Codes PUT operation:**

```
{
  "appId": "Rx",
  "errorCodes": [
    {
      "conditionName": "IP CAN session not established",
      "useExperimentalResultCode": false,
      "errorMessage": "Enforcement session not found for current request",
```

```

        "diameterResultCode": "3012"
    }
  ]
}

```

### Sample Response body structure for Diameter Error Codes GET and PUT operation:

```

{
  "appId": "Rx",
  "errorCodes": [
    {
      "conditionName": "IP CAN session not established",
      "useExperimentalResultCode": false,
      "errorMessage": "Enforcement session not found for current request",
      "diameterResultCode": "3012"
    }
  ]
}

```

### Import and Export Diameter Error Codes

**Table 2-69 Request or Response Body Parameters**

| Field Name                 | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                   |
|----------------------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| topic                      | string    | Mandatory                                       | Topic of each managed object                                                                                                  |
| sourceVersion              | string    | Optional                                        | System version of product from which data is exported                                                                         |
| date                       | string    | Optional                                        | Current timestamp                                                                                                             |
| exportData                 | array     | Mandatory                                       | Exported list of Error Codes.                                                                                                 |
| appld                      | string    | Mandatory                                       | Specifies the application ID.                                                                                                 |
| errorCodes                 | string    | Mandatory                                       | Specifies the error parameters.                                                                                               |
| conditionName              | string    | Mandatory                                       | Specifies the error condition name                                                                                            |
| useExperimentalResult Code | Boolean   | Optional                                        | Indicates whether to use the Result Code AVP (268) or Experimental Result AVP (297) when an error result is generated by BSF. |
| errors.message             | string    | Optional                                        | Error message                                                                                                                 |
| diameterResultCode         | string    | Conditional                                     | Specifies the custom Diameter result code for a defined condition.                                                            |

**Sample Request Body structure for Diameter Error Codes Import and Export operations:**

```

{
  "topic": "diameter.errorcodes.test",
  "sourceVersion": "23.2.0-od-20230307",
  "date": "2023-03-10T17:44:08Z",
  "exportData": [
    {
      "appId": "Rx",
      "errorCodes": [
        {
          "conditionName": "IP CAN session not established",
          "useExperimentalResultCode": false,
          "errorMessage": "Enforcement session not found for current request",
          "diameterResultCode": "3012"
        }
      ]
    }
  ]
}

```

## 2.14 Session Viewer

**Table 2-70 Policy Session Viewer APIs**

| Description    | HTTP Method or Custom Operation | Resource URI                            | Possible Result Code          |
|----------------|---------------------------------|-----------------------------------------|-------------------------------|
| Get Session    | GET                             | {apiRoot}/oc-cnpolicy-query/v1/sessions | See <a href="#">Table A-1</a> |
| Delete Session | DELETE                          | {apiRoot}/oc-cnpolicy-query/v1/sessions | See <a href="#">Table A-4</a> |

## Get and Delete Session

Table 2-71 Request Parameters

| Field Name  | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| sessionType | string    | M                                               | Allowed Values:<br><ol style="list-style-type: none"><li>1. SM_Policy_Association</li><li>2. AM_Policy_Association</li><li>3. PA_Policy_Association</li><li>4. SM_TDF_Session</li><li>5. PCRF_Core_Session</li><li>6. Binding_Session</li><li>7. User_Data</li><li>8. UE_Policy_Association</li><li>9. Usage_Monitoring</li><li>10. All</li></ol> DELETE with "All" option is implemented to delete all subscriber/session for SM and PA session type only. |

Table 2-71 (Cont.) Request Parameters

| Field Name      | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| identifierType  | string    | M                                               | <p>Allowed Values:</p> <ul style="list-style-type: none"> <li>• SUPI</li> <li>• IMSI</li> <li>• MSISDN</li> <li>• POLICY_ASSOC_ID</li> <li>• DIAMETER_SESSION_ID</li> <li>• GPSI</li> <li>• PEI</li> </ul> <p>SM Service supports all the values from 1-6</p> <p>UE Service supports SUPI, GPSI, PEI, and POLICY_ASSOC_ID</p> <p>AM Service supports SUPI, GPSI, and POLICY_ASSOC_ID</p> <p>PA service only supports POLICY_ASSOC_ID</p> <p>PCRF-CORE supports (IMSI , MSISDN ,IPV4, IPV6, DIAMETER_SESSION_ID)</p> <p>USER-DATA supports SUPI and GPSI</p> <p>UE Service supports ( SUPI and POLICY_ASSOC_ID)</p> <p>Usage Monitoring supports SUPI and GPSI</p> <p>ALL supports SUPI and GPSI</p> |
| identifierValue | string    | M                                               | Indicates the value of the selected identifier type.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| sessionSubtype  | string    | O                                               | <p>Allowed Values:</p> <ul style="list-style-type: none"> <li>• ALL</li> <li>• GX</li> <li>• RX</li> <li>• SD</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| remote          | boolean   | O                                               | <p>Allowed Values:</p> <ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| getUserData     | boolean   | M                                               | <p>Allowed Values:</p> <ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

Sample Response body structure for GET operation:

"string"

### cURL Commands

The following are sample cURL commands for some of the services:

#### For UE Service

- **GET**

```
curl -X GET "http://<localhost>/oc-cnpolicy-query/v1/sessions?
identifierType=POLICY_ASSOC_ID&identifierValue=5bc04e63-b2b8-4084-
b8d5-577c8d05a0b2&sessionType=UE_Policy_Association" -H "accept: application/
json"
```

- **DELETE**

```
curl -X DELETE "http://<localhost>/oc-cnpolicy-query/v1/sessions?
identifierType=SUPI&identifierValue=imsi-100000000002&sessionType=UE_Policy_Ass
ociation" -H "accept: application/json"
```

#### For PA Service

- **GET**

```
curl -X GET "http://<localhost>/oc-cnpolicy-query/v1/sessions?
identifierType=POLICY_ASSOC_ID&identifierValue=5bc04e63-b2b8-4084-
b8d5-577c8d05a0b2&sessionType=PA_Policy_Association" -H "accept: application/
json"
```

- **DELETE**

```
curl -X DELETE "http://<localhost>/oc-cnpolicy-query/v1/sessions?
identifierType=POLICY_ASSOC_ID&identifierValue=73c3a7cd-afdb-4ce6-828b-
a0fd2bd401ae&sessionType=PA_Policy_Association" -H "accept: application/json"
```

#### For AM Service

- **GET**

```
curl -X GET "http://<localhost>/oc-cnpolicy-query/v1/sessions?
identifierType=supi&identifierValue=imsi-450081000000001&sessionType=AM_Policy
_Association" -H "accept: application/json"
```

- **DELETE**

```
curl -X DELETE "http://<localhost>/oc-cnpolicy-query/v1/sessions?
identifierType=SUPI&identifierValue=imsi-450081000000001&sessionType=AM_Policy
_Association" -H "accept: application/json"
```

#### For PCRF Core Service

- **GET**

```
curl -X 'GET' \ 'https://<localhost>/oc-cnpolicy-query/v1/sessions?
getUserData=true&identifierType=MSISDN&identifierValue=01151601062&sessionType
=PCRF_Core_Session' \ -H 'accept: application/json'
```

- **DELETE**

```
curl -X 'DELETE' \ 'https://<localhost>/oc-cnpolicy-query/v1/sessions?
getUserData=true&identifierType=MSISDN&identifierValue=01151601062&sessionType
=PCRF_Core_Session' \ -H 'accept: application/json'
```

## 2.15 Policy General Settings

**Table 2-72 Supported REST APIs**

| Description                          | HTTP Method or Custom Operation | Resource URI                                          | Possible Result Code          |
|--------------------------------------|---------------------------------|-------------------------------------------------------|-------------------------------|
| Get Individual General Configuration | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/general        | See <a href="#">Table A-1</a> |
| Update General Configuration         | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/general        | See <a href="#">Table A-2</a> |
| Export Global Configurations         | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/general/export | See <a href="#">Table A-1</a> |
| Import Global Configurations         | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/general/import | See <a href="#">Table A-3</a> |

### Get and Update Operations

**Table 2-73 Request/Response Body Parameters**

| Field Name          | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                                                                                                  |
|---------------------|-----------|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| apiGatewayHost      | String    | O                                         | Name for the API gateway host                                                                                                |
| apiGatewayPort      | Number    | O                                         | Port number of the API gateway                                                                                               |
| enableMetrics       | boolean   | O                                         | This determines if system metrics is enabled. This will take priority on global metrics config<br><b>Default Value:</b> TRUE |
| enableTLS           | boolean   | O                                         | This determines if TLS is enabled<br><b>Default Value:</b> TRUE                                                              |
| enableTracing       | boolean   | O                                         | This determines if tracing is enabled<br><b>Default Value:</b> TRUE                                                          |
| enableSubscriberLog | boolean   | O                                         | This determines if subscriber logging is enabled for a subscriber<br><b>Default Value:</b> FALSE                             |

Table 2-73 (Cont.) Request/Response Body Parameters

| Field Name           | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                |
|----------------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| perHost              | string    | O                                               | Valid url of PER host to receive the PER record. The format of the url is: http://per-host:per-port, where per-host specifies the PER host and per-port specifies the PER port. For example, http://localhost:8101/v1/echo |
| enablePER            | boolean   | O                                               | This determines whether to enable/disable Policy Event Record (PER) feature<br><b>Default Value:</b> false                                                                                                                 |
| enableSBICorrelation | boolean   | O                                               | This determines whether to enable/disable correlation-info header in PCF<br><b>Default Value:</b> false                                                                                                                    |
| enhancedLogging      | Array     | O                                               | Used to configure the enhanced logging for Policy. For details on the parameters under in section, see <a href="#">Table 2-74</a> .                                                                                        |
| truncateStackTrace   | Array     | O                                               | Used to configure the stack trace truncation feature. For details on the parameters under in section, see <a href="#">Table 2-75</a> .                                                                                     |

Table 2-74 Request/Response Parameters for Enhanced Logging

| Name                                      | Data Type | Mandatory (M)/<br>Optional (O) | Description                                                                                                                |
|-------------------------------------------|-----------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| enhancedLogging.enableEnhancedLogging     | Boolean   | O                              | Specifies whether to enable or disable enhanced logging for the Policy deployment.<br><b>Default value:</b> false          |
| enhancedLogging.enableLogUEIdentifierInfo | Boolean   | O                              | Specifies whether to enable or disable UE Identifier information for the Policy deployment.<br><b>Default value:</b> false |



**Table 2-75 Request/Response Parameters for TruncateStackTrace**

| Name                                        | Data Type | Mandatory (M)/<br>Optional (O) | Description                                                                                                                                                                                                       |
|---------------------------------------------|-----------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| truncateStackTrace.enableTruncateStackTrace | Boolean   | O                              | Specifies whether to enable or disable the Stack Trace Truncation feature.<br><br>When this field is enabled, the amount of lines configured on all stack traces are truncated.<br><br><b>Default value:</b> true |
| truncateStackTrace.stackTraceLines          | Integer   | O                              | This field is configured to limit the number of lines shown on the stack trace.<br><br><b>Default value:</b> 5<br><b>Range:</b> 0 to 65535                                                                        |

**Sample Request body structure for PUT operations:**

```
{
  "enableTracing": true,
  "enableMetrics": true,
  "apiGatewayHost": "string",
  "apiGatewayPort": 80,
  "enableTls": true,
  "enableSubscriberLog": false,
  "enablePER": false,
  "perHost": "string",
  "enableSBICorrelation": false,
  "enhancedLogging": {
    "enableTruncateStackTrace": true,
    "stackTraceLines": 0,
    "enableEnhancedLogging": true,
    "stateSessionDeletionLogLevel": "string",
    "enableLogUEIdentifierInfo": true,
    "enableLogUeInfoInSessionDeletion": true
  },
  "truncateStackTrace": {
    "stackTraceLines": 0,
    "enableTruncateStackTrace": true
  }
}
```

**Sample Response body structure for GET and PUT operations:**

```
{
  "enableTracing": true,
  "enableMetrics": true,
  "apiGatewayHost": "string",
```

```

"apiGatewayPort": 80,
"enableTls": true,
"enableSubscriberLog": false,
"enablePER": false,
"perHost": "string",
"enableSBICorrelation": false,
"enhancedLogging": {
  "enableTruncateStackTrace": true,
  "stackTraceLines": 0,
  "enableEnhancedLogging": true,
  "staleSessionDeletionLogLevel": "string",
  "enableLogUEIdentifierInfo": true,
  "enableLogUeInfoInSessionDeletion": true
},
"truncateStackTrace": {
  "stackTraceLines": 0,
  "enableTruncateStackTrace": true
}
}

```

## Export/Import Global Configurations

**Table 2-76 Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                             |
|---------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| date          | string    |                                                 | Current timestamp                                                                                       |
| exportData    | array     |                                                 | Exported list of diameter settings. For more information, see <a href="#">Get and Update Operations</a> |
| sourceVersion | string    |                                                 | System version of product from which data is exported                                                   |
| topic         | string    |                                                 | Topic of each managed object                                                                            |

## Sample Request Body structure for Import/Export operations:

```

{
  "topic": "string",
  "sourceVersion": "string",
  "date": "string",
  "exportData": {
    "enableTracing": true,
    "enableMetrics": true,
    "apiGatewayHost": "string",
    "apiGatewayPort": 80,
    "enableTls": true,
    "enableSubscriberLog": false,
    "enablePER": false,
    "perHost": "string",
    "enableSBICorrelation": false,
    "enhancedLogging": {

```

```

    "enableTruncateStackTrace": true,
    "stackTraceLines": 0,
    "enableEnhancedLogging": true,
    "staleSessionDeletionLogLevel": "string",
    "enableLogUEIdentifierInfo": true,
    "enableLogUEInfoInSessionDeletion": true
  },
  "truncateStackTrace": {
    "stackTraceLines": 0,
    "enableTruncateStackTrace": true
  }
}

```

## 2.16 Subscriber Logging

**Table 2-77 Supported REST APIs**

| Description               | HTTP Method or Custom Operation | Resource URI                                                                       | Possible Result Code          |
|---------------------------|---------------------------------|------------------------------------------------------------------------------------|-------------------------------|
| Create Subscriber Logging | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/subscriberActivityLogging                   | See <a href="#">Table A-3</a> |
| Export Subscriber Logs    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/subscriberActivityLogging/export            | See <a href="#">Table A-1</a> |
| Import Subscriber Logs    | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/subscriberActivityLogging/import            | See <a href="#">Table A-3</a> |
| Get Subscriber Logging    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/subscriberActivityLogging/{identifierValue} | See <a href="#">Table A-1</a> |
| Update Subscriber Logging | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/subscriberActivityLogging/{identifierValue} | See <a href="#">Table A-2</a> |
| Delete Subscriber Logging | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/subscriberActivityLogging/{identifierValue} | See <a href="#">Table A-4</a> |

### Get and Create Subscriber Logging

**Table 2-78 Request/Response Body Parameters**

| Field Name | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description |
|------------|-----------|-----------------------------------------|-------------|
| enable     | boolean   | M                                       |             |

Table 2-78 (Cont.) Request/Response Body Parameters

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|------------|-----------|-------------------------------------------------|-------------|
| type       | string    | M                                               |             |
| value      | string    | M                                               |             |

**Sample Request body structure for POST operation:**

```
{
  "enable": true,
  "type": "gpsi",
  "value": "string"
}
```

**Sample Response body structure for GET, POST, and PUT operations:**

```
[
  {
    "date": "string",
    "errors": [
      {
        "message": "string",
        "name": "string"
      }
    ],
    "exportData": [
      {
        "enable": true,
        "type": "gpsi",
        "value": "string"
      }
    ],
    "sourceVersion": "string",
    "topic": "string"
  }
]
```

**Delete Subscriber Logging**

Table 2-79 Request/Response Body Parameters

| Field Name      | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description           |
|-----------------|-----------|-------------------------------------------------|-----------------------|
| identifierValue | string    | M                                               | Subscriber Identifier |

## Export/Import Subscriber Logging

**Table 2-80 Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                     |
|---------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| date          | string    | O                                               | Current timestamp                                                                                               |
| exportData    | array     | M                                               | Exported list of subscriber logs. For more information, see <a href="#">Get and Create Subscriber Logging</a> . |
| sourceVersion | string    | O                                               | System version of product from which data is exported                                                           |
| topic         | string    | M                                               | Topic of each managed object                                                                                    |

**Sample Request Body structure for Import/Export operations:**

```
{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "enable": true,
      "type": "gpsi",
      "value": "string"
    }
  ],
  "sourceVersion": "string",
  "topic": "string"
}
```

## 2.17 Recreate Attempts Profile

This section describes the service URIs available to create and configure reattempt profiles for Policy.

**Table 2-81 Policy Recreate Attempts Profile APIs**

| Description              | HTTP Method or Custom Operation | Resource URI                                                                               | Possible Result Code          |
|--------------------------|---------------------------------|--------------------------------------------------------------------------------------------|-------------------------------|
| Create Reattempt Profile | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/reattemptProfile                    | See <a href="#">Table A-3</a> |
| Get Reattempt Profile    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/reattemptProfile/{retryProfileName} | See <a href="#">Table A-1</a> |
| Update Reattempt Profile | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/reattemptProfile/{retryProfileName} | See <a href="#">Table A-2</a> |
| Delete Reattempt Profile | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/reattemptProfile/{retryProfileName} | See <a href="#">Table A-4</a> |

**Request and Response Body Parameters**

This section describes the request and response parameters used in reattempt profile APIs.

**Table 2-82 Request and Response Body Parameters (for POST and PUT operations)**

| Field Name     | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                                                                        |
|----------------|-----------|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name           | String    | M                                       | The unique name for the reattempt profile. This name is used to refer to the reattempt profile in other service configuration screen, such as SM Service. The name can only contain the characters A–Z, a–z, 0–9, period (.), hyphen (-), and underline (_). The maximum length is 255 characters. |
| interface Type | String    | O                                       | The interface for which a reattempt profile is being created. The interface types are: <ul style="list-style-type: none"> <li>• BSF</li> <li>• AMF</li> <li>• NRF</li> </ul>                                                                                                                       |

**Table 2-82 (Cont.) Request and Response Body Parameters (for POST and PUT operations)**

| Field Name                 | Data Type                  | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                      |
|----------------------------|----------------------------|-----------------------------------------|----------------------------------------------------------------------------------|
| reattemptSettings          | BSFRecreateAttempt         | O                                       | Creates a number of reattempts that should be run for the chosen interface type. |
| reattemptErrorCodeSettings | ReattemptErrorCodeSettings | O                                       | Provide Re-attempt Error Code settings details.                                  |
| rateLimitSettings          | RateLimitSettings          | O                                       | Provide Rate Limiting settings details.                                          |

**Table 2-83 BSFRecreateAttempt**

| Field Name         | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------|-----------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| numberOfAttempts   | integer   | M                                       | To configure the maximum number of reattempts that are allowed for a service operation.<br>On selecting <b>BSF</b> interface type, it is the number of reattempts that must be run when PCF Binding request fails. It takes a range between 0 - 50.<br>On selecting <b>NRF</b> interface type, it is the number of reattempts that must be run when AMF discovery request fails. It takes a range between 0 - 100.<br>On selecting <b>AMF</b> interface type, it is the number of reattempt that must be run when N1N2 Subscribe, N1N2 Transfer, N1N2 Failure Notification requests fails. It takes a range between 0 - 100. |
| backOffTimerConfig | Attempt   | O                                       | The amount of time that represents each back-off timer.<br><b>Note:</b> In case the number of configured attempts in the Back-off timer configurations table is less than the set value for <b>Maximum Number of Attempts</b> , the remaining attempts uses the back off timer and max random number of the last configured attempt.<br><b>Note:</b> Policy supports a maximum of 20 back-off timer configurations.                                                                                                                                                                                                          |

Table 2-83 (Cont.) BSFRecreateAttempt

| Field Name          | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                         |
|---------------------|-----------|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| thresholdLimitLevel | integer   | O                                       | The threshold limit for the Pending Operations. Once this value is reached, no pending operations are added to the table.<br><b>Range:</b> 0 - 1000 for BSF interface type.<br><b>Range:</b> 0 - 360000 for NRF/AMF interface type. |

Table 2-84 Attempt

| Field Name      | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                |
|-----------------|-----------|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| index           | integer   | O                                       | Represents the number of back-off timer.                                                                                                                                                                                   |
| backOffTimer    | integer   | M                                       | Configure back-off timer for every reattempt request in seconds.                                                                                                                                                           |
| maxRandomNumber | integer   | O                                       | Configure any random number in milliseconds that is added to the back-off timer. This can be in the range of 0-5000 milliseconds. If this is not configured then the back-off timer is considered without an random value. |



Table 2-85 ReattemptErrorCodeSettings

| Field Name                 | Data Type           | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                          |
|----------------------------|---------------------|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| reattemptOnInternalFailure | boolean             | O                                       | To enable reattempt for internal failure, for example: request timed out at UE service.<br><b>Default value:</b> true                                                |
| reattemptErrorCodes        | ReattemptErrorCodes | O                                       | Configure the list of combination of HTTP error code and cause for reattempt with back off.<br>A maximum of 32 combinations of error code and cause can be provided. |

Table 2-86 ReattemptErrorCodes

| Field Name  | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                      |
|-------------|-----------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| errorCode   | integer   | M                                       | Provide the HTTP error code for which the reattempt is applicable. It is a number and can range from 100-999.                                                                                                                                    |
| errorCauses | [string]  | O                                       | Provide the cause for an error code so that reattempt is made only for the matching causes of the error code.<br><b>Note:</b> The <b>Error Cause</b> value should be in upper case. Use only underscore '_' between words, and do not use space. |

Table 2-87 RateLimitSettings

| Field Name         | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                            |
|--------------------|-----------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| rateLimitPerSecond | integer   | M                                       | Configure the rate limit threshold per second for NF service operation(s). This value can be in the range between 0 - 700.<br><b>Default value:</b> 50 |

**Sample Request body structure for POST and PUT operations:**

```
{
  "name": "string",
  "interfaceType": "bsf",
  "reattemptSettings": {
    "numberOfAttempts": 0,
    "backOffTimerConfig": [
      {
        "index": 0,
        "backOffTimer": 0,
        "maxRandomNumber": 5000
      }
    ],
    "thresholdLimitLevel": 0
  },
  "reattemptErrorCodeSettings": {
    "reattemptOnInternalFailure": true,
    "reattemptErrorCodes": [
      {
        "errorCode": 999,
        "errorCauses": [
          "string"
        ]
      }
    ]
  },
  "rateLimitSettings": {
    "rateLimitPerSecond": 50
  }
}
```

```

    }
  }

  {
    "name": "string",
    "interfaceType": "bsf",
    "reattemptSettings": {
      "numberOfAttempts": 0,
      "backOffTimerConfig": [
        {
          "index": 0,
          "backOffTimer": 0,
          "maxRandomNumber": 5000
        }
      ],
      "thresholdLimitLevel": 0
    },
    "reattemptErrorCodeSettings": {
      "reattemptOnInternalFailure": true,
      "reattemptErrorCodes": [
        {
          "errorCode": 999,
          "errorCauses": [
            "string"
          ]
        }
      ]
    },
    "rateLimitSettings": {
      "rateLimitPerSecond": 50
    }
  }
}

```

### cURL Command for GET

```
curl -X GET "http://<IP Address>/api-docs/oc-cnpolicy-configuration/v1/
services/common/reattemptProfile/<retryProfileName>" -H "accept: application/
json"
```

### cURL Command for POST

```
curl -X POST "http://<IP Address>/api-docs/oc-cnpolicy-configuration/v1/
services/common/reattemptProfile" -H "accept: application/json" -H "Content-
Type: application/json" -d "{ \"alternateRoutingSettings\":
{ \"enableFallback\": true, \"errorCodesAlternateRoute\":
[ { \"errorCauses\": [ \"string\" ], \"errorCode\": 0 } ],
\"errorCodesReAttempt\": [ { \"errorCauses\": [ \"string\" ], \"errorCode\":
0 } ], \"localityPreference\": \"DIFFERENT\",
\"maxNumOfAlternateRoutingAttempts\": 3, \"nfSetPreference\": \"DIFFERENT\",
\"priorityPool\": false, \"reAttemptFailedNF\": true, \"reAttemptSameNF\":
true, \"retryFallbackAfterInterval\": 900,
\"useAlternateSCPforAlternateRouting\": true, \"useSbiBindingInformation\":
true }, \"enableAlternateRouting\": true, \"enableRetry\": true, \"name\":
```

```
\\"string\\", \\"retrySettings\\": { \\"maximumNumberOfRetries\\": 3 },  
\\"serverHeaderSupport\\": \\"DISABLED\\"}"
```

## Export or Import Retry Profile

**Table 2-88 Response Body Parameters for Import Request**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                    |
|----------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------|
| date           | string    | O                                               | Specifies the current timestamp                                                |
| errors:message | string    | O                                               | Specifies the error message.                                                   |
| errors:name    | string    | O                                               | Specifies the name of the error.                                               |
| exportData     | array     | M                                               | Exported retry profile. For more information, see <a href="#">Table 2-92</a> . |
| key            | string    | O                                               | Indicates the ID of Retry Profile                                              |
| sourceVersion  | string    | O                                               | System version of product from which data is exported                          |
| topic          | string    | M                                               | Topic of each managed object                                                   |

**Table 2-89 Import/Export Recreate Attempt Profile**

| API Name                | Request Type | Request Url                                                                     | Possible Result Code          |
|-------------------------|--------------|---------------------------------------------------------------------------------|-------------------------------|
| Export Recreate Profile | GET          | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/reattemptsProfile/export | See <a href="#">Table A-1</a> |
| Import Recreate Profile | POST         | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/reattemptsProfile/import | See <a href="#">Table A-3</a> |

**Table 2-90 Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory/Optional/<br>Conditional | Description                                           |
|---------------|-----------|------------------------------------|-------------------------------------------------------|
| topic         | String    | M                                  | It should be commonconfig.congestionThresholdProfiles |
| sourceVersion | String    | M                                  | Build version                                         |
| date          | String    | M                                  | Date in pattern "yyyy-MM-dd'T'HH:mm:ss'Z'"            |

Table 2-90 (Cont.) Request/Response Body Parameters

| Field Name | Data Type                          | Mandatory/Optional/Conditional | Description                                                                                                                                 |
|------------|------------------------------------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| exportData | Congestion Threshold Profiles Data | M                              | Array for Congestion Control Threshold Profiles. This array contains JSON objects of each service that supports congestion control feature. |

**Sample Request Body structure for Import and Export operations:**

```
{
  "topic": "string",
  "sourceVersion": "string",
  "date": "string",
  "exportData": [
    {
      "name": "string",
      "interfaceType": "bsf",
      "reattemptSettings": {
        "numberOfAttempts": 0,
        "backOffTimerConfig": [
          {
            "index": 0,
            "backOffTimer": 0,
            "maxRandomNumber": 5000
          }
        ],
        "thresholdLimitLevel": 0
      },
      "reattemptErrorCodeSettings": {
        "reattemptOnInternalFailure": true,
        "reattemptErrorCodes": [
          {
            "errorCode": 999,
            "errorCauses": [
              "string"
            ]
          }
        ]
      }
    }
  ],
  "rateLimitSettings": {
    "rateLimitPerSecond": 50
  }
},
"errors": [
  {
    "name": "string",
    "message": "string"
  }
]
```

```
    ]
  }
```

## 2.18 Retry Profile

This section describes the service URIs available to create and configure retry profiles for Policy.

**Table 2-91 Supported REST APIs for Retry Profile**

| Description           | HTTP Method or Custom Operation | Resource URI                                                                            | Possible Result Code          |
|-----------------------|---------------------------------|-----------------------------------------------------------------------------------------|-------------------------------|
| Create Retry Profile  | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/retryprofiles                    | See <a href="#">Table A-3</a> |
| Get Retry Profile     | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/retryprofiles/{retryProfileName} | See <a href="#">Table A-1</a> |
| Update Retry Profile  | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/retryprofiles/{retryProfileName} | See <a href="#">Table A-2</a> |
| Export Retry Profiles | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/retryprofiles/export             | See <a href="#">Table A-1</a> |
| Import Retry Profiles | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/retryprofiles/import             | See <a href="#">Table A-3</a> |
| Delete Retry Profile  | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/retryprofiles/{retryProfileName} | See <a href="#">Table A-4</a> |

### Request and Response Body Parameters

This section describes the request and response parameters used in retry profile APIs.

**Table 2-92 Request and Response Body Parameters (for POST and PUT operations)**

| Field Name               | Data Type                | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                   |
|--------------------------|--------------------------|-----------------------------------------|---------------------------------------------------------------|
| alternateRoutingSettings | AlternateRoutingSettings | Optional                                | Specifies the alternate routing settings for a retry profile. |

**Table 2-92 (Cont.) Request and Response Body Parameters (for POST and PUT operations)**

| Field Name             | Data Type | Mandatory(M)/Optional(O)/Conditional(C)                                                                                                              | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enableAlternateRouting | boolean   | Optional                                                                                                                                             | <p>Specifies whether to enable or disable alternate routing.</p> <p>On enabling this switch, ensure that you configure the parameters under the Alternate Routing Settings group.</p> <p>When enabled, alternate routing is attempted when Policy messages are not delivered successfully to an external NF destination. It may happen because of an exception on the Egress Gateway, such as connection error, timeout, or a failure returned by the external NF or an intermediate router.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| enableRetry            | boolean   | Optional                                                                                                                                             | <p>Specifies whether to enable or disable retry for failed messages between core microservices of Policy.</p> <p>On enabling this switch, ensure that you configure the parameters under <b>Retry Settings</b> group. However, if the switch is disabled, the configurations in the Retry Settings group are not taken into consideration.</p> <p>When enabled, retries are attempted when PCF encounters internal send failures for egress messages.</p> <p>A failure to send egress messages internally indicates an exception in the core service, such as SM service, UDR or CHF connector, and so on. The exception can occur while connecting to the next microservice or a failure on the microservice itself. For example, egress message did not reach the egress gateway. This also includes the connection errors and timeouts on the core microservice.</p> <p><b>Note:</b> Since the failure is internal, the external NF and SCP (if applicable) remain the same during retry attempt.</p> |
| name                   | string    | Optional<br>The name can only contain the characters A–Z, a–z, 0–9, period (.), hyphen (-), and underline (_). The maximum length is 255 characters. | Specifies the unique name for the retry profile.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

**Table 2-92 (Cont.) Request and Response Body Parameters (for POST and PUT operations)**

| Field Name                    | Data Type                                                                                                                                                                 | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| retrySettings                 | RetrySettings                                                                                                                                                             | Optional                                | Specifies the retry settings for a retry profile.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| serverHeaderSupport           | Enum<br>The valid values for this parameter are as follow:<br><ul style="list-style-type: none"> <li>DISABLED</li> <li>MULTI_INSTANCE</li> <li>SINGLE_INSTANCE</li> </ul> | Optional                                | Specifies whether to enable or disable server header. The value configured in this parameter is used when PCF acts as a consumer and receives server header in error response messages. <ul style="list-style-type: none"> <li>Disabled: Disable server header. On disabling server header, Policy as a consumer searches for alternate producer without considering the value of server header.</li> <li>Single Instance: Accept only one value in the server header. When the value is configured as Single Instance and server header contains multiple values, Policy rejects the header.</li> <li>Multi Instance: Accept only one value in the server header.</li> </ul> |
| ignoreCustomserverheadervalue | String                                                                                                                                                                    | Optional                                | This field appears on selection of either "Single Instance" or "Multi Instance" value for the field <b>Server Header Support</b> . In this field you can specify the string pattern that can be ignored in the server header value. This is provided in the form of regular expression. The regular expression evaluates the server header content to ignore the strings that match the pattern specified the regular expression.                                                                                                                                                                                                                                             |



Table 2-93 AlternateRoutingSettings

| Field Name               | Data Type                  | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------|----------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enableFallback           | boolean                    | Optional                                | Specifies whether to enable or disable falling back to the higher priority destination that failed earlier (after the retry interval). Policy attempts fallback even if the current destination is available. When enabled, Policy attempts to fallback to a higher priority NF destination. The priority of NF destination is determined by Alternate Route service (either via DNS-SRV resolution or by static configuration). By default, it is disabled. |
| errorCodesAlternateRoute | AlternateRoutingErrorCodes | Optional                                | Specifies the HTTP error codes for which Policy retries alternate routing on receiving the error response from the destination network function or Egress Gateway.                                                                                                                                                                                                                                                                                           |
| errorCodesReAttempt      | AlternateRoutingErrorCodes | Optional                                | Specifies the HTTP error codes for which Policy does not look for alternate producer and retries the request to the same producer NF or SCP that failed in the first attempt. Policy considers this parameter only when <b>Re-attempt to same NF</b> switch is enabled.                                                                                                                                                                                      |

Table 2-93 (Cont.) AlternateRoutingSettings

| Field Name         | Data Type                                                                                                                                            | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| localityPreference | ENUM<br>The valid values for this parameter are as follow: <ul style="list-style-type: none"><li>• DIFFERENT</li><li>• NONE</li><li>• SAME</li></ul> | Optional                                | <p>Specifies the locality preference when choosing the alternate producer for a failed request.</p> <p>Policy excludes the producer (received in the failed request) and selects an alternate producer based on the value provided for this attribute.</p> <ul style="list-style-type: none"><li>• Same: Chooses the next producer from the same locality as the previous request.</li><li>• Different: Chooses the next producer from a different locality.</li><li>• None <b>(default)</b>: Locality filter does not apply.</li></ul> |

Table 2-93 (Cont.) AlternateRoutingSettings

| Field Name                       | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------|-----------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| maxNumOfAlternateRoutingAttempts | boolean   | Optional                                | <p>Specifies the number of retries that PCF attempts on receiving error response from Ingress Gateway. The number of retry attempts can be in the range of 1 to 10.</p> <p><b>Note:</b> The value configured for this parameter does not include the initial attempt. For instance, if you set the value as 3, Policy performs the retry cycle three times after the initial attempt.</p> <p>If the retry attempts are exhausted, Policy fails the transaction with an exception. In certain cases, the number of retry attempts can be greater than the available alternate destinations to be tried. If such a situation arises, Policy fails the transaction when no alternate destination is available even if retry attempts are still available.</p> |

Table 2-93 (Cont.) AlternateRoutingSettings

| Field Name      | Data Type                                                                                                                                                | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| nfSetPreference | ENUM<br>The valid values for this parameter are as follow: <ul style="list-style-type: none"> <li>• DIFFERENT</li> <li>• NONE</li> <li>• SAME</li> </ul> | Optional                                | <p>Specifies the NF set preference when choosing the alternate producer for an initial request.</p> <p>Policy excludes the producer (received in the failed request) and selects an alternate producer based on the value provided for this attribute.</p> <ul style="list-style-type: none"> <li>• Same: Selects the next producer from the same NFSet as the previous request.</li> <li>• Different: Selects the next producer from a different NFSet.</li> <li>• None <b>(default)</b>: NFSets filter does not apply.</li> </ul> <p><b>Note:</b> This parameter applies only to initial requests. For subsequent requests, the default behavior is to choose the same NFSet irrespective of the value configured for this field.</p> |

Table 2-93 (Cont.) AlternateRoutingSettings

| Field Name        | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                 |
|-------------------|-----------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| reAttemptFailedNF | boolean   | Optional                                | When you set the value for this parameter to true, Policy initiates the retry cycle and sends request to the selected NF when the following conditions are true: <ul style="list-style-type: none"><li>• Retry attempts made to all available NF instances</li><li>• Maximum Number of Alternate Routing Attempt is not exhausted</li></ul> |
| reAttemptSameNf   | boolean   | Optional                                | Specifies whether Policy shall send the request to the same NF that failed in the first attempt. If you set the value to true, make sure to configure the value for <code>errorCodesReAttempt</code> attribute.<br><br>By default, the value is false for this parameter.                                                                   |

Table 2-93 (Cont.) AlternateRoutingSettings

| Field Name                 | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------|-----------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| retryFallbackAfterInterval | integer   | Optional                                | <p>Specifies the time in seconds after which Policy re-attempts a request to a higher priority destination.</p> <p>In case of fallback, when a route is being determined while the current destination has not failed, PCF attempts to fallback to a higher priority NF destination. Priority of NF destination is determined by Alternate Route service, either through DNS-SRV resolution or static configuration.</p> <p>You can set the value for retry after interval from 0 to 86,400 seconds.</p> <p>By default, the value is set to 0, which means that a high priority destination is blocklisted.</p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>• This configuration applies to subsequent message routing only.</li> <li>• Blacklisting may still be done by Egress Gateway</li> <li>• An NF destination (FQDN) is not re-attempted within the context of a single operation, such as SM Modification request</li> </ul> |

Table 2-93 (Cont.) AlternateRoutingSettings

| Field Name                         | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------|-----------|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| useAlternateSCPforAlternateRouting | boolean   | Optional                                | <p>Specifies whether to enable or disable choosing alternate SCP to reach the alternate destination.</p> <p>If you set the value for this parameter as true, Egress Gateway uses an alternate SCP for routing to an alternate NF destination. If there are fewer SCPs than alternate NF destinations, Egress Gateway tries sending the request through one of the previously used SCPs.</p> <p><b>Note:</b> Additional SCP configuration is required for Egress Gateway. For more information, see <i>Oracle Communications Cloud Native Core, Converged Policy Installation, Upgrade and Fault Recovery Guide</i>.</p> |

Table 2-93 (Cont.) AlternateRoutingSettings

| Field Name               | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------|-----------|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| useSbiBindingInformation | boolean   | Optional                                | <p>Specifies whether to enable or disable use of information received in 3gpp-sbi-binding header. When Policy receives the unique NF Instance ID in the error response, it retrieves 3gpp-sbi-binding header for that particular NF instance, and then extracts the SetId to choose the alternate producer. This parameter is considered only for subsequent retry requests.</p> <p>By default, the value is false for this attribute.</p> <p><b>Note:</b> When the value is set to false, the NFSet Preference parameter is not taken into consideration.</p> |

Table 2-94 AlternateRoutingErrorCodes

| Field Name  | Data Type | Mandatory(M)/Optional(O)/Conditional(C)                                                                       | Description                                                          |
|-------------|-----------|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| errorCauses | string    | Optional<br>You can configure up to five error causes per error code.                                         | Specifies the HTTP error code. For example, 504                      |
| errorCode   | integer   | Mandatory<br>You can configure up to 10 error codes for a retry profile.<br>Enter a range in [100-999] number | Specifies the error cause. For example, GATEWAY_TIMEOUT, NF_TIMEOUT. |



Table 2-95 RetrySettings

| Field Name             | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C)                                                                                                                                                  | Description                                                                                                                                                                                                                                                                                                                                              |
|------------------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| maximumNumberOfRetries | integer   | Optional<br>The number of retry attempts can be in the range of 1 to 10.<br><b>Note:</b> It is mandatory to configure this parameter if Retry on Internal Send Failure parameter is set to true. | Specifies the number of retries that PCF attempts on encountering failure while sending egress messages between Policy core microservices.<br><b>Note:</b> The value configured for this parameter does not include the initial attempt. For instance, if you set the value as 3, Policy performs the retry cycle three times after the initial attempt. |

**Sample Request body structure for POST and PUT operations:**

```
{
  "alternateRoutingSettings": {
    "enableFallback": true,
    "errorCodesAlternateRoute": [
      {
        "errorCauses": [
          "string"
        ],
        "errorCode": 0
      }
    ],
    "errorCodesReAttempt": [
      {
        "errorCauses": [
          "string"
        ],
        "errorCode": 0
      }
    ],
    "localityPreference": "DIFFERENT",
    "maxNumOfAlternateRoutingAttempts": 3,
    "nfSetPreference": "DIFFERENT",
    "reAttemptFailedNF": true,
    "reAttemptSameNF": true,
    "retryFallbackAfterInterval": 900,
    "useAlternateSCPforAlternateRouting": true,
    "useSbiBindingInformation": true
  },
  "enableAlternateRouting": true,
  "enableRetry": true,
  "name": "string",
  "retrySettings": {
    "maximumNumberOfRetries": 3
  },
}
```

```
"serverHeaderSupport": "DISABLED"
}
```

### Sample Response body structure for GET, POST, and PUT operations:

```
{
  "alternateRoutingSettings": {
    "enableFallback": true,
    "errorCodesAlternateRoute": [
      {
        "errorCauses": [
          "string"
        ],
        "errorCode": 0
      }
    ],
    "errorCodesReAttempt": [
      {
        "errorCauses": [
          "string"
        ],
        "errorCode": 0
      }
    ],
    "localityPreference": "DIFFERENT",
    "maxNumOfAlternateRoutingAttempts": 3,
    "nfSetPreference": "DIFFERENT",
    "reAttemptFailedNF": true,
    "reAttemptSameNF": true,
    "retryFallbackAfterInterval": 900,
    "useAlternateSCPforAlternateRouting": true,
    "useSbiBindingInformation": true
  },
  "enableAlternateRouting": true,
  "enableRetry": true,
  "name": "string",
  "retrySettings": {
    "maximumNumberOfRetries": 3
  },
  "serverHeaderSupport": "DISABLED"
}
```

### cURL Command for GET

```
curl -X GET "http://10.75.168.25:31679/oc-cnpolicy-configuration/v1/services/
common/retryprofiles/<retryProfileName>" -H "accept: application/json"
```

### cURL Command for POST

```
curl -X POST "http://10.75.168.25:31679/oc-cnpolicy-configuration/v1/services/
common/retryprofiles" -H "accept: application/json" -H "Content-Type:
application/json" -d "{ \"alternateRoutingSettings\": { \"enableFallback\":
true, \"errorCodesAlternateRoute\": [ { \"errorCauses\": [ \"string\" ],
\"errorCode\": 0 } ], \"errorCodesReAttempt\": [ { \"errorCauses\":
```

```
[ \"string\" ], \"errorCode\": 0 } ], \"localityPreference\": \"DIFFERENT\",
\"maxNumOfAlternateRoutingAttempts\": 3, \"nfSetPreference\": \"DIFFERENT\",
\"priorityPool\": false, \"reAttemptFailedNF\": true, \"reAttemptSameNf\":
true, \"retryFallbackAfterInterval\": 900,
\"useAlternateSCPforAlternateRouting\": true, \"useSbiBindingInformation\":
true }, \"enableAlternateRouting\": true, \"enableRetry\": true, \"name\":
\"string\", \"retrySettings\": { \"maximumNumberOfRetries\": 3 },
\"serverHeaderSupport\": \"DISABLED\"}"
```

## Export or Import Retry Profile

**Table 2-96 Response Body Parameters for Import Request**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                    |
|----------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------|
| date           | string    | O                                               | Specifies the current timestamp                                                |
| errors:message | string    | O                                               | Specifies the error message.                                                   |
| errors:name    | string    | O                                               | Specifies the name of the error.                                               |
| exportData     | array     | M                                               | Exported retry profile. For more information, see <a href="#">Table 2-92</a> . |
| key            | string    | O                                               | Indicates the ID of Retry Profile                                              |
| sourceVersion  | string    | O                                               | System version of product from which data is exported                          |
| topic          | string    | M                                               | Topic of each managed object                                                   |

## Sample Request Body structure for Import and Export operations:

```
{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "alternateRoutingSettings": {
        "enableFallback": true,
        "errorCodesAlternateRoute": [
          {
            "errorCauses": [
              "string"
            ],
            "errorCode": 0
          }
        ]
      }
    }
  ]
}
```

```

    },
    "errorCodesReAttempt": [
      {
        "errorCauses": [
          "string"
        ],
        "errorCode": 0
      }
    ],
    "localityPreference": "DIFFERENT",
    "maxNumOfAlternateRoutingAttempts": 3,
    "nfSetPreference": "DIFFERENT",
    "reAttemptFailedNF": true,
    "reAttemptSameNF": true,
    "retryFallbackAfterInterval": 900,
    "useAlternateSCPforAlternateRouting": true,
    "useSbiBindingInformation": true
  },
  "enableAlternateRouting": true,
  "enableRetry": true,
  "name": "string",
  "retrySettings": {
    "maximumNumberOfRetries": 3
  },
  "serverHeaderSupport": "DISABLED"
}
},
"key": "string",
"sourceVersion": "string",
"systemVersion": "string",
"topic": "string"
}

```

## 2.19 Timer Profile

**Table 2-97 Supported REST APIs**

| Description          | HTTP Method or Custom Operation | Resource URI                                                                       | Possible Result Code          |
|----------------------|---------------------------------|------------------------------------------------------------------------------------|-------------------------------|
| Create Timer Profile | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/timerprofiles               | See <a href="#">Table A-3</a> |
| Get Timer Profile    | GET                             | /oc-cnpolicy-configuration/v1/services/common/timerprofiles/{serviceType}          | See <a href="#">Table A-1</a> |
| Update Timer Profile | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/timerprofiles/{serviceType} | See <a href="#">Table A-2</a> |

Table 2-97 (Cont.) Supported REST APIs

| Description           | HTTP Method or Custom Operation | Resource URI                                                                       | Possible Result Code          |
|-----------------------|---------------------------------|------------------------------------------------------------------------------------|-------------------------------|
| Export Timer Profiles | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/timerprofiles/export        | See <a href="#">Table A-1</a> |
| Import Timer Profiles | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/timerprofiles/import        | See <a href="#">Table A-3</a> |
| Delete Timer Profile  | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/timerprofiles/{serviceType} | See <a href="#">Table A-4</a> |

## Get, Create, and Update Timer Profiles

Table 2-98 Request/Response Body Parameters

| Field Name            | Data Type                | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                                                                                                                                                                                                                |
|-----------------------|--------------------------|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| serviceType           | string                   | M                                         | Specifies the following supported service types: <ul style="list-style-type: none"> <li>PCF User Connector</li> <li>PCF Session Management</li> <li>PCF Access and Mobility</li> <li>PCF UE Policy</li> <li>PCF Binding Service</li> </ul> |
| UDR.svcTimeoutMapping | SvcTimeoutMapping ForUDR | C                                         | Details of UDR service time out.                                                                                                                                                                                                           |
| CHF.svcTimeoutMapping | SvcTimeoutMapping ForCHF | C                                         | Details of CHF service time out.                                                                                                                                                                                                           |
| BSF.svcTimeoutMapping | SvcTimeoutMapping ForBSF | C                                         | Details of BSF service time out.                                                                                                                                                                                                           |
| SMF.svcTimeoutMapping | SvcTimeoutMapping ForSMF | C                                         | Details of SMF service time out.                                                                                                                                                                                                           |
| AF.svcTimeoutMapping  | SvcTimeoutMapping ForAF  | C                                         | Details of AF service time out.                                                                                                                                                                                                            |
| AMF.svcTimeoutMapping | SvcTimeoutMapping ForAMF | C                                         | Details of AMF service time out.                                                                                                                                                                                                           |

**Table 2-99 SvcTimeoutMappingForUDR Parameters**

| Field Name                             | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                     |
|----------------------------------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| nudr-dr                                | integer   | O                                               | Timeout value specified in "3gpp-Sbi-Max-Rsp-Time" header for the nudr-dr service. Provide a number between 1 to 2147483647. For example: 3000. |
| QUERY                                  | integer   | O                                               | Timeout value specified in "3gpp-max-response-time" header for the Query messages.                                                              |
| SUBSCRIBE                              | integer   | O                                               | Timeout value specified in "3gpp-max-response-time" header for the subscribe messages.                                                          |
| UNSUBSCRIBE                            | integer   | O                                               | Timeout value specified in "3gpp-max-response-time" header for the unsubscribe messages.                                                        |
| UPDATE                                 | integer   | O                                               | Timeout value specified in "3gpp-max-response-time" header for the update messages.                                                             |
| SUBSCRIBE_WITH_IM<br>MEDIATE_REPORTING | integer   | O                                               | Timeout when a POST (subscribe) request is sent from PCF to UDR having the attribute "immRep" set to true. Range: 0 - 15000 ms<br>Default: 3000 |

**Table 2-100 SvcTimeoutMappingForCHF Parameters**

| Field Name                | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                      |
|---------------------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| nchf-spendinglimitcontrol | integer   | O                                               | Timeout value specified in "3gpp-Sbi-Max-Rsp-Time" header for the nchfspendinglimitcontrol service. Provide a number between 1 to 2147483647. For example: 3000. |

**Table 2-101 SvcTimeoutMappingForBSF Parameters**

| Field Name      | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                            |
|-----------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| nbsf-management | integer   | O                                               | Timeout value specified in "3gpp-Sbi-Max-Rsp-Time" header for the nbsfmanagement service. Provide a number between 1 to 2147483647. For example: 3000. |

**Table 2-102 SvcTimeoutMappingForSMF Parameters**

| Field Name   | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                          |
|--------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| notification | integer   | O                                               | Timeout value specified in "3gpp-Sbi-Max-Rsp-Time" header for the notification service. Provide a number between 1 to 2147483647. For example: 3000. |

**Table 2-103 SvcTimeoutMappingForAF Parameters**

| Field Name   | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                          |
|--------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| notification | integer   | O                                               | Timeout value specified in "3gpp-Sbi-Max-Rsp-Time" header for the notification service. Provide a number between 1 to 2147483647. For example: 3000. |

**Table 2-104 SvcTimeoutMappingForAMF Parameters**

| Field Name   | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                       |
|--------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| namf-comm    | integer   | O                                               | Timeout value specified in "3gpp-Sbi-Max-Rsp-Time" header for the namf-comm service. Provide a number between 1 to 2147483647. For example: 3000. |
| notification | integer   | O                                               | Timeout value specified in "3gpp-max-response-time" header for the notification service.                                                          |

**Sample Request body structure for POST and PUT operations:**

```
{
  "serviceType": "string",
  "UDR": {
    "svcTimeoutMapping": {
      "nudr-dr": 3000,
      "QUERY": 0,
      "SUBSCRIBE": 0,
      "UNSUBSCRIBE": 0,
      "UPDATE": 0,
      "SUBSCRIBE_WITH_IMMEDIATE_REPORTING": 0
    }
  },
  "CHF": {
    "svcTimeoutMapping": {
      "nchf-spendinglimitcontrol": 3000
    }
  },
  "BSF": {
    "svcTimeoutMapping": {
      "nbsf-management": 3000
    }
  },
  "SMF": {
    "svcTimeoutMapping": {
      "notification": 3000
    }
  },
  "AF": {
    "svcTimeoutMapping": {
      "notification": 3000
    }
  },
  "AMF": {
    "svcTimeoutMapping": {
      "namf-comm": 3000,

```



```

        "notification": 3000
    }
}
}

```

## Export/Import Timer Profiles

**Table 2-105 Request/Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                               |
|----------------|-----------|-------------------------------------------------|-----------------------------------------------------------|
| systemVersion  | string    | O                                               | The system version.                                       |
| topic          | string    | M                                               | Topic of each managed object                              |
| sourceVersion  | string    | O                                               | System version of the product from which data is exported |
| date           | string    | O                                               | Current timestamp                                         |
| exportData     | array     | M                                               | Date to be exported.                                      |
| errors.message | string    | O                                               | The error message.                                        |
| errors.name    | string    | O                                               | The error name.                                           |

## Sample Request Body structure for Import/Export operations:

```

{
  "topic": "string",
  "sourceVersion": "string",
  "date": "string",
  "exportData": [
    {
      "serviceType": "string",
      "UDR": {
        "svcTimeoutMapping": {
          "nudr-dr": 3000,
          "QUERY": 0,
          "SUBSCRIBE": 0,
          "UNSUBSCRIBE": 0,
          "UPDATE": 0,
          "SUBSCRIBE_WITH_IMMEDIATE_REPORTING": 0
        }
      },
      "CHF": {
        "svcTimeoutMapping": {
          "nchf-spendinglimitcontrol": 3000
        }
      },
      "BSF": {
        "svcTimeoutMapping": {
          "nbsf-management": 3000
        }
      },
      "SMF": {
        "svcTimeoutMapping": {

```

```

        "notification": 3000
      }
    },
    "AF": {
      "svcTimeoutMapping": {
        "notification": 3000
      }
    },
    "AMF": {
      "svcTimeoutMapping": {
        "namf-comm": 3000,
        "notification": 3000
      }
    }
  }
],
"errors": [
  {
    "name": "string",
    "message": "string"
  }
]
}

```

## 2.20 Retry Profile for PCC

**Table 2-106 Supported REST APIs**

| Description              | HTTP Method or Custom Operation | Resource URI                                                                                  | Possible Result Code          |
|--------------------------|---------------------------------|-----------------------------------------------------------------------------------------------|-------------------------------|
| Create PCC Retry Profile | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/pccretryprofiles                       | See <a href="#">Table A-3</a> |
| Export PCC Retry Profile | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/pccretryprofiles/export                | See <a href="#">Table A-1</a> |
| Import PCC Retry Profile | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/pccretryprofiles/import                | See <a href="#">Table A-3</a> |
| Get PCC Retry Profile    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/pccretryprofiles/{pccRetryProfileName} | See <a href="#">Table A-1</a> |
| Update PCC Retry Profile | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/pccretryprofiles/{pccRetryProfileName} | See <a href="#">Table A-2</a> |

**Table 2-106 (Cont.) Supported REST APIs**

| Description              | HTTP Method or Custom Operation | Resource URI                                                                                  | Possible Result Code          |
|--------------------------|---------------------------------|-----------------------------------------------------------------------------------------------|-------------------------------|
| Delete PCC Retry Profile | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/pccretryprofiles/{pccRetryProfileName} | See <a href="#">Table A-4</a> |

**Create, Get, and Update Retry Profile for PCC****Table 2-107 Data structures supported by the POST, GET, and PUT Response Body**

| Field Name           | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                       |
|----------------------|-----------|-----------------------------------------|-----------------------------------|
| backOffInterval      | integer   | M                                       | Enter a value between 1 and 86400 |
| description          | string    | O                                       |                                   |
| id                   | string    | O                                       |                                   |
| initialRetryInterval | integer   | M                                       | Enter a value between 0 and 30    |
| maxRetryAttempt      | integer   | M                                       | Enter a value between 1 and 10    |
| maxRetryCycles       | integer   | M                                       | Enter a value between 1 and 4     |
| maxRetryInterval     | integer   | M                                       | Enter a value between 1 and 180   |
| name                 | string    | M                                       |                                   |

**Table 2-107 (Cont.) Data structures supported by the POST, GET, and PUT Response Body**

| Field Name      | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ruleFailureCode | array     |                                                 | <p>Contains items of type string.<br/>Supported values:</p> <ul style="list-style-type: none"> <li>UNKNOWN_RULE_NAME</li> <li>RATING_GROUP_ERROR</li> <li>SERVICE_IDENTIFIER_ERROR</li> <li>GW_PCEF_MALFUNCTION</li> <li>RESOURCES_LIMITATION</li> <li>MAX_NR_BEARERS_REACHED</li> <li>UNKNOWN_BEARER_ID</li> <li>MISSING_BEARER_ID</li> <li>MISSING_FLOW_INFORMATION</li> <li>RESOURCE_ALLOCATION_FAILURE</li> <li>UNSUCCESSFUL_QOS_VALIDATION</li> <li>INCORRECT_FLOW_INFORMATION</li> <li>PS_TO_CS_HANDOVER</li> <li>TDF_APPLICATION_IDENTIFIER_ERROR</li> <li>NO_BEARER_BOUND</li> <li>FILTER_RESTRICTIONS</li> <li>AN_GW_FAILED</li> <li>MISSING_REDIRECT_SERVER_ADDRESS</li> <li>CM_END_USER_SERVICE_DENIED</li> <li>CM_CREDIT_CONTROL_NOT_APPLICABLE</li> <li>CM_AUTHORIZATION_REJECTED</li> <li>CM_USER_UNKNOWN</li> <li>CM_RATING_FAILED</li> </ul> |

**Sample Request Body structure for POST and PUT operations:**

```
{
  "backOffInterval": 0,
  "description": "string",
  "id": "string",
  "initialRetryInterval": 0,
  "maxRetryAttempt": 0,
  "maxRetryCycles": 0,
  "maxRetryInterval": 0,
  "name": "string",
  "ruleFailureCode": [
```

```

    "AN_GW_FAILED"
  ]
}

```

### Sample Response Body structure for GET, POST and PUT operations:

```

{
  "backOffInterval": 0,
  "description": "string",
  "id": "string",
  "initialRetryInterval": 0,
  "maxRetryAttempt": 0,
  "maxRetryCycles": 0,
  "maxRetryInterval": 0,
  "name": "string",
  "ruleFailureCode": [
    "AN_GW_FAILED"
  ]
}

```

### Export/Import Retry Profile for PCC

**Table 2-108 Request/Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                 |
|----------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------|
| date           | string    |                                                 | Current timestamp                                                                           |
| errors         | array     |                                                 |                                                                                             |
| errors:message | string    |                                                 |                                                                                             |
| errors:name    | string    |                                                 |                                                                                             |
| exportData     | array     | M                                               | Exported list of PCC retry profile. For more information, see <a href="#">Table 2-107</a> . |
| key            | string    |                                                 | Indicates the ID                                                                            |
| sourceVersion  | string    |                                                 | System version of the product from which data is exported                                   |
| topic          | string    | M                                               | Topic of each managed object                                                                |

### Sample Request Body structure for Import/Export operations:

```

{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [

```

```

{
  "backOffInterval": 0,
  "description": "string",
  "id": "string",
  "initialRetryInterval": 0,
  "maxRetryAttempt": 0,
  "maxRetryCycles": 0,
  "maxRetryInterval": 0,
  "name": "string",
  "ruleFailureCode": [
    "AN_GW_FAILED"
  ]
}
],
"key": "string",
"sourceVersion": "string",
"topic": "string"
}

```

### Delete Retry Profile for PCC

**Table 2-109 Request/Response Body Parameters**

| Field Name          | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description            |
|---------------------|-----------|-------------------------------------------------|------------------------|
| pccRetryProfileName | string    | M                                               | PCC Retry Profile Name |

## 2.21 Retry Profile for ADC

**Table 2-110 Supported REST APIs**

| Description              | HTTP Method or<br>Custom Operation | Resource URI                                                                                  | Possible Result Code          |
|--------------------------|------------------------------------|-----------------------------------------------------------------------------------------------|-------------------------------|
| Create ADC Retry Profile | POST                               | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/adcretryprofiles                       | See <a href="#">Table A-3</a> |
| Export ADC Retry Profile | GET                                | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/adcretryprofiles/export                | See <a href="#">Table A-1</a> |
| Import ADC Retry Profile | POST                               | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/adcretryprofiles/export                | See <a href="#">Table A-3</a> |
| Get ADC Retry Profile    | GET                                | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/adcretryprofiles/{adcRetryProfileName} | See <a href="#">Table A-1</a> |

**Table 2-110 (Cont.) Supported REST APIs**

| Description              | HTTP Method or Custom Operation | Resource URI                                                                                  | Possible Result Code          |
|--------------------------|---------------------------------|-----------------------------------------------------------------------------------------------|-------------------------------|
| Update ADC Retry Profile | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/adcretryprofiles/{adcRetryProfileName} | See <a href="#">Table A-2</a> |
| Delete ADC Retry Profile | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/adcretryprofiles/{adcRetryProfileName} | See <a href="#">Table A-4</a> |

**Create, Get, and Update Retry Profile for ADC****Table 2-111 Data structures supported by the POST, GET, and PUT Response Body**

| Field Name           | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                       |
|----------------------|-----------|-------------------------------------------|-----------------------------------|
| backOffInterval      | integer   | M                                         | Enter a value between 1 and 86400 |
| description          | string    | O                                         |                                   |
| id                   | string    | O                                         |                                   |
| initialRetryInterval | integer   | M                                         | Enter a value between 0 and 30    |
| maxRetryAttempt      | integer   | M                                         | Enter a value between 1 and 10    |
| maxRetryCycles       | integer   | M                                         | Enter a value between 1 and 4     |
| maxRetryInterval     | integer   | M                                         | Enter a value between 1 and 180   |
| name                 | string    | M                                         |                                   |

**Table 2-111 (Cont.) Data structures supported by the POST, GET, and PUT Response Body**

| Field Name      | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ruleFailureCode | array     |                                                 | <p>Contains items of type string.<br/>Supported values:</p> <ul style="list-style-type: none"> <li>UNKNOWN_RULE_NAME</li> <li>RATING_GROUP_ERROR</li> <li>SERVICE_IDENTIFIER_ERROR</li> <li>GW_PCEF_MALFUNCTION</li> <li>RESOURCES_LIMITATION</li> <li>MAX_NR_BEARERS_REACHED</li> <li>UNKNOWN_BEARER_ID</li> <li>MISSING_BEARER_ID</li> <li>MISSING_FLOW_INFORMATION</li> <li>RESOURCE_ALLOCATION_FAILURE</li> <li>UNSUCCESSFUL_QOS_VALIDATION</li> <li>INCORRECT_FLOW_INFORMATION</li> <li>PS_TO_CS_HANDOVER</li> <li>TDF_APPLICATION_IDENTIFIER_ERROR</li> <li>NO_BEARER_BOUND</li> <li>FILTER_RESTRICTIONS</li> <li>AN_GW_FAILED</li> <li>MISSING_REDIRECT_SERVER_ADDRESS</li> <li>CM_END_USER_SERVICE_DENIED</li> <li>CM_CREDIT_CONTROL_NOT_APPLICABLE</li> <li>CM_AUTHORIZATION_REJECTED</li> <li>CM_USER_UNKNOWN</li> <li>CM_RATING_FAILED</li> </ul> |

**Sample Request Body structure for POST and PUT operations:**

```
{
  "backOffInterval": 0,
  "description": "string",
  "id": "string",
  "initialRetryInterval": 0,
  "maxRetryAttempt": 0,
  "maxRetryCycles": 0,
  "maxRetryInterval": 0,
  "name": "string",
  "ruleFailureCode": [
```



```

    "AN_GW_FAILED"
  ]
}

```

### Sample Response Body structure for GET, POST and PUT operations:

```

{
  "backOffInterval": 0,
  "description": "string",
  "id": "string",
  "initialRetryInterval": 0,
  "maxRetryAttempt": 0,
  "maxRetryCycles": 0,
  "maxRetryInterval": 0,
  "name": "string",
  "ruleFailureCode": [
    "AN_GW_FAILED"
  ]
}

```

### Export/Import Retry Profile for ADC

**Table 2-112 Request/Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                               |
|----------------|-----------|-------------------------------------------------|-----------------------------------------------------------|
| date           | string    |                                                 | Current timestamp                                         |
| errors         | array     |                                                 |                                                           |
| errors:message | string    |                                                 |                                                           |
| errors:name    | string    |                                                 |                                                           |
| exportData     | array     | M                                               | Exported list of ADC retry profile.                       |
| key            | string    |                                                 | Indicates the ID                                          |
| sourceVersion  | string    |                                                 | System version of the product from which data is exported |
| topic          | string    | M                                               | Topic of each managed object                              |

### Sample Request Body structure for Import/Export operations:

```

{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "backOffInterval": 0,

```

```

    "description": "string",
    "id": "string",
    "initialRetryInterval": 0,
    "maxRetryAttempt": 0,
    "maxRetryCycles": 0,
    "maxRetryInterval": 0,
    "name": "string",
    "ruleFailureCode": [
      "AN_GW_FAILED"
    ]
  }
],
"key": "string",
"sourceVersion": "string",
"topic": "string"
}

```

### Delete Retry Profile for ADC

**Table 2-113 Request/Response Body Parameters**

| Field Name          | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description            |
|---------------------|-----------|-------------------------------------------------|------------------------|
| adcRetryProfileName | string    | M                                               | ADC Retry Profile Name |

## 2.22 Site Takeover

This section describes the service URIs available to create and configure sites for takeover for Policy.

**Table 2-114 Supported REST APIs for Site Takeover**

| Description           | HTTP Method or<br>Custom Operation | Resource URI                                                               | Possible Result Code          |
|-----------------------|------------------------------------|----------------------------------------------------------------------------|-------------------------------|
| Export Site Takeovers | GET                                | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/sitetakeover/export | See <a href="#">Table A-1</a> |
| Import Site Takeovers | POST                               | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/sitetakeover/import | See <a href="#">Table A-3</a> |

## Export or Import Site Takeover

Table 2-115 Response Body Parameters for Import Request

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                    |
|----------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------|
| date           | string    | O                                               | Specifies the current timestamp                                                |
| errors:message | string    | O                                               | Specifies the error message.                                                   |
| errors:name    | string    | O                                               | Specifies the name of the error.                                               |
| exportData     | array     | M                                               | Exported Site Takeover. For more information, see <a href="#">Table 2-92</a> . |
| key            | string    | O                                               | Indicates the ID of Site Takeover                                              |
| sourceVersion  | string    | O                                               | System version of product from which data is exported                          |
| topic          | string    | M                                               | Topic of each managed object                                                   |

## Sample Request Body structure for Import and Export operations:

```
{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "name": "site1",
      "targetSiteId": "siteid12345"
    }
  ]
}
```

## 2.23 NF Profile

Table 2-116 Supported REST APIs

| Description           | HTTP Method or Custom Operation | Resource URI                                                              | Possible Result Code          |
|-----------------------|---------------------------------|---------------------------------------------------------------------------|-------------------------------|
| Create the NF Profile | POST                            | /oc-cnpolicy-configuration/v1/services/common/producer-nfprofile/{NFType} | See <a href="#">Table A-3</a> |

Table 2-116 (Cont.) Supported REST APIs

| Description           | HTTP Method or Custom Operation | Resource URI                                                                             | Possible Result Code          |
|-----------------------|---------------------------------|------------------------------------------------------------------------------------------|-------------------------------|
| Update the NF Profile | PUT                             | /oc-cnpolicy-configuration/v1/services/common/producer-nfprofile/{NFType}/{nfInstanceId} | See <a href="#">Table A-2</a> |
| Delete the NF Profile | DELETE                          | /oc-cnpolicy-configuration/v1/services/common/producer-nfprofile/{NFType}/{nfInstanceId} | See <a href="#">Table A-4</a> |
| Get All nfInstanceIds | GET                             | /oc-cnpolicy-configuration/v1/services/common/producer-nfinstanceids/{NFType}            | See <a href="#">Table A-1</a> |
| Get a NF Profile      | GET                             | /oc-cnpolicy-configuration/v1/services/common/producer-nfprofile/{NFType}/{nfInstanceId} | See <a href="#">Table A-1</a> |

Table 2-117 Request/Response Body Parameters

| Field Name        | Data Type          | Mandatory(M)<br>/ Optional(O)<br>Conditional(C) | Description                                                                                                                  |
|-------------------|--------------------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| nfInstanceId      | NfInstanceId       | M                                               | Unique identity of the NF Instance.                                                                                          |
| nfType            | NFType             | M                                               | Type of Network Function                                                                                                     |
| nfStatus          | NFStatus           | M                                               | Status of the NF Instance                                                                                                    |
| heartBeatTimer    | Integer            | C                                               | Time in seconds expected between two consecutive heartbeat messages from an NF Instance to the NRF.                          |
| plmnList          | array(PlmnId)      | C                                               | PLMN(s) of the Network Function                                                                                              |
| sNssais           | array(Snssai)      | O                                               | S-NSSAIs of the Network Function.                                                                                            |
| perPlmnSnssaiList | array(PlmnSnssai)  | O                                               | List of S-NSSAIs supported by the Network Function for each PLMN.                                                            |
| nsiList           | array(string)      | O                                               | NSI identities of the Network Function.                                                                                      |
| fqdn              | Fqdn               | C                                               | FQDN of the Network Function                                                                                                 |
| interPlmnFqdn     | Fqdn               | C                                               | Specifies the FQDN that is used for inter-PLMN routing, if the NF needs to be discoverable by other NFs in a different PLMN. |
| ipv4Addresses     | array(Ipv4Address) | C                                               | IPv4 address(es) of the Network Function                                                                                     |

Table 2-117 (Cont.) Request/Response Body Parameters

| Field Name                     | Data Type                 | Mandatory(M)<br>/ Optional(O)<br>Conditional(C) | Description                                                                                                                                      |
|--------------------------------|---------------------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| ipv6Addresses                  | rarray(Ipv6Addr)          | C                                               | IPv6 address(es) of the Network Function                                                                                                         |
| allowedPlmns                   | array(PlmnId)             | O                                               | PLMNs allowed to access the NF instance.                                                                                                         |
| allowedNfTypes                 | array(NFType)             | O                                               | Type of the NFs allowed to access the NF instance.                                                                                               |
| allowedNfDomains               | array(string)             | O                                               | Pattern representing the NF domain names allowed to access the NF instance. If not provided, any NF domain is allowed to access the NF.          |
| allowedNssais                  | array(Snssai)             | O                                               | S-NSSAI of the allowed slices to access the NF instance.                                                                                         |
| priority                       | integer                   | O                                               | Priority (relative to other NFs of the same type) in the range of 0-65535, to be used for NF selection; lower values indicate a higher priority. |
| capacity                       | integer                   | O                                               | Static capacity information in the range of 0-65535, expressed as a weight relative to other NF instances of the same type.                      |
| load                           | integer                   | O                                               | Dynamic load information, ranged from 0 to 100, indicates the current load percentage of the NF.                                                 |
| locality                       | string                    | O                                               | Operator defined information about the location of the NF instance (e.g. geographic location, data center)                                       |
| udrInfo                        | UdrInfo                   | O                                               | Specific data for the UDR (ranges of SUPI, group ID ...)                                                                                         |
| groupId                        | NfGroupId                 | O                                               | Identity of the UDM group that is served by the UDM instance. If not provided, the UDM instance does not pertain to any UDM group.               |
| supiRanges                     | array(SupiRange)          | O                                               | List of ranges of SUPIs whose profile data is available in the UDM instance.                                                                     |
| gpsiRanges                     | array(IdentityRange)      | O                                               | List of ranges of GPSIs whose profile data is available in the UDM instance.                                                                     |
| externalGroupIdentifiersRanges | array(IdentityRange)      | O                                               | List of ranges of external groups whose profile data is available in the UDM instance                                                            |
| supportedDataSets              | array(DataSetId)          | O                                               | List of supported data sets in the UDR instance. If not provided, the UDR supports all data sets.                                                |
| bsfInfo                        | BsfInfo                   | O                                               | Specific data for the BSF                                                                                                                        |
| ipv4AddressRanges              | array(Ipv4AddressesRange) | O                                               | List of ranges of IPv4 addresses handled by BSF. If not provided, the BSF can serve any IPv4 address.                                            |
| dnnList                        | array(Dnn)                | O                                               | List of DNNs handled by the BSF. If not provided, the BSF can serve any DNN.                                                                     |
| ipDomainList                   | array(string)             | O                                               | List of IPv4 address domains.                                                                                                                    |
| ipv6PrefixRanges               | array(Ipv6PrefixRange)    | O                                               | List of ranges of IPv6 prefixes handled by the BSF. If not provided, the BSF can serve any IPv6 prefix.                                          |
| chfInfo                        | ChfInfo                   | O                                               | specific data for the CHF.                                                                                                                       |
| gpsiRangeList                  | array(IdentityRange)      | O                                               | List of ranges of GPSI that can be served by the CHF instance. If not provided, the CHF can serve any GPSI.                                      |

Table 2-117 (Cont.) Request/Response Body Parameters

| Field Name                 | Data Type | Mandatory(M)<br>/ Optional(O)<br>Conditional(C) | Description                                                                                                                                             |
|----------------------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| customInfo                 | Object    | O                                               | Specific data for custom Network Functions                                                                                                              |
| nfProfileChangesSupportInd | boolean   | O                                               | NF Profile Changes Support Indicator. This parameter indicates if the NF Service Consumer supports receiving NF Profile Changes in the response or not. |
| nfProfileChangesInd        | boolean   | O                                               | NF Profile Changes Indicator. This parameter indicates if the NF Profile contains NF Profile changes or the complete NF Profile.                        |

Sample request body:

```
{
  "nfInstanceId": "3fa85f64-5717-4562-b3fc-2c963f66afa",
  "nfType": "BSF",
  "nfStatus": "REGISTERED",
  "heartBeatTimer": 0,
  "plmnList": [
    {
      "mcc": "string",
      "mnc": "string"
    }
  ],
  "sNssais": [
    {
      "sst": 0,
      "sd": "string"
    }
  ],
  "perPlmnSnsaiList": [
    {
      "plmnId": {
        "mcc": "string",
        "mnc": "string"
      },
      "sNssaiList": [
        {
          "sst": 0,
          "sd": "string"
        }
      ]
    }
  ],
  "nsiList": [
    "string"
  ],
  "fqdn": "string",
  "interPlmnFqdn": "string",
}
```

```

"ipv4Addresses": [
  "string"
],
"ipv6Addresses": [
  "string"
],
"allowedPlmns": [
  {
    "mcc": "string",
    "mnc": "string"
  }
],
"allowedNfTypes": [
  "string"
],
"allowedNfDomains": [
  "string"
],
"allowedNssais": [
  {
    "sst": 0,
    "sd": "string"
  }
],
"priority": 0,
"capacity": 0,
"load": 0,
"locality": "string",
"udrInfo": {
  "groupId": "string",
  "supiRanges": [
    {
      "start": "string",
      "end": "string",
      "pattern": "string"
    }
  ],
  "gpsiRanges": [
    {
      "start": "string",
      "end": "string",
      "pattern": "string"
    }
  ],
  "externalGroupIdentifiersRanges": [
    {
      "start": "string",
      "end": "string",
      "pattern": "string"
    }
  ],
  "supportedDataSets": [
    "APPLICATION"
  ]
},
"bsfInfo": {

```

```

    "ipv4AddressRanges": [
      {
        "start": "string",
        "end": "string"
      }
    ],
    "dnnList": [
      "string"
    ],
    "ipDomainList": [
      "string"
    ],
    "ipv6PrefixRanges": [
      {
        "start": "string",
        "end": "string"
      }
    ]
  },
  "chfInfo": {
    "supiRangeList": [
      {
        "start": "string",
        "end": "string",
        "pattern": "string"
      }
    ],
    "gpsiRangeList": [
      {
        "start": "string",
        "end": "string",
        "pattern": "string"
      }
    ]
  },
  "customInfo": {},
  "recoveryTime": "string",
  "nfServicePersistence": true,
  "nfServices": [
    {
      "serviceInstanceId": "string",
      "serviceName": "string",
      "versions": [
        {
          "apiVersionInUri": "string",
          "apiFullVersion": "string",
          "expiry": "string"
        }
      ],
      "scheme": "http",
      "nfServiceStatus": "REGISTERED",
      "fqdn": "string",
      "ipEndpoints": [
        {
          "ipv4Address": "string",
          "ipv6Address": "string",

```



```

        "transport": "TCP",
        "port": 0
      }
    ],
    "apiPrefix": "string",
    "allowedNfTypes": [
      "string"
    ],
    "priority": 0,
    "capacity": 0,
    "load": 0
  }
],
"nfProfileChangesSupportInd": true,
"nfProfileChangesInd": true
}

```

Sample response body:

```

{
  "nfInstanceId": "3fa85f64-5717-4562-b3fc-2c963f66afa9",
  "nfType": "BSF",
  "nfStatus": "REGISTERED",
  "heartBeatTimer": 0,
  "plmnList": [
    {
      "mcc": "string",
      "mnc": "string"
    }
  ],
  "sNssais": [
    {
      "sst": 0,
      "sd": "string"
    }
  ],
  "perPlmnSnssaiList": [
    {
      "plmnId": {
        "mcc": "string",
        "mnc": "string"
      },
      "sNssaiList": [
        {
          "sst": 0,
          "sd": "string"
        }
      ]
    }
  ],
  "nsiList": [
    "string"
  ],
  "fqdn": "string",
  "interPlmnFqdn": "string",

```

```

"ipv4Addresses": [
  "string"
],
"ipv6Addresses": [
  "string"
],
"allowedPlmns": [
  {
    "mcc": "string",
    "mnc": "string"
  }
],
"allowedNfTypes": [
  "string"
],
"allowedNfDomains": [
  "string"
],
"allowedNssais": [
  {
    "sst": 0,
    "sd": "string"
  }
],
"priority": 0,
"capacity": 0,
"load": 0,
"locality": "string",
"udrInfo": {
  "groupId": "string",
  "supiRanges": [
    {
      "start": "string",
      "end": "string",
      "pattern": "string"
    }
  ],
  "gpsiranges": [
    {
      "start": "string",
      "end": "string",
      "pattern": "string"
    }
  ],
  "externalGroupIdentifiersRanges": [
    {
      "start": "string",
      "end": "string",
      "pattern": "string"
    }
  ],
  "supportedDataSets": [
    "APPLICATION"
  ]
},
"bsfInfo": {

```

```

    "ipv4AddressRanges": [
      {
        "start": "string",
        "end": "string"
      }
    ],
    "dnnList": [
      "string"
    ],
    "ipDomainList": [
      "string"
    ],
    "ipv6PrefixRanges": [
      {
        "start": "string",
        "end": "string"
      }
    ]
  },
  "chfInfo": {
    "supiRangeList": [
      {
        "start": "string",
        "end": "string",
        "pattern": "string"
      }
    ],
    "gpsiRangeList": [
      {
        "start": "string",
        "end": "string",
        "pattern": "string"
      }
    ]
  },
  "customInfo": {},
  "recoveryTime": "string",
  "nfServicePersistence": true,
  "nfServices": [
    {
      "serviceInstanceId": "string",
      "serviceName": "string",
      "versions": [
        {
          "apiVersionInUri": "string",
          "apiFullVersion": "string",
          "expiry": "string"
        }
      ],
      "scheme": "http",
      "nfServiceStatus": "REGISTERED",
      "fqdn": "string",
      "ipEndpoints": [
        {
          "ipv4Address": "string",
          "ipv6Address": "string",

```

```

        "transport": "TCP",
        "port": 0
    },
    "apiPrefix": "string",
    "allowedNfTypes": [
        "string"
    ],
    "priority": 0,
    "capacity": 0,
    "load": 0
    }
},
"nfProfileChangesSupportInd": true,
"nfProfileChangesInd": true
}

```

## 2.24 Session Management Service

**Table 2-118 Supported REST APIs**

| Description                       | HTTP Method or Custom Operation | Resource URI                                                 | Possible Result Code          |
|-----------------------------------|---------------------------------|--------------------------------------------------------------|-------------------------------|
| Get Session Management Service    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcfsm        | See <a href="#">Table A-1</a> |
| Update Session Management Service | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcfsm        | See <a href="#">Table A-2</a> |
| Export Session Management Service | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcfsm/export | See <a href="#">Table A-1</a> |
| Import Session Management Service | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcfsm/import | See <a href="#">Table A-3</a> |

### Get and Update Session Management Service

**Table 2-119 Request/Response Body Parameters**

| Field Name                  | Data Type                   | Mandatory(M)/ Optional(O) | Description |
|-----------------------------|-----------------------------|---------------------------|-------------|
| system                      | SystemConfiguration         | O                         |             |
| user                        | SmUserConfiguration         | O                         |             |
| policy                      | Policy                      | O                         |             |
| policyControlRequestTrigger | PolicyControlRequestTrigger | O                         |             |
| binding                     | SmBindingConfiguration      | O                         |             |
| qos                         | QOSConfiguration            | O                         |             |
| rule                        | RuleConfiguration           |                           |             |

**Table 2-119 (Cont.) Request/Response Body Parameters**

| Field Name            | Data Type                        | Mandatory(M)/<br>Optional(O) | Description |
|-----------------------|----------------------------------|------------------------------|-------------|
| charging              | ChargingConfiguration            | O                            |             |
| trafficControl        | TrafficControlConfiguration      | O                            |             |
| imsEmergencySession   | IMSEmergencySessionConfiguration | O                            |             |
| audit                 | AuditConfiguration               | O                            |             |
| extendedAudit         | AuditExtendedConfiguration       | O                            |             |
| pendingTransaction    | PendingTransactionConfiguration  | O                            |             |
| nwdaf                 | SmNwdafConfiguration             | O                            |             |
| overloadConfiguration | OverloadConfiguration            | O                            |             |
| advancedSettings      | AdvancedSettings                 | M                            |             |

**Table 2-120 SystemConfiguration**

| Field Name              | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                             |
|-------------------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| componentTracingEnabled | Boolean   | O                                               | Determines if component tracing is enabled.<br>Component tracing is used to evaluate system process latency in detail level.<br>Default Value: false                                                                    |
| pcf_fqdn                | string    | O                                               | This is the PCF FQDN used by the PCF to register Binding data to BSF. AF may use this FQDN to communicate with PCF on N5 reference point.<br>Default Value: pcf-sm-service.pcf                                          |
| pcf_diamrealm           | string    | O                                               | This is the PCF diameter realm used by the PCF to register Binding data to BSF. Diameter based AF may use this diameter realm to communicate with PCF on Rx reference point.<br>Default Value: pcf-sm-service.svc       |
| pcf_diamidentity        | string    | O                                               | This is the PCF diameter identity used by the PCF to register Binding data to BSF. Diameter based AF may use this diameter identity to communicate with PCF on Rx reference point.<br>Default Value: pcf-sm-service.svc |

Table 2-120 (Cont.) SystemConfiguration

| Field Name                  | Data Type    | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                               |
|-----------------------------|--------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| snssai                      | string       | O                                               | This is the PCF SNSSAI used by the PCF to register Binding data to BSF. AF/BSF may use this SNSSAI to discover proper PCF.<br><b>Format:</b> sst,sd. <b>Default Value:</b> 0-000000                                                                       |
| metricsEnabled              | Boolean      | O                                               | This determines if system metrics is enabled. This will take priority on global metrics config.<br>Default Value: true                                                                                                                                    |
| smfNotificationRetryProfile | string       | O                                               | Defines the retry profile configuration for session management.                                                                                                                                                                                           |
| overrideSupportedFeatures   | string, ENUM | O                                               | Specifies the list of supported features that can be configured to override system embedded values. For example, SessionRuleErrorHandling, NetLoc, and so on.                                                                                             |
| enableCustomJson            | Boolean      | O                                               | Specifies either to enable or disable customized JSON file reading.                                                                                                                                                                                       |
| nfCommProfile               | string       | O                                               | Specifies the NF communication profile used by SMF.                                                                                                                                                                                                       |
| dataCompressionScheme       | string       | O                                               | Specifies the data compression scheme used by SM. Following are the allowed values for this field: <ul style="list-style-type: none"> <li>Disabled</li> <li>MySQL_Compressed</li> <li>Zlib_Compressed</li> </ul> By default, this value remains disabled. |
| dbEncodingEnabled           | Boolean      | O                                               | Specifies either to enable or disable database encoding.<br><b>Default Value:</b> false                                                                                                                                                                   |
| rxReauthProfileForRxCreate  | String       | O                                               | Specifies the selection of the Rx Reauth Profile for Update Notify Failures happens due to Rx Create Request.<br>Allowed Value: String (Only one profile)<br><b>Default Value:</b> Empty                                                                  |
| rxReauthProfileForRxUpdate  | String       | O                                               | Specifies the selection of the Rx Reauth Profile for Update Notify Failure happens due to Rx Update Request.<br>Allowed Value: String (Only one profile)<br><b>Default Value:</b> Empty                                                                   |

Table 2-121 SmUserConfiguration

| Field Name                   | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                        |
|------------------------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| validateUser                 | Boolean   | O                                               | Determines if user validate is enabled. HTTP 400 with cause <b>USER_UNKNOWN</b> returns, if this is enabled and user not found in UDR. <b>Default Value:</b> FALSE |
| queryUser                    | Boolean   | O                                               | Determines if user query from UDR is enabled. <b>Default Value:</b> TRUE                                                                                           |
| queryUserOnUpdate            | Boolean   | O                                               | Determines if user query from UDR on update is enabled. <b>Default Value:</b> FALSE                                                                                |
| queryUserOnDelete            | Boolean   | O                                               | Determines if user query from UDR on delete is enabled. <b>Default Value:</b> FALSE                                                                                |
| queryUserOnReauth            | Boolean   | O                                               | Determines if user query from UDR on reauth is enabled. <b>Default Value:</b> FALSE                                                                                |
| subsToNotifyEnabled          | Boolean   | O                                               | Determines if subscribe to notify about subscriber data change is enabled. <b>Default Value:</b> true                                                              |
| ignoreSubsNotificationCheck  | Boolean   | O                                               | Ignore subscriber's notification check. <b>Default Value:</b> false<br><b>Note:</b> Currently, this field is not used by the Policy application.                   |
| enableChfQueryAll            | Boolean   | O                                               | Determines whether to enable on-demand retrieval of policy counters for a subscriber from OCS synchronously.                                                       |
| enableAsyncChfQuery          | Boolean   | O                                               | Determines whether to enable on-demand retrieval of policy counters for a subscriber from OCS asynchronously.                                                      |
| enableOcsQueryAll            | Boolean   | O                                               | Determines whether to fetch policy counters for a subscriber from OCS.                                                                                             |
| forceLookupOcsDataOnSmUpdate | Boolean   | O                                               | Determines whether to perform force lookup for OCS Data. <b>Default Value:</b> false                                                                               |
| enableSmDataQuery            | Boolean   | O                                               |                                                                                                                                                                    |
| enableOsdQuery               | Boolean   |                                                 | Determines whether to perform on demand lookup for Policy Counters to be fetched from OCS. <b>Default Value:</b> false                                             |
| includeSnssaiInUserQuery     | Boolean   | O                                               | Determines if Snssai is included for SmPolicyData for PCF query and subscribe to UDR for Notification.                                                             |
| includeDnnInUserQuery        | Boolean   | O                                               | Determines if Dnn is included for SmPolicyData for PCF query and subscribe to UDR for Notification.                                                                |
| disableSubscriberVariables   | Boolean   | O                                               | Determines if subscriber variables are stored or not in the PCF database. <b>Default Value:</b> false                                                              |

Table 2-121 (Cont.) SmUserConfiguration

| Field Name                             | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                               |
|----------------------------------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------|
| ldapData.enable                        | Boolean   | O                                               | PCF fetches user profile from LDAP through PDS.<br>Default Value: false   |
| operatorSpecificData.subscribeToNotify | Boolean   | O                                               | PCF fetches OperatorSpecificData (imported using Custom Schema) from UDR. |

Table 2-122 Policy

| Field Name      | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                        |
|-----------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------|
| evaluateEnabled | Boolean   | O                                               | This determines if policy evaluation is enabled or not. <b>Default Value:</b> TRUE |

Table 2-123 PolicyControlRequestTrigger

| Field Name                          | Data Type                                          | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------|----------------------------------------------------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| defaultPolicyControlRequestTriggers | defaultPolicyControlRequestTriggers [string, ENUM] | O                                               | Default Policy Control Request Trigger(s) to install on PDU session at SM Policy association establishment. This is a comma split string.<br>Example: [ PLMN_CH, RES_MO_RE, AC_TY_CH, UE_IP_CH, UE_MAC_CH, AN_CH_COR, US_RE, APP_STA, APP_STO, AN_INFO, CM_SES_FAIL, PS_DA_OFF, DEF_QOS_CH, SE_AMBR_CH, QOS_NOTIF, NO_CREDIT, PRA_CH, SAREA_CH, SCNN_CH, RE_TIMEOUT, RES_RELEASE, SUCC_RES_ALLO, RAT_TY_CH, REF_QOS_IND_CH, SCELL_CH ] |

Table 2-124 SmBindingConfiguration

| Field Name                 | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                      |
|----------------------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| bsfRetryProfileForInitMsgs | string    | O                                               | Retry Profile to be used when PCF fails to send a create message to a producer node.                             |
| bindingOperationEnabled    | Boolean   | O                                               | This determines if binding operation (register and deregister) to the BSF is enabled. <b>Default Value:</b> TRUE |



Table 2-124 (Cont.) SmBindingConfiguration

| Field Name                                 | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| useLocalConfigure<br>dBsfAlways            | Boolean   | O                                               | Whether to use local configured BSF without Always discovering. <b>Default Value:</b> FALSE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| useLocalConfigure<br>dBsfWhenNotDiscovered | Boolean   | O                                               | Whether to use local configured (if having) BSF when not discovered or discover failed. <b>Default Value:</b> FALSE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| useHttp2                                   | Boolean   | O                                               | Determines if using http/2 to communicate with BSF. Otherwise use http/1.1. <b>Default Value:</b> TRUE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| abortOnBindingError                        | Boolean   | O                                               | Determines if PCF (SM service) should abort terminate session when binding error is received.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| bsfRetryProfileFor<br>SubsqMsgs            | string    | O                                               | <p>Retry Profile to be used when PCF fails to send an in-session message to a producer node.</p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>If both "Retry Profile for Initial Messages" and "Retry Profile for Subsequent Messages" are not configured (default case) no retry is attempted.</li> <li>If both "Retry Profile for Initial Messages" and "Retry Profile for Subsequent Messages" are configured, retries is attempted accordingly.</li> <li>If "Retry Profile for Initial Messages" is configured but "Retry Profile for Subsequent Messages" is not configured then the profile for initial messages is used for subsequent messages. (to be backward compatible with release 1.8.x)</li> <li>If "Retry Profile for Initial Messages" is not configured but "Retry Profile for Subsequent Messages" is configured then retry is not attempted for initial messages but is attempted for subsequent messages.</li> </ul> |
| bsfRecreateAttemptState                    | string    | O                                               | <p>Specifies to either enable or disable the BSF recreate attempts functionality. The possible values:</p> <p><b>Enabled</b></p> <p><b>Disable</b></p> <p><b>Disable and Cleanup</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| bsfReattemptProfile                        | string    | O                                               | Specifies the reattempt profile to be used for binding recreate attempts.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| bsfNfCommProfile                           | string    | O                                               | Specifies the NF communication profile used by BSF.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

Table 2-124 (Cont.) SmBindingConfiguration

| Field Name                  | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| defaultBindingOperationMode | ENUM      | O                                               | <p>Allows users to configure binding operation mode as synchronous or asynchronous.</p> <p><b>Note:</b> The mode chosen during the CREATE request remains same during UPDATE and TERMINATE operations for the same SM session.</p> <p>The default binding operation mode is set to synchronous.</p> <p><b>Note:</b> To ensure backward compatibility, if this attribute is not available in the database, the value is set to "Synchronous"</p> <p>After performing necessary configurations, user may use the policy action - <b>Set Binding Registration Mode</b> to update configurations for specific policies. For more information, see <i>Oracle Communications Cloud Native Core, Converged Policy Design Guide</i>.</p> |

Table 2-125 QOSConfiguration

| Field Name                  | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C)ain<br>ts | Description                                                                                                                                                     |
|-----------------------------|-----------|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| defaultQos5qi               | string    | O                                                        | <p>This is the 5Qi of default Qos which will be applied if no default Qos is requested by UE.</p> <p><b>Default Value:</b> 9</p>                                |
| defaultQosArpPreemptCap     | ENUM      | O                                                        | <p>This is the ARP PreemptionCapability of default Qos which will be applied if no default Qos is requested by UE.</p> <p><b>Default Value:</b> MAY_PREEMPT</p> |
| defaultQosArpPreemptVuln    | ENUM      | O                                                        | <p>This is the ARP PreemptionVulnerability of default Qos which will be applied if no default Qos is requested by UE. <b>Default Value:</b> NOT_PREEMPTABLE</p> |
| defaultQosArpPriorityLevel  | string    | O                                                        | <p>This is the ARP Priority Level of default Qos which will be applied if no default Qos is requested by UE.</p> <p><b>Default Value:</b> 1</p>                 |
| installDefQosIfNotRequested | Boolean   | O                                                        | <p>This determines whether to install default Qos to the PDU session if UE not requested <b>Default Value:</b> TRUE</p>                                         |

Table 2-125 (Cont.) QOSConfiguration

| Field Name                         | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C)ain<br>ts | Description                                                                                                                                                                                      |
|------------------------------------|-----------|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| qosDataIdPrefix                    | string    | O                                                        | This is the prefix of qos data id used by PCF to generate qos data id. For example, prefix is "qosdata_", the generated qos data id is qosdata_0, chgdata_1, etc. <b>Default Value:</b> qosdata_ |
| updateDefaultPcfRuleWithAuthDefQos | Boolean   | O                                                        | This determines whether to update Qos of default PccRule with the authDefQos of session rule. <b>Default Value:</b> TRUE                                                                         |

Table 2-126 RuleConfiguration

| Field Name                 | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C)ain<br>ts | Description                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------|-----------|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| appRulePrecedenceMax       | string    | O                                                        | This value defines the maximum value for precedence of a PCC rule as authorized by the establishment of an application flow by the AF. If multiple rules are applied to the same packet flow or UE resource (that is., overlapping rules) a rule with lower precedence value takes the priority over a rule with higher precedence value. The value of -1 is used to not set the precedence of a rule (NOT RECOMMENDED). <b>Default Value:</b> 899 |
| appRulePrecedenceMin       | string    | O                                                        | This value defines the minimum value for precedence of a PCC rule as authorized by the establishment of an application flow by the AF. If multiple rules are applied to the same packet flow or UE resource (that is., overlapping rules) a rule with lower precedence value takes the priority over a rule with higher precedence value. The value of -1 is used to not set the precedence of a rule (NOT RECOMMENDED). <b>Default Value:</b> 400 |
| defaultPccRule5qi          | string    | O                                                        | This is the 5Qi of default pcc rule. <b>Default Value:</b> 9                                                                                                                                                                                                                                                                                                                                                                                       |
| defaultQosArpPriorityLevel | string    | O                                                        | This is the ARP Priority Level of qos of default pcc rule The range is 1 to 15. Values are ordered in decreasing order of priority, for example, with 1 as the highest priority and 15 as the lowest priority. <b>Default Value:</b> 15                                                                                                                                                                                                            |

Table 2-126 (Cont.) RuleConfiguration

| Field Name                                               | Data Type             | Mandatory(M)/<br>Optional(O)/<br>Conditional(C)ain<br>ts | Description                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------------|-----------------------|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| defaultPccRuleArp<br>PreemptCap                          | ENUM                  | O                                                        | This is the ARP PreemptionCapability of qos of default PCC rule.<br><ul style="list-style-type: none"> <li>NOT_PREEMPT</li> <li>MAY_PREEMPT</li> </ul> <b>Default Value:</b> NOT_PREEMPT                                                                                                                                                                                                   |
| defaultPccRuleArp<br>PreemptVuln                         | ENUM                  | O                                                        | This is the ARP PreemptionVulnerability of qos of default pcc rule.<br><ul style="list-style-type: none"> <li>PREEMPTABLE</li> <li>NOT_PREEMPTABLE</li> </ul> <b>Default Value:</b> PREEMPTABLE                                                                                                                                                                                            |
| defaultPccRuleArp<br>PriorityLevel                       | string<br>example: 15 | O                                                        | This is the ARP Priority Level of qos of default pcc rule The range is 1 to 15. Values are ordered in decreasing order of priority, for example, with 1 as the highest priority and 15 as the lowest priority. <b>Default Value:</b> 15                                                                                                                                                    |
| defaultPccRulePre<br>cedence                             | string                | O                                                        | This is the precedence of default pcc rule. <b>Default Value:</b> 3000                                                                                                                                                                                                                                                                                                                     |
| installDefaultPccRu<br>le                                | ENUM                  | O                                                        | This determine whether and how to install default pcc rule for a PDU session<br><ul style="list-style-type: none"> <li>ALWAYS</li> <li>IF_NO_PROVISIONED_RULE: Only if no other provisioned rule is configured</li> <li>IF_NO_RULE: Only if no other rule (predefined or provisioned) is configured/installed</li> <li>NEVER</li> </ul> <b>Default Value:</b> IF_NO_RULE                   |
| defaultPccRuleProf<br>ile                                | string                | O                                                        | If a default PCC Rule Profile is configured by the user, it is applied to the chosen PCC Rule.                                                                                                                                                                                                                                                                                             |
| ruleIdPrefix                                             | string                | O                                                        | This is the prefix of rule id of the pcc rule or session rule auto generated by PCF. for example, prefix is "0_", the generated rule id is 0_0, 0_1, etc. <b>Default Value:</b> 0_                                                                                                                                                                                                         |
| switchFlowInToOut<br>Enabled                             | Boolean               | O                                                        | This determines whether to switch "in" to "out" in flow description. The src and desc will be switched as well. For example, if enabled, "permit in ip from 2800:a00:cc01:c056:1c00:de10:c481:f193/128 to 2800:a00:800:7::1:3b/128 36004" will be changed to "permit out ip from 2800:a00:800:7::1:3b/128 36004 to 2800:a00:cc01:c056:1c00:de10:c481:f193/128" <b>Default Value:</b> FALSE |
| packetFilterUsageT<br>oTrueForPreliminar<br>yServiceInfo | string                | O                                                        |                                                                                                                                                                                                                                                                                                                                                                                            |

Table 2-126 (Cont.) RuleConfiguration

| Field Name                                          | Data Type    | Mandatory(M)/<br>Optional(O)/<br>Conditional(C)ain<br>ts | Description                                                                                                                                           |
|-----------------------------------------------------|--------------|----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| ruleConflictsStrategy                               | string       | O                                                        |                                                                                                                                                       |
| setPacketFilterUsageToTrueForPreliminaryServiceInfo | Boolean      | O                                                        |                                                                                                                                                       |
| defaultPolicyControlRequestTriggers                 | string, ENUM | O                                                        | This is the default Policy Control Request Trigger(s) to install on PDU session at SM Policy association establishment. This is a comma split string. |
| defaultPccRuleRequestedRuleData                     | string, ENUM | O                                                        |                                                                                                                                                       |

Table 2-127 ChargingConfiguration

| Field Name                | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                      |
|---------------------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| chgDataIdPrefix           | string    | O                                               | This is the prefix of chg data id used by PCF to generate chg data id. For example, prefix is "chgdata_", the generated chg data id is chgdata_0, chgdata_1, etc. <b>Default Value:</b> chgdata_ |
| offline                   | Boolean   | O                                               | Indicates the offline charging is applicable to the PDU session.                                                                                                                                 |
| online                    | Boolean   | O                                               | Indicates the online charging is applicable to the PDU session.                                                                                                                                  |
| primaryChfAddress         | string    | O                                               | Specifies the primary CHF address.                                                                                                                                                               |
| primaryChfInstanceId      | string    | O                                               | Specifies the Instance ID of the primary CHF.                                                                                                                                                    |
| primaryChfSetId           | string    | O                                               | Specifies the Set ID of the primary CHF.                                                                                                                                                         |
| secondaryChfAddress       | string    | O                                               | Specifies the secondary CHF address.                                                                                                                                                             |
| secondaryChfInstanceId    | string    | O                                               | Specifies the Instance ID of the secondary CHF.                                                                                                                                                  |
| secondaryChfSetId         | string    | O                                               | Specifies the Set ID of the secondary CHF.                                                                                                                                                       |
| useSubscriberDefChgMethod | Boolean   | O                                               | Indicates whether to use the online value defined in the PDU session.<br><b>Default Value:</b> true                                                                                              |

Table 2-128 TrafficControlConfiguration

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                            |
|----------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| tcDataIdPrefix | string    | O                                               | This is the prefix of traffic control data id used by PCF to generate tc data id. For example, prefix is "tcdata_", the generated tc data id is tcdata_0, tcdata_1, etc. <b>Default Value:</b> tcdata_ |

Table 2-129 IMSEmergencySessionConfiguration

| Field Name                                            | Data Type         | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                          |
|-------------------------------------------------------|-------------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| arpPreemptCap                                         | ENUM              | M                                               | Defines whether a service data flow may get resources that were already assigned to another service data flow with a lower priority level.<br><b>Default Value:</b> MAY_PREEMPT      |
| arpPreemptVuln                                        | Boolean           | M                                               | Defines whether a service data flow may lose the resources assigned to it in order to admit a service data flow with higher priority level.<br><b>Default Value:</b> NOT_PREEMPTABLE |
| arpPriorityLevel                                      | integer (\$int32) | O                                               | Defines the relative importance of a resource request.<br><b>Default Value:</b> 1                                                                                                    |
| Any number of values are permitted for Emergency DNNs | string            | O                                               | DNN included in the request from SMF to PCF to establish an emergency session.                                                                                                       |

Table 2-130 AuditConfiguration

| Field Name   | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                     |
|--------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------|
| audit.enable | Boolean   | O                                               | Determines whether to send registration request to Audit service or not.<br>Default Value: true |

Table 2-130 (Cont.) AuditConfiguration

| Field Name             | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                          |
|------------------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| audit.frequency        | integer   | M                                               | Defines the time when next audit for the SM service table begins after delta time if auditing this table has been finished before this specified time.<br>Default Value: 330                                                                                                                                         |
| audit.maxTtl           | integer   | M                                               | Defines the maximum age of a SM policy association after which a record is purged from PCF SM database without sending further queries to SM.<br>Default Value: 2880                                                                                                                                                 |
| audit.notificationRate | integer   | M                                               | Defines the number of stale records which Audit service will notify to Session Management (SM) service in one second.<br>Default Value: 50<br><b>Note:</b> To configure higher number than the recommended value, contact My Oracle Support ( <a href="https://support.oracle.com">https://support.oracle.com</a> ). |
| audit.ttl              | integer   | M                                               | Defines the age of a SM policy association after which a record is considered to be stale on PCF and the SMF is queried for presence of such associations.<br>Default Value: 1440                                                                                                                                    |

Table 2-131 AuditExtendedConfiguration

| Field Name          | Data Type                | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                    |
|---------------------|--------------------------|-------------------------------------------------|--------------------------------|
| pendingOperation    | AuditPendingOperation    | M                                               | Pending Operation details.     |
| smPolicyAssociation | AuditSmPolicyAssociation | M                                               | SM Policy Association details. |
| tdfSession          | AuditTdfSession          | M                                               | TDF Session details for Audit. |

Table 2-132 AuditPendingOperation

| Field Name          | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| notificationRate    | integer   | O                                               | Defines the number of pending operation records which Audit service notifies to Session Management (SM) service in one second.<br><b>Note:</b> The notification rate for all the operations of Audit service remains the same. Policy does not allow to configure different values for different operations. Therefore, by default the notification rate configured for the <b>SmPolicyAssociation</b> section applies for <b>Pending Operations</b> .<br><b>Default Value:</b> 50 |
| ttl                 | integer   | O                                               | Defines the age of a pending operation after which a record is considered to be stale. This is a non modifiable field.<br><b>Default Value:</b> 0                                                                                                                                                                                                                                                                                                                                  |
| maxTtl              | integer   | O                                               | Defines the maximum age of a pending operation after which a record is purged from PCF SM database without sending further queries to SM.<br><b>Default Value:</b> 2880                                                                                                                                                                                                                                                                                                            |
| frequency           | integer   | O                                               | Defines the frequency with which the Audit service performs audit of the pending operation table for the Retry Timestamps that have been reached.<br><b>Default Value:</b> 10                                                                                                                                                                                                                                                                                                      |
| enableAlternateSite | Boolean   | O                                               | The site takeover profile.                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| alternateSiteId     | string    | O                                               | Specifies if the site takeover must be enabled in case of failure.                                                                                                                                                                                                                                                                                                                                                                                                                 |



Table 2-133 AuditSmPolicyAssociation

| Field Name       | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                             |
|------------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enable           | Boolean   | O                                               | Determines whether to send registration request to Audit service or not.<br><b>Default Value:</b> True                                                                                                                                                                                                                                  |
| notificationRate | integer   | O                                               | Defines the number of stale records which Audit service notifies to Session Management (SM) service in one second.<br><b>Default and Recommended Value:</b> 50<br><b>Note:</b> To configure higher number than the recommended value, contact My Oracle Support ( <a href="https://support.oracle.com">https://support.oracle.com</a> ) |
| ttl              | integer   | O                                               | Defines the age of a SM policy association after which a record is considered to be stale on PCF and the SMF is queried for presence of such associations.<br><b>Default Value:</b> 1440                                                                                                                                                |
| maxTtl           | integer   | O                                               | Defines the maximum age of a SM policy association after which a record is purged from PCF SM database without sending further queries to SM.<br><b>Default Value:</b> 2880                                                                                                                                                             |

Table 2-133 (Cont.) AuditSmPolicyAssociation

| Field Name       | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| minAuditAttempts | integer   | M                                               | <p>Specifies the minimum number of consecutive failed audit attempts until maxTTL / forceTTL is reached.</p> <p>If maxTTL is reached and audit_attempts + 1 &gt;= Minimum Audit Attempts for maxTTL, Audit service sends notification to SM service with maxTTL flag set to <i>true</i>. SM Service sends DELETE request to PDS and Binding Service.</p> <p><b>Range:</b> 0-99</p> <p><b>Default Value:</b> 0</p> <p><b>Note:</b> If maxTTL is not reached and if audit attempts are reached, the number of audit attempts are incremented until maxTTL is reached.</p> |
| frequency        | integer   | O                                               | <p>Defines the time when next audit for the SM service table is done after delta time if auditing this table has been finished before this specified time.</p> <p><b>Default Value:</b> 10</p>                                                                                                                                                                                                                                                                                                                                                                          |

Table 2-134 AuditTdfSession

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                          |
|------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| enable     | Boolean   | O                                               | <p>SM determines whether to send registration request to Audit service or not.</p> <p><b>Default Value:</b> True</p> |

Table 2-134 (Cont.) AuditTdfSession

| Field Name       | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| notificationRate | integer   | O                                               | Defines the number of TDF stale records which Audit service notifies to Session Management (SM) service in one second.<br><b>Default Value:</b> 50                                                                                                                                                                                                                                                                                                                                                                                        |
| ttl              | integer   | O                                               | Defines the age of a TDF session after which a record is considered to be stale on PCF and the TDF is queried for presence of such associations.<br><b>Default Value:</b> 1440                                                                                                                                                                                                                                                                                                                                                            |
| maxTtl           | integer   | O                                               | Defines the maximum age of a pending operation after which a record is purged from PCF SM database without sending further queries to SM.<br><b>Default Value:</b> 2880                                                                                                                                                                                                                                                                                                                                                                   |
| minAuditAttempts | integer   | M                                               | Specifies the minimum number of consecutive failed audit attempts until maxTTL / forceTTL is reached.<br><br>If maxTTL is reached and audit_attempts + 1 >= Minimum Audit Attempts for maxTTL, Audit service sends notification to SM service with maxTTL flag set to <i>true</i> . SM Service deletes stale TDF Session from TdfSession table.<br><br>If maxTTL is not reached and if audit attempts are reached, the number of audit attempts are incremented until maxTTL is reached.<br><b>Range:</b> 0-99<br><b>Default Value:</b> 0 |

Table 2-134 (Cont.) AuditTdfSession

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                          |
|------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| frequency  | integer   | O                                               | Defines the time frequency with which the Audit service performs audit for the stale sessions in TdfSession table. If the audit of TdfSession table is finished before this specified time, then next audit for this table happens after the delta time.<br><b>Default Value:</b> 10 |
| queryTDF   | Boolean   | O                                               | On true, SM sends a RAR request with Tdfsession toward TDF. On false, SM deletes the Tdfsession.<br><b>Default Value:</b> False                                                                                                                                                      |

Table 2-135 PendingTransactionConfiguration

| Field Name                                   | Data Type | Mandatory(M)/<br>Optional(O) | Description                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------|-----------|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enter a range in milliseconds from [0-10000] | integer   | M                            | Indicates the time between two consecutive retry UpdateNotify messages when UpdateNotify message is held back from being sent to SMF.<br>The default value for this field is 1000.                                                                                                                                                                                                       |
| enter a range from [0-5]                     | integer   | M                            | Indicates the count for UpdateNotify message to be retried when it is held back from sending to SMF.<br>The default value for this field is 2.                                                                                                                                                                                                                                           |
| errorUpdateNotifyHandlingApp                 | string    | O                            | On Update Notify to SMF triggered by Rx, this configuration decides if it should RETRY (with UpdateNotifyRetryBackoff and UpdateNotifyRetryCount settings) or DISCARD when receiving 400 Pending Transaction response from SMF.<br>The default value for this field is DISCARD. The allowed values are: <ul style="list-style-type: none"> <li>DISCARD (0)</li> <li>RETRY (1)</li> </ul> |

**Table 2-135 (Cont.) PendingTransactionConfiguration**

| Field Name           | Data Type | Mandatory(M)/<br>Optional(O) | Description                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------|-----------|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| updateNotifyHandling | string    | O                            | On Update Notify to SMF triggered by Subscriber Notification, this configuration decides if it should RETRY (with UpdateNotifyRetryBackoff and UpdateNotifyRetryCount settings) or DISCARD when receiving 400 Pending Transaction response from SMF. The default value for this field is RETRY. The allowed values are: <ul style="list-style-type: none"><li>• DISCARD (0)</li><li>• RETRY (1)</li></ul> |

**Table 2-136 SmNwdafConfiguration**

| Field Name      | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                          |
|-----------------|-----------|-------------------------------------------------|--------------------------------------|
| enableNwdafData | Boolean   | O                                               | To enable or disable the Nwdaf data. |

Table 2-137 overloadConfiguration

| Field Name                                         | Data Type | Mandatory(M)/<br>Optional(O) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------------------------------|-----------|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| overloadConfiguration.enhancedOverloadControlLevel | Integer   | O                            | <p>Specifies the current status of the Enhanced Overload Control mechanism. It indicates whether advanced overload management features are active for this service.</p> <p>Possible Values:</p> <ul style="list-style-type: none"> <li>-1 (DISABLED)</li> <li>1 (L1)</li> <li>2 (L2)</li> <li>3 (L3)</li> </ul> <p><b>Default Value:</b> -1</p> <p>DISABLED, L1, L2, L3 are the corresponding value of this parameter in UI.</p> <p><b>Note:</b> Setting one of these different control level to either 1, 2, and 3 signifies that, if the configuration Control Level is set to 1, and the actual Load Level of SM service is either in L1 or above state (that is, L2 or L3), then only Enhanced Overload Actions will be applied. Similarly, if the Configuration control level is set to 2 and even if the service load Level of SM service is in L1 state, the Enhance Overload actions will not be applied. Once the system load level reaches L2, then the Overload actions will get applied. Similarly, if the configuration is in L3 state, then even if the SM service load level is in L1 or L2 state, enhance overload actions will not be performed.</p> |
| overloadConfiguration.overloadConfigurationProfile | String    | O                            | <p>Specifies the name of the overload configuration profile assigned to this service.</p> <p>A profile includes specific rules for overload handling.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

Table 2-138 AdvancedSettings

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                     |
|------------|-----------|-------------------------------------------------|---------------------------------|
| key        | string    | O                                               | Specifies the key name.         |
| value      | string    | O                                               | Specifies the value of the key. |

For more information on the Advanced Settings "Keys" and "Values", see "**Session Management Service**" section of "Configuring Policy Using CNC Console" in *Oracle Communications Cloud Native Core, Converged Policy User Guide*.

**Sample Request body structure for GET and PUT operations:**

```

{
  "system": {
    "componentTracingEnabled": true,
    "pcf_fqdn": "pcf-smsservice.oacle.com",
    "pcf_diamrealm": "oacle.com",
    "pcf_diamidentity": "pcf-smsservice.oacle.com",
    "snssai": "0,000000",
    "metricsEnabled": true,
    "smfNotificationRetryProfile": "string",
    "overrideSupportedFeatures": [
      "TSC"
    ],
    "enableCustomJson": true,
    "nfCommProfile": "string",
    "dataCompressionScheme": "string",
    "dbEncodingEnabled": true,
    "rxReauthProfileForRxCreate": "string",
    "rxReauthProfileForRxUpdate": "string"
  },
  "user": {
    "validateUser": true,
    "queryUser": true,
    "queryUserOnUpdate": true,
    "queryUserOnDelete": true,
    "queryUserOnReauth": true,
    "subsToNotifyEnabled": true,
    "ignoreSubsNotificationCheck": true,
    "enableChfQueryAll": true,
    "enableAsyncChfQuery": true,
    "enableOcsQueryAll": true,
    "enableAsyncOcsQuery": true,
    "forceLookupOcsDataOnSmUpdate": true,
    "enableSmDataQuery": true,
    "enableOsdQuery": true,
    "includeSnssaiInUserQuery": true,
    "includeDnnInUserQuery": true,
    "disableSubscriberVariables": true,
    "ldapData.enable": true,
    "operatorSpecificData.subscribeToNotify": true
  },
  "policy": {
    "evaluateEnabled": true
  },
  "policyControlRequestTrigger": {
    "defaultPolicyControlRequestTriggers": [
      "PLMN_CH"
    ]
  },
  "binding": {
    "bsfRetryProfileForInitMsgs": "string",
    "bindingOperationEnabled": true,
    "useLocalConfiguredBsfAlways": true,
    "useLocalConfiguredBsfWhenNotDiscovered": true,
  }
}

```

```

    "useHttp2": true,
    "abortOnBindingError": true,
    "bsfRetryProfileForSubsqMsgs": "string",
    "bsfNfCommProfile": "string",
    "bsfRecreateAttemptState": "string",
    "bsfReattemptProfile": "string",
    "defaultBindingOperationMode": "SYNCHRONOUS"
  },
  "qos": {
    "qosDataIdPrefix": "qosdata_",
    "updateDefaultPcfRuleWithAuthDefQos": true,
    "installDefQosIfNotRequested": true,
    "defaultQos5qi": "9",
    "defaultQosArpPreemptCap": "MAY_PREEMPT",
    "defaultQosArpPreemptVuln": "NOT_PREEMPTABLE",
    "defaultQosArpPriorityLevel": "1"
  },
  "rule": {
    "defaultPolicyControlRequestTriggers": [
      "SUCC_RES_ALLO"
    ],
    "packetFilterUsageToTrueForPreliminaryServiceInfo": "string",
    "installDefaultPccRule": "ALWAYS",
    "defaultPccRuleProfile": "string",
    "ruleIdPrefix": "0_",
    "defaultPccRule5qi": "9",
    "defaultPccRulePrecedence": "3000",
    "defaultPccRuleArpPreemptCap": "NOT_PREEMPT",
    "defaultPccRuleRequestedRuleData": [
      "SUCC_RES_ALLO"
    ],
    "defaultPccRuleArpPreemptVuln": "PREEMPTABLE",
    "ruleConflictsStrategy": "INSTALL",
    "appRulePrecedenceMin": "400",
    "appRulePrecedenceMax": "899",
    "defaultPccRuleArpPriorityLevel": "15",
    "switchFlowInToOutEnabled": true,
    "setPacketFilterUsageToTrueForPreliminaryServiceInfo": true
  },
  "charging": {
    "chgDataIdPrefix": "chgdata_",
    "primaryChfAddress": "string",
    "primaryChfInstanceId": "string",
    "primaryChfSetId": "string",
    "secondaryChfAddress": "string",
    "secondaryChfInstanceId": "string",
    "secondaryChfSetId": "string",
    "online": true,
    "offline": true,
    "useSubscriberDefChgMethod": true
  },
  "trafficControl": {
    "tcDataIdPrefix": "tcdata_"
  },
  "imsEmergencySession": {
    "Any number of values are permitted for Emergency DNNs": [

```



```

        "string"
      ],
      "arpPriorityLevel": 15,
      "arpPreemptCap": "NOT_PREEMPT",
      "arpPreemptVuln": "NOT_PREEMPTABLE"
    },
    "audit": {
      "enable": true,
      "notificationRate": 50,
      "ttl": 1440,
      "maxTtl": 2880,
      "frequency": 330
    },
    "extendedAudit": {
      "pendingOperation": {
        "notificationRate": 0,
        "ttl": 0,
        "maxTtl": 0,
        "frequency": 0,
        "enableAlternateSite": true,
        "alternateSiteId": "string"
      },
      "smPolicyAssociation": {
        "enable": true,
        "notificationRate": 0,
        "ttl": 0,
        "maxTtl": 0,
        "minAuditAttempts": 5,
        "frequency": 0
      },
      "tdfSession": {
        "enable": true,
        "notificationRate": 0,
        "ttl": 0,
        "maxTtl": 0,
        "minAuditAttempts": 5,
        "frequency": 0,
        "queryTDF": true
      }
    },
    "pendingTransaction": {
      "enter a range in milliseconds from [0-10000]": 1000,
      "enter a range from [0-5]": 2,
      "errorUpdateNotifyHandlingApp": "string",
      "updateNotifyHandling": "string"
    },
    "nwdaf": {
      "enableNwdafData": true
    },
    "overloadConfiguration": {
      "enhancedOverloadControlLevel": -1,
      "overloadConfigurationProfile": "string"
    },
    "advancedSettings": [
      {
        "key": "string",

```

```

        "value": "string"
      }
    ]
  }
}

```

## Export/Import Session Management Service

**Table 2-139 Request/Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                        |
|----------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| date           | string    |                                                 | Current timestamp                                                                                                                  |
| errors:message | string    |                                                 |                                                                                                                                    |
| errors:name    | string    |                                                 |                                                                                                                                    |
| exportData     | array     |                                                 | Exported list of session management service. For more information, see <a href="#">Get and Update Session Management Service</a> . |
| sourceVersion  | string    |                                                 | System version of product from which data is exported                                                                              |
| topic          | string    |                                                 | Topic of each managed object                                                                                                       |

### Sample Request Body structure for Import/Export operations:

```

{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": {
    "advancedSettings": [
      {
        "key": "string",
        "value": "string"
      }
    ]
  },
  "audit": {
    "enable": true,
    "frequency": 330,
    "maxTtl": 2880,
    "notificationRate": 50,
    "ttl": 1440
  },
  "binding": {
    "abortOnBindingError": true,
    "bindingOperationEnabled": true,
    "bsfNfCommProfile": "string",

```

```

    "bsfRetryProfileForInitMsgs": "string",
    "bsfRetryProfileForSubsqMsgs": "string",
    "defaultBindingOperationMode": "SYNCHRONOUS",
    "useHttp2": true,
    "useLocalConfiguredBsfAlways": true,
    "useLocalConfiguredBsfWhenNotDiscovered": true
  },
  "charging": {
    "chgDataIdPrefix": "chgdata_",
    "offline": true,
    "online": true,
    "primaryChfAddress": "string",
    "primaryChfInstanceId": "string",
    "primaryChfSetId": "string",
    "secondaryChfAddress": "string",
    "secondaryChfInstanceId": "string",
    "secondaryChfSetId": "string",
    "useSubscriberDefChgMethod": true
  },
  "imsEmergencySession": {
    "arpPreemptCap": "MAY_PREEMPT",
    "arpPreemptVuln": "NOT_PREEMPTABLE",
    "arpPriorityLevel": 0,
    "emergencyDNNs": [
      "string"
    ]
  },
  "pendingTransaction": {
    "updateNotifyRetryBackoff": 1000,
    "updateNotifyRetryCount": 2
  },
  "policy": {
    "evaluateEnabled": true
  },
  "policyControlRequestTrigger": {
    "defaultPolicyControlRequestTriggers": [
      "AC_TY_CH"
    ]
  },
  "qos": {
    "defaultQos5qi": 9,
    "defaultQosArpPreemptCap": "MAY_PREEMPT",
    "defaultQosArpPreemptVuln": "NOT_PREEMPTABLE",
    "defaultQosArpPriorityLevel": 1,
    "installDefQosIfNotRequested": true,
    "qosDataIdPrefix": "qosdata_",
    "updateDefaultPccRuleWithAuthDefQos": true
  },
  "rule": {
    "appRulePrecedenceMax": 899,
    "appRulePrecedenceMin": 400,
    "defaultPccRule5qi": 9,
    "defaultPccRuleArpPreemptCap": "NOT_PREEMPT",
    "defaultPccRuleArpPreemptVuln": "PREEMPTABLE",
    "defaultPccRuleArpPriorityLevel": 15,
    "defaultPccRulePrecedence": 3000,

```

```

    "defaultPccRuleProfile": "string",
    "installDefaultPccRule": "ALWAYS",
    "packetFilterUsageToTrueForPreliminaryServiceInfo": true,
    "ruleConflictsStrategy": "INSTALL",
    "ruleIdPrefix": "0_",
    "setPacketFilterUsageToTrueForPreliminaryServiceInfo": true,
    "switchFlowInToOutEnabled": true
  },
  "system": {
    "componentTracingEnabled": true,
    "enableCustomJson": true,
    "metricsEnabled": true,
    "nfCommProfile": "string",
    "overrideSupportedFeatures": [
      "3GPP-PS-Data-Off"
    ],
    "pcf_diamidentity": "pcf-smsservice.oracle.com",
    "pcf_diamrealm": "oracle.com",
    "pcf_fqdn": "pcf-smsservice.oracle.com",
    "smfNotificationRetryProfile": "string",
    "snssai": "0,000000"
  },
  "trafficControl": {
    "tcDataIdPrefix": "tcdata_"
  },
  "user": {
    "disableSubscriberVariables": true,
    "enableAsyncChfQuery": true,
    "enableAsyncOcsQuery": true,
    "enableChfQueryAll": true,
    "enableOcsQueryAll": true,
    "enableOsdQuery": true,
    "enableSmDataQuery": true,
    "ignoreSubsNotificationCheck": true,
    "includeDnnInUserQuery": true,
    "includeSnssaiInUserQuery": true,
    "ldapData.enable": true,
    "operatorSpecificData.subscribeToNotify": true,
    "queryUser": true,
    "queryUserOnDelete": true,
    "queryUserOnReauth": true,
    "queryUserOnUpdate": true,
    "subsToNotifyEnabled": true,
    "validateUser": true
  }
},
"sourceVersion": "string",
"topic": "string"
}

```

## 2.25 Session Rule

**Table 2-140 Supported REST APIs**

| Description          | HTTP Method or Custom Operation | Resource URI                                                                           | Possible Result Code          |
|----------------------|---------------------------------|----------------------------------------------------------------------------------------|-------------------------------|
| Create Session Rule  | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/sessionrules                   | See <a href="#">Table A-3</a> |
| Export Session Rules | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/sessionrules/export            | See <a href="#">Table A-1</a> |
| Import Session Rule  | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/sessionrules/import            | See <a href="#">Table A-3</a> |
| Get Session Rule     | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/sessionrules/{sessionRuleName} | See <a href="#">Table A-1</a> |
| Update Session Rule  | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/sessionrules/{sessionRuleName} | See <a href="#">Table A-2</a> |
| Delete Session Rule  | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/sessionrules/{sessionRuleName} | See <a href="#">Table A-4</a> |

### Get, Create, and Update Session Rules

**Table 2-141 Request/Response Body Parameters**

| Field Name   | Data Type    | Mandatory(M)/ Optional(O)/ Conditional(C)aints | Description                                   |
|--------------|--------------|------------------------------------------------|-----------------------------------------------|
| authDefQosId | string       | O                                              | Authorized default QoS information            |
| authSessAmbr | AuthSessAmbr | O                                              | Authorized Session-AMBR                       |
| description  | string       | O                                              | Specifies the description of the Session Rule |
| name         | string       | M                                              | Specifies the name of the Session Rule        |
| refCondData  | string       |                                                | specifies the reference to the condition data |
| sessRuleId   | string       | M                                              | Specifies the Session Rule ID                 |

**Table 2-142 AuthSessAmbr**

| Field Name | Data Type                                                                                   | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description       |
|------------|---------------------------------------------------------------------------------------------|-------------------------------------------------|-------------------|
| downlink   | string<br>Enter a value starting with number and ending bps or Kbps or Mbps or Gbps or Tbps | O                                               | AMBR for downlink |
| uplink     | string<br>Enter a value starting with number and ending bps or Kbps or Mbps or Gbps or Tbps | O                                               | AMBR for uplink   |

**Sample Request body structure for POST and PUT operations:**

```
{
  "authDefQosId": "string",
  "authSessAmbr": {
    "downlink": "string",
    "uplink": "string"
  },
  "description": "string",
  "name": "string",
  "refCondData": "string",
  "sessRuleId": "string"
}
```

**Sample Response body structure for GET, POST, and PUT operations:**

```
{
  "authDefQosId": "string",
  "authSessAmbr": {
    "downlink": "string",
    "uplink": "string"
  },
  "description": "string",
  "name": "string",
  "refCondData": "string",
  "sessRuleProfileId": "string"
}
```

**Delete Session Rule****Table 2-143 Request/Response Body Parameters**

| Field Name      | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description       |
|-----------------|-----------|-------------------------------------------------|-------------------|
| sessionRuleName | string    | M                                               | Session Rule Name |

## Export/Import Session Rule

Table 2-144 Request/Response Body Parameters

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                     |
|----------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| date           | string    |                                                 | Current timestamp                                                                                               |
| errors:message | string    |                                                 | Error message                                                                                                   |
| errors:name    | string    |                                                 | Name of the error                                                                                               |
| exportData     | array     |                                                 | Exported list of session rules. For more information, see <a href="#">Get, Create, and Update Session Rules</a> |
| key            | string    |                                                 | Indicates the ID of Session Rule                                                                                |
| sourceVersion  | string    |                                                 | System version of product from which data is exported                                                           |
| topic          | string    |                                                 | Topic of each managed object                                                                                    |

## Sample Request Body structure for Import/Export operations:

```

{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "authDefQosId": "string",
      "authSessAmbr": {
        "downlink": "string",
        "uplink": "string"
      },
      "description": "string",
      "name": "string",
      "refCondData": "string",
      "sessRuleId": "string"
    }
  ],
  "key": "string",
  "sourceVersion": "string",
  "topic": "string"
}

```

## 2.26 Session Rule Profile

**Table 2-145 Supported REST APIs**

| Description                  | HTTP Method or Custom Operation | Resource URI                                                                                         | Possible Result Code          |
|------------------------------|---------------------------------|------------------------------------------------------------------------------------------------------|-------------------------------|
| Create Session Rule Profile  | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/sessionruleprofiles                          | See <a href="#">Table A-3</a> |
| Export Session Rule Profiles | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/sessionruleprofiles/export                   | See <a href="#">Table A-1</a> |
| Import Session Rule Profile  | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/sessionruleprofiles/import                   | See <a href="#">Table A-3</a> |
| Get Session Rule Profile     | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/sessionruleprofiles/{sessionRuleProfileName} | See <a href="#">Table A-1</a> |
| Update Session Rule Profile  | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/sessionruleprofiles/{sessionRuleProfileName} | See <a href="#">Table A-2</a> |
| Delete Session Rule Profile  | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/sessionruleprofiles/{sessionRuleProfileName} | See <a href="#">Table A-4</a> |

### Get, Create, and Update Session Rule Profiles

**Table 2-146 Request/Response Body Parameters**

| Field Name   | Data Type    | Mandatory(M)/ Optional(O)/ Conditional(C)aints | Description                                           |
|--------------|--------------|------------------------------------------------|-------------------------------------------------------|
| authDefQosId | string       | O                                              | Authorized default QoS information                    |
| authSessAmbr | AuthSessAmbr | O                                              | Authorized Session-AMBR                               |
| description  | string       |                                                | Specifies the description of the Session Rule Profile |
| name         | string       | M                                              | Specifies the name of the Session Rule Profile        |



**Table 2-146 (Cont.) Request/Response Body Parameters**

| Field Name        | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                           |
|-------------------|-----------|-------------------------------------------------|---------------------------------------|
| refCondData       | string    |                                                 |                                       |
| sessRuleProfileId | string    | M                                               | Specifies the Session Rule Profile ID |

**Table 2-147 AuthSessAmbr**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description       |
|------------|-----------|-------------------------------------------------|-------------------|
| downlink   | string    | O                                               | AMBR for downlink |
| uplink     | string    | O                                               | AMBR for uplink   |

**Sample Request body structure for POST and PUT operations:**

```
{
  "authDefQosId": "string",
  "authSessAmbr": {
    "downlink": "string",
    "uplink": "string"
  },
  "description": "string",
  "name": "string",
  "refCondData": "string",
  "sessRuleProfileId": "string"
}
```

**Sample Response body structure for GET, POST, and PUT operations:**

```
{
  "authDefQosId": "string",
  "authSessAmbr": {
    "downlink": "string",
    "uplink": "string"
  },
  "description": "string",
  "name": "string",
  "refCondData": "string",
  "sessRuleProfileId": "string"
}
```

**Delete Session Rule Profile****Table 2-148 Request/Response Body Parameters**

| Field Name             | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description               |
|------------------------|-----------|-------------------------------------------------|---------------------------|
| sessionRuleProfileName | string    | M                                               | Session Rule Profile Name |

**Export/Import Session Rule Profile****Table 2-149 Request/Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                       |
|----------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| date           | string    |                                                 | Current timestamp                                                                                                                 |
| errors:message | string    |                                                 | Error message                                                                                                                     |
| errors:name    | string    |                                                 | Name of the error                                                                                                                 |
| exportData     | array     |                                                 | Exported list of session rule profiles. For more information, see <a href="#">Get, Create, and Update Session Rule Profiles</a> . |
| key            | string    |                                                 | Indicates the ID of Session Rule Profile                                                                                          |
| sourceVersion  | string    |                                                 | System version of product from which data is exported                                                                             |
| topic          | string    |                                                 | Topic of each managed object                                                                                                      |

**Sample Request Body structure for Import/Export operations:**

```
{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "authDefQosId": "string",
      "authSessAmbr": {
        "downlink": "string",
        "uplink": "string"
      },
      "description": "string",
      "name": "string",
      "refCondData": "string",
      "sessRuleProfileId": "string"
    }
  ]
}
```

```

    }
  ],
  "key": "string",
  "sourceVersion": "string",
  "topic": "string"
}

```

## 2.27 QoS Information

**Table 2-150 Supported REST APIs**

| Description            | HTTP Method or Custom Operation | Resource URI                                                                                | Possible Result Code          |
|------------------------|---------------------------------|---------------------------------------------------------------------------------------------|-------------------------------|
| Create QoS Information | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/qosinformation                      | See <a href="#">Table A-3</a> |
| Export QoS Information | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/qosinformation/export               | See <a href="#">Table A-1</a> |
| Import QoS Information | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/qosinformation/import               | See <a href="#">Table A-3</a> |
| Get QoS Information    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/qosinformation/{qosInformationName} | See <a href="#">Table A-1</a> |
| Update QoS Information | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/qosinformation/{qosInformationName} | See <a href="#">Table A-2</a> |
| Delete QoS Information | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/qosinformation/{qosInformationName} | See <a href="#">Table A-4</a> |

### Get, Create, and Update QoS Information

**Table 2-151 Request/Response Body Parameters**

| Field Name | Data Type                                           | Mandatory(M)/ Optional(O)/ Conditional(C)aints | Description                                                                                                                                       |
|------------|-----------------------------------------------------|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| 5qi        | string (\$int32)<br>enter a range in [0-255] number | O                                              | Identifier for the authorized QoS parameters for the service data flow. It shall be included when the QoS data decision is initially provisioned. |

Table 2-151 (Cont.) Request/Response Body Parameters

| Field Name      | Data Type         | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                       |
|-----------------|-------------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| arp             | Arp               | O                                               | Indicates the allocation and retention priority. It shall be included when the Authorized Default QoS is initially provisioned.                                                   |
| averWindow      | integer           | O                                               | Represents the duration over which the guaranteed and maximum bitrate shall be calculated. The allowed integer value ranges from 1 to 4095.<br><b>Default Value:</b> 2000         |
| description     | string            | O                                               | The description of the Qos Information.                                                                                                                                           |
| maxDataBurstVol | integer           | O                                               | Denotes the largest amount of data that is required to be transferred within a period of 5GAN PDB. The allowed integer value ranges from 1 to 4095.<br><b>Default Value:</b> 2000 |
| name            | string            | M                                               | The name of the Qos Information.                                                                                                                                                  |
| priorityLevel   | integer (\$int32) | O                                               | Unsigned integer indicating the 5QI Priority Level, within a range of 1 to 127.                                                                                                   |

Table 2-152 Arp

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                        |
|------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| preemptCap | ENUM      | M                                               | Defines whether a service data flow may get resources that were already assigned to another service data flow with a lower priority level. Possible values are: <ul style="list-style-type: none"> <li>• NOT_PREEMPT : Shall not trigger pre-emption.</li> <li>• MAY_PREEMPT : May trigger pre-emption.</li> </ul> |

**Table 2-152 (Cont.) Arp**

| Field Name    | Data Type         | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                 |
|---------------|-------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| preemptVuln   | ENUM              | M                                               | Defines whether a service data flow may lose the resources assigned to it in order to admit a service data flow with higher priority level. Possible values are: <ul style="list-style-type: none"> <li>• NOT_PREEMPTABLE : Shall not be pre-empted.</li> <li>• PREEMPTABLE : May be pre-empted.</li> </ul> |
| priorityLevel | integer (\$int32) | M                                               | Unsigned integer indicating the ARP Priority Level, within the range 1 to 15.                                                                                                                                                                                                                               |

**Sample Request body structure for POST and PUT operations:**

```
{
  "5qi": "string",
  "arp": {
    "preemptCap": "MAY_PREEMPT",
    "preemptVuln": "NOT_PREEMPTABLE",
    "priorityLevel": 0
  },
  "averWindow": 2000,
  "description": "string",
  "maxDataBurstVol": 2000,
  "name": "string",
  "priorityLevel": "string"
}
```

**Sample Response body structure for GET, POST, and PUT operations:**

```
{
  "5qi": "string",
  "arp": {
    "preemptCap": "MAY_PREEMPT",
    "preemptVuln": "NOT_PREEMPTABLE",
    "priorityLevel": 0
  },
  "averWindow": 2000,
  "description": "string",
  "maxDataBurstVol": 2000,
  "name": "string",
  "priorityLevel": "string"
}
```

## Delete QoS Information

**Table 2-153 Request/Response Body Parameters**

| Field Name         | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description          |
|--------------------|-----------|-------------------------------------------------|----------------------|
| qosInformationName | string    | M                                               | Qos Information Name |

## Export/Import QoS Information

**Table 2-154 Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                           |
|---------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| date          | string    | M                                               | Current timestamp                                                                                                     |
| exportData    | array     | M                                               | Exported list of QoS information. For more information, see <a href="#">Get, Create, and Update QoS Information</a> . |
| key           | string    | M                                               | Indicates the ID of QoS Information                                                                                   |
| sourceVersion | string    | M                                               | System version of product from which data is exported                                                                 |
| topic         | string    | M                                               | Topic of each managed object                                                                                          |

### Sample Request Body structure for Import/Export operations:

```
{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "5qi": "string",
      "arp": {
        "preemptCap": "MAY_PREEMPT",
        "preemptVuln": "NOT_PREEMPTABLE",
        "priorityLevel": 0
      },
      "averWindow": 2000,
      "description": "string",
      "maxDataBurstVol": 2000,
      "name": "string",
      "priorityLevel": "string"
    }
  ]
}
```

```

    }
  ],
  "key": "string",
  "sourceVersion": "string",
  "topic": "string"
}

```

## 2.28 QoS Data

**Table 2-155 Supported REST APIs**

| Description     | HTTP Method or Custom Operation | Resource URI                                                                  | Possible Result Code          |
|-----------------|---------------------------------|-------------------------------------------------------------------------------|-------------------------------|
| Create QoS Data | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/qosdata               | See <a href="#">Table A-3</a> |
| Export QoS Data | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/qosdata/export        | See <a href="#">Table A-1</a> |
| Import QoS Data | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/qosdata/import        | See <a href="#">Table A-3</a> |
| Get QoS Data    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/qosdata/{qosDataName} | See <a href="#">Table A-1</a> |
| Update QoS Data | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/qosdata/{qosDataName} | See <a href="#">Table A-2</a> |
| Delete QoS Data | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/qosdata/{qosDataName} | See <a href="#">Table A-4</a> |

### Get, Create, and Update QoS Data s

**Table 2-156 Request/Response Body Parameters**

| Field Name | Data Type                                           | Mandatory(M)/ Optional(O)/ Conditional(C)aints | Description                                                                                                              |
|------------|-----------------------------------------------------|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| 5qi        | string (\$int32)<br>enter a range in [0-255] number | O                                              | Identifier for the authorized QoS parameters for the service data flow. It shall be included when the QoS data decision. |
| arp        | Arp                                                 | O                                              | ARP information                                                                                                          |

Table 2-156 (Cont.) Request/Response Body Parameters

| Field Name           | Data Type                                                                                  | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                              |
|----------------------|--------------------------------------------------------------------------------------------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| averwindow           | string                                                                                     | O                                               | Averwindow details.                                                                                                                                                                                      |
| defQosFlowIndication | boolean                                                                                    | O                                               | Indicates that the dynamic PCC rule shall always have its binding with the QoS Flow associated with the default QoS rule. Default value is "FALSE", if not present and has not been supplied previously. |
| description          | string                                                                                     | O                                               | The description of the Qos Data                                                                                                                                                                          |
| gbrDI                | string , Enter a value starting with number and ending bps or Kbps or Mbps or Gbps or Tbps | O                                               | Indicates the guaranteed bandwidth in downlink.                                                                                                                                                          |
| gbrUI                | string , Enter a value starting with number and ending bps or Kbps or Mbps or Gbps or Tbps | O                                               | Indicates the guaranteed bandwidth in uplink.                                                                                                                                                            |
| maxDataBurstVol      | integer (\$int32)<br>Enter a value between 1 and 4095                                      | O                                               | Denotes the largest amount of data that is required to be transferred within a period of 5GAN PDB (NOTE).                                                                                                |
| maxPacketLossRateDI  | integer (\$int32)<br>Enter a value between 0 and 1000                                      | O                                               | Indicates the downlink maximum rate for lost packets that can be tolerated for the service data flow.                                                                                                    |
| maxPacketLossRateUI  | integer (\$int32)<br>Enter a value between 0 and 1000                                      | O                                               | Indicates the uplink maximum rate for lost packets that can be tolerated for the service data flow.                                                                                                      |
| maxbrDI              | string , Enter a value starting with number and ending bps or Kbps or Mbps or Gbps or Tbps | O                                               | Indicates the max bandwidth in downlink.                                                                                                                                                                 |
| maxbrUI              | string , Enter a value starting with number and ending bps or Kbps or Mbps or Gbps or Tbps | O                                               | Indicates the max bandwidth in uplink.                                                                                                                                                                   |
| name                 | string                                                                                     | M                                               | The name of the Qos Data                                                                                                                                                                                 |
| priorityLevel        | integer (\$int32)<br>Enter a value between 1 and 127                                       | O                                               | Defines the relative importance of a resource request.                                                                                                                                                   |



Table 2-156 (Cont.) Request/Response Body Parameters

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                 |
|---------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| qnc           | boolean   | O                                               | Indicates whether notifications are requested from 3GPP NG-RAN when the GFBR can no longer (or again) be guaranteed for a QoS flow during the lifetime of the QoS flow.     |
| qosId         | string    | O                                               | Specifies the QoS Id.                                                                                                                                                       |
| reflectiveQos | boolean   | O                                               | Indicates whether the QoS information is reflective for the corresponding service data flow. Default value is "FALSE", if not present and has not been supplied previously. |
| sharingKeyDI  | string    | O                                               | Indicates, by containing the same value, what PCC rules may share resource in downlink direction.                                                                           |
| sharingKeyUI  | string    | O                                               | Indicates, by containing the same value, what PCC rules may share resource in uplink direction.                                                                             |

Table 2-157 Arp

| Field Name    | Data Type                                              | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                 |
|---------------|--------------------------------------------------------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| preemptCap    | ENUM                                                   | M                                               | Defines whether a service data flow may get resources that were already assigned to another service data flow with a lower priority level.  |
| preemptVuln   | ENUM                                                   | M                                               | Defines whether a service data flow may lose the resources assigned to it in order to admit a service data flow with higher priority level. |
| priorityLevel | integer (\$int32)<br>enter a range in [1-15]<br>number | M                                               | Defines the relative importance of a resource request.                                                                                      |

**Sample Request body structure for POST and PUT operations:**

```
{
  "5qi": 0,
  "arp": {
    "preemptCap": "MAY_PREEMPT",
    "preemptVuln": "NOT_PREEMPTABLE",
    "priorityLevel": 0
  },
  "averWindow": 2000,
  "defQosFlowIndication": true,
  "description": "string",
  "gbrDL": "string",
  "gbrUL": "string",
  "maxDataBurstVol": 0,
  "maxPacketLossRateDL": 0,
  "maxPacketLossRateUL": 0,
  "maxbrDL": "string",
  "maxbrUL": "string",
  "name": "string",
  "priorityLevel": 0,
  "qnc": true,
  "qosId": "string",
  "reflectiveQos": true,
  "sharingKeyDL": "string",
  "sharingKeyUL": "string"
}
```

**Sample Response body structure for GET, POST, and PUT operations:**

```
{
  "5qi": 0,
  "arp": {
    "preemptCap": "MAY_PREEMPT",
    "preemptVuln": "NOT_PREEMPTABLE",
    "priorityLevel": 0
  },
  "averWindow": 2000,
  "defQosFlowIndication": true,
  "description": "string",
  "gbrDL": "string",
  "gbrUL": "string",
  "maxDataBurstVol": 0,
  "maxPacketLossRateDL": 0,
  "maxPacketLossRateUL": 0,
  "maxbrDL": "string",
  "maxbrUL": "string",
  "name": "string",
  "priorityLevel": 0,
  "qnc": true,
  "qosId": "string",
  "reflectiveQos": true,
  "sharingKeyDL": "string",
  "sharingKeyUL": "string"
}
```

**Delete QoS Data****Table 2-158 Request/Response Body Parameters**

| Field Name  | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description   |
|-------------|-----------|-------------------------------------------------|---------------|
| qosDataName | string    | M                                               | Qos Data Name |

**Export/Import QoS Data s****Table 2-159 Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                               |
|---------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| date          | string    | M                                               | Current timestamp                                                                                         |
| exportData    | array     | M                                               | Exported list of QoS data. For more information, see <a href="#">Get, Create, and Update QoS Data s</a> . |
| key           | string    | O                                               | Indicates the ID of QoS Data                                                                              |
| sourceVersion | string    | O                                               | System version of product from which data is exported                                                     |
| topic         | string    | O                                               | Topic of each managed object                                                                              |

**Sample Request Body structure for Import/Export operations:**

```
{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "5qi": 0,
      "arp": {
        "preemptCap": "MAY_PREEMPT",
        "preemptVuln": "NOT_PREEMPTABLE",
        "priorityLevel": 0
      },
      "averWindow": 2000,
      "defQosFlowIndication": true,
      "description": "string",
      "gbrDl": "string",
      "gbrUl": "string",

```

```

        "maxDataBurstVol": 0,
        "maxPacketLossRateDl": 0,
        "maxPacketLossRateUl": 0,
        "maxbrDl": "string",
        "maxbrUl": "string",
        "name": "string",
        "priorityLevel": 0,
        "qnc": true,
        "qosId": "string",
        "reflectiveQos": true,
        "sharingKeyDl": "string",
        "sharingKeyUl": "string"
    }
},
"key": "string",
"sourceVersion": "string",
"topic": "string"
}

```

## 2.29 Traffic for PCC Rule

**Table 2-160 Supported REST APIs**

| Description             | HTTP Method or Custom Operation | Resource URI                                                                         | Possible Result Code          |
|-------------------------|---------------------------------|--------------------------------------------------------------------------------------|-------------------------------|
| Create Traffic PCC Rule | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/pccrules                      | See <a href="#">Table A-3</a> |
| Export Traffic PCC Rule | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/pccrules/export               | See <a href="#">Table A-1</a> |
| Import Traffic PCC Rule | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/pccrules/import               | See <a href="#">Table A-3</a> |
| Get Traffic PCC Rule    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/pccrules/{trafficPccRuleName} | See <a href="#">Table A-1</a> |
| Update Traffic PCC Rule | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/pccrules/{trafficPccRuleName} | See <a href="#">Table A-2</a> |
| Delete Traffic PCC Rule | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/pccrules/{trafficPccRuleName} | See <a href="#">Table A-4</a> |

## Create, Get, and Update Traffic for PCC Rule

Table 2-161 Data structures supported by the POST, GET, and PUT Response Body

| Field Name                                         | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                 |
|----------------------------------------------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| description                                        | string    | O                                               |                                                                                                             |
| name                                               | string    | M                                               |                                                                                                             |
| param.diameter.pccRule.ARP.PreemptionCapability    | string    | O                                               | Allowed values <ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> </ul>                           |
| param.diameter.pccRule.ARP.PreemptionVulnerability | string    | O                                               | Allowed values <ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> </ul>                           |
| param.diameter.pccRule.ARP.PriorityLevel           | string    | O                                               |                                                                                                             |
| param.diameter.pccRule.FlowDescriptions            | string    | O                                               |                                                                                                             |
| param.diameter.pccRule.FlowInformations            | array     | O                                               |                                                                                                             |
| param.diameter.pccRule.FlowStatus                  | string    | O                                               | Allowed values <ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> <li>• 2</li> <li>• 3</li> </ul> |
| param.diameter.pccRule.bearerUsage                 | ENUM      | O                                               |                                                                                                             |
| param.diameter.pccRule.MeteringMethod              | string    | O                                               | Allowed values <ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> <li>• 2</li> <li>• 3</li> </ul> |
| param.diameter.pccRule.MonitoringKey               | string    | O                                               |                                                                                                             |
| param.diameter.pccRule.Offline                     | string    | O                                               | Allowed values <ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> </ul>                           |
| param.diameter.pccRule.Online                      | string    | O                                               | Allowed values <ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> </ul>                           |
| param.diameter.pccRule.Precedence                  | string    | O                                               |                                                                                                             |
| param.diameter.pccRule.RatingGroup                 | string    | O                                               |                                                                                                             |
| param.diameter.pccRule.ReportingLevel              | string    | O                                               | Allowed values <ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> <li>• 2</li> </ul>              |

**Table 2-161 (Cont.) Data structures supported by the POST, GET, and PUT Response Body**

| Field Name                                                | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                           |
|-----------------------------------------------------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| param.diameter.pccRule.RequiredAccessInfo                 | string    | O                                               | Allowed values <ul style="list-style-type: none"> <li>• 1</li> <li>• 2</li> <li>• 3</li> </ul>                                                                                                                                        |
| param.diameter.pccRule.ResourceAllocationNotification     | string    | O                                               | Allowed values <ul style="list-style-type: none"> <li>• 0</li> </ul>                                                                                                                                                                  |
| param.diameter.pccRule.ServiceIdentifier                  | string    | O                                               |                                                                                                                                                                                                                                       |
| param.diameter.pccRule.applicationServiceProviderIdentity | string    | O                                               |                                                                                                                                                                                                                                       |
| param.diameter.pccRule.maxAuthDL                          | string    | O                                               |                                                                                                                                                                                                                                       |
| param.diameter.pccRule.maxAuthUL                          | string    | O                                               |                                                                                                                                                                                                                                       |
| param.diameter.pccRule.minRateDL                          | string    | O                                               |                                                                                                                                                                                                                                       |
| param.diameter.pccRule.minRateUL                          | string    | O                                               |                                                                                                                                                                                                                                       |
| param.diameter.pccRule.qci                                | string    | O                                               | Allowed values: <ul style="list-style-type: none"> <li>• 1</li> <li>• 2</li> <li>• 3</li> <li>• 4</li> <li>• 5</li> <li>• 6</li> <li>• 7</li> <li>• 8</li> <li>• 9</li> <li>• 65</li> <li>• 66</li> <li>• 69</li> <li>• 70</li> </ul> |
| param.diameter.pccRule.sponsorIdentity                    | string    | O                                               |                                                                                                                                                                                                                                       |
| param.diameter.pccRule.tdfApplicationIdentifier           | string    | O                                               |                                                                                                                                                                                                                                       |
| param.diameter.pccRule.tdfMuteNotification                | string    | O                                               | Allowed values <ul style="list-style-type: none"> <li>• 0</li> </ul>                                                                                                                                                                  |

**Table 2-161 (Cont.) Data structures supported by the POST, GET, and PUT Response Body**

| Field Name                                      | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                 |
|-------------------------------------------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| param.diameter.pccRule.tdfRedirectAddressType   | string    | O                                               | Allowed values <ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> <li>• 2</li> <li>• 3</li> </ul> |
| param.diameter.pccRule.tdfRedirectServerAddress | string    | O                                               |                                                                                                             |
| param.diameter.pccRule.tdfRedirectSupport       | string    | O                                               | Allowed values <ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> </ul>                           |

**Table 2-162 param.diameter.pccRule.FlowInformations**

| Field Name      | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                |
|-----------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| flowDescription | string    | O                                               |                                                                                                                            |
| flowDirection   | string    | M                                               | Allowed values: <ul style="list-style-type: none"> <li>• -1</li> <li>• 0</li> <li>• 1</li> <li>• 2</li> <li>• 3</li> </ul> |
| tos             | string    | O                                               |                                                                                                                            |
| tosMask         | string    | O                                               |                                                                                                                            |

**Sample Request Body structure for POST and PUT operations:**

```
{
  "description": "string",
  "name": "string",
  "param.diameter.pccRule.ARP.PreemptionCapability": "0",
  "param.diameter.pccRule.ARP.PreemptionVulnerability": "0",
  "param.diameter.pccRule.ARP.PriorityLevel": "string",
  "param.diameter.pccRule.FlowDescriptions": "string",
  "param.diameter.pccRule.FlowInformations": [
    {
      "flowDescription": "string",
      "flowDirection": "-1",
      "tos": "string",
      "tosMask": "string"
    }
  ],
  "param.diameter.pccRule.FlowStatus": "0",
  "param.diameter.pccRule.MeteringMethod": "0",
}
```

```

"param.diameter.pccRule.MonitoringKey": "string",
"param.diameter.pccRule.Offline": "0",
"param.diameter.pccRule.Online": "0",
"param.diameter.pccRule.PStoCSSessionContinuity": "0",
"param.diameter.pccRule.Precedence": "string",
"param.diameter.pccRule.RatingGroup": "string",
"param.diameter.pccRule.ReportingLevel": "0",
"param.diameter.pccRule.RequiredAccessInfo": "1",
"param.diameter.pccRule.ResourceAllocationNotification": "0",
"param.diameter.pccRule.ServiceIdentifier": "string",
"param.diameter.pccRule.applicationServiceProviderIdentity": "string",
"param.diameter.pccRule.maxAuthDL": "string",
"param.diameter.pccRule.maxAuthUL": "string",
"param.diameter.pccRule.minRateDL": "string",
"param.diameter.pccRule.minRateUL": "string",
"param.diameter.pccRule.name": "string",
"param.diameter.pccRule.qci": "1",
"param.diameter.pccRule.sponsorIdentity": "string",
"param.diameter.pccRule.tdfApplicationIdentifier": "string",
"param.diameter.pccRule.tdfMuteNotification": "0",
"param.diameter.pccRule.tdfRedirectAddressType": "0",
"param.diameter.pccRule.tdfRedirectServerAddress": "string",
"param.diameter.pccRule.tdfRedirectSupport": "0"
}

```

#### Sample Response Body structure for GET, POST and PUT operations:

```

{
  "description": "string",
  "name": "string",
  "param.diameter.pccRule.ARP.PreemptionCapability": "0",
  "param.diameter.pccRule.ARP.PreemptionVulnerability": "0",
  "param.diameter.pccRule.ARP.PriorityLevel": "string",
  "param.diameter.pccRule.FlowDescriptions": "string",
  "param.diameter.pccRule.FlowInformations": [
    {
      "flowDescription": "string",
      "flowDirection": "-1",
      "tos": "string",
      "tosMask": "string"
    }
  ],
  "param.diameter.pccRule.FlowStatus": "0",
  "param.diameter.pccRule.MeteringMethod": "0",
  "param.diameter.pccRule.MonitoringKey": "string",
  "param.diameter.pccRule.Offline": "0",
  "param.diameter.pccRule.Online": "0",
  "param.diameter.pccRule.PStoCSSessionContinuity": "0",
  "param.diameter.pccRule.Precedence": "string",
  "param.diameter.pccRule.RatingGroup": "string",
  "param.diameter.pccRule.ReportingLevel": "0",
  "param.diameter.pccRule.RequiredAccessInfo": "1",
  "param.diameter.pccRule.ResourceAllocationNotification": "0",
  "param.diameter.pccRule.ServiceIdentifier": "string",
  "param.diameter.pccRule.applicationServiceProviderIdentity": "string",

```



```

"param.diameter.pccRule.maxAuthDL": "string",
"param.diameter.pccRule.maxAuthUL": "string",
"param.diameter.pccRule.minRateDL": "string",
"param.diameter.pccRule.minRateUL": "string",
"param.diameter.pccRule.name": "string",
"param.diameter.pccRule.qci": "1",
"param.diameter.pccRule.sponsorIdentity": "string",
"param.diameter.pccRule.tdfApplicationIdentifier": "string",
"param.diameter.pccRule.tdfMuteNotification": "0",
"param.diameter.pccRule.tdfRedirectAddressType": "0",
"param.diameter.pccRule.tdfRedirectServerAddress": "string",
"param.diameter.pccRule.tdfRedirectSupport": "0"
}

```

## Export/Import Traffic for PCC Rule

**Table 2-163 Request/Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                |
|----------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------|
| date           | string    |                                                 | Current timestamp                                                                          |
| errors         | array     |                                                 |                                                                                            |
| errors:message | string    |                                                 |                                                                                            |
| errors:name    | string    |                                                 |                                                                                            |
| exportData     | array     | M                                               | Exported list of traffic Pcc Rule. For more information, see <a href="#">Table 2-161</a> . |
| key            | string    |                                                 | Indicates the ID                                                                           |
| sourceVersion  | string    |                                                 | System version of the product from which data is exported                                  |
| topic          | string    | M                                               | Topic of each managed object                                                               |

## Sample Request Body structure for Import/Export operations:

```

{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "description": "string",
      "name": "string",
      "param.diameter.pccRule.ARP.PreemptionCapability": "0",
      "param.diameter.pccRule.ARP.PreemptionVulnerability": "0",
      "param.diameter.pccRule.ARP.PriorityLevel": "string",
      "param.diameter.pccRule.FlowDescriptions": "string",

```

```

"param.diameter.pccRule.FlowInformations": [
  {
    "flowDescription": "string",
    "flowDirection": "-1",
    "tos": "string",
    "tosMask": "string"
  }
],
"param.diameter.pccRule.FlowStatus": "0",
"param.diameter.pccRule.MeteringMethod": "0",
"param.diameter.pccRule.MonitoringKey": "string",
"param.diameter.pccRule.Offline": "0",
"param.diameter.pccRule.Online": "0",
"param.diameter.pccRule.PStoCSSessionContinuity": "0",
"param.diameter.pccRule.Precedence": "string",
"param.diameter.pccRule.RatingGroup": "string",
"param.diameter.pccRule.ReportingLevel": "0",
"param.diameter.pccRule.RequiredAccessInfo": "1",
"param.diameter.pccRule.ResourceAllocationNotification": "0",
"param.diameter.pccRule.ServiceIdentifier": "string",
"param.diameter.pccRule.applicationServiceProviderIdentity": "string",
"param.diameter.pccRule.maxAuthDL": "string",
"param.diameter.pccRule.maxAuthUL": "string",
"param.diameter.pccRule.minRateDL": "string",
"param.diameter.pccRule.minRateUL": "string",
"param.diameter.pccRule.name": "string",
"param.diameter.pccRule.qci": "1",
"param.diameter.pccRule.sponsorIdentity": "string",
"param.diameter.pccRule.tdfApplicationIdentifier": "string",
"param.diameter.pccRule.tdfMuteNotification": "0",
"param.diameter.pccRule.tdfRedirectAddressType": "0",
"param.diameter.pccRule.tdfRedirectServerAddress": "string",
"param.diameter.pccRule.tdfRedirectSupport": "0"
}
],
"key": "string",
"sourceVersion": "string",
"topic": "string"
}

```

## Delete Traffic for PCC Rule

**Table 2-164 Request/Response Body Parameters**

| Field Name         | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description           |
|--------------------|-----------|-------------------------------------------------|-----------------------|
| trafficPccRuleName | string    | M                                               | Traffic PCC Rule Name |

## 2.30 Traffic for PCC Profile

**Table 2-165 Supported REST APIs**

| Description                | HTTP Method or Custom Operation | Resource URI                                                                                   | Possible Result Code          |
|----------------------------|---------------------------------|------------------------------------------------------------------------------------------------|-------------------------------|
| Create Traffic PCC Profile | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/pccruleprofiles                         | See <a href="#">Table A-3</a> |
| Export Traffic PCC Profile | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/pccruleprofiles/export                  | See <a href="#">Table A-1</a> |
| Import Traffic PCC Profile | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/pccruleprofiles/import                  | See <a href="#">Table A-3</a> |
| Get Traffic PCC Profile    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/pccruleprofiles/{trafficPccProfileName} | See <a href="#">Table A-1</a> |
| Update Traffic PCC Profile | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/pccruleprofiles/{trafficPccProfileName} | See <a href="#">Table A-2</a> |
| Delete Traffic PCC Profile | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/pccruleprofiles/{trafficPccProfileName} | See <a href="#">Table A-4</a> |

### Create, Get, and Update Traffic for PCC Profile

**Table 2-166 Data structures supported by the POST, GET, and PUT Response Body**

| Field Name                                             | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                                                   |
|--------------------------------------------------------|-----------|-------------------------------------------|-------------------------------------------------------------------------------|
| description                                            | string    | O                                         |                                                                               |
| name                                                   | string    | M                                         |                                                                               |
| param.diameter.pcc Profile.ARP.PreemptionCapability    | string    | O                                         | Allowed values <ul style="list-style-type: none"> <li>0</li> <li>1</li> </ul> |
| param.diameter.pcc Profile.ARP.PreemptionVulnerability | string    | O                                         | Allowed values <ul style="list-style-type: none"> <li>0</li> <li>1</li> </ul> |
| param.diameter.pcc Profile.ARP.Priority Level          | string    | O                                         |                                                                               |

**Table 2-166 (Cont.) Data structures supported by the POST, GET, and PUT Response Body**

| Field Name                                                   | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                 |
|--------------------------------------------------------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| param.diameter.pcc<br>Profile.FlowDescriptions               | string    | O                                               |                                                                                                             |
| param.diameter.pcc<br>Profile.FlowInformations               | array     | O                                               |                                                                                                             |
| param.diameter.pcc<br>Profile.FlowStatus                     | string    | O                                               | Allowed values <ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> <li>• 2</li> <li>• 3</li> </ul> |
| param.diameter.pcc<br>Profile.bearerUsage                    | ENUM      | O                                               |                                                                                                             |
| param.diameter.pcc<br>Profile.MeteringMethod                 | string    | O                                               | Allowed values <ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> <li>• 2</li> <li>• 3</li> </ul> |
| param.diameter.pcc<br>Profile.MonitoringKey                  | string    | O                                               |                                                                                                             |
| param.diameter.pcc<br>Profile.Offline                        | string    | O                                               | Allowed values <ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> </ul>                           |
| param.diameter.pcc<br>Profile.Online                         | string    | O                                               | Allowed values <ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> </ul>                           |
| param.diameter.pcc<br>Profile.Precedence                     | string    | O                                               |                                                                                                             |
| param.diameter.pcc<br>Profile.RatingGroup                    | string    | O                                               |                                                                                                             |
| param.diameter.pcc<br>Profile.ReportingLevel                 | string    | O                                               | Allowed values <ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> <li>• 2</li> </ul>              |
| param.diameter.pcc<br>Profile.RequiredAccessInfo             | string    | O                                               | Allowed values <ul style="list-style-type: none"> <li>• 1</li> <li>• 2</li> <li>• 3</li> </ul>              |
| param.diameter.pcc<br>Profile.ResourceAllocationNotification | string    | O                                               | Allowed values <ul style="list-style-type: none"> <li>• 0</li> </ul>                                        |
| param.diameter.pcc<br>Profile.ServiceIdentifier              | string    | O                                               |                                                                                                             |

**Table 2-166 (Cont.) Data structures supported by the POST, GET, and PUT Response Body**

| Field Name                                                   | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                           |
|--------------------------------------------------------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| param.diameter.pccProfile.applicationServiceProviderIdentity | string    | O                                               |                                                                                                                                                                                                                                       |
| param.diameter.pccProfile.maxAuthDL                          | string    | O                                               |                                                                                                                                                                                                                                       |
| param.diameter.pccProfile.maxAuthUL                          | string    | O                                               |                                                                                                                                                                                                                                       |
| param.diameter.pccProfile.minRateDL                          | string    | O                                               |                                                                                                                                                                                                                                       |
| param.diameter.pccProfile.minRateUL                          | string    | O                                               |                                                                                                                                                                                                                                       |
| param.diameter.pccProfile.qci                                | string    | O                                               | Allowed values: <ul style="list-style-type: none"> <li>• 1</li> <li>• 2</li> <li>• 3</li> <li>• 4</li> <li>• 5</li> <li>• 6</li> <li>• 7</li> <li>• 8</li> <li>• 9</li> <li>• 65</li> <li>• 66</li> <li>• 69</li> <li>• 70</li> </ul> |
| param.diameter.pccProfile.sponsorIdentity                    | string    | O                                               |                                                                                                                                                                                                                                       |
| param.diameter.pccProfile.tdfApplicationIdentifier           | string    | O                                               |                                                                                                                                                                                                                                       |
| param.diameter.pccProfile.tdfMuteNotification                | string    | O                                               | Allowed values <ul style="list-style-type: none"> <li>• 0</li> </ul>                                                                                                                                                                  |
| param.diameter.pccProfile.tdfRedirectAddressType             | string    | O                                               | Allowed values <ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> <li>• 2</li> <li>• 3</li> </ul>                                                                                                                           |
| param.diameter.pccProfile.tdfRedirectServerAddress           | string    | O                                               |                                                                                                                                                                                                                                       |
| param.diameter.pccProfile.tdfRedirectSupport                 | string    | O                                               | Allowed values <ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> </ul>                                                                                                                                                     |

Table 2-167 param.diameter.pccProfile.FlowInformations

| Field Name      | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                |
|-----------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| flowDescription | string    | O                                               |                                                                                                                            |
| flowDirection   | string    | M                                               | Allowed values: <ul style="list-style-type: none"> <li>• -1</li> <li>• 0</li> <li>• 1</li> <li>• 2</li> <li>• 3</li> </ul> |
| tos             | string    | O                                               |                                                                                                                            |
| tosMask         | string    | O                                               |                                                                                                                            |

**Sample Request Body structure for POST and PUT operations:**

```
{
  "description": "string",
  "name": "string",
  "param.diameter.pccProfile.ARP.PreemptionCapability": "0",
  "param.diameter.pccProfile.ARP.PreemptionVulnerability": "0",
  "param.diameter.pccProfile.ARP.PriorityLevel": "string",
  "param.diameter.pccProfile.FlowDescriptions": "string",
  "param.diameter.pccProfile.FlowInformations": [
    {
      "flowDescription": "string",
      "flowDirection": "-1",
      "tos": "string",
      "tosMask": "string"
    }
  ],
  "param.diameter.pccProfile.FlowStatus": "0",
  "param.diameter.pccProfile.MeteringMethod": "0",
  "param.diameter.pccProfile.MonitoringKey": "string",
  "param.diameter.pccProfile.Offline": "0",
  "param.diameter.pccProfile.Online": "0",
  "param.diameter.pccProfile.Precedence": "string",
  "param.diameter.pccProfile.RatingGroup": "string",
  "param.diameter.pccProfile.ReportingLevel": "0",
  "param.diameter.pccProfile.RequiredAccessInfo": "1",
  "param.diameter.pccProfile.ResourceAllocationNotification": "0",
  "param.diameter.pccProfile.ServiceIdentifier": "string",
  "param.diameter.pccProfile.applicationServiceProviderIdentity": "string",
  "param.diameter.pccProfile.maxAuthDL": "string",
  "param.diameter.pccProfile.maxAuthUL": "string",
  "param.diameter.pccProfile.minRateDL": "string",
  "param.diameter.pccProfile.minRateUL": "string",
  "param.diameter.pccProfile.qci": "1",
  "param.diameter.pccProfile.sponsorIdentity": "string",
  "param.diameter.pccProfile.tdfApplicationIdentifier": "string",
  "param.diameter.pccProfile.tdfMuteNotification": "0",
  "param.diameter.pccProfile.tdfRedirectAddressType": "0",
  "param.diameter.pccProfile.tdfRedirectServerAddress": "string",
}
```

```
"param.diameter.pccProfile.tdfRedirectSupport": "0"
}
```

### Sample Response Body structure for GET, POST and PUT operations:

```
{
  "description": "string",
  "name": "string",
  "param.diameter.pccProfile.ARP.PreemptionCapability": "0",
  "param.diameter.pccProfile.ARP.PreemptionVulnerability": "0",
  "param.diameter.pccProfile.ARP.PriorityLevel": "string",
  "param.diameter.pccProfile.FlowDescriptions": "string",
  "param.diameter.pccProfile.FlowInformations": [
    {
      "flowDescription": "string",
      "flowDirection": "-1",
      "tos": "string",
      "tosMask": "string"
    }
  ],
  "param.diameter.pccProfile.FlowStatus": "0",
  "param.diameter.pccProfile.MeteringMethod": "0",
  "param.diameter.pccProfile.MonitoringKey": "string",
  "param.diameter.pccProfile.Offline": "0",
  "param.diameter.pccProfile.Online": "0",
  "param.diameter.pccProfile.Precedence": "string",
  "param.diameter.pccProfile.RatingGroup": "string",
  "param.diameter.pccProfile.ReportingLevel": "0",
  "param.diameter.pccProfile.RequiredAccessInfo": "1",
  "param.diameter.pccProfile.ResourceAllocationNotification": "0",
  "param.diameter.pccProfile.ServiceIdentifier": "string",
  "param.diameter.pccProfile.applicationServiceProviderIdentity": "string",
  "param.diameter.pccProfile.maxAuthDL": "string",
  "param.diameter.pccProfile.maxAuthUL": "string",
  "param.diameter.pccProfile.minRateDL": "string",
  "param.diameter.pccProfile.minRateUL": "string",
  "param.diameter.pccProfile.qci": "1",
  "param.diameter.pccProfile.sponsorIdentity": "string",
  "param.diameter.pccProfile.tdfApplicationIdentifier": "string",
  "param.diameter.pccProfile.tdfMuteNotification": "0",
  "param.diameter.pccProfile.tdfRedirectAddressType": "0",
  "param.diameter.pccProfile.tdfRedirectServerAddress": "string",
  "param.diameter.pccProfile.tdfRedirectSupport": "0"
}
```

### Export/Import Traffic for PCC Profile

**Table 2-168 Request/Response Body Parameters**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description       |
|------------|-----------|-------------------------------------------------|-------------------|
| date       | string    |                                                 | Current timestamp |
| errors     | array     |                                                 |                   |

**Table 2-168 (Cont.) Request/Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                   |
|----------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------|
| errors:message | string    |                                                 |                                                                                               |
| errors:name    | string    |                                                 |                                                                                               |
| exportData     | array     | M                                               | Exported list of traffic Pcc Profile. For more information, see <a href="#">Table 2-166</a> . |
| key            | string    |                                                 | Indicates the ID                                                                              |
| sourceVersion  | string    |                                                 | System version of the product from which data is exported                                     |
| topic          | string    | M                                               | Topic of each managed object                                                                  |

**Sample Request Body structure for Import/Export operations:**

```
{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "description": "string",
      "name": "string",
      "param.diameter.pccProfile.ARP.PreemptionCapability": "0",
      "param.diameter.pccProfile.ARP.PreemptionVulnerability": "0",
      "param.diameter.pccProfile.ARP.PriorityLevel": "string",
      "param.diameter.pccProfile.FlowDescriptions": "string",
      "param.diameter.pccProfile.FlowInformations": [
        {
          "flowDescription": "string",
          "flowDirection": "-1",
          "tos": "string",
          "tosMask": "string"
        }
      ],
      "param.diameter.pccProfile.FlowStatus": "0",
      "param.diameter.pccProfile.MeteringMethod": "0",
      "param.diameter.pccProfile.MonitoringKey": "string",
      "param.diameter.pccProfile.Offline": "0",
      "param.diameter.pccProfile.Online": "0",
      "param.diameter.pccProfile.Precedence": "string",
      "param.diameter.pccProfile.RatingGroup": "string",
      "param.diameter.pccProfile.ReportingLevel": "0",
      "param.diameter.pccProfile.RequiredAccessInfo": "1",
      "param.diameter.pccProfile.ResourceAllocationNotification": "0",
    }
  ],
}
```



```

        "param.diameter.pccProfile.ServiceIdentifier": "string",
        "param.diameter.pccProfile.applicationServiceProviderIdentity":
"string",
        "param.diameter.pccProfile.maxAuthDL": "string",
        "param.diameter.pccProfile.maxAuthUL": "string",
        "param.diameter.pccProfile.minRateDL": "string",
        "param.diameter.pccProfile.minRateUL": "string",
        "param.diameter.pccProfile.qci": "1",
        "param.diameter.pccProfile.sponsorIdentity": "string",
        "param.diameter.pccProfile.tdfApplicationIdentifier": "string",
        "param.diameter.pccProfile.tdfMuteNotification": "0",
        "param.diameter.pccProfile.tdfRedirectAddressType": "0",
        "param.diameter.pccProfile.tdfRedirectServerAddress": "string",
        "param.diameter.pccProfile.tdfRedirectSupport": "0"
    }
},
"key": "string",
"sourceVersion": "string",
"topic": "string"
}

```

### Delete Traffic for PCC Profile

**Table 2-169 Request/Response Body Parameters**

| Field Name            | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description              |
|-----------------------|-----------|-------------------------------------------------|--------------------------|
| trafficPccProfileName | string    | M                                               | Traffic PCC Profile Name |

## 2.31 Traffic for Diameter QoS

**Table 2-170 Supported REST APIs**

| Description                 | HTTP Method or<br>Custom Operation | Resource URI                                                              | Possible Result Code          |
|-----------------------------|------------------------------------|---------------------------------------------------------------------------|-------------------------------|
| Create Traffic Diameter QoS | POST                               | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/diameterqos        | See <a href="#">Table A-3</a> |
| Export Traffic Diameter QoS | GET                                | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/diameterqos/export | See <a href="#">Table A-1</a> |
| Import Traffic Diameter QoS | POST                               | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/diameterqos/import | See <a href="#">Table A-3</a> |

Table 2-170 (Cont.) Supported REST APIs

| Description                 | HTTP Method or Custom Operation | Resource URI                                                                                | Possible Result Code          |
|-----------------------------|---------------------------------|---------------------------------------------------------------------------------------------|-------------------------------|
| Get Traffic Diameter QoS    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/diameterqos/{trafficDiameterQoSName} | See <a href="#">Table A-1</a> |
| Update Traffic Diameter QoS | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/diameterqos/{trafficDiameterQoSName} | See <a href="#">Table A-2</a> |
| Delete Traffic Diameter QoS | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/diameterqos/{trafficDiameterQoSName} | See <a href="#">Table A-4</a> |

## Create, Get, and Update Traffic for Diameter QoS

Table 2-171 Data structures supported by the POST, GET, and PUT Response Body

| Field Name                                               | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                                                    |
|----------------------------------------------------------|-----------|-------------------------------------------|--------------------------------------------------------------------------------|
| description                                              | string    | O                                         |                                                                                |
| name                                                     | string    | M                                         |                                                                                |
| param.diameter.qosProfile.ARP.PreemptionCapability       | string    | O                                         | Allowed values: <ul style="list-style-type: none"> <li>0</li> <li>1</li> </ul> |
| param.diameter.qosProfile.ARP.PreemptionVulnerability    | string    | O                                         | Allowed values: <ul style="list-style-type: none"> <li>0</li> <li>1</li> </ul> |
| param.diameter.qosProfile.ARP.PriorityLevel              | string    | O                                         |                                                                                |
| param.diameter.qosProfile.ResourceAllocationNotification | string    | O                                         | Allowed values: <ul style="list-style-type: none"> <li>0</li> </ul>            |
| param.diameter.qosProfile.maxAuthDL                      | string    | O                                         |                                                                                |
| param.diameter.qosProfile.maxAuthUL                      | string    | O                                         |                                                                                |
| param.diameter.qosProfile.minRateDL                      | string    | O                                         |                                                                                |
| param.diameter.qosProfile.minRateUL                      | string    | O                                         |                                                                                |

**Table 2-171 (Cont.) Data structures supported by the POST, GET, and PUT Response Body**

| Field Name                    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                           |
|-------------------------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| param.diameter.qosProfile.qci | string    | O                                               | Allowed values: <ul style="list-style-type: none"> <li>• 1</li> <li>• 2</li> <li>• 3</li> <li>• 4</li> <li>• 5</li> <li>• 6</li> <li>• 7</li> <li>• 8</li> <li>• 9</li> <li>• 65</li> <li>• 66</li> <li>• 69</li> <li>• 70</li> </ul> |

**Sample Request Body structure for POST and PUT operations:**

```
{
  "description": "string",
  "name": "string",
  "param.diameter.qosProfile.ARP.PreemptionCapability": "0",
  "param.diameter.qosProfile.ARP.PreemptionVulnerability": "0",
  "param.diameter.qosProfile.ARP.PriorityLevel": "string",
  "param.diameter.qosProfile.ResourceAllocationNotification": "0",
  "param.diameter.qosProfile.maxAuthDL": "string",
  "param.diameter.qosProfile.maxAuthUL": "string",
  "param.diameter.qosProfile.minRateDL": "string",
  "param.diameter.qosProfile.minRateUL": "string",
  "param.diameter.qosProfile.qci": "1"
}
```

**Sample Response Body structure for GET, POST and PUT operations:**

```
{
  "description": "string",
  "name": "string",
  "param.diameter.qosProfile.ARP.PreemptionCapability": "0",
  "param.diameter.qosProfile.ARP.PreemptionVulnerability": "0",
  "param.diameter.qosProfile.ARP.PriorityLevel": "string",
  "param.diameter.qosProfile.ResourceAllocationNotification": "0",
  "param.diameter.qosProfile.maxAuthDL": "string",
  "param.diameter.qosProfile.maxAuthUL": "string",
  "param.diameter.qosProfile.minRateDL": "string",
  "param.diameter.qosProfile.minRateUL": "string",
  "param.diameter.qosProfile.qci": "1"
}
```

## Export/Import Traffic for Diameter QoS

Table 2-172 Request/Response Body Parameters

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                    |
|----------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------------------|
| date           | string    |                                                 | Current timestamp                                                                              |
| errors         | array     |                                                 |                                                                                                |
| errors:message | string    |                                                 |                                                                                                |
| errors:name    | string    |                                                 |                                                                                                |
| exportData     | array     | M                                               | Exported list of traffic diameter QoS. For more information, see <a href="#">Table 2-171</a> . |
| key            | string    |                                                 | Indicates the ID                                                                               |
| sourceVersion  | string    |                                                 | System version of the product from which data is exported                                      |
| topic          | string    | M                                               | Topic of each managed object                                                                   |

## Sample Request Body structure for Import/Export operations:

```

{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "description": "string",
      "name": "string",
      "param.diameter.qosProfile.ARP.PreemptionCapability": "0",
      "param.diameter.qosProfile.ARP.PreemptionVulnerability": "0",
      "param.diameter.qosProfile.ARP.PriorityLevel": "string",
      "param.diameter.qosProfile.ResourceAllocationNotification": "0",
      "param.diameter.qosProfile.maxAuthDL": "string",
      "param.diameter.qosProfile.maxAuthUL": "string",
      "param.diameter.qosProfile.minRateDL": "string",
      "param.diameter.qosProfile.minRateUL": "string",
      "param.diameter.qosProfile.qci": "1"
    }
  ],
  "key": "string",
  "sourceVersion": "string",
  "topic": "string"
}

```

## Delete Traffic for Diameter QoS

Table 2-173 Request/Response Body Parameters

| Field Name                 | Data Type | Constraints | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                  |
|----------------------------|-----------|-------------|-------------------------------------------------|------------------------------|
| trafficDiameterQoS<br>Name | string    |             | M                                               | Traffic Diameter<br>QoS Name |

## 2.32 Traffic for ADC Rule

Table 2-174 Supported REST APIs

| Description                | HTTP Method or<br>Custom Operation | Resource URI                                                                                         | Possible Result Code          |
|----------------------------|------------------------------------|------------------------------------------------------------------------------------------------------|-------------------------------|
| Create Traffic Adc Rule    | POST                               | {apiRoot}/oc-cnpolicy-<br>configuration/v1/<br>policydata/pcrf/<br>adcrules                          | See <a href="#">Table A-3</a> |
| Export Traffic Adc Rule    | GET                                | {apiRoot}/oc-cnpolicy-<br>configuration/v1/<br>policydata/pcrf/<br>adcrules/export                   | See <a href="#">Table A-1</a> |
| Import Traffic Adc Rule    | POST                               | {apiRoot}/oc-cnpolicy-<br>configuration/v1/<br>policydata/pcrf/<br>adcrules/import                   | See <a href="#">Table A-3</a> |
| Get Traffic Adc Rule       | GET                                | {apiRoot}/oc-cnpolicy-<br>configuration/v1/<br>policydata/pcrf/<br>adcrules/<br>{trafficAdcRuleName} | See <a href="#">Table A-1</a> |
| Update Traffic Adc<br>Rule | PUT                                | {apiRoot}/oc-cnpolicy-<br>configuration/v1/<br>policydata/pcrf/<br>adcrules/<br>{trafficAdcRuleName} | See <a href="#">Table A-2</a> |
| Delete Traffic Adc Rule    | DELETE                             | {apiRoot}/oc-cnpolicy-<br>configuration/v1/<br>policydata/pcrf/<br>adcrules/<br>{trafficAdcRuleName} | See <a href="#">Table A-4</a> |

## Create, Get, and Update Traffic for ADC Rule

Table 2-175 Data structures supported by the POST, GET, and PUT Response Body

| Field Name  | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|-------------|-----------|-------------------------------------------------|-------------|
| description | string    | O                                               |             |

**Table 2-175 (Cont.) Data structures supported by the POST, GET, and PUT Response Body**

| Field Name                                          | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                  |
|-----------------------------------------------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| name                                                | string    | M                                               |                                                                                                              |
| param.diameter.adc<br>Rule.FlowStatus               | string    | O                                               | Allowed values: <ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> <li>• 2</li> <li>• 3</li> </ul> |
| param.diameter.adc<br>Rule.MeteringMethod           | string    | O                                               | Allowed values: <ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> <li>• 2</li> <li>• 3</li> </ul> |
| param.diameter.adc<br>Rule.MonitoringKey            | string    | O                                               |                                                                                                              |
| param.diameter.adc<br>Rule.Offline                  | string    | O                                               | Allowed values: <ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> </ul>                           |
| param.diameter.adc<br>Rule.Online                   | string    | O                                               | Allowed values: <ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> </ul>                           |
| param.diameter.adc<br>Rule.Precedence               | string    | O                                               |                                                                                                              |
| param.diameter.adc<br>Rule.RatingGroup              | string    | O                                               |                                                                                                              |
| param.diameter.adc<br>Rule.ReportingLevel           | string    | O                                               | Allowed values: <ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> </ul>                           |
| param.diameter.adc<br>Rule.ServiceIdentifier        | string    | O                                               |                                                                                                              |
| param.diameter.adc<br>Rule.maxAuthDL                | string    | O                                               |                                                                                                              |
| param.diameter.adc<br>Rule.maxAuthUL                | string    | O                                               |                                                                                                              |
| param.diameter.adc<br>Rule.name                     | string    | M                                               |                                                                                                              |
| param.diameter.adc<br>Rule.tdfApplicationIdentifier | string    | O                                               |                                                                                                              |
| param.diameter.adc<br>Rule.tdfMuteNotification      | string    | O                                               | Allowed values: <ul style="list-style-type: none"> <li>• 0</li> </ul>                                        |
| param.diameter.adc<br>Rule.tdfRedirectAddressType   | string    | O                                               | Allowed values: <ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> <li>• 2</li> <li>• 3</li> </ul> |

**Table 2-175 (Cont.) Data structures supported by the POST, GET, and PUT Response Body**

| Field Name                                      | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                        |
|-------------------------------------------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------|
| param.diameter.adcRule.tdfRedirectServerAddress | string    | O                                               |                                                                                    |
| param.diameter.adcRule.tdfRedirectSupport       | string    | O                                               | Allowed values: <ul style="list-style-type: none"> <li>• 0</li> <li>• 1</li> </ul> |

**Sample Request Body structure for POST and PUT operations:**

```
{
  "description": "string",
  "name": "string",
  "param.diameter.adcRule.FlowStatus": "0",
  "param.diameter.adcRule.MeteringMethod": "0",
  "param.diameter.adcRule.MonitoringKey": "string",
  "param.diameter.adcRule.Offline": "0",
  "param.diameter.adcRule.Online": "0",
  "param.diameter.adcRule.Precedence": "string",
  "param.diameter.adcRule.RatingGroup": "string",
  "param.diameter.adcRule.ReportingLevel": "0",
  "param.diameter.adcRule.ServiceIdentifier": "string",
  "param.diameter.adcRule.maxAuthDL": "string",
  "param.diameter.adcRule.maxAuthUL": "string",
  "param.diameter.adcRule.name": "string",
  "param.diameter.adcRule.tdfApplicationIdentifier": "string",
  "param.diameter.adcRule.tdfMuteNotification": "0",
  "param.diameter.adcRule.tdfRedirectAddressType": "0",
  "param.diameter.adcRule.tdfRedirectServerAddress": "string",
  "param.diameter.adcRule.tdfRedirectSupport": "0"
}
```

**Sample Response Body structure for GET, POST and PUT operations:**

```
{
  "description": "string",
  "name": "string",
  "param.diameter.adcRule.FlowStatus": "0",
  "param.diameter.adcRule.MeteringMethod": "0",
  "param.diameter.adcRule.MonitoringKey": "string",
  "param.diameter.adcRule.Offline": "0",
  "param.diameter.adcRule.Online": "0",
  "param.diameter.adcRule.Precedence": "string",
  "param.diameter.adcRule.RatingGroup": "string",
  "param.diameter.adcRule.ReportingLevel": "0",
  "param.diameter.adcRule.ServiceIdentifier": "string",
  "param.diameter.adcRule.maxAuthDL": "string",
  "param.diameter.adcRule.maxAuthUL": "string",
}
```

```

"param.diameter.adcRule.name": "string",
"param.diameter.adcRule.tdfApplicationIdentifier": "string",
"param.diameter.adcRule.tdfMuteNotification": "0",
"param.diameter.adcRule.tdfRedirectAddressType": "0",
"param.diameter.adcRule.tdfRedirectServerAddress": "string",
"param.diameter.adcRule.tdfRedirectSupport": "0"
}

```

## Export/Import Traffic for ADC Rule

**Table 2-176 Request/Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                               |
|----------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| date           | string    |                                                 | Current timestamp                                                                                                         |
| errors         | array     |                                                 |                                                                                                                           |
| errors:message | string    |                                                 |                                                                                                                           |
| errors:name    | string    |                                                 |                                                                                                                           |
| exportData     | array     | M                                               | Exported list of traffic Adc Rule. For more information, see <a href="#">Create, Get, and Update Traffic for ADC Rule</a> |
| key            | string    |                                                 | Indicates the ID                                                                                                          |
| sourceVersion  | string    |                                                 | System version of the product from which data is exported                                                                 |
| topic          | string    | M                                               | Topic of each managed object                                                                                              |

## Sample Request Body structure for Import/Export operations:

```

{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "description": "string",
      "name": "string",
      "param.diameter.adcRule.FlowStatus": "0",
      "param.diameter.adcRule.MeteringMethod": "0",
      "param.diameter.adcRule.MonitoringKey": "string",
      "param.diameter.adcRule.Offline": "0",
      "param.diameter.adcRule.Online": "0",
      "param.diameter.adcRule.Precedence": "string",
      "param.diameter.adcRule.RatingGroup": "string",
      "param.diameter.adcRule.ReportingLevel": "0",
      "param.diameter.adcRule.ServiceIdentifier": "string",

```



```

        "param.diameter.adcRule.maxAuthDL": "string",
        "param.diameter.adcRule.maxAuthUL": "string",
        "param.diameter.adcRule.name": "string",
        "param.diameter.adcRule.tdfApplicationIdentifier": "string",
        "param.diameter.adcRule.tdfMuteNotification": "0",
        "param.diameter.adcRule.tdfRedirectAddressType": "0",
        "param.diameter.adcRule.tdfRedirectServerAddress": "string",
        "param.diameter.adcRule.tdfRedirectSupport": "0"
    }
},
"key": "string",
"sourceVersion": "string",
"topic": "string"
}

```

### Delete Traffic for ADC Rule

**Table 2-177 Request/Response Body Parameters**

| Field Name         | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description           |
|--------------------|-----------|-------------------------------------------------|-----------------------|
| trafficAdcRuleName | string    | M                                               | Traffic ADC Rule Name |

## 2.33 Time Period

**Table 2-178 PCRF and PCF Time Period APIs**

| Description        | HTTP Method or<br>Custom Operation | Resource URI                                                       | Possible Result Code          |
|--------------------|------------------------------------|--------------------------------------------------------------------|-------------------------------|
| Get Time Period    | GET                                | {apiRoot}/oc-cnpolicy-configuration/v1/timePeriod/{timePeriodName} | See <a href="#">Table A-1</a> |
| Update Time Period | PUT                                | {apiRoot}/oc-cnpolicy-configuration/v1/timePeriod/{timePeriodName} | See <a href="#">Table A-2</a> |
| Delete Time Period | DELETE                             | {apiRoot}/oc-cnpolicy-configuration/v1/timePeriod/{timePeriodName} | See <a href="#">Table A-4</a> |
| Create Time Period | POST                               | {apiRoot}/oc-cnpolicy-configuration/v1/timePeriod                  | See <a href="#">Table A-3</a> |

**Table 2-179 PCRF Time Period REST APIs**

| Description        | HTTP Method or Custom Operation | Resource URI                                                            | Possible Result Code          |
|--------------------|---------------------------------|-------------------------------------------------------------------------|-------------------------------|
| Get Time Period    | GET                             | {apiRoot}/ocpm/pcrf/v1/configuration/policy/timePeriod/{timePeriodName} | See <a href="#">Table A-1</a> |
| Update Time Period | PUT                             | {apiRoot}/ocpm/pcrf/v1/configuration/policy/timePeriod/{timePeriodName} | See <a href="#">Table A-2</a> |
| Delete Time Period | DELETE                          | {apiRoot}/ocpm/pcrf/v1/configuration/policy/timePeriod/{timePeriodName} | See <a href="#">Table A-4</a> |
| Create Time Period | POST                            | {apiRoot}/ocpm/pcrf/v1/configuration/policy/timePeriod                  | See <a href="#">Table A-3</a> |

**Table 2-180 PCF Time Period REST APIs**

| Description        | HTTP Method or Custom Operation | Resource URI                                                       | Possible Result Code          |
|--------------------|---------------------------------|--------------------------------------------------------------------|-------------------------------|
| Get Time Period    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/timePeriod/{timePeriodName} | See <a href="#">Table A-1</a> |
| Update Time Period | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/timePeriod/{timePeriodName} | See <a href="#">Table A-2</a> |
| Delete Time Period | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/timePeriod/{timePeriodName} | See <a href="#">Table A-4</a> |
| Create Time Period | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/timePeriod                  | See <a href="#">Table A-3</a> |

**Create, Get, and Update Time Period****Table 2-181 Data structures supported by the POST, GET, and PUT Response Body**

| Field Name  | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description              |
|-------------|-----------|-----------------------------------------|--------------------------|
| description | string    | O                                       | Provide the description. |
| name        | string    | M                                       | Provide the name.        |
| precedence  | string    | O                                       | Provide the precedence.  |
| timeSlot    | TimeSlot  | O                                       |                          |

**Table 2-182 TimeSlot**

| Field Name   | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|--------------|-----------|-------------------------------------------------|-------------|
| daysOfMonth  | string    | O                                               |             |
| daysOfWeek   | string    | O                                               |             |
| endTime      | string    | O                                               |             |
| monthsOfYear | string    | O                                               |             |
| startTime    | string    | O                                               |             |
| years        | string    | O                                               |             |

**Sample Request Body structure for GET, POST, and PUT operations:**

```
{
  "name": "string",
  "description": "string",
  "precedence": "string",
  "timeSlot": [
    {
      "years": "string",
      "monthsOfYear": "string",
      "daysOfMonth": "string",
      "daysOfWeek": "string",
      "startTime": "string",
      "endTime": "string"
    }
  ]
}
```

## Export/Import Time Period

**Table 2-183 Export/Import Time Period APIs**

| Description            | HTTP Method or<br>Custom Operation | Resource URI                                                          | Possible Result Code          |
|------------------------|------------------------------------|-----------------------------------------------------------------------|-------------------------------|
| Import Time Period     | POST                               | {apiRoot}/ocpm/pcrf/v1/<br>configuration/policy/<br>timePeriod/import | See <a href="#">Table A-3</a> |
| Export Time Period     | GET                                | {apiRoot}/ocpm/pcrf/v1/<br>configuration/policy/<br>timePeriod/export | See <a href="#">Table A-1</a> |
| PCF Import Time Period | POST                               | {apiRoot}/oc-cnpolicy-<br>configuration/v1/<br>timePeriod/import      | See <a href="#">Table A-3</a> |
| PCF Export Time Period | GET                                | {apiRoot}/oc-cnpolicy-<br>configuration/v1/<br>timePeriod/export      | See <a href="#">Table A-1</a> |

**Table 2-184 Request/Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                               |
|----------------|-----------|-------------------------------------------------|-----------------------------------------------------------|
| date           | string    |                                                 | Current timestamp                                         |
| errors         | array     |                                                 |                                                           |
| errors:message | string    |                                                 |                                                           |
| errors:name    | string    |                                                 |                                                           |
| exportData     | array     | M                                               | Exported list of time period.                             |
| key            | string    |                                                 | Indicates the ID                                          |
| sourceVersion  | string    |                                                 | System version of the product from which data is exported |
| topic          | string    | M                                               | Topic of each managed object                              |

**Sample Request Body structure for Import/Export operations:**

```
{
  "topic": "string",
  "sourceVersion": "string",
  "date": "string",
  "exportData": [
    {
      "name": "string",
      "description": "string",
      "precedence": "string",
      "timeSlot": [
        {
          "years": "string",
          "monthsOfYear": "string",
          "daysOfMonth": "string",
          "daysOfWeek": "string",
          "startTime": "string",
          "endTime": "string"
        }
      ]
    }
  ],
  "errors": [
    {
      "name": "string",
      "message": "string"
    }
  ]
}
```

## 2.34 Predefined Pcc Rule Base

**Table 2-185 Supported REST APIs**

| Description                     | HTTP Method or Custom Operation | Resource URI                                                                                          | Possible Result Code          |
|---------------------------------|---------------------------------|-------------------------------------------------------------------------------------------------------|-------------------------------|
| Create Predefined Pcc Rule Base | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/predefinedpccrules                             | See <a href="#">Table A-3</a> |
| Export Predefined Pcc Rule Base | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/predefinedpccrules/export                      | See <a href="#">Table A-1</a> |
| Import Predefined Pcc Rule Base | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/predefinedpccrules/import                      | See <a href="#">Table A-3</a> |
| Get Predefined Pcc Rule Base    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/predefinedpccrules/{predefinedPccRuleBaseName} | See <a href="#">Table A-1</a> |
| Update Predefined Pcc Rule Base | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/predefinedpccrules/{predefinedPccRuleBaseName} | See <a href="#">Table A-2</a> |
| Delete Predefined Pcc Rule Base | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/predefinedpccrules/{predefinedPccRuleBaseName} | See <a href="#">Table A-4</a> |

### Create, Get, and Update Predefined Pcc Rule Base

**Table 2-186 Data structures supported by the POST, GET, and PUT Response Body**

| Field Name                                   | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description |
|----------------------------------------------|-----------|-------------------------------------------|-------------|
| name                                         | string    | M                                         |             |
| param.diameter.pccPredefBaseRule.description | string    | O                                         |             |

**Table 2-186 (Cont.) Data structures supported by the POST, GET, and PUT Response Body**

| Field Name                            | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|---------------------------------------|-----------|-------------------------------------------------|-------------|
| param.diameter.pccPredefBaseRule.name | string    | O                                               |             |

**Sample Request Body structure for POST and PUT operations:**

```
{
  "name": "string",
  "param.diameter.pccPredefBaseRule.description": "string",
  "param.diameter.pccPredefBaseRule.name": "string"
}
```

**Sample Response Body structure for GET, POST and PUT operations:**

```
{
  "name": "string",
  "param.diameter.pccPredefBaseRule.description": "string",
  "param.diameter.pccPredefBaseRule.name": "string"
}
```

### Export/Import Predefined Pcc Rule Base

**Table 2-187 Request/Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                        |
|----------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------|
| date           | string    |                                                 | Current timestamp                                                                                  |
| errors         | array     |                                                 |                                                                                                    |
| errors:message | string    |                                                 |                                                                                                    |
| errors:name    | string    |                                                 |                                                                                                    |
| exportData     | array     | M                                               | Exported list of predefined Pcc Rule Base. For more information, see <a href="#">Table 2-186</a> . |
| key            | string    |                                                 | Indicates the ID                                                                                   |
| sourceVersion  | string    |                                                 | System version of the product from which data is exported                                          |
| topic          | string    | M                                               | Topic of each managed object                                                                       |

**Sample Request Body structure for Import/Export operations:**

```

{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "name": "string",
      "param.diameter.pccPredefBaseRule.description": "string",
      "param.diameter.pccPredefBaseRule.name": "string"
    }
  ],
  "key": "string",
  "sourceVersion": "string",
  "topic": "string"
}

```

**Delete Predefined Pcc Rule Base****Table 2-188 Request/Response Body Parameters**

| Field Name                    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                      |
|-------------------------------|-----------|-------------------------------------------------|----------------------------------|
| predefinedPccRuleBase<br>Name | string    | M                                               | Predefined Pcc Rule<br>Base Name |

## 2.35 Predefined Pcc Rule

**Table 2-189 Supported REST APIs**

| Description                   | HTTP Method or<br>Custom Operation | Resource URI                                                                                     | Possible Result Code          |
|-------------------------------|------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------|
| Create Predefined Pcc<br>Rule | POST                               | {apiRoot}/oc-cnpolicy-<br>configuration/v1/<br>policydata/pcrf/<br>predefinedpccrules            | See <a href="#">Table A-3</a> |
| Export Predefined Pcc<br>Rule | GET                                | {apiRoot}/oc-cnpolicy-<br>configuration/v1/<br>policydata/pcrf/<br>predefinedpccrules/<br>export | See <a href="#">Table A-1</a> |
| Import Predefined Pcc<br>Rule | POST                               | {apiRoot}/oc-cnpolicy-<br>configuration/v1/<br>policydata/pcrf/<br>predefinedpccrules/<br>import | See <a href="#">Table A-3</a> |

Table 2-189 (Cont.) Supported REST APIs

| Description                | HTTP Method or Custom Operation | Resource URI                                                                                      | Possible Result Code          |
|----------------------------|---------------------------------|---------------------------------------------------------------------------------------------------|-------------------------------|
| Get Predefined Pcc Rule    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/predefinedpccrules/{predefinedPccRuleName} | See <a href="#">Table A-1</a> |
| Update Predefined Pcc Rule | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/predefinedpccrules/{predefinedPccRuleName} | See <a href="#">Table A-2</a> |
| Delete Predefined Pcc Rule | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/predefinedpccrules/{predefinedPccRuleName} | See <a href="#">Table A-4</a> |

**Create, Get, and Update Predefined Pcc Rule**

Table 2-190 Data structures supported by the POST, GET, and PUT Response Body

| Field Name                                 | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description |
|--------------------------------------------|-----------|-------------------------------------------|-------------|
| name                                       | string    | M                                         |             |
| param.diameter.pccPredefRule.MonitoringKey | string    | O                                         |             |
| param.diameter.pccPredefRule.description   | string    | O                                         |             |
| param.diameter.pccPredefRule.name          | string    | O                                         |             |

**Sample Request Body structure for POST and PUT operations:**

```
{
  "name": "string",
  "param.diameter.pccPredefRule.MonitoringKey": "string",
  "param.diameter.pccPredefRule.description": "string",
  "param.diameter.pccPredefRule.name": "string"
}
```

**Sample Response Body structure for GET, POST and PUT operations:**

```
{
  "name": "string",
```



```

    "param.diameter.pccPredefRule.MonitoringKey": "string",
    "param.diameter.pccPredefRule.description": "string",
    "param.diameter.pccPredefRule.name": "string"
  }

```

## Export/Import Predefined Pcc Rule

**Table 2-191 Request/Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                               |
|----------------|-----------|-------------------------------------------------|-----------------------------------------------------------|
| date           | string    |                                                 | Current timestamp                                         |
| errors         | array     |                                                 |                                                           |
| errors:message | string    |                                                 |                                                           |
| errors:name    | string    |                                                 |                                                           |
| exportData     | array     | M                                               | Exported list of predefined Pcc Rule.                     |
| key            | string    |                                                 | Indicates the ID                                          |
| sourceVersion  | string    |                                                 | System version of the product from which data is exported |
| topic          | string    | M                                               | Topic of each managed object                              |

### Sample Request Body structure for Import/Export operations:

```

{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "name": "string",
      "param.diameter.pccPredefRule.MonitoringKey": "string",
      "param.diameter.pccPredefRule.description": "string",
      "param.diameter.pccPredefRule.name": "string"
    }
  ],
  "key": "string",
  "sourceVersion": "string",
  "topic": "string"
}

```

## Delete Predefined Pcc Rule

Table 2-192 Request/Response Body Parameters

| Field Name            | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description              |
|-----------------------|-----------|-------------------------------------------------|--------------------------|
| predefinedPccRuleName | string    | M                                               | Predefined Pcc Rule Name |

## 2.36 Predefined Adc Rule Base

Table 2-193 Supported REST APIs

| Description                     | HTTP Method or Custom Operation | Resource URI                                                                                              | Possible Result Code          |
|---------------------------------|---------------------------------|-----------------------------------------------------------------------------------------------------------|-------------------------------|
| Create Predefined Adc Rule Base | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/predefinedadcrulebases                             | See <a href="#">Table A-3</a> |
| Export Predefined Adc Rule Base | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/predefinedadcrulebases/export                      | See <a href="#">Table A-1</a> |
| Import Predefined Adc Rule Base | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/predefinedadcrulebases/import                      | See <a href="#">Table A-3</a> |
| Get Predefined Adc Rule Base    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/predefinedadcrulebases/{predefinedAdcRuleBaseName} | See <a href="#">Table A-1</a> |
| Update Predefined Adc Rule Base | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/predefinedadcrulebases/{predefinedAdcRuleBaseName} | See <a href="#">Table A-2</a> |
| Delete Predefined Adc Rule Base | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/predefinedadcrulebases/{predefinedAdcRuleBaseName} | See <a href="#">Table A-4</a> |

## Create, Get, and Update Predefined Adc Rule Base

Table 2-194 Data structures supported by the POST, GET, and PUT Response Body

| Field Name                                   | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|----------------------------------------------|-----------|-------------------------------------------------|-------------|
| name                                         | string    | M                                               |             |
| param.diameter.adcPredefBaseRule.description | string    | O                                               |             |
| param.diameter.adcPredefBaseRule.name        | string    | O                                               |             |

Sample Request Body structure for POST and PUT operations:

```
{
  "name": "string",
  "param.diameter.adcPredefBaseRule.description": "string",
  "param.diameter.adcPredefBaseRule.name": "string"
}
```

Sample Response Body structure for GET, POST and PUT operations:

```
{
  "name": "string",
  "param.diameter.adcPredefBaseRule.description": "string",
  "param.diameter.adcPredefBaseRule.name": "string"
}
```

## Export/Import Predefined Adc Rule Base

Table 2-195 Request/Response Body Parameters

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                               |
|----------------|-----------|-------------------------------------------------|-----------------------------------------------------------|
| date           | string    |                                                 | Current timestamp                                         |
| errors         | array     |                                                 |                                                           |
| errors:message | string    |                                                 |                                                           |
| errors:name    | string    |                                                 |                                                           |
| exportData     | array     | M                                               | Exported list of predefined Adc Base Rule.                |
| key            | string    |                                                 | Indicates the ID                                          |
| sourceVersion  | string    |                                                 | System version of the product from which data is exported |
| topic          | string    | M                                               | Topic of each managed object                              |

Sample Request Body structure for Import/Export operations:

```
{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "name": "string",
      "param.diameter.adcPredefBaseRule.description": "string",
      "param.diameter.adcPredefBaseRule.name": "string"
    }
  ],
  "key": "string",
  "sourceVersion": "string",
  "topic": "string"
}
```

#### Delete Predefined Adc Rule Base

**Table 2-196 Request/Response Body Parameters**

| Field Name                    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                      |
|-------------------------------|-----------|-------------------------------------------------|----------------------------------|
| predefinedAdcRuleBase<br>Name | string    | M                                               | Predefined Adc Rule<br>Base Name |

## 2.37 Predefined Adc Rule

**Table 2-197 Supported REST APIs**

| Description                   | HTTP Method or<br>Custom Operation | Resource URI                                                                                     | Possible Result Code          |
|-------------------------------|------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------|
| Create Predefined Adc<br>Rule | POST                               | {apiRoot}/oc-cnpolicy-<br>configuration/v1/<br>policydata/pcrf/<br>predefinedadcrules            | See <a href="#">Table A-3</a> |
| Export Predefined Adc<br>Rule | GET                                | {apiRoot}/oc-cnpolicy-<br>configuration/v1/<br>policydata/pcrf/<br>predefinedadcrules/<br>export | See <a href="#">Table A-1</a> |
| Import Predefined Adc<br>Rule | POST                               | {apiRoot}/oc-cnpolicy-<br>configuration/v1/<br>policydata/pcrf/<br>predefinedadcrules/<br>import | See <a href="#">Table A-3</a> |

**Table 2-197 (Cont.) Supported REST APIs**

| Description                | HTTP Method or Custom Operation | Resource URI                                                                                      | Possible Result Code          |
|----------------------------|---------------------------------|---------------------------------------------------------------------------------------------------|-------------------------------|
| Get Predefined Adc Rule    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/predefinedadcrules/{predefinedAdcRuleName} | See <a href="#">Table A-1</a> |
| Update Predefined Adc Rule | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/predefinedadcrules/{predefinedAdcRuleName} | See <a href="#">Table A-2</a> |
| Delete Predefined Adc Rule | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/predefinedadcrules/{predefinedAdcRuleName} | See <a href="#">Table A-4</a> |

**Create, Get, and Update Predefined Adc Rule****Table 2-198 Data structures supported by the POST, GET, and PUT Response Body**

| Field Name                               | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description |
|------------------------------------------|-----------|-------------------------------------------|-------------|
| name                                     | string    | M                                         |             |
| param.diameter.adcPredefRule.description | string    | O                                         |             |
| param.diameter.adcPredefRule.name        | string    | O                                         |             |

Sample Request Body structure for POST and PUT operations:

```
{
  "name": "string",
  "param.diameter.adcPredefRule.description": "string",
  "param.diameter.adcPredefRule.name": "string"
}
```

Sample Response Body structure for GET, POST and PUT operations:

```
{
  "name": "string",
  "param.diameter.adcPredefBaseRule.description": "string",
  "param.diameter.adcPredefBaseRule.name": "string"
}
```

**Export/Import Predefined Adc Rule****Table 2-199 Request/Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                               |
|----------------|-----------|-------------------------------------------------|-----------------------------------------------------------|
| date           | string    |                                                 | Current timestamp                                         |
| errors         | array     |                                                 |                                                           |
| errors:message | string    |                                                 |                                                           |
| errors:name    | string    |                                                 |                                                           |
| exportData     | array     | M                                               | Exported list of predefined Adc Rule.                     |
| key            | string    |                                                 | Indicates the ID                                          |
| sourceVersion  | string    |                                                 | System version of the product from which data is exported |
| topic          | string    | M                                               | Topic of each managed object                              |

Sample Request Body structure for Import/Export operations:

```
{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "name": "string",
      "param.diameter.adcPredefBaseRule.description": "string",
      "param.diameter.adcPredefBaseRule.name": "string"
    }
  ],
  "key": "string",
  "sourceVersion": "string",
  "topic": "string"
}
```

**Delete Predefined Adc Rule****Table 2-200 Request/Response Body Parameters**

| Field Name            | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description              |
|-----------------------|-----------|-------------------------------------------------|--------------------------|
| predefinedAdcRuleName | string    | M                                               | Predefined Adc Rule Name |

## 2.38 PCRF Presence Reporting Area

**Table 2-201 Supported REST APIs**

| Description                         | HTTP Method or Custom Operation | Resource URI                                                              | Possible Result Code          |
|-------------------------------------|---------------------------------|---------------------------------------------------------------------------|-------------------------------|
| Create PCRF Presence Reporting Area | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/pras               | See <a href="#">Table A-3</a> |
| Export PCRF Presence Reporting Area | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/pras/export        | See <a href="#">Table A-1</a> |
| Import PCRF Presence Reporting Area | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/pras/import        | See <a href="#">Table A-3</a> |
| Get PCRF Presence Reporting Area    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/pras/{praPcrfName} | See <a href="#">Table A-1</a> |
| Update PCRF Presence Reporting Area | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/pras/{praPcrfName} | See <a href="#">Table A-2</a> |
| Delete PCRF Presence Reporting Area | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcrf/pras/{praPcrfName} | See <a href="#">Table A-4</a> |

### Create, Get, and Update Pra

**Table 2-202 Data structures supported by the POST, GET, and PUT Response Body**

| Field Name  | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                   |
|-------------|-----------|-------------------------------------------|-----------------------------------------------|
| description | string    | O                                         |                                               |
| id          | string    | M                                         |                                               |
| name        | string    | M                                         |                                               |
| praltems    | array     | O                                         |                                               |
| type        | string    |                                           | Allowed value:<br>Core Network pre-configured |

**Table 2-203 praltems**

| Field Name | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description |
|------------|-----------|-------------------------------------------|-------------|
| cgi        | Cgi       | O                                         |             |

Table 2-203 (Cont.) praltems

| Field Name   | Data Type   | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                         |
|--------------|-------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ecgi         | Ecgi        | O                                               | Allowed values: <ul style="list-style-type: none"> <li>• -1</li> <li>• 0</li> <li>• 1</li> <li>• 2</li> <li>• 3</li> </ul>                                                          |
| home_enodeb  | HomeEnodeb  | O                                               |                                                                                                                                                                                     |
| macro_enodeb | MacroEnodeb | O                                               |                                                                                                                                                                                     |
| rai          | RAI         |                                                 |                                                                                                                                                                                     |
| sai          | SAI         |                                                 |                                                                                                                                                                                     |
| tai          | TAI         |                                                 |                                                                                                                                                                                     |
| type         | string      |                                                 | Allowed values: <ul style="list-style-type: none"> <li>• tai</li> <li>• rai</li> <li>• macro_enodeb</li> <li>• home_enodeb</li> <li>• ecgi</li> <li>• sai</li> <li>• cgi</li> </ul> |

Table 2-204 cgi

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|------------|-----------|-------------------------------------------------|-------------|
| ci         | string    | O                                               |             |
| lac        | string    | O                                               |             |
| mcc        | string    | O                                               |             |
| mnc        | string    | O                                               |             |

Table 2-205 ecgi

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|------------|-----------|-------------------------------------------------|-------------|
| eci        | string    | O                                               |             |
| mcc        | string    | O                                               |             |
| mnc        | string    | O                                               |             |



Table 2-206 home\_enodeb

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|------------|-----------|-------------------------------------------------|-------------|
| henb       | string    | O                                               |             |
| mcc        | string    | O                                               |             |
| menb       | string    | O                                               |             |
| mnc        | string    | O                                               |             |

Table 2-207 macro\_enodeb

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|------------|-----------|-------------------------------------------------|-------------|
| mcc        | string    | O                                               |             |
| menb       | string    | O                                               |             |
| mnc        | string    | O                                               |             |

Table 2-208 rai

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|------------|-----------|-------------------------------------------------|-------------|
| lac        | string    | O                                               |             |
| mcc        | string    | O                                               |             |
| mnc        | string    | O                                               |             |
| rac        | string    | O                                               |             |

Table 2-209 sai

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|------------|-----------|-------------------------------------------------|-------------|
| lac        | string    | O                                               |             |
| mcc        | string    | O                                               |             |
| mnc        | string    | O                                               |             |
| sac        | string    | O                                               |             |

Table 2-210 tai

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|------------|-----------|-------------------------------------------------|-------------|
| mcc        | string    | O                                               |             |
| mnc        | string    | O                                               |             |
| tac        | string    | O                                               |             |

**Sample Request Body structure for POST and PUT operations:**

```

{
  "description": "string",
  "id": "string",
  "name": "string",
  "praItems": [
    {
      "cgi": {
        "ci": "string",
        "lac": "string",
        "mcc": "string",
        "mnc": "string"
      },
      "ecgi": {
        "eci": "string",
        "mcc": "string",
        "mnc": "string"
      },
      "home_enodeb": {
        "henb": "string",
        "mcc": "string",
        "menb": "string",
        "mnc": "string"
      },
      "macro_enodeb": {
        "mcc": "string",
        "menb": "string",
        "mnc": "string"
      },
      "rai": {
        "lac": "string",
        "mcc": "string",
        "mnc": "string",
        "rac": "string"
      },
      "sai": {
        "lac": "string",
        "mcc": "string",
        "mnc": "string",
        "sac": "string"
      },
      "tai": {
        "mcc": "string",
        "mnc": "string",
        "tac": "string"
      },
      "type": "cgi"
    }
  ],
  "type": "Core Network pre-configured"
}

```

Sample Response Body structure for GET, POST and PUT operations:

```
{
  "description": "string",
  "id": "string",
  "name": "string",
  "praItems": [
    {
      "cgi": {
        "ci": "string",
        "lac": "string",
        "mcc": "string",
        "mnc": "string"
      },
      "ecgi": {
        "eci": "string",
        "mcc": "string",
        "mnc": "string"
      },
      "home_enodeb": {
        "henb": "string",
        "mcc": "string",
        "menb": "string",
        "mnc": "string"
      },
      "macro_enodeb": {
        "mcc": "string",
        "menb": "string",
        "mnc": "string"
      },
      "rai": {
        "lac": "string",
        "mcc": "string",
        "mnc": "string",
        "rac": "string"
      },
      "sai": {
        "lac": "string",
        "mcc": "string",
        "mnc": "string",
        "sac": "string"
      },
      "tai": {
        "mcc": "string",
        "mnc": "string",
        "tac": "string"
      },
      "type": "cgi"
    }
  ],
  "type": "Core Network pre-configured"
}
```

## Export/Import Pra

Table 2-211 Request/Response Body Parameters

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                               |
|----------------|-----------|-------------------------------------------------|-----------------------------------------------------------|
| date           | string    |                                                 | Current timestamp                                         |
| errors         | array     |                                                 |                                                           |
| errors:message | string    |                                                 |                                                           |
| errors:name    | string    |                                                 |                                                           |
| exportData     | array     | M                                               | Exported list of Pra.                                     |
| key            | string    |                                                 | Indicates the ID                                          |
| sourceVersion  | string    |                                                 | System version of the product from which data is exported |
| topic          | string    | M                                               | Topic of each managed object                              |

Sample Request Body structure for Import/Export operations:

```
{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "description": "string",
      "id": "string",
      "name": "string",
      "praItems": [
        {
          "cgi": {
            "ci": "string",
            "lac": "string",
            "mcc": "string",
            "mnc": "string"
          },
          "ecgi": {
            "eci": "string",
            "mcc": "string",
            "mnc": "string"
          },
          "home_enodeb": {
            "henb": "string",
            "mcc": "string",
            "menb": "string",
            "mnc": "string"
          }
        }
      ]
    }
  ],
}
```

```

    "macro_enodeb": {
      "mcc": "string",
      "menb": "string",
      "mnc": "string"
    },
    "rai": {
      "lac": "string",
      "mcc": "string",
      "mnc": "string",
      "rac": "string"
    },
    "sai": {
      "lac": "string",
      "mcc": "string",
      "mnc": "string",
      "sac": "string"
    },
    "tai": {
      "mcc": "string",
      "mnc": "string",
      "tac": "string"
    },
    "type": "cgi"
  },
  "type": "Core Network pre-configured"
}
},
"key": "string",
"sourceVersion": "string",
"topic": "string"
}

```

### Delete Pra

**Table 2-212 Request/Response Body Parameters**

| Field Name  | Data Type | Constraints | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description   |
|-------------|-----------|-------------|-------------------------------------------------|---------------|
| praPcrfName | string    |             | M                                               | Pra Pcrf Name |

## 2.39 Media Profile

**Table 2-213 PCRF and PCF Media Profile APIs**

| Description       | HTTP Method or<br>Custom Operation | Resource URI                                                                       | Possible Result Code          |
|-------------------|------------------------------------|------------------------------------------------------------------------------------|-------------------------------|
| Get Media Profile | GET                                | {apiRoot}/oc-cnpolicy-<br>configuration/v1/<br>mediaProfile/<br>{mediaProfileName} | See <a href="#">Table A-1</a> |

**Table 2-213 (Cont.) PCRF and PCF Media Profile APIs**

| Description          | HTTP Method or Custom Operation | Resource URI                                                           | Possible Result Code          |
|----------------------|---------------------------------|------------------------------------------------------------------------|-------------------------------|
| Update Media Profile | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/mediaProfile/{mediaProfileName} | See <a href="#">Table A-2</a> |
| Delete Media Profile | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/mediaProfile/{mediaProfileName} | See <a href="#">Table A-4</a> |
| Create Media Profile | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/mediaProfile                    | See <a href="#">Table A-3</a> |

**Table 2-214 PCRF Media Profile APIs**

| Description          | HTTP Method or Custom Operation | Resource URI                                                                | Possible Result Code          |
|----------------------|---------------------------------|-----------------------------------------------------------------------------|-------------------------------|
| Get Media Profile    | GET                             | /ocpm/pcrf/v1/configuration/policy/mediaProfile/{mediaProfileName}          | See <a href="#">Table A-1</a> |
| Update Media Profile | PUT                             | {apiRoot}/ocpm/pcrf/v1/configuration/policy/mediaProfile/{mediaProfileName} | See <a href="#">Table A-2</a> |
| Delete Media Profile | DELETE                          | {apiRoot}/ocpm/pcrf/v1/configuration/policy/mediaProfile/{mediaProfileName} | See <a href="#">Table A-4</a> |
| Create Media Profile | POST                            | {apiRoot}/ocpm/pcrf/v1/configuration/policy/mediaProfile                    | See <a href="#">Table A-3</a> |

**Table 2-215 PCF Media Profile APIs**

| Description          | HTTP Method or Custom Operation | Resource URI                                                           | Possible Result Code          |
|----------------------|---------------------------------|------------------------------------------------------------------------|-------------------------------|
| Get Media Profile    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/mediaProfile/{mediaProfileName} | See <a href="#">Table A-1</a> |
| Update Media Profile | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/mediaProfile/{mediaProfileName} | See <a href="#">Table A-2</a> |
| Delete Media Profile | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/mediaProfile/{mediaProfileName} | See <a href="#">Table A-4</a> |

Table 2-215 (Cont.) PCF Media Profile APIs

| Description          | HTTP Method or Custom Operation | Resource URI                                        | Possible Result Code          |
|----------------------|---------------------------------|-----------------------------------------------------|-------------------------------|
| Create Media Profile | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/mediaProfile | See <a href="#">Table A-3</a> |

**Create, Get, and Update Media Profile**

Table 2-216 Data structures supported by the POST, GET, and PUT Response Body

| Field Name       | Data Type   | Mandatory(M)/Optional(O)/Conditional(C) | Description                                         |
|------------------|-------------|-----------------------------------------|-----------------------------------------------------|
| codecName        | string      | M                                       |                                                     |
| description      | string      |                                         | Provide the description of the Media.               |
| frameSizeInBytes | integer     | M                                       | enter a range in 0 to 65535                         |
| frameSizeInMS    | number      | M                                       |                                                     |
| id               | string      | M                                       |                                                     |
| mediaType        | string      | M                                       |                                                     |
| name             | string      | M                                       |                                                     |
| pTime            | integer     | M                                       | enter a range in 0 to 65535                         |
| payLoad          | integer     | M                                       | enter a range in 0 to 255                           |
| sampleRate       | integer     | M                                       | enter a range in 0 to 65535                         |
| transportType    | string ENUM | M                                       | Possible values:<br>RTP/AVP<br>RTP/SAVP<br>RTP/AVPF |
| useDefaultPTime  | boolean     | M                                       |                                                     |

**Sample Request Body structure for GET, POST, and PUT operations:**

```
{
  "id": "string",
  "name": "string",
  "description": "string",
  "codecName": "string",
  "transportType": "RTP/AVP",
  "mediaType": "string",
  "enter a range in 0 to 255": 255,
  "enter a range in 0 to 65535": 65535,
  "frameSizeInMS": 0,
  "useDefaultPTime": true
}
```

**Export/Import Media Profile****Table 2-217 Export/Import Media Profile APIs**

| Description              | HTTP Method or Custom Operation | Resource URI                                                    | Possible Result Code          |
|--------------------------|---------------------------------|-----------------------------------------------------------------|-------------------------------|
| Import Media Profile     | POST                            | {apiRoot}/ocpm/pcrf/v1/configuration/policy/mediaProfile/import | See <a href="#">Table A-3</a> |
| Export Media Profile     | GET                             | {apiRoot}/ocpm/pcrf/v1/configuration/policy/mediaProfile/export | See <a href="#">Table A-1</a> |
| PCF Import Media Profile | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/mediaProfile/import      | See <a href="#">Table A-3</a> |
| PCF Export Media Profile | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/mediaProfile/export      | See <a href="#">Table A-1</a> |

**Table 2-218 Export/Import Media Profile Request/Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                               |
|----------------|-----------|-----------------------------------------|-----------------------------------------------------------|
| date           | string    | M                                       | Current timestamp                                         |
| errors         | array     | M                                       |                                                           |
| errors:message | string    | M                                       |                                                           |
| errors:name    | string    | M                                       |                                                           |
| exportData     | array     | M                                       | Exported list of media profile.                           |
| key            | string    | M                                       | Indicates the ID                                          |
| sourceVersion  | string    | O                                       | System version of the product from which data is exported |
| topic          | string    | M                                       | Topic of each managed object                              |

**Sample Request Body structure for Import/Export operations:**

```
{
  "topic": "string",
  "sourceVersion": "string",
  "date": "string",
  "exportData": [
    {
      "id": "string",
      "name": "string",
      "description": "string",
      "codecName": "string",
      "transportType": "RTP/AVP",
      "mediaType": "string",

```



```

        "enter a range in 0 to 255": 255,
        "enter a range in 0 to 65535": 65535,
        "frameSizeInMS": 0,
        "useDefaultPTime": true
    }
  ],
  "errors": [
    {
      "name": "string",
      "message": "string"
    }
  ]
}

```

### Delete Media Profile

**Table 2-219 Request/Response Body Parameters**

| Field Name       | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description        |
|------------------|-----------|-------------------------------------------------|--------------------|
| mediaProfileName | string    | M                                               | Media Profile Name |

## 2.40 Match List

**Table 2-220 Supported REST APIs**

| Description       | HTTP Method or<br>Custom Operation | Resource URI                                                              | Possible Result Code          |
|-------------------|------------------------------------|---------------------------------------------------------------------------|-------------------------------|
| Export Match List | GET                                | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/matchList/export | See <a href="#">Table A-1</a> |
| Import Match List | POST                               | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/matchList/export | See <a href="#">Table A-3</a> |
| Delete Match List | DELETE                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/matchList/export |                               |

### Export/Import Match List

**Table 2-221 Request/Response Body Parameters**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description       |
|------------|-----------|-------------------------------------------------|-------------------|
| date       | string    | O                                               | Current timestamp |

Table 2-221 (Cont.) Request/Response Body Parameters

| Field Name               | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                      |
|--------------------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| exportData.description   | string    | O                                               | Includes a brief description of the match list.                                                                                                                                                                                  |
| exportData.id            | string    | M                                               | A unique identifier for the match list. This unique identifier cannot be changed once set.                                                                                                                                       |
| exportData.options.label | string    | O                                               | Includes a label for the match list.                                                                                                                                                                                             |
| exportData.items         | array     | M                                               | Includes a list or array of homogeneous items in the match list. The data type of the items in the list must be the same as the data type of exportData.type parameter.                                                          |
| exportData.name          | string    | M                                               | Specifies the name of the match list.                                                                                                                                                                                            |
| exportData.type          | string    | M                                               | Specifies the data type of the items in the match list. The allowed data types are: <ul style="list-style-type: none"> <li>• string</li> <li>• wildcard</li> <li>• ipv4</li> <li>• ipv6</li> <li>• Regular expression</li> </ul> |
| sourceVersion            | string    | O                                               | System version of the product from which data is exported                                                                                                                                                                        |
| topic                    | string    | M                                               | Topic of each managed object                                                                                                                                                                                                     |

**Sample Request Body structure for Import/Export operations:**

```
{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "description": "string",
      "id": "string",
      "items": [
        "string"
      ]
    }
  ]
}
```

```

    ],
    "name": "string",
    "type": "string"
  }
],
"sourceVersion": "string",
"topic": "string"
}

```

### Sample cURL GET command

```
curl -X GET "http://10.75.151.216:30726/api-docs/oc-cnpolicy-configuration/v1/policydata/common/matchList/export" -H "accept: application/json"
```

### Sample cURL POST command

```
curl -X POST "http://10.75.151.216:30726/api-docs/oc-cnpolicy-configuration/v1/policydata/common/matchList/import" -H "accept: application/problem+json" -H "Content-Type: application/json" -d "{ \"date\": \"string\", \"errors\": [ { \"message\": \"string\", \"name\": \"string\" } ], \"exportData\": [ { \"description\": \"string\", \"id\": \"string\", \"items\": [ \"string\" ], \"name\": \"string\", \"type\": \"string\" } ], \"sourceVersion\": \"string\", \"topic\": \"string\"}"
```

### Sample cURL DELETE command

```
curl -X 'DELETE' 'http://localhost:8000/oc-cnpolicy-configuration/v1/policydata/common/matchList/{matchListName}' -H 'accept: */*'
```

## 2.41 Dropdown Blocks

**Table 2-222 Supported REST APIs**

| Description            | HTTP Method or Custom Operation | Resource URI                                                                   | Possible Result Code          |
|------------------------|---------------------------------|--------------------------------------------------------------------------------|-------------------------------|
| Export dropdown blocks | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/dropdownBlocks/export | See <a href="#">Table A-1</a> |
| Import Dropdown Blocks | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/dropdownBlocks/import | See <a href="#">Table A-3</a> |

## Export/Import Dropdown Blocks

Table 2-223 Request/Response Body Parameters

| Field Name               | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                               |
|--------------------------|-----------|-------------------------------------------------|-----------------------------------------------------------|
| date                     | string    |                                                 | Current timestamp                                         |
| exportData.attrName      | string    |                                                 |                                                           |
| exportData.description   | string    |                                                 |                                                           |
| exportData.options.label | string    |                                                 |                                                           |
| exportData.options.value | string    |                                                 |                                                           |
| exportData.topic         | string    |                                                 |                                                           |
| exportData.type          | string    |                                                 |                                                           |
| sourceVersion            | string    |                                                 | System version of the product from which data is exported |
| topic                    | string    | M                                               | Topic of each managed object                              |

## Sample Request Body structure for Import/Export operations:

```
{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "attrName": "string",
      "description": "string",
      "options": [
        {
          "label": "string",
          "value": "string"
        }
      ],
      "topic": "string",
      "type": "DYNAMIC"
    }
  ],
  "sourceVersion": "string",
  "topic": "string"
}
```

## 2.42 Custom Vendor

### Create, Get, and Update Custom Vendor

**Table 2-224 PCRF and PCF Custom Vendor APIs**

| API Name             | HTTP Method or Custom Operation | Resource URI                                                           | Description                                    | Possible Result Code          |
|----------------------|---------------------------------|------------------------------------------------------------------------|------------------------------------------------|-------------------------------|
| Get Custom Vendor    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/customVendor/{customVendorName} | Fetch the provided Custom Vendor details.      | See <a href="#">Table A-1</a> |
| Create Custom Vendor | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/customVendor                    | Create a Custom Vendor                         | See <a href="#">Table A-3</a> |
| Update Custom Vendor | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/customVendor/{customVendorName} | Update the provided Custom Vendor information. | See <a href="#">Table A-2</a> |
| Delete custom Vendor | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/customVendor/{customVendorName} | Delete the provided Custom vendor information. | See <a href="#">Table A-4</a> |

**Table 2-225 PCRF Custom Vendor APIs**

| API Name             | HTTP Method or Custom Operation | Resource URI                                                                | Description                               | Possible Result Code          |
|----------------------|---------------------------------|-----------------------------------------------------------------------------|-------------------------------------------|-------------------------------|
| Get Custom Vendor    | GET                             | {apiRoot}/ocpm/pcrf/v1/configuration/policy/customVendor/{customVendorName} | Fetch the provided Custom Vendor details. | See <a href="#">Table A-1</a> |
| Create Custom Vendor | POST                            | {apiRoot}/ocpm/pcrf/v1/configuration/policy/customVendor                    | Create a Custom Vendor                    | See <a href="#">Table A-3</a> |

**Table 2-225 (Cont.) PCRF Custom Vendor APIs**

| API Name             | HTTP Method or Custom Operation | Resource URI                                                                | Description                                    | Possible Result Code          |
|----------------------|---------------------------------|-----------------------------------------------------------------------------|------------------------------------------------|-------------------------------|
| Update Custom Vendor | PUT                             | {apiRoot}/ocpm/pcrf/v1/configuration/policy/customVendor/{customVendorName} | Update the provided Custom Vendor information. | See <a href="#">Table A-2</a> |
| Delete custom Vendor | DELETE                          | {apiRoot}/ocpm/pcrf/v1/configuration/policy/customVendor/{customVendorName} | Delete the provided Custom vendor information. | See <a href="#">Table A-4</a> |

**Table 2-226 PCF Custom Vendor APIs**

| API Name             | HTTP Method or Custom Operation | Resource URI                                                          | Description                                    | Possible Result Code          |
|----------------------|---------------------------------|-----------------------------------------------------------------------|------------------------------------------------|-------------------------------|
| Get Custom Vendor    | GET                             | {apiRoot}/oc-npolicy-configuration/v1/customVendor/{customVendorName} | Fetch the provided Custom Vendor details.      | See <a href="#">Table A-1</a> |
| Create Custom Vendor | POST                            | {apiRoot}/oc-npolicy-configuration/v1/customVendor                    | Create a Custom Vendor                         | See <a href="#">Table A-3</a> |
| Update Custom Vendor | PUT                             | {apiRoot}/oc-npolicy-configuration/v1/customVendor/{customVendorName} | Update the provided Custom Vendor information. | See <a href="#">Table A-2</a> |
| Delete custom Vendor | DELETE                          | {apiRoot}/oc-npolicy-configuration/v1/customVendor/{customVendorName} | Delete the provided Custom vendor information. | See <a href="#">Table A-4</a> |

**Table 2-227 Data structures supported by the POST, GET, and PUT Response Body**

| Field Name  | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                  |
|-------------|-----------|-----------------------------------------|----------------------------------------------|
| description | string    | O                                       | Provide description about the Custom Vendor. |

**Table 2-227 (Cont.) Data structures supported by the POST, GET, and PUT Response Body**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                           |
|------------|-----------|-------------------------------------------------|---------------------------------------|
| name       | string    | M                                               | Provide a name to the Custom Vendor.  |
| value      | string    | O                                               | Provide a value to the Custom Vendor. |

**Sample Request Body structure for POST and PUT operations:**

```
{
  "name": "string",
  "description": "string",
  "value": "string"
}
```

### Export/Import Custom Vendor

**Table 2-228 Export/Import Custom Vendor REST APIs**

| Description          | HTTP Method or<br>Custom Operation | Resource URI                                                                                  | Possible Result Code          |
|----------------------|------------------------------------|-----------------------------------------------------------------------------------------------|-------------------------------|
| Export Custom Vendor | GET                                | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/customattributes/customvendor/export | See <a href="#">Table A-1</a> |
| Import Custom Vendor | POST                               | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/customattributes/customvendor/import | See <a href="#">Table A-3</a> |

**Table 2-229 Request/Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                  |
|----------------|-----------|-------------------------------------------------|------------------------------|
| date           | string    |                                                 | Current timestamp            |
| errors         | array     |                                                 |                              |
| errors:message | string    |                                                 |                              |
| errors:name    | string    |                                                 |                              |
| exportData     | array     | M                                               | Exported list of custom avp. |
| key            | string    |                                                 | Indicates the ID             |

**Table 2-229 (Cont.) Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                               |
|---------------|-----------|-------------------------------------------------|-----------------------------------------------------------|
| sourceVersion | string    |                                                 | System version of the product from which data is exported |
| topic         | string    | M                                               | Topic of each managed object                              |

**Sample Request Body structure for Import/Export operations:**

```
{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "description": "string",
      "name": "string",
      "value": "string"
    }
  ],
  "key": "string",
  "sourceVersion": "string",
  "topic": "string"
}
```

## 2.43 Custom Schema

**Table 2-230 Supported REST APIs**

| Description          | HTTP Method or<br>Custom Operation | Resource URI                                                                                  | Possible Result Code          |
|----------------------|------------------------------------|-----------------------------------------------------------------------------------------------|-------------------------------|
| Export Custom Schema | GET                                | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/customattributes/customschema/export | See <a href="#">Table A-1</a> |
| Import Custom Schema | POST                               | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/customattributes/customschema/import | See <a href="#">Table A-3</a> |



## Export/Import Custom Schema

Table 2-231 Request/Response Body Parameters

| Field Name      | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                               |
|-----------------|-----------|-------------------------------------------------|-----------------------------------------------------------|
| date            | string    |                                                 | Current timestamp                                         |
| exportData.name | string    |                                                 |                                                           |
| exportData.type | string    |                                                 |                                                           |
| key             |           |                                                 |                                                           |
| sourceVersion   | string    |                                                 | System version of the product from which data is exported |
| topic           | string    | M                                               | Topic of each managed object                              |

Sample Request Body structure for Import/Export operations:

```
{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "name": "string",
      "tag": [
        "string"
      ]
    }
  ],
  "key": "string",
  "sourceVersion": "string",
  "topic": "string"
}
```

## 2.44 Custom AVP

Table 2-232 Supported REST APIs

| Description       | HTTP Method or<br>Custom Operation | Resource URI                                                                  | Possible Result Code          |
|-------------------|------------------------------------|-------------------------------------------------------------------------------|-------------------------------|
| Create Custom AVP | POST                               | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/customattributes/avp | See <a href="#">Table A-3</a> |

Table 2-232 (Cont.) Supported REST APIs

| Description       | HTTP Method or Custom Operation | Resource URI                                                                                  | Possible Result Code          |
|-------------------|---------------------------------|-----------------------------------------------------------------------------------------------|-------------------------------|
| Export Custom AVP | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/customattributes/avp/export          | See <a href="#">Table A-1</a> |
| Import Custom AVP | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/customattributes/avp/import          | See <a href="#">Table A-3</a> |
| Get Custom AVP    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/customattributes/avp/{customAVPName} | See <a href="#">Table A-1</a> |
| Update Custom AVP | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/customattributes/avp/{customAVPName} | See <a href="#">Table A-2</a> |
| Delete Custom AVP | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/customattributes/avp/{customAVPName} | See <a href="#">Table A-4</a> |

## Create, Get, and Update Custom AVP Name

Table 2-233 Request/Response Body Parameters

| Field Name         | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                                                                                                                                                                                                                                                         |
|--------------------|-----------|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| vendorSpecificFlag | boolean   |                                           |                                                                                                                                                                                                                                                                                     |
| avpCode            | string    |                                           |                                                                                                                                                                                                                                                                                     |
| avpType            | string    |                                           | <ul style="list-style-type: none"> <li>enumerated</li> <li>float32</li> <li>float64</li> <li>grouped</li> <li>id</li> <li>int32</li> <li>int64</li> <li>ipFilterRule</li> <li>octetString</li> <li>time</li> <li>uint32</li> <li>uint64</li> <li>uri</li> <li>utf8String</li> </ul> |

**Table 2-233 (Cont.) Request/Response Body Parameters**

| Field Name         | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                        |
|--------------------|-----------|-------------------------------------------------|--------------------------------------------------------------------|
| description        | string    |                                                 |                                                                    |
| mandatoryFlag      | boolean   |                                                 |                                                                    |
| mayEncryptFlag     | boolean   |                                                 |                                                                    |
| name               | string    | M                                               |                                                                    |
| protectFlag        | boolean   |                                                 |                                                                    |
| rootAvp            | string    |                                                 |                                                                    |
| vendorId           | string    | M                                               | 10415<br>5535<br>21274<br>9<br>5263<br>3076<br>255<br>2636<br>4874 |
| vendorSpecificFlag | boolean   |                                                 |                                                                    |

**Sample Request body structure for POST and PUT operations:**

```
{
  "VendorSpecificFlag": true,
  "avpCode": "string",
  "avpType": "address",
  "description": "string",
  "mandatoryFlag": true,
  "mayEncryptFlag": true,
  "name": "string",
  "protectFlag": true,
  "rootAvp": "ADC-Rule-Definition:10415",
  "vendorId": "10415",
  "vendorSpecificFlag": true
}
```

**Sample Response body structure for GET, POST, and PUT operations:**

```
{
  "VendorSpecificFlag": true,
  "avpCode": "string",
  "avpType": "address",
  "description": "string",
  "mandatoryFlag": true,
  "mayEncryptFlag": true,
  "name": "string",
  "protectFlag": true,
  "rootAvp": "ADC-Rule-Definition:10415",
  "vendorId": "10415",
}
```

```

    "vendorSpecificFlag": true
  }

```

### Delete Custom AVP

**Table 2-234 Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description     |
|---------------|-----------|-------------------------------------------------|-----------------|
| customAVPName | string    | M                                               | Custom AVP Name |

### Export/Import Custom AVP

**Table 2-235 Request/Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                               |
|----------------|-----------|-------------------------------------------------|-----------------------------------------------------------|
| date           | string    |                                                 | Current timestamp                                         |
| errors         | array     |                                                 |                                                           |
| errors:message | string    |                                                 |                                                           |
| errors:name    | string    |                                                 |                                                           |
| exportData     | array     | M                                               | Exported list of custom avp.                              |
| key            | string    |                                                 | Indicates the ID                                          |
| sourceVersion  | string    |                                                 | System version of the product from which data is exported |
| topic          | string    | M                                               | Topic of each managed object                              |

### Sample Request Body structure for Import/Export operations:

```

{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "VendorSpecificFlag": true,
      "avpCode": "string",
      "avpType": "address",
      "description": "string",
      "mandatoryFlag": true,
      "mayEncryptFlag": true,
      "name": "string",
      "protectFlag": true,
      "rootAvp": "ADC-Rule-Definition:10415",

```

```

        "vendorId": "10415",
        "vendorSpecificFlag": true
    }
  ],
  "key": "string",
  "sourceVersion": "string",
  "topic": "string"
}

```

## 2.45 Charging Server

**Table 2-236 Supported REST APIs**

| Description            | HTTP Method or Custom Operation | Resource URI                                                             | Possible Result Code          |
|------------------------|---------------------------------|--------------------------------------------------------------------------|-------------------------------|
| Create Charging Server | POST                            | /oc-cnpolicy-configuration/v1/policy/chargingServer                      | See <a href="#">Table A-3</a> |
| Export Charging Server | GET                             | /oc-cnpolicy-configuration/v1/policy/chargingServer/export               | See <a href="#">Table A-1</a> |
| Import Charging Server | POST                            | /oc-cnpolicy-configuration/v1/policy/chargingServer/import               | See <a href="#">Table A-3</a> |
| Get Charging Server    | GET                             | /oc-cnpolicy-configuration/v1/policy/chargingServer/{chargingServerName} | See <a href="#">Table A-1</a> |
| Update Charging Server | PUT                             | /oc-cnpolicy-configuration/v1/policy/chargingServer/{chargingServerName} | See <a href="#">Table A-2</a> |
| Delete Charging Server | DELETE                          | /oc-cnpolicy-configuration/v1/policy/chargingServer/{chargingServerName} | See <a href="#">Table A-4</a> |

### Get, Create, and Update Charging Server

**Table 2-237 Request/Response Body Parameters**

| Field Name  | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                   |
|-------------|-----------|-------------------------------------------|-------------------------------|
| description | string    |                                           |                               |
| hostName    | string    |                                           |                               |
| name        | string    | M                                         |                               |
| port        | string    |                                           |                               |
| protocol    | string    | M                                         | diameter<br>radius<br>tacacs+ |
| security    | boolean   |                                           |                               |

**Table 2-237 (Cont.) Request/Response Body Parameters**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description        |
|------------|-----------|-------------------------------------------------|--------------------|
| transport  | string    | M                                               | tcp<br>udp<br>sctp |

**Sample Request body structure for POST and PUT operations:**

```
{
  "description": "string",
  "hostName": "string",
  "name": "string",
  "port": "string",
  "protocol": "diameter",
  "security": true,
  "transport": "sctp"
}
```

**Sample Response body structure for GET, POST, and PUT operations:**

```
{
  "description": "string",
  "hostName": "string",
  "name": "string",
  "port": "string",
  "protocol": "diameter",
  "security": true,
  "transport": "sctp"
}
```

### Delete Charging Server

**Table 2-238 Request/Response Body Parameters**

| Field Name         | Data Type | Constraints | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description          |
|--------------------|-----------|-------------|-------------------------------------------------|----------------------|
| chargingServerName | string    |             | M                                               | Charging Server Name |

### Export/Import Charging Server

**Table 2-239 Request/Response Body Parameters**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description       |
|------------|-----------|-------------------------------------------------|-------------------|
| date       | string    |                                                 | Current timestamp |

**Table 2-239 (Cont.) Request/Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                           |
|----------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| errors         | array     |                                                 |                                                                                                                       |
| errors:message | string    |                                                 |                                                                                                                       |
| errors:name    | string    |                                                 |                                                                                                                       |
| exportData     | array     | M                                               | Exported list of charging server. For more information, see <a href="#">Get, Create, and Update Charging Server</a> . |
| key            | string    |                                                 | Indicates the ID                                                                                                      |
| sourceVersion  | string    |                                                 | System version of the product from which data is exported                                                             |
| topic          | string    | M                                               | Topic of each managed object                                                                                          |

**Sample Request Body structure for Import/Export operations:**

```

{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "description": "string",
      "hostName": "string",
      "name": "string",
      "port": "string",
      "protocol": "diameter",
      "security": true,
      "transport": "sctp"
    }
  ],
  "key": "string",
  "sourceVersion": "string",
  "topic": "string"
}

```

## 2.46 PCRF Public Log

**Table 2-240 Supported REST APIs**

| Description     | HTTP Method or Custom Operation | Resource URI                                                 | Possible Result Code          |
|-----------------|---------------------------------|--------------------------------------------------------------|-------------------------------|
| Export Pcrf Log | GET                             | {apiRoot}/ocpm/pcrf/v1/configuration/diameter/logPcrf/export | See <a href="#">Table A-1</a> |
| Import Pcrf Log | POST                            | {apiRoot}/ocpm/pcrf/v1/configuration/diameter/logPcrf/import | See <a href="#">Table A-3</a> |
| Get Pcrf Log    | GET                             | {apiRoot}/ocpm/pcrf/v1/configuration/service/logPcrf         | See <a href="#">Table A-1</a> |
| Update Pcrf Log | PUT                             | {apiRoot}/ocpm/pcrf/v1/configuration/service/logPcrf         | See <a href="#">Table A-2</a> |

### Get and Update PCRF Public Log

**Table 2-241 Request/Response Body Parameters**

| Field Name      | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                  |
|-----------------|-----------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| packageLogLevel | Array     | O                                       |                                                                                                                                                              |
| rootLogLevel    | string    | M                                       | Allowed values: <ul style="list-style-type: none"> <li>• trace</li> <li>• debug</li> <li>• info</li> <li>• warn</li> <li>• error</li> <li>• fatal</li> </ul> |

**Table 2-242 packageLogLevel**

| Field Name         | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                  |
|--------------------|-----------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| logLevelForPackage | string    | O                                       | Allowed values: <ul style="list-style-type: none"> <li>• trace</li> <li>• debug</li> <li>• info</li> <li>• warn</li> <li>• error</li> <li>• fatal</li> </ul> |
| packageName        | string    | M                                       |                                                                                                                                                              |



## Export/Import PCRF Public Log

Table 2-243 Request/Response Body Parameters

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                           |
|---------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| date          | string    |                                                 | Current timestamp                                                                                     |
| exportData    | array     |                                                 | Exported list of Pcrf Log. For more information, see <a href="#">Get and Update PCRF Public Log</a> . |
| sourceVersion | string    |                                                 | System version of the product from which data is exported                                             |
| topic         | string    |                                                 | Topic of each managed object                                                                          |

## 2.47 User Service

Table 2-244 Supported REST APIs

| Description         | HTTP Method or Custom Operation | Resource URI                                                   | Possible Result Code          |
|---------------------|---------------------------------|----------------------------------------------------------------|-------------------------------|
| Get User Service    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcfuser        | See <a href="#">Table A-1</a> |
| Update User Service | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcfuser        | See <a href="#">Table A-2</a> |
| Export User Service | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcfuser/export | See <a href="#">Table A-1</a> |
| Import User Service | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcfuser/import | See <a href="#">Table A-3</a> |

## Get and Update User Service

Table 2-245 Request/Response Body Parameters

| Field Name | Data Type               | Constraints | Mandatory(M)/<br>Optional(O)/<br>Conditional(C)a<br>ints | Description |
|------------|-------------------------|-------------|----------------------------------------------------------|-------------|
| chf        | chf configuration       |             | O                                                        |             |
| common     | CommonConfigu<br>ration |             | O                                                        |             |
| db         | DBConfiguration         |             | O                                                        |             |

**Table 2-245 (Cont.) Request/Response Body Parameters**

| Field Name | Data Type                    | Constraints | Mandatory(M)/<br>Optional(O)/<br>Conditional(C)a<br>ints | Description |
|------------|------------------------------|-------------|----------------------------------------------------------|-------------|
| system     | UserSystemConf<br>figuration |             | O                                                        |             |
| udr        | UDRConfiguratio<br>n         |             | O                                                        |             |

**Table 2-246 chf Configuration**

| Field Name                        | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                |
|-----------------------------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------|
| chf.retryProfileForInitMsgs       | String    | O                                               | Specifies the retry or alternate routing options to communicate with CHF.                  |
| chf.retryProfileForSubsequentMsgs | String    | O                                               | Specifies the retry or alternate routing options to send subsequent messages to CHF.       |
| chf.nfCommProfile                 | String    | O                                               | Indicates whether to assign a profile created on the NF Communication Profile page to CHF. |

Table 2-246 (Cont.) chf Configuration

| Field Name         | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| chf.pcfServiceName | String    | O                                               | <p>Specifies the custom/ 3gpp defined PCF service name to be included in the Binding Header in the subscription request or notification responses sent towards CHF.</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>Aggregate or custom service name that represents a group of PCF services with aggregated service level information. For example: npcf-custom-service</li> <li>Any of the 3GPP defined PCF service names such as npcf-smpolicycontrol or npcf-am-policy-control</li> </ul> <p>By default, the value of this parameter is empty.</p> |

Table 2-247 CommonConfiguration

| Field Name     | Data Type               | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|----------------|-------------------------|-------------------------------------------------|-------------|
| requestTimeout | string<br>example: 1000 | O                                               |             |
| resourceGetSub | boolean                 | O                                               |             |

Table 2-248 DBConfiguration

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|----------------|-----------|-------------------------------------------------|-------------|
| indexing       | Indexing  | O                                               |             |
| keysPrecedence | ENUM      | O                                               |             |
| userIndexKeys  | ENUM      | O                                               |             |

Table 2-249 Indexing

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|---------------|-----------|-------------------------------------------------|-------------|
| indexByExtid  | boolean   | O                                               |             |
| indexByImsi   | boolean   | O                                               |             |
| indexByMsisdn | boolean   | O                                               |             |
| indexByNai    | boolean   | O                                               |             |

Table 2-250 UserSystemConfiguration

| Field Name | Data Type    | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                |
|------------|--------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| apiRoot    | string       | O                                               | This is PCF User Service API Root URI. It is part of PCF user service. This value is auto injected at service deployment. User can also configure this manually. <b>Default Value:</b> N/A |
| logLevel   | string, ENUM | O                                               | Indicates the log level of PCF Session Management (SM) service. Default Value: <b>WARN</b>                                                                                                 |

Table 2-251 UDR Configuration

| Field Name                  | Data Type                                                | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|-----------------------------|----------------------------------------------------------|-------------------------------------------------|-------------|
| udr.retryProfileForInitMsgs | string                                                   | O                                               |             |
| udr.baseUri                 | string<br>example: /nudr-dr/v1                           | O                                               |             |
| udr.supportedFeatures       | string<br>example: f                                     | O                                               |             |
| udr.smDataVSANames          | string                                                   | O                                               |             |
| udr.amDataUri               | string<br>example: /policy-data/ues/{ueld}/am-data       | O                                               |             |
| udr.uePolicySetUri          | string<br>example: /policy-data/ues/{ueld}/ue-policy-set | O                                               |             |

Table 2-251 (Cont.) UDR Configuration

| Field Name                                      | Data Type                                                       | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                           |
|-------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| udr.smDataUri                                   | string<br>example: /policy-data/ues/{ueid}/sm-data              | O                                               |                                                                                                       |
| udr.usageMonUri                                 | string<br>example: /policy-data/ues/{ueid}/sm-data/{usageMonId} | O                                               |                                                                                                       |
| udr.subsToNotifyUri                             | string<br>example: /policy-data/subs-to-notify                  | O                                               |                                                                                                       |
| udr.subsToNotifySubsIdUri                       | string<br>example: /policy-data/subs-to-notify/{subsId}         | O                                               |                                                                                                       |
| udr.retryProfileForSubsq<br>tMsgs               | string                                                          |                                                 |                                                                                                       |
| udr.smDataSubscription<br>Resource              | integer                                                         |                                                 |                                                                                                       |
| smDataSubscriptionRes<br>ource                  | string, ENUM                                                    |                                                 |                                                                                                       |
| udr.discoverUdrWithPoli<br>cyAsSupportedDataSet | boolean                                                         |                                                 | udr                                                                                                   |
| udr.requestTimeout                              | string<br>example: 1000                                         | O                                               |                                                                                                       |
| udr.explodeSnssai                               | boolean                                                         | O                                               |                                                                                                       |
| udr.enableDiscoveryOn<br>Demand                 | boolean                                                         | O                                               |                                                                                                       |
| udr.retrySubscriptionAs                         | string                                                          | O                                               |                                                                                                       |
| udr.nfCommProfile                               | String                                                          | O                                               | Indicates whether to assign a profile created on the NF Communication Profile page to UDR.            |
| udr.sendTargetAPIRoute<br>InSubsToNotify        | boolean                                                         | O                                               | Specifies whether to send target API route header in subscribe to notify request towards UDR.         |
| udr.sendInitDiscParamsI<br>nSubsToNotify        | boolean                                                         | O                                               | Specifies whether to send discovery parameters in subscribe to notify request towards UDR.            |
| udr.sendProdIdInSubsTo<br>Notify                | boolean                                                         | O                                               | Specifies whether to send producer Id in Discovery header in subscribe to notify request towards UDR. |

Table 2-251 (Cont.) UDR Configuration

| Field Name        | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|-------------------|-----------|-------------------------------------------------|-------------|
| enableHttp11      | boolean   | O                                               |             |
| immRep            | boolean   | O                                               |             |
| enableImmRepGetFb | boolean   | O                                               |             |

**Sample Request body structure for PUT operations:**

```
{
  "system": {
    "apiRoot": "string"
  },
  "common": {
    "requestTimeout": "1000"
  },
  "db": {
    "keysPrecedence": [
      "MSISDN"
    ],
    "userIndexKeys": [
      "msisdn"
    ],
    "indexing": {
      "indexByMsisdn": true,
      "indexByExtid": true,
      "indexByImsi": true,
      "indexByNai": true
    }
  },
  "udr": {
    "retryProfileForInitMsgs": "string",
    "baseUri": "/nudr-dr/v1",
    "supportedFeatures": "f",
    "smDataVSANames": "string",
    "amDataUri": "/policy-data/ues/{ueId}/am-data",
    "uePolicySetUri": "/policy-data/ues/{ueId}/ue-policy-set",
    "smDataUri": "/policy-data/ues/{ueId}/sm-data",
    "usageMonUri": "/policy-data/ues/{ueId}/sm-data/{usageMonId}",
    "subsToNotifyUri": "/policy-data/subs-to-notify",
    "subsToNotifySubsIdUri": "/policy-data/subs-to-notify/{subsId}",
    "retryProfileForSubsqMsgs": "string",
    "smDataSubscriptionResource": "1",
    "discoverUdrWithPolicyAsSupportedDataSet": true,
    "requestTimeout": "1000",
    "explodeSnssai": true,
    "enableDiscoveryOnDemand": true,
    "retrySubscriptionAs": "subsequent",
    "nfCommProfile": "string",
    "sendTargetAPIRouteInSubsToNotify": true,
    "sendInitDiscParamsInSubsToNotify": false,
    "sendProdIdInSubsToNotify": false "immRep": false,
```

```

    "enableImmRepGetFb": false
  },
  "chf": {
    "retryProfileForInitMsgs": "string",
    "retryProfileForSubsqtMsgs": "string",
    "nfCommProfile": "string"
    "pcfServiceName": "string"
  },
  "advancedSettings": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}

```

### Sample Response body structure for GET and PUT operations:

```

{
  "system": {
    "apiRoot": "string"
  },
  "common": {
    "requestTimeout": "1000"
  },
  "db": {
    "keysPrecedence": [
      "MSISDN"
    ],
    "userIndexKeys": [
      "msisdn"
    ],
    "indexing": {
      "indexByMsisdn": true,
      "indexByExtid": true,
      "indexByImsi": true,
      "indexByNai": true
    }
  },
  "udr": {
    "retryProfileForInitMsgs": "string",
    "baseUri": "/nudr-dr/v1",
    "supportedFeatures": "f",
    "smDataVSANames": "string",
    "amDataUri": "/policy-data/ues/{ueId}/am-data",
    "uePolicySetUri": "/policy-data/ues/{ueId}/ue-policy-set",
    "smDataUri": "/policy-data/ues/{ueId}/sm-data",
    "usageMonUri": "/policy-data/ues/{ueId}/sm-data/{usageMonId}",
    "subsToNotifyUri": "/policy-data/subs-to-notify",
    "subsToNotifySubsIdUri": "/policy-data/subs-to-notify/{subsId}",
    "retryProfileForSubsqtMsgs": "string",
    "smDataSubscriptionResource": "1",
    "discoverUdrWithPolicyAsSupportedDataSet": true,
    "requestTimeout": "1000",
  }
}

```

```

    "explodeSnssai": true,
    "enableDiscoveryOnDemand": true,
    "retrySubscriptionAs": "subsequent",
    "nfCommProfile": "string",
    "sendTargetAPIRouteInSubsToNotify": true,
    "sendInitDiscParamsInSubsToNotify": false,
    "sendProdIdInSubsToNotify": false
    "immRep": false,
    "enableImmRepGetFb": false
  },
  "chf": {
    "retryProfileForInitMsgs": "string",
    "retryProfileForSubsqtMsgs": "string",
    "nfCommProfile": "string"
  },
  "advancedSettings": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}

```

## Export/Import User Service

**Table 2-252 Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                            |
|---------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| date          | string    |                                                 | Current timestamp                                                                                      |
| exportData    | array     |                                                 | Exported list of user service. For more information, see <a href="#">Get and Update User Service</a> . |
| sourceVersion | string    |                                                 | System version of product from which data is exported                                                  |
| topic         | string    |                                                 | Topic of each managed object                                                                           |

### Sample Request Body structure for Import/Export operations:

```

{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": {
    "chf": {
      "nfCommProfile": "string",
      "retryProfileForInitMsgs": "string",

```



```

    "retryProfileForSubsqtMsgs": "string"
  },
  "common": {
    "requestTimeout": 1000,
    "resourceGetSub": true
  },
  "db": {
    "indexing": {
      "indexByExtid": true,
      "indexByImsi": true,
      "indexByMsisdn": true,
      "indexByNai": true
    },
    "keysPrecedence": [
      "EXTID"
    ],
    "userIndexKeys": [
      "extid"
    ]
  },
  "system": {
    "apiRoot": "string"
  },
  "udr": {
    "amDataUri": "/policy-data/ues/{ueId}/am-data",
    "baseUri": "/nudr-dr/v1",
    "discoverUdrWithPolicyAsSupportedDataSet": true,
    "enableDiscoveryOnDemand": true,
    "enableHttp11": true,
    "explodeSnssai": true,
    "nfCommProfile": "string",
    "requestTimeout": 1000,
    "retryProfileForInitMsgs": "string",
    "retryProfileForSubsqtMsgs": "string",
    "sendInitDiscParamsInSubsToNotify": false,
    "sendProdIdInSubsToNotify": false,
    "sendTargetAPIRouteInSubsToNotify": true,
    "smDataSubscriptionResource": "1",
    "smDataUri": "/policy-data/ues/{ueId}/sm-data",
    "subsToNotifySubsIdUri": "/policy-data/subs-to-notify/{subsId}",
    "subsToNotifyUri": "/policy-data/subs-to-notify",
    "supportedFeatures": "f",
    "uePolicySetUri": "/policy-data/ues/{ueId}/ue-policy-set",
    "usageMonUri": "/policy-data/ues/{ueId}/sm-data/{usageMonId}"
  }
},
"sourceVersion": "string",
"topic": "string"
}

```

## 2.48 Test Policy Projects

**Table 2-253 Supported REST APIs**

| Description                | HTTP Method or Custom Operation | Resource URI                                                                           | Possible Result Code          |
|----------------------------|---------------------------------|----------------------------------------------------------------------------------------|-------------------------------|
| Export test policy project | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policymgmt/policytests/testpolicyproject/export | See <a href="#">Table A-1</a> |
| Import test policy project | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policymgmt/policytests/testpolicyproject/import | See <a href="#">Table A-3</a> |

### Export/Import Test Policy Projects

**Table 2-254 Request/Response Body Parameters**

| Field Name                                      | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                               |
|-------------------------------------------------|-----------|-----------------------------------------|-----------------------------------------------------------|
| date                                            | string    |                                         | Current timestamp                                         |
| exportData.script                               | string    |                                         |                                                           |
| exportData.serviceType                          | string    |                                         |                                                           |
| exportData.suiteName                            | string    |                                         |                                                           |
| exportData.testcase.fieldVal.basicInfo.caseDesc | string    |                                         |                                                           |
| exportData.testcase.fieldVal.basicInfo.caseName | string    |                                         |                                                           |
| exportData.inputVal                             | string    |                                         |                                                           |
| exportData.resVal                               | string    |                                         |                                                           |
| exportData.name                                 | string    |                                         |                                                           |
| exportData.reqDataModel                         | string    |                                         |                                                           |
| exportData.resDataModel                         | string    |                                         |                                                           |
| exportData.suiteName                            | string    |                                         |                                                           |
| exportData.testCaseScript                       | string    |                                         |                                                           |
| key                                             | string    |                                         |                                                           |
| sourceVersion                                   | string    |                                         | System version of the product from which data is exported |
| topic                                           | string    | M                                       | Topic of each managed object                              |

**Sample Request Body structure for Import/Export operations:**

```

{
  "date": "string",
  "exportData": [
    {
      "script": "string",
      "serviceType": "string",
      "suiteName": "string",
      "testCase": [
        {
          "fieldVal": {
            "basicInfo": {
              "caseDesc": "string",
              "caseName": "string"
            },
            "inputVal": {},
            "resVal": {}
          },
          "name": "string",
          "reqDataModel": "string",
          "resDataModel": "string",
          "suiteName": "string",
          "testCaseScript": "string"
        }
      ]
    }
  ],
  "key": "string",
  "sourceVersion": "string",
  "topic": "string"
}

```

## 2.49 Data Model

**Table 2-255 Supported REST APIs**

| Export data model | HTTP Method or Custom Operation | Resource URI                                                                    | Possible Result Code          |
|-------------------|---------------------------------|---------------------------------------------------------------------------------|-------------------------------|
| Import data model | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policymgmt/policytests/datamodels/export | See <a href="#">Table A-1</a> |
| Description       | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policymgmt/policytests/datamodels/import | See <a href="#">Table A-3</a> |

## Export/Import Data Models

Table 2-256 Request/Response Body Parameters

| Field Name                               | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                               |
|------------------------------------------|-----------|-------------------------------------------------|-----------------------------------------------------------|
| date                                     | string    |                                                 | Current timestamp                                         |
| exportData.description                   | string    |                                                 |                                                           |
| exportData.enumItems.name                | string    |                                                 |                                                           |
| exportData.enumItems.value               | string    |                                                 |                                                           |
| exportData.fields.description            | string    |                                                 |                                                           |
| exportData.fields.itemType.objectType    | string    |                                                 |                                                           |
| exportData.fields.itemType.primitiveType | string    |                                                 |                                                           |
| exportData.fields.itemType.type          | string    |                                                 |                                                           |
| exportData.fields.labelName              | string    |                                                 |                                                           |
| exportData.fields.name                   | string    |                                                 |                                                           |
| exportData.fields.objectType             | string    |                                                 |                                                           |
| exportData.fields.primitiveType          | string    |                                                 |                                                           |
| exportData.fields.type                   | string    |                                                 |                                                           |
| exportData.id                            | string    |                                                 |                                                           |
| exportData.labelName                     | string    |                                                 |                                                           |
| exportData.multiValue                    | string    |                                                 |                                                           |
| exportData.name                          | string    |                                                 |                                                           |
| exportData.type                          | string    |                                                 |                                                           |
| key                                      | string    |                                                 |                                                           |
| sourceVersion                            | string    |                                                 | System version of the product from which data is exported |
| topic                                    | string    | M                                               | Topic of each managed object                              |

## Sample Request Body structure for Import/Export operations:

```
{
  "date": "string",
  "exportData": [
    {
      "description": "string",
      "enumItems": [
        {
          "name": "string",
          "value": "string"
        }
      ]
    }
  ]
}
```

```

    }
  ],
  "fields": [
    {
      "description": "string",
      "itemType": {
        "objectType": "string",
        "primitiveType": "boolean",
        "type": "object"
      },
      "labelName": "string",
      "name": "string",
      "objectType": "string",
      "primitiveType": "string",
      "type": "array"
    }
  ],
  "id": "string",
  "labelName": "string",
  "multiValue": true,
  "name": "string",
  "type": "enum"
}
],
"key": "string",
"sourceVersion": "string",
"topic": "string"
}

```

## 2.50 Policy Projects

**Table 2-257 Supported REST APIs**

| Description            | HTTP Method or Custom Operation | Resource URI                                                                                                                                                                                                                       | Possible Result Code          |
|------------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Import policy projects | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policymgmt/policyprojects/import                                                                                                                                                            | See <a href="#">Table A-3</a> |
| Export Policy Projects | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policymgmt/policyprojects/export                                                                                                                                                            | See <a href="#">Table A-1</a> |
| Get policy project     | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policymgmt/policyprojects?policyProjectName=projectName&serviceName=service where, <b>serviceName</b> is a mandatory query Parameter and <b>policyProjectName</b> is an optional parameter. | See <a href="#">Table A-1</a> |

Table 2-257 (Cont.) Supported REST APIs

| Description                 | HTTP Method or Custom Operation | Resource URI                                                                                                                  | Possible Result Code          |
|-----------------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Export Policy               | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policymgmt/policyprojects/policy/export/{serviceName}/{policyProjectName}/{policyName} | See <a href="#">Table A-1</a> |
| Import Policy               | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policymgmt/policyprojects/policy/import                                                | See <a href="#">Table A-3</a> |
| Delete policy project       | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policymgmt/policyprojects/{serviceName}/{policyProjectName}                            | See <a href="#">Table A-4</a> |
| Update Policy Project State | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policymgmt/policyprojects/{serviceName}/{policyProjectName}                            | See <a href="#">Table A-2</a> |

## Get, Create, and Update Policy Projects

Table 2-258 Request/Response Body Parameters

| Field Name  | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                                         |
|-------------|-----------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| description | string    | O                                       | Specifies the description of a policy project.                                                                                                                                                                                                                      |
| name        | String    | O                                       | Specifies the name of a policy project.                                                                                                                                                                                                                             |
| policy      | array     | O                                       |                                                                                                                                                                                                                                                                     |
| serviceType | String    | O                                       | Specifies the following supported service types: <ul style="list-style-type: none"> <li>• PCF Session Management</li> <li>• PCF Access and Mobility</li> <li>• PCRF Core</li> <li>• PCF UE Policy</li> <li>• PCF Data Source</li> <li>• Usage Monitoring</li> </ul> |

## Sample Response body structure for GET, POST, and PUT operations:

```
{
  "date": "string",
  "errors": [
    {
      "message": "string",
```

```

        "name": "string"
      }
    ],
    "exportData": [
      {
        "description": "string",
        "entrance": true,
        "key": "string",
        "layout": "string",
        "name": "string",
        "outputModels": [
          "string"
        ],
        "policy": [
          {
            "entrance": true,
            "layout": "string",
            "name": "string",
            "outputModels": [
              "string"
            ],
            "script": "string"
          }
        ],
        "projectId": "string",
        "script": "string",
        "serviceType": "string"
      }
    ],
    "key": "string",
    "sourceVersion": "string",
    "topic": "string"
  }
}

```

### Delete Policy Projects

**Table 2-259 Request/Response Body Parameters**

| Field Name        | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description         |
|-------------------|-----------|-------------------------------------------------|---------------------|
| policyProjectName | string    | M                                               | Policy Project Name |

### Export/Import Policy Projects

**Sample Request Body structure for Import/Export operations:**

```

{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
}

```

```

"exportData": [
  {
    "description": "string",
    "entrance": true,
    "key": "string",
    "layout": "string",
    "name": "string",
    "outputModels": [
      "string"
    ],
    "policy": [
      {
        "entrance": true,
        "layout": "string",
        "name": "string",
        "outputModels": [
          "string"
        ],
        "script": "string"
      }
    ],
    "projectId": "string",
    "script": "string",
    "serviceType": "string"
  }
],
"key": "string",
"sourceVersion": "string",
"topic": "string"
}

```

## 2.51 Policy Library

**Table 2-260 Supported REST APIs - Peer Node**

| Description           | HTTP Method or Custom Operation | Resource URI                                                           | Possible Result Code          |
|-----------------------|---------------------------------|------------------------------------------------------------------------|-------------------------------|
| Export Policy Library | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policymgmt/policylibrary/export | See <a href="#">Table A-1</a> |
| Import Policy Library | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policymgmt/policylibrary/import | See <a href="#">Table A-3</a> |



## Export/Import Policy Library

Table 2-261 Request/Response Body Parameters

| Field Name           | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                               |
|----------------------|-----------|-------------------------------------------------|-----------------------------------------------------------|
| date                 | string    |                                                 | Current timestamp                                         |
| exportData.hasReturn | boolean   |                                                 |                                                           |
| exportData.layout    | string    |                                                 |                                                           |
| exportData.library   | string    |                                                 |                                                           |
| exportData.name      | string    |                                                 |                                                           |
| exportData.paramList | array     |                                                 |                                                           |
| exportData.script    | string    |                                                 |                                                           |
| exportData.service   | string    |                                                 |                                                           |
| sourceVersion        | string    |                                                 | System version of the product from which data is exported |
| topic                | string    | M                                               | Topic of each managed object                              |

## Sample Request Body structure for Import/Export operations:

```
{
  "date": "string",
  "exportData": [
    {
      "hasReturn": true,
      "layout": "string",
      "library": "string",
      "name": "string",
      "paramList": [
        "string"
      ],
      "script": "string",
      "service": "string"
    }
  ],
  "sourceVersion": "string",
  "topic": "string"
}
```

## 2.52 Policy Data

Table 2-262 Supported REST APIs

| API Name                                        | HTTP Method or Custom Operation | Resource URI                                                        | Possible Result Code          |
|-------------------------------------------------|---------------------------------|---------------------------------------------------------------------|-------------------------------|
| Export Policy Data with or without Dependencies | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policymgmt/policydata/export | See <a href="#">Table A-3</a> |

**Note**

The **Policy Data** export API returns a ResourceId in response to the POST request. The ResourceId is the background task id for the POST operation. This id can be used to track the policy data export requests, and download the export data. For example, the POST API for Policy Data export operation takes the project name, policy name, and service type as input. The response of this API contains the resource id of the file created for export. You can use this resource Id to download the export data at any point of time. For more information about the API to download the export data, see [Bulk Import Export Controller](#).

## Export Policy Data

Table 2-263 Request Body Parameters

| Field Name          | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------|-----------|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name                | string    | M                                         | Name of the project.                                                                                                                                                                                                                                                                                                                                                                           |
| policies            | array     | M                                         | Name of the policies.                                                                                                                                                                                                                                                                                                                                                                          |
| serviceType         | string    | M                                         | Service type.<br><b>Note:</b> Only AM and SM service types are supported.                                                                                                                                                                                                                                                                                                                      |
| includeDependencies | boolean   | O                                         | This is a flag to decide, if dependencies must be included with export data. Provide any of the following values: <ul style="list-style-type: none"> <li><b>true:</b> Export all the dependent MOs of the policy names provided in the <b>policies</b> field</li> <li><b>false:</b> Does not export all the dependent MOs of the policy names provided in the <b>policies</b> field</li> </ul> |

**Sample Request Body structure for Export operations:**

```
[
  {
    "policyProjects": [
      {
        "name": "string",
        "policies": [
          "string"
        ]
      }
    ],
    "serviceType": "string"
  }
]
```

Below are the status displayed by Policy Data export:

- **INIT**: The policies are being validated and export of MOs is not started.
- **IN\_PROGRESS**: The export is running.
- **DONE**: The export is complete. Following are the possible status if the export is in DONE status:
  - **SUCCESS** : The export is successful
  - **FAILED** : When error exist in all the Policies exported.
  - **PARTIAL\_SUCCESS** : The export is partially successful

## 2.53 URSP

**Table 2-264 Supported REST APIs**

| Description | HTTP Method or Custom Operation | Resource URI                                                             | Possible Result Code          |
|-------------|---------------------------------|--------------------------------------------------------------------------|-------------------------------|
| Create URSP | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfue/ursps            | See <a href="#">Table A-3</a> |
| Export URSP | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfue/ursps/export     | See <a href="#">Table A-1</a> |
| Import URSP | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfue/ursps/import     | See <a href="#">Table A-3</a> |
| Get URSP    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfue/ursps/{urspName} | See <a href="#">Table A-1</a> |
| Update URSP | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfue/ursps/{urspName} | See <a href="#">Table A-2</a> |

**Table 2-264 (Cont.) Supported REST APIs**

| Description | HTTP Method or Custom Operation | Resource URI                                                             | Possible Result Code          |
|-------------|---------------------------------|--------------------------------------------------------------------------|-------------------------------|
| Delete URSP | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfue/ursps/{urspName} | See <a href="#">Table A-4</a> |

**Get, Create, and Update URSPs****Table 2-265 Request/Response Body Parameters**

| Field Name                   | Data Type                                         | Mandatory(M)/ Optional(O)/ Conditional(C)aints | Description                        |
|------------------------------|---------------------------------------------------|------------------------------------------------|------------------------------------|
| name                         | string                                            | M                                              | Name of the URSP rule.             |
| precedence                   | integer(\$int32) Enter a value between 0 and 255. | M                                              | Precedence value of the URSP rule. |
| routeSelectionDescriptorList | UrspRouteSelectionDescriptorList                  | O                                              | List of URSP routes.               |
| trafficDescriptors           | TrafficDescriptorIE                               | O                                              | List of traffic descriptors.       |

**Table 2-266 UrspRouteSelectionDescriptorList**

| Field Name                         | Data Type                           | Mandatory(M)/ Optional(O)/ Conditional(C) | Description |
|------------------------------------|-------------------------------------|-------------------------------------------|-------------|
| routePrecedence                    | integer(\$int32)                    | M                                         |             |
| routeSelectionDescriptorComponents | RouteSelectionDescriptorComponentIE | M                                         |             |

**Table 2-267 UrspRouteSelectionDescriptorList**

| Field Name                         | Data Type                           | Mandatory(M)/ Optional(O)/ Conditional(C) | Description |
|------------------------------------|-------------------------------------|-------------------------------------------|-------------|
| routePrecedence                    | integer(\$int32)                    | O                                         |             |
| routeSelectionDescriptorComponents | RouteSelectionDescriptorComponentIE | O                                         |             |

**Table 2-268 RouteSelectionDescriptorComponentIE**

| Field Name                   | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description |
|------------------------------|-----------|-------------------------------------------|-------------|
| routeSelectionDescriptorType | ENUM      | O                                         |             |

**Table 2-268 (Cont.) RouteSelectionDescriptorComponentIE**

| Field Name | Data Type                         | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|------------|-----------------------------------|-------------------------------------------------|-------------|
| value      | RouteSelectionDescriptorComponent | O                                               |             |

**Table 2-269 TrafficDescriptorIE**

| Field Name            | Data Type                         | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|-----------------------|-----------------------------------|-------------------------------------------------|-------------|
| trafficDescriptorType | ENUM                              | O                                               |             |
| value                 | RouteSelectionDescriptorComponent | O                                               |             |

**Table 2-270 RouteSelectionDescriptorComponentIE**

| Field Name                   | Data Type                  | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|------------------------------|----------------------------|-------------------------------------------------|-------------|
| routeSelectionDescriptorType | ENUM                       | O                                               |             |
| value                        | TrafficDescriptorComponent | O                                               |             |

**Sample Request body structure for POST and PUT operations:**

```
{
  "name": "string",
  "precedence": 0,
  "routeSelectionDescriptorList": [
    {
      "routePrecedence": 0,
      "routeSelectionDescriptorComponents": [
        {
          "routeSelectionDescriptorType": "DNN",
          "value": {}
        }
      ]
    }
  ],
  "trafficDescriptors": [
    {
      "trafficDescriptorType": "CONNECTION_CAPABILITIES",
      "value": {}
    }
  ]
}
```

**Sample Response body structure for GET, POST, and PUT operations:**

```

{
  "name": "string",
  "precedence": 0,
  "routeSelectionDescriptorList": [
    {
      "routePrecedence": 0,
      "routeSelectionDescriptorComponents": [
        {
          "routeSelectionDescriptorType": "DNN",
          "value": {}
        }
      ]
    }
  ],
  "trafficDescriptors": [
    {
      "trafficDescriptorType": "CONNECTION_CAPABILITIES",
      "value": {}
    }
  ]
}

```

**Delete URSP****Table 2-271 Request/Response Body Parameters**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|------------|-----------|-------------------------------------------------|-------------|
| urspName   | string    | M                                               | URSP Name   |

**Export/Import URSP****Table 2-272 Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                             |
|---------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| date          | string    |                                                 | Current timestamp                                                                                       |
| exportData    | array     |                                                 | Exported list of URSPservice. For more information, see <a href="#">Get, Create, and Update URSPs</a> . |
| key           | string    |                                                 | Indicates the ID of URSP                                                                                |
| sourceVersion | string    |                                                 | System version of product from which data is exported                                                   |
| topic         | string    |                                                 | Topic of each managed object                                                                            |

**Sample Request Body structure for Import/Export operations:**

```

{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "name": "string",
      "precedence": 0,
      "routeSelectionDescriptorList": [
        {
          "routePrecedence": 0,
          "routeSelectionDescriptorComponents": [
            {
              "routeSelectionDescriptorType": "DNN",
              "value": {}
            }
          ]
        }
      ]
    }
  ],
  "trafficDescriptors": [
    {
      "trafficDescriptorType": "CONNECTION_CAPABILITIES",
      "value": {}
    }
  ]
},
"key": "string",
"sourceVersion": "string",
"topic": "string"
}

```

## 2.54 UPSI

**Table 2-273 Supported REST APIs**

| Description | HTTP Method or Custom Operation | Resource URI                                                         | Possible Result Code          |
|-------------|---------------------------------|----------------------------------------------------------------------|-------------------------------|
| Create UPSI | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfue/upsis        | See <a href="#">Table A-3</a> |
| Export UPSI | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfue/upsis/export | See <a href="#">Table A-1</a> |

**Table 2-273 (Cont.) Supported REST APIs**

| Description | HTTP Method or Custom Operation | Resource URI                                                             | Possible Result Code          |
|-------------|---------------------------------|--------------------------------------------------------------------------|-------------------------------|
| Import UPSI | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfue/upsis/import     | See <a href="#">Table A-3</a> |
| Get UPSI    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfue/upsis/{upsiName} | See <a href="#">Table A-1</a> |
| Update UPSI | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfue/upsis/{upsiName} | See <a href="#">Table A-2</a> |
| Delete UPSI | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfue/upsis/{upsiName} | See <a href="#">Table A-4</a> |

**Get, Create, and Update UPSIs****Table 2-274 Request/Response Body Parameters**

| Field Name | Data Type                                           | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                                          |
|------------|-----------------------------------------------------|-------------------------------------------|----------------------------------------------------------------------|
| name       | string                                              | M                                         | Name of the UPSI.                                                    |
| plmn       | Plmn                                                | M                                         | PLMN Identity                                                        |
| upsc       | integer(\$int32) Enter a value between 0 and 65535. | M                                         | Defines UE Policy Section Code. Enter a number between 0 and 65,535. |
| urspRules  | string                                              | O                                         | Defines URSP rules.                                                  |

**Table 2-275 Plmn**

| Field Name | Data Type                     | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                                   |
|------------|-------------------------------|-------------------------------------------|---------------------------------------------------------------|
| mcc        | string<br>Valid Range [0-999] | M                                         | Specifies a Mobile Country Code. enter a 2 or 3 digit number. |
| mnc        | string<br>Valid Range [0-999] | M                                         | Specifies a Mobile Network Code. enter a 2 or 3 digit number. |

**Sample Request body structure for POST and PUT operations:**

```
{
  "name": "string",
  "plmn": {
    "mcc": "string",
```



```

    "mnc": "string"
  },
  "upsc": 0,
  "urspRules": [
    "string"
  ]
}

```

**Sample Response body structure for GET, POST, and PUT operations:**

```

{
  "name": "string",
  "plmn": {
    "mcc": "string",
    "mnc": "string"
  },
  "upsc": 0,
  "urspRules": [
    "string"
  ]
}

```

### Delete UPSI

**Table 2-276 Request/Response Body Parameters**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|------------|-----------|-------------------------------------------------|-------------|
| upsiName   | string    | M                                               | UPSI Name   |

### Export/Import UPSI

**Table 2-277 Request/Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                              |
|----------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| date           | string    |                                                 | Current timestamp                                                                                        |
| errors:message | string    |                                                 |                                                                                                          |
| errors:name    | string    |                                                 |                                                                                                          |
| exportData     | array     |                                                 | Exported list of UPSI service. For more information, see <a href="#">Get, Create, and Update UPSIs</a> . |
| sourceVersion  | string    |                                                 | System version of product from which data is exported                                                    |
| topic          | string    |                                                 | Topic of each managed object                                                                             |

**Sample Request Body structure for Import/Export operations:**

```

{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "name": "string",
      "plmn": {
        "mcc": "string",
        "mnc": "string"
      },
      "upsc": 0,
      "urspRules": [
        "string"
      ]
    }
  ],
  "sourceVersion": "string",
  "topic": "string"
}

```

## 2.55 Traffic Control Data

**Table 2-278 Supported REST APIs**

| Description                 | HTTP Method or Custom Operation | Resource URI                                                                                        | Possible Result Code          |
|-----------------------------|---------------------------------|-----------------------------------------------------------------------------------------------------|-------------------------------|
| Create Traffic Control Data | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/trafficcontroldata                          | See <a href="#">Table A-3</a> |
| Export Traffic Control Data | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/trafficcontroldata/export                   | See <a href="#">Table A-1</a> |
| Import Traffic Control Data | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/trafficcontroldata/import                   | See <a href="#">Table A-3</a> |
| Get Traffic Control Data    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/trafficcontroldata/{trafficControlDataName} | See <a href="#">Table A-1</a> |

Table 2-278 (Cont.) Supported REST APIs

| Description                 | HTTP Method or Custom Operation | Resource URI                                                                                        | Possible Result Code          |
|-----------------------------|---------------------------------|-----------------------------------------------------------------------------------------------------|-------------------------------|
| Update Traffic Control Data | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/trafficcontroldata/{trafficControlDataName} | See <a href="#">Table A-2</a> |
| Delete Traffic Control Data | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/trafficcontroldata/{trafficControlDataName} | See <a href="#">Table A-4</a> |

## Get, Create, and Update Traffic Control Data

Table 2-279 Request/Response Body Parameters

| Field Name   | Data Type    | Mandatory(M)/<br>Optional(O)/<br>Conditional(C)aints | Description                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--------------|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| description  | string       | O                                                    | The description of the Traffic Control policy data.                                                                                                                                                                                                                                                                                                                                                                             |
| flowStatus   | ENUM         | O                                                    | The following options are available: <ul style="list-style-type: none"> <li>ENABLED-UPLINK</li> <li>ENABLED-DOWNLINK</li> <li>ENABLED</li> <li>DISABLED</li> <li>REMOVED</li> </ul> Enum determining what action to perform on traffic. Possible values are: [enable, disable, enable_uplink, enable_downlink] . The default value "ENABLED" shall apply, if the attribute is not present and has not been supplied previously. |
| muteNotif    | boolean      | O                                                    | Indicates whether application's start or stop notification is to be muted. The default value "FALSE" shall apply, if the attribute is not present and has not been supplied previously.                                                                                                                                                                                                                                         |
| name         | string       | M                                                    | The name of the Traffic Control policy data.                                                                                                                                                                                                                                                                                                                                                                                    |
| redirectInfo | RedirectInfo | O                                                    | Redirect Information                                                                                                                                                                                                                                                                                                                                                                                                            |
| routeToLocs  | RouteToLocs  | O                                                    | Route To Locs Information                                                                                                                                                                                                                                                                                                                                                                                                       |
| tcId         | string       | O                                                    | Specifies the traffic control ID.                                                                                                                                                                                                                                                                                                                                                                                               |

**Table 2-279 (Cont.) Request/Response Body Parameters**

| Field Name             | Data Type      | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                            |
|------------------------|----------------|-------------------------------------------------|----------------------------------------------------------------------------------------|
| trafficSteeringPolIdDl | string         | O                                               | Reference to a pre-configured traffic steering policy for downlink traffic at the SMF. |
| trafficSteeringPolIdUl | string         | O                                               | Reference to a pre-configured traffic steering policy for uplink traffic at the SMF.   |
| upPathChgEvent         | UpPathChgEvent | O                                               | Up Path Chg Event Information                                                          |

**Table 2-280 RedirectInfo**

| Field Name            | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                        |
|-----------------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| redirectAddressType   | ENUM      | O                                               | This string provides forward-compatibility with future extensions to the enumeration but is not used to encode content defined in the present version of this API. |
| redirectEnabled       | boolean   | O                                               | Indicates the redirect is enabled.                                                                                                                                 |
| redirectServerAddress | string    | O                                               | Indicates the address of the redirect server.                                                                                                                      |

**Table 2-281 RouteToLocs**

| Field Name     | Data Type | Constraints | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                 |
|----------------|-----------|-------------|-------------------------------------------------|---------------------------------------------|
| dnai           | string    |             | O                                               | Identifies the location of the application. |
| routeInfo      | RouteInfo |             | O                                               | Includes the traffic routing information.   |
| routeProfileId | string    |             | O                                               | Identifies the routing profile Id.          |

Table 2-282 RouteInfo

| Field Name | Data Type                                                      | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                  |
|------------|----------------------------------------------------------------|-------------------------------------------------|--------------------------------------------------------------|
| ipv4Addr   | string                                                         | O                                               | Ipv4 address of the tunnel end point in the data network.    |
| ipv6Addr   | string                                                         | O                                               | Ipv6 address of the tunnel end point in the data network     |
| portNumber | integer (\$int32)<br>Enter a number greater than or equal to 0 | O                                               | UDP port number of the tunnel end point in the data network. |

Table 2-283 UpPathChgEvent

| Field Name      | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| dnaiChgType     | ENUM      | O                                               | <p>The following options are available:</p> <ul style="list-style-type: none"> <li>• EARLY</li> <li>• EARLY_LATE</li> <li>• LATE</li> </ul> <p>Possible values are -<br/>           EARLY: Early notification of UP path reconfiguration. -<br/>           EARLY_LATE: Early and late notification of UP path reconfiguration.<br/>           This value shall only be present in the subscription to the DNAI change event. - LATE: Late notification of UP path reconfiguration.<br/>           This string provides forwardcompatibility with future extensions to the enumeration but is not used to encode content defined in the present version of this API.</p> |
| notifCorreId    | string    | O                                               | It is used to set the value of Notification Correlation ID in the notification sent by the SMF.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| notificationUri | string    | O                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

**Sample Request body structure for POST and PUT operations:**

```
{
  "description": "string",
  "flowStatus": "DISABLED",
  "muteNotif": true,
  "name": "string",
  "redirectInfo": {
    "redirectAddressType": "IPV4_ADDR",
    "redirectEnabled": true,
    "redirectServerAddress": "string"
  },
  "routeToLocs": [
    {
      "dnai": "string",
      "routeInfo": {
        "ipv4Addr": "string",
        "ipv6Addr": "string",
        "portNumber": 0
      },
      "routeProfId": "string"
    }
  ],
  "tcId": "string",
  "trafficSteeringPolIdDl": "string",
  "trafficSteeringPolIdUl": "string",
  "upPathChgEvent": {
    "dnaiChgType": "EARLY",
    "notifCorreId": "string",
    "notificationUri": "string"
  }
}
```

**Sample Response body structure for GET, POST, and PUT operations:**

```
{
  "description": "string",
  "flowStatus": "DISABLED",
  "muteNotif": true,
  "name": "string",
  "redirectInfo": {
    "redirectAddressType": "IPV4_ADDR",
    "redirectEnabled": true,
    "redirectServerAddress": "string"
  },
  "routeToLocs": [
    {
      "dnai": "string",
      "routeInfo": {
        "ipv4Addr": "string",
        "ipv6Addr": "string",
        "portNumber": 0
      },
      "routeProfId": "string"
    }
  ]
}
```

```

    ],
    "tcId": "string",
    "trafficSteeringPolIdDl": "string",
    "trafficSteeringPolIdUl": "string",
    "upPathChgEvent": {
      "dnaiChgType": "EARLY",
      "notifCorreId": "string",
      "notificationUri": "string"
    }
  }
}

```

### Delete Traffic Control Data

**Table 2-284 Request/Response Body Parameters**

| Field Name             | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description               |
|------------------------|-----------|-------------------------------------------------|---------------------------|
| trafficControlDataName | string    | M                                               | Traffic Control Data Name |

### Export/Import Traffic Control Data

**Table 2-285 Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                             |
|---------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| date          | string    |                                                 | Current timestamp                                                                                                                       |
| exportData    | array     |                                                 | Exported list of traffic control data service. For more information, see <a href="#">Get, Create, and Update Traffic Control Data</a> . |
| key           | string    |                                                 | Indicates the ID of Traffic Control Data                                                                                                |
| sourceVersion | string    |                                                 | System version of product from which data is exported                                                                                   |
| topic         | string    |                                                 | Topic of each managed object                                                                                                            |

### Sample Request Body structure for Import/Export operations:

```

{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "description": "string",

```

```

    "flowStatus": "DISABLED",
    "muteNotif": true,
    "name": "string",
    "redirectInfo": {
      "redirectAddressType": "IPV4_ADDR",
      "redirectEnabled": true,
      "redirectServerAddress": "string"
    },
    "routeToLocs": [
      {
        "dnai": "string",
        "routeInfo": {
          "ipv4Addr": "string",
          "ipv6Addr": "string",
          "portNumber": 0
        },
        "routeProfId": "string"
      }
    ],
    "tcId": "string",
    "trafficSteeringPolIdDl": "string",
    "trafficSteeringPolIdUl": "string",
    "upPathChgEvent": {
      "dnaiChgType": "EARLY",
      "notifCorreId": "string",
      "notificationUri": "string"
    }
  }
},
"key": "string",
"sourceVersion": "string",
"topic": "string"
}

```

## 2.56 PCC Rule

**Table 2-286 Supported REST APIs**

| Description      | HTTP Method or Custom Operation | Resource URI                                                            | Possible Result Code          |
|------------------|---------------------------------|-------------------------------------------------------------------------|-------------------------------|
| Create PCC Rule  | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/pccrules        | See <a href="#">Table A-3</a> |
| Export PCC Rules | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/pccrules/export | See <a href="#">Table A-1</a> |
| Import PCC Rule  | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/pccrules/import | See <a href="#">Table A-3</a> |



Table 2-286 (Cont.) Supported REST APIs

| Description     | HTTP Method or Custom Operation | Resource URI                                                                   | Possible Result Code          |
|-----------------|---------------------------------|--------------------------------------------------------------------------------|-------------------------------|
| Get PCC Rule    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/pccrules/{pccRuleName} | See <a href="#">Table A-1</a> |
| Update PCC Rule | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/pccrules/{pccRuleName} | See <a href="#">Table A-2</a> |
| Delete PCC Rule | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/pccrules/{pccRuleName} | See <a href="#">Table A-4</a> |

## Get, Create, and Update PCC Rules

Table 2-287 Request/Response Body Parameters

| Field Name    | Data Type | Mandatory(M)/Optional(O)/Conditional(C)aints | Description                                                                                                                                                                                 |
|---------------|-----------|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| afSigProtocol | ENUM      | O                                            | Indicates the protocol used for signalling between the UE and the AF. The default value "NO_INFORMATION" shall apply, if the attribute is not present and has not been supplied previously. |
| qosFlowUsage  | ENUM      | O                                            | Indicates the QoS flow usage. The default value is not applicable for this field. Users can select GENERAL or IMS_SIG from the drop down list as per the requirement.                       |
| appld         | string    | O                                            | A reference to the application detection filter configured at the UPF.                                                                                                                      |
| appReloc      | boolean   | O                                            | Indication of application relocation possibility. The default value "NO_INFORMATION" shall apply, if the attribute is not present and has not been supplied previously.                     |
| contVer       | string    | O                                            | Indicates the content version of the PCC rule.                                                                                                                                              |
| description   | string    | O                                            | The description of the PCC rule                                                                                                                                                             |

Table 2-287 (Cont.) Request/Response Body Parameters

| Field Name  | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                           |
|-------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| flowInfos   | FlowInfos | O                                               | An array of IP flow packet filter information.                                                                                                                                                                                                                                        |
| name        | string    | M                                               | The name of the PCC rule                                                                                                                                                                                                                                                              |
| pccRuleId   | string    | M                                               | Univocally identifies the PCC rule within a PDU session.                                                                                                                                                                                                                              |
| precedence  | string    | O                                               | Determines the order in which this PCC rule is applied relative to other PCC rules within the same PDU session. It shall be included if the "flowInfos" attribute is included or may be included if the "appld" attribute is included when the PCF initially provisions the PCC rule. |
| refChgData  | string    | O                                               | A reference to the ChargingData policy decision type.                                                                                                                                                                                                                                 |
| refCondData | string    | O                                               | A reference to the condition data.                                                                                                                                                                                                                                                    |
| refQosData  | string    | O                                               | A reference to the QoSData policy type decision type.                                                                                                                                                                                                                                 |
| refTcData   | string    | O                                               | A reference to the TrafficControlData policy decision type.                                                                                                                                                                                                                           |
| refUmData   | string    | O                                               | A reference to UsageMonitoringData policy decision type.                                                                                                                                                                                                                              |
| type        | ENUM      | O                                               |                                                                                                                                                                                                                                                                                       |

Table 2-288 FlowInfos

| Field Name         | Data Type          | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                     |
|--------------------|--------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ethFlowDescription | ethFlowDescription | O                                               | Ethernet Flow Description Information                                                                                                                                                           |
| flowDescription    | string             | O                                               | Indicates the details about flow. Enter a description for the flow.                                                                                                                             |
| flowDirection      | ENUM               | O                                               | Indicates the flow direction. Select from the following options: <ul style="list-style-type: none"> <li>• DOWNLINK</li> <li>• UPLINK</li> <li>• BIDIRECTIONAL</li> <li>• UNSPECIFIED</li> </ul> |

Table 2-288 (Cont.) FlowInfos

| Field Name        | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                     |
|-------------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| flowLabel         | string    | O                                               | The Ipv6 flow label header field.                                                                                                               |
| name              | string    | M                                               | Indicates the name for the flow                                                                                                                 |
| packFiltId        | string    | O                                               | An identifier of packet filter                                                                                                                  |
| packetFilterUsage | boolean   | O                                               | The packet shall be sent to the UE. The default value "FALSE" shall apply, if the attribute is not present and has not been supplied previously |
| spi               | string    | O                                               | The security parameter index of the IPSec packet.                                                                                               |
| tosTrafficClass   | string    | O                                               | Contains the Ipv4 Type-of-Service and mask field or the Ipv6 Traffic-Class field and mask field.                                                |

Table 2-289 ethFlowDescription

| Field Name  | Data Type                                                  | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------|------------------------------------------------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| destMacAddr | string<br>enter a MAC address ,such as'3D-F2-C9-A6-B3-4F'. | O                                               | A string indicating MAC address. Enter a valid MAC address. For example, 3D-F2-C9-A6-B3-4F                                                                                                                                                                                                                                                                                                                                    |
| ethType     | string                                                     | O                                               | A two-octet string that represents the Ethertype, in hexadecimal representation. Each character in the string shall take a value of "0" to "9" or "A" to "F" and shall represent 4 bits. The most significant character representing the 4 most significant bits of the ethType shall appear first in the string, and the character representing the 4 least significant bits of the ethType shall appear last in the string. |

Table 2-289 (Cont.) ethFlowDescription

| Field Name    | Data Type                                                 | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------|-----------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| fDesc         | string                                                    | O                                               | Contains the flow description for the Uplink or Downlink IP flow. It shall be present when the Ethertype is IP.                                                                                                                                                                                                                                                                                                                                                                                                              |
| fDir          | ENUM                                                      | O                                               | Indicates the packet filter direction. Select from the following options: <ul style="list-style-type: none"> <li>• DOWNLINK</li> <li>• UPLINK</li> <li>• BIDIRECTIONAL</li> <li>• UNSPECIFIED</li> </ul>                                                                                                                                                                                                                                                                                                                     |
| sourceMacAddr | string<br>enter a MAC address ,such as'3D-F2-C9-A6-B3-4F' | O                                               | Enter a source MAC Address. For example, 3D-F2-C9- A6-B3-4F                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| vlanTags      | string                                                    | O                                               | Customer-VLAN and/or Service-VLAN tags containing the VID, PCP/DEI fields. Each field is encoded as a two-octet string in hexadecimal representation. Each character in the string shall take a value of "0" to "9" or "A" to "F" and shall represent 4 bits. The most significant character representing the 4 most significant bits of the VID or PCF/DEI field shall appear first in the string, and the character representing the 4 least significant bits of the VID or PCF/DEI field shall appear last in the string. |

**Sample Request body structure for POST and PUT operations:**

```
{
  "afSigProtocol": "NO_INFORMATION",
  "appId": "string",
  "appReloc": true,
  "contVer": "string",
  "description": "string",
  "flowInfos": [
```

```

    {
      "ethFlowDescription": {
        "destMacAddr": "string",
        "ethType": "string",
        "fDesc": "string",
        "fDir": "BIDIRECTIONAL",
        "fdesc": "string",
        "fdir": "BIDIRECTIONAL",
        "sourceMacAddr": "string",
        "vlanTags": [
          "string"
        ]
      },
      "flowDescription": "string",
      "flowDirection": "BIDIRECTIONAL",
      "flowLabel": "string",
      "name": "string",
      "packFiltId": "string",
      "packetFilterUsage": true,
      "spi": "string",
      "tosTrafficClass": "string"
    }
  ],
  "name": "string",
  "pccRuleId": "string",
  "precedence": "string",
  "refChgData": [
    "string"
  ],
  "refCondData": "string",
  "refQosData": [
    "string"
  ],
  "refTcData": [
    "string"
  ],
  "refUmData": [
    "string"
  ],
  "type": "DYNAMIC"
}

```

**Sample Response body structure for GET, POST, and PUT operations:**

```

{
  "afSigProtocol": "NO_INFORMATION",
  "appId": "string",
  "appReloc": true,
  "contVer": "string",
  "description": "string",
  "flowInfos": [
    {
      "ethFlowDescription": {
        "destMacAddr": "string",
        "ethType": "string",

```

```

        "fDesc": "string",
        "fDir": "BIDIRECTIONAL",
        "fdesc": "string",
        "fdir": "BIDIRECTIONAL",
        "sourceMacAddr": "string",
        "vlanTags": [
            "string"
        ]
    },
    "flowDescription": "string",
    "flowDirection": "BIDIRECTIONAL",
    "flowLabel": "string",
    "name": "string",
    "packFiltId": "string",
    "packetFilterUsage": true,
    "spi": "string",
    "tosTrafficClass": "string"
}
],
"name": "string",
"pccRuleId": "string",
"precedence": "string",
"refChgData": [
    "string"
],
"refCondData": "string",
"refQosData": [
    "string"
],
"refTcData": [
    "string"
],
"refUmData": [
    "string"
],
"type": "DYNAMIC"
}

```

### Delete PCC Rule

**Table 2-290 Request/Response Body Parameters**

| Field Name  | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description   |
|-------------|-----------|-------------------------------------------------|---------------|
| PCCRuleName | string    | M                                               | PCC Rule Name |

## Export/Import PCC Rule s

Table 2-291 Request/Response Body Parameters

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                              |
|---------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| date          | string    |                                                 | Current timestamp                                                                                        |
| exportData    | array     |                                                 | Exported list of PCC Rule. For more information, see <a href="#">Get, Create, and Update PCC Rules</a> . |
| key           | string    |                                                 | Indicates the ID                                                                                         |
| sourceVersion | string    |                                                 | System version of product from which data is exported                                                    |
| topic         | string    |                                                 | Topic of each managed object                                                                             |

## Sample Request Body structure for Import/Export operations:

```
{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "afSigProtocol": "NO_INFORMATION",
      "appId": "string",
      "appReloc": true,
      "contVer": "string",
      "description": "string",
      "flowInfos": [
        {
          "ethFlowDescription": {
            "destMacAddr": "string",
            "ethType": "string",
            "fDesc": "string",
            "fDir": "BIDIRECTIONAL",
            "fdesc": "string",
            "fdir": "BIDIRECTIONAL",
            "sourceMacAddr": "string",
            "vlanTags": [
              "string"
            ]
          },
          "flowDescription": "string",
          "flowDirection": "BIDIRECTIONAL",
          "flowLabel": "string",

```

```

        "name": "string",
        "packFiltId": "string",
        "packetFilterUsage": true,
        "spi": "string",
        "tosTrafficClass": "string"
    }
],
"name": "string",
"pccRuleId": "string",
"precedence": "string",
"refChgData": [
    "string"
],
"refCondData": "string",
"refQosData": [
    "string"
],
"refTcData": [
    "string"
],
"refUmData": [
    "string"
],
"type": "DYNAMIC"
}
],
"key": "string",
"sourceVersion": "string",
"topic": "string"
}

```

## 2.57 PCC Rule Profile

**Table 2-292 Supported REST APIs**

| Description              | HTTP Method or Custom Operation | Resource URI                                                                                 | Possible Result Code          |
|--------------------------|---------------------------------|----------------------------------------------------------------------------------------------|-------------------------------|
| Create PCC Rule Profile  | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/pccruleprofiles                      | See <a href="#">Table A-3</a> |
| Export PCC Rule Profiles | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/pccruleprofiles/export               | See <a href="#">Table A-1</a> |
| Import PCC Rule Profile  | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/pccruleprofiles/import               | See <a href="#">Table A-3</a> |
| Get PCC Rule Profile     | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/pccruleprofiles/{pccRuleProfileName} | See <a href="#">Table A-1</a> |



Table 2-292 (Cont.) Supported REST APIs

| Description             | HTTP Method or Custom Operation | Resource URI                                                                                 | Possible Result Code          |
|-------------------------|---------------------------------|----------------------------------------------------------------------------------------------|-------------------------------|
| Update PCC Rule Profile | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/pccruleprofiles/{pccRuleProfileName} | See <a href="#">Table A-2</a> |
| Delete PCC Rule Profile | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/pccruleprofiles/{pccRuleProfileName} | See <a href="#">Table A-4</a> |

## Get, Create, and Update PCC Rule Profile

Table 2-293 Request/Response Body Parameters

| Field Name    | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C)aints | Description                                                                                                                                                           |
|---------------|-----------|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| afSigProtocol | ENUM      | O                                              | Specifies the protocol used for signaling between the UE and the AF.                                                                                                  |
| qosFlowUsage  | ENUM      | O                                              | Indicates the QoS flow usage. The default value is not applicable for this field. Users can select GENERAL or IMS_SIG from the drop down list as per the requirement. |
| appld         | string    | O                                              | A reference to the application detection filter configured at the UPF.                                                                                                |
| appReloc      | boolean   | O                                              | Specifies application relocation possibility.                                                                                                                         |
| contVer       | string    | O                                              | Specifies the content version of the PCC rule.                                                                                                                        |
| description   | string    | O                                              | Description of PCC Rule Profile.                                                                                                                                      |
| flowInfos     | FlowInfos | O                                              | An array of IP flow packet filter information.                                                                                                                        |
| id            | string    | M                                              | Unique identifier of PCC Rule Profile                                                                                                                                 |
| name          | string    | M                                              | Specifies the name of PCC Rule Profile.                                                                                                                               |

Table 2-293 (Cont.) Request/Response Body Parameters

| Field Name  | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                     |
|-------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| precedence  | string    |                                                 | Determines the order in which this PCC rule is applied relative to other PCC rules within the same PDU session. It shall be included if the <b>flowInfos</b> attribute is included or may be included if the <b>appld</b> attribute is included when the PCF initially provisions the PCC rule. |
| refChgData  | string    |                                                 | A reference to the ChargingData policy decision type.                                                                                                                                                                                                                                           |
| refCondData | string    |                                                 | A reference to the condition data.                                                                                                                                                                                                                                                              |
| refQosData  | string    |                                                 | A reference to the QoSData policy type decision type.                                                                                                                                                                                                                                           |
| refTcData   | string    |                                                 | A reference to the TrafficControlData policy decision type.                                                                                                                                                                                                                                     |
| refUmData   | string    |                                                 | A reference to UsageMonitoringData policy decision type.                                                                                                                                                                                                                                        |
| type        | ENUM      |                                                 | Possible values are: <ul style="list-style-type: none"> <li>DYNAMIC</li> <li>PREDEFINED</li> </ul>                                                                                                                                                                                              |

Table 2-294 FlowInfos

| Field Name         | Data Type          | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                          |
|--------------------|--------------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| ethFlowDescription | ethFlowDescription |                                                 | Defines a packet filter for an Ethernet flow.                                                                                        |
| flowDescription    | string             |                                                 | Specifies the packet filters of the IP flow(s).                                                                                      |
| flowDirection      | ENUM               |                                                 | Indicates the direction/directions that a filter is applicable, downlink only, uplink only or both down- and uplink (bidirectional). |
| flowLabel          | string             |                                                 | Ipv6 flow label header field.                                                                                                        |
| name               | string             | M                                               |                                                                                                                                      |
| packFiltId         | string             |                                                 | An identifier of packet filter.                                                                                                      |

Table 2-294 (Cont.) FlowInfos

| Field Name        | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                           |
|-------------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| packetFilterUsage | boolean   |                                                 | The packet shall be sent to the UE. The default value <b>FALSE</b> shall apply, if the attribute is not present and has not been supplied previously. |
| spi               | string    |                                                 | Specifies the security parameter index of the IPSec packet.                                                                                           |
| tosTrafficClass   | string    |                                                 | Specifies the Ipv4 Type-of-Service and mask field or the Ipv6 Traffic-Class field and mask field.                                                     |

Table 2-295 ethFlowDescription

| Field Name  | Data Type                                                  | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------|------------------------------------------------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| destMacAddr | string<br>enter a MAC address ,such as'3D-F2-C9-A6-B3-4F'. |                                                 | A string indicating MAC address. Enter a valid MAC address. For example, 3D-F2-C9-A6-B3-4F                                                                                                                                                                                                                                                                                                                                    |
| ethType     | string                                                     |                                                 | A two-octet string that represents the Ethertype, in hexadecimal representation. Each character in the string shall take a value of "0" to "9" or "A" to "F" and shall represent 4 bits. The most significant character representing the 4 most significant bits of the ethType shall appear first in the string, and the character representing the 4 least significant bits of the ethType shall appear last in the string. |
| fDesc       | string                                                     |                                                 | Indicates the details about flow. Enter a description for the flow.                                                                                                                                                                                                                                                                                                                                                           |

Table 2-295 (Cont.) ethFlowDescription

| Field Name    | Data Type                                                 | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------|-----------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| fDir          | ENUM                                                      |                                                 | Indicates the flow direction. Select from the following options: <ul style="list-style-type: none"> <li>• DOWNLINK</li> <li>• UPLINK</li> <li>• BIDIRECTIONAL</li> <li>• UNSPECIFIED</li> </ul>                                                                                                                                                                                                                                                                                                                              |
| sourceMacAddr | string<br>enter a MAC address ,such as'3D-F2-C9-A6-B3-4F' |                                                 | Enter a MAC Address. For example, 3D-F2-C9-A6-B3-4F                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| vlanTags      | string                                                    |                                                 | Customer-VLAN and/or Service-VLAN tags containing the VID, PCP/DEI fields. Each field is encoded as a two-octet string in hexadecimal representation. Each character in the string shall take a value of "0" to "9" or "A" to "F" and shall represent 4 bits. The most significant character representing the 4 most significant bits of the VID or PCF/DEI field shall appear first in the string, and the character representing the 4 least significant bits of the VID or PCF/DEI field shall appear last in the string. |

**Sample Request body structure for POST and PUT operations:**

```
{
  "afSigProtocol": "NO_INFORMATION",
  "appId": "string",
  "appReloc": true,
  "contVer": "string",
  "description": "string",
  "flowInfos": [
    {
      "ethFlowDescription": {
        "destMacAddr": "string",
        "ethType": "string",
        "fDesc": "string",
        "fDir": "BIDIRECTIONAL",
```

```

        "fdesc": "string",
        "fdir": "BIDIRECTIONAL",
        "sourceMacAddr": "string",
        "vlanTags": [
            "string"
        ]
    },
    "flowDescription": "string",
    "flowDirection": "BIDIRECTIONAL",
    "flowLabel": "string",
    "name": "string",
    "packFiltId": "string",
    "packetFilterUsage": true,
    "spi": "string",
    "tosTrafficClass": "string"
}
],
"id": "string",
"name": "string",
"precedence": "string",
"refChgData": [
    "string"
],
"refCondData": "string",
"refQosData": [
    "string"
],
"refTcData": [
    "string"
],
"refUmData": [
    "string"
],
"type": "DYNAMIC"
}

```

#### Sample Response body structure for GET, POST, and PUT operations:

```

{
    "date": "string",
    "errors": [
        {
            "message": "string",
            "name": "string"
        }
    ],
    "exportData": [
        {
            "afSigProtocol": "NO_INFORMATION",
            "appId": "string",
            "appReloc": true,
            "contVer": "string",
            "description": "string",
            "flowInfos": [

```

```

    {
      "ethFlowDescription": {
        "destMacAddr": "string",
        "ethType": "string",
        "fDesc": "string",
        "fDir": "BIDIRECTIONAL",
        "fdesc": "string",
        "fdir": "BIDIRECTIONAL",
        "sourceMacAddr": "string",
        "vlanTags": [
          "string"
        ]
      },
      "flowDescription": "string",
      "flowDirection": "BIDIRECTIONAL",
      "flowLabel": "string",
      "name": "string",
      "packFiltId": "string",
      "packetFilterUsage": true,
      "spi": "string",
      "tosTrafficClass": "string"
    }
  ],
  "id": "string",
  "name": "string",
  "precedence": "string",
  "refChgData": [
    "string"
  ],
  "refCondData": "string",
  "refQosData": [
    "string"
  ],
  "refTcData": [
    "string"
  ],
  "refUmData": [
    "string"
  ],
  "type": "DYNAMIC"
}
],
"key": "string",
"sourceVersion": "string",
"topic": "string"
}

```

**Delete PCC Rule Profile****Table 2-296 Request/Response Body Parameters**

| Field Name         | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description           |
|--------------------|-----------|-------------------------------------------------|-----------------------|
| PCCRuleProfileName | string    | M                                               | PCC Rule Profile Name |

**Export/Import PCC Rule Profile****Table 2-297 Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                             |
|---------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| date          | string    |                                                 | Current timestamp                                                                                                       |
| exportData    | array     |                                                 | Exported list of PCC Rule Profile. For more information, see <a href="#">Get, Create, and Update PCC Rule Profile</a> . |
| key           | string    |                                                 | Indicates the ID                                                                                                        |
| sourceVersion | string    |                                                 | System version of product from which data is exported                                                                   |
| topic         | string    |                                                 | Topic of each managed object                                                                                            |

**Sample Request Body structure for Import/Export operations:**

```
{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "afSigProtocol": "NO_INFORMATION",
      "appId": "string",
      "appReloc": true,
      "contVer": "string",
      "description": "string",
      "flowInfos": [
        {
          "ethFlowDescription": {
            "destMacAddr": "string",
            "ethType": "string",
            "fDesc": "string",

```

```

        "fDir": "BIDIRECTIONAL",
        "fdesc": "string",
        "fdir": "BIDIRECTIONAL",
        "sourceMacAddr": "string",
        "vlanTags": [
            "string"
        ]
    },
    "flowDescription": "string",
    "flowDirection": "BIDIRECTIONAL",
    "flowLabel": "string",
    "name": "string",
    "packFiltId": "string",
    "packetFilterUsage": true,
    "spi": "string",
    "tosTrafficClass": "string"
}
],
"id": "string",
"name": "string",
"precedence": "string",
"refChgData": [
    "string"
],
"refCondData": "string",
"refQosData": [
    "string"
],
"refTcData": [
    "string"
],
"refUmData": [
    "string"
],
"type": "DYNAMIC"
}
],
"key": "string",
"sourceVersion": "string",
"topic": "string"
}

```

## 2.58 Condition Data

**Table 2-298 Supported REST APIs**

| Description           | HTTP Method or Custom Operation | Resource URI                                                          | Possible Result Code          |
|-----------------------|---------------------------------|-----------------------------------------------------------------------|-------------------------------|
| Create Condition Data | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/conditiondata | See <a href="#">Table A-3</a> |



**Table 2-298 (Cont.) Supported REST APIs**

| Description           | HTTP Method or Custom Operation | Resource URI                                                                              | Possible Result Code          |
|-----------------------|---------------------------------|-------------------------------------------------------------------------------------------|-------------------------------|
| Export Condition Data | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/conditiondata/export              | See <a href="#">Table A-1</a> |
| Import Condition Data | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/conditiondata/import              | See <a href="#">Table A-3</a> |
| Get Condition Data    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/conditiondata/{conditionDataName} | See <a href="#">Table A-1</a> |
| Update Condition Data | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/conditiondata/{conditionDataName} | See <a href="#">Table A-2</a> |
| Delete Condition Data | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/conditiondata/{conditionDataName} | See <a href="#">Table A-4</a> |

**Get, Create, and Update Condition Data****Table 2-299 Request/Response Body Parameters**

| Field Name       | Data Type                                | Mandatory(M)/ Optional(O)/ Conditional(C)aints | Description                                           |
|------------------|------------------------------------------|------------------------------------------------|-------------------------------------------------------|
| activationTime   | string,<br>example : YYYY-MM-DDTHH:MM:SS | O                                              | The time when the decision data shall be activated.   |
| condId           | string                                   | O                                              | Specifies the condition ID.                           |
| deactivationTime | string<br>example : YYYY-MM-DDTHH:MM:SS  | O                                              | The time when the decision data shall be deactivated. |
| description      | string                                   | O                                              | The description of the Condition Data policy data.    |
| name             | string                                   | M                                              | The name of the Condition Data policy data.           |

**Sample Request body structure for POST and PUT operations:**

```
{
  "activationTime": "YYYY-MM-DDTHH:MM:SS",
  "condId": "string",
  "deactivationTime": "YYYY-MM-DDTHH:MM:SS",
```

```

    "description": "string",
    "name": "string"
  }

```

### Sample Response body structure for GET, POST, and PUT operations:

```

{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "activationTime": "YYYY-MM-DDTHH:MM:SS",
      "condId": "string",
      "deactivationTime": "YYYY-MM-DDTHH:MM:SS",
      "description": "string",
      "name": "string"
    }
  ],
  "key": "string",
  "sourceVersion": "string",
  "topic": "string"
}

```

### Delete Condition Data

**Table 2-300 Request/Response Body Parameters**

| Field Name        | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                 |
|-------------------|-----------|-------------------------------------------------|---------------------------------------------|
| conditionDataName | string    | M                                               | The name of the Condition Data policy data. |

### Export/Import Condition Data

**Table 2-301 Request/Response Body Parameters**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                         |
|------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| date       | string    |                                                 | Current timestamp                                                                                                   |
| exportData | array     |                                                 | Exported list of condition data. For more information, see <a href="#">Get, Create, and Update Condition Data</a> . |
| key        | string    |                                                 | Indicates the ID                                                                                                    |

**Table 2-301 (Cont.) Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                           |
|---------------|-----------|-------------------------------------------------|-------------------------------------------------------|
| sourceVersion | string    |                                                 | System version of product from which data is exported |
| topic         | string    |                                                 | Topic of each managed object                          |

Sample Request Body structure for Import/Export operations:

```
{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "activationTime": "YYYY-MM-DDTHH:MM:SS",
      "condId": "string",
      "deactivationTime": "YYYY-MM-DDTHH:MM:SS",
      "description": "string",
      "name": "string"
    }
  ],
  "key": "string",
  "sourceVersion": "string",
  "topic": "string"
}
```

## 2.59 Charging Data

**Table 2-302 Supported REST APIs**

| Description          | HTTP Method or Custom Operation | Resource URI                                                                | Possible Result Code          |
|----------------------|---------------------------------|-----------------------------------------------------------------------------|-------------------------------|
| Create Charging Data | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/chargingdata        | See <a href="#">Table A-3</a> |
| Export Charging Data | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/chargingdata/export | See <a href="#">Table A-1</a> |

Table 2-302 (Cont.) Supported REST APIs

| Description           | HTTP Method or Custom Operation | Resource URI                                                                            | Possible Result Code          |
|-----------------------|---------------------------------|-----------------------------------------------------------------------------------------|-------------------------------|
| Import Charging Data  | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/chargingdata/import             | See <a href="#">Table A-3</a> |
| Get Charging Data     | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/chargingdata/{chargingDataName} | See <a href="#">Table A-1</a> |
| Update Condition Data | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/chargingdata/{chargingDataName} | See <a href="#">Table A-2</a> |
| Delete Charging Data  | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfsm/chargingdata/{chargingDataName} | See <a href="#">Table A-4</a> |

**Get, Create, and Update Charging Data**

Table 2-303 Request/Response Body Parameters

| Field Name                  | Data Type                                                    | Mandatory(M)/ Optional(O)/ Conditional(C)aints | Description                                                                  |
|-----------------------------|--------------------------------------------------------------|------------------------------------------------|------------------------------------------------------------------------------|
| afChargingIdentifiercglList | integer (\$int64),<br>Enter a value between 0 and 4294967295 | O                                              | Univocally identifies the charging control policy data within a PDU session. |
| appSvcProvId                | string                                                       | O                                              | Indicates the application service provider identity.                         |
| chgId                       | string                                                       | M                                              | Specifies the charging id.                                                   |
| description                 | string                                                       | O                                              | The description of the Charging Data.                                        |

Table 2-303 (Cont.) Request/Response Body Parameters

| Field Name     | Data Type                                                          | Mandatory(M)/<br>Optional(O)/<br>Conditional(C)aints | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------|--------------------------------------------------------------------|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| meteringMethod | ENUM                                                               | O                                                    | <p>The following options are available</p> <ul style="list-style-type: none"> <li>• DURATION</li> <li>• VOLUME</li> <li>• DURATION_VOLUME</li> <li>• EVENT</li> </ul> <p>Defines what parameters shall be metered for offline charging. If the attribute is not present but it has been supplied previously, the previous information remains valid. If the attribute is not present and it has not been supplied previously or the attribute has been supplied previously but the attribute is set to NULL, the metering method pre-configured at the SMF is applicable as default metering method.</p> |
| name           | string                                                             | M                                                    | The name of the Charging Data.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| offline        | boolean                                                            | O                                                    | <p>Indicates the offline charging is applicable to the PDU session or PCC rule. The default value "FALSE" shall apply, if the attribute is not present and has not been supplied previously. (NOTE)</p>                                                                                                                                                                                                                                                                                                                                                                                                  |
| online         | boolean                                                            | O                                                    | <p>Indicates the online charging is applicable to the PDU session or PCC rule. The default value "FALSE" shall apply, if the attribute is not present and has not been supplied previously. (NOTE)</p>                                                                                                                                                                                                                                                                                                                                                                                                   |
| ratingGroup    | integer (\$int64),<br>Enter a value<br>between 0 and<br>4294967295 | O                                                    | The charging key for the PCC rule used for rating purposes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

Table 2-303 (Cont.) Request/Response Body Parameters

| Field Name     | Data Type                                                          | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------|--------------------------------------------------------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| reportingLevel | ENUM                                                               | O                                               | The following options are available: <ul style="list-style-type: none"> <li>SER_ID_LEVEL</li> <li>RAT_GR_LEVEL</li> <li>SPON_CON_LEVEL</li> </ul> Defines on what level the SMF reports the usage for the related PCC rule. If the attribute is not present but it has been supplied previously, the previous information remains valid. If the attribute is not present and it has not been supplied previously or the attribute has been supplied previously but it is set to NULL, the reporting level pre-configured at the SMF is applicable as default reporting level. |
| sdfHandl       | boolean                                                            |                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| serviceId      | integer (\$int64),<br>Enter a value<br>between 0 and<br>4294967295 | O                                               | Indicates the identifier of the service or service component the service data flow in a PCC rule relates to.                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| sponsorId      | string                                                             | O                                               | Indicates the sponsor identity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

**Sample Request body structure for POST and PUT operations:**

```
{
  "afChargingIdentifier": 0,
  "appSvcProvId": "string",
  "chgId": "string",
  "description": "string",
  "meteringMethod": "DURATION",
  "name": "string",
  "offline": true,
  "online": true,
  "ratingGroup": 0,
  "reportingLevel": "RAT_GR_LEVEL",
  "sdfHandl": true,
  "serviceId": 0,
  "sponsorId": "string"
}
```

**Sample Response body structure for GET, POST, and PUT operations:**

```
{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "afChargingIdentifier": 0,
      "appSvcProvId": "string",
      "chgId": "string",
      "description": "string",
      "meteringMethod": "DURATION",
      "name": "string",
      "offline": true,
      "online": true,
      "ratingGroup": 0,
      "reportingLevel": "RAT_GR_LEVEL",
      "sdfHandl": true,
      "serviceId": 0,
      "sponsorId": "string"
    }
  ],
  "key": "string",
  "sourceVersion": "string",
  "topic": "string"
}
```

**Delete Charging Data****Table 2-304 Request/Response Body Parameters**

| Field Name       | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description        |
|------------------|-----------|-------------------------------------------------|--------------------|
| chargingDataName | string    | M                                               | Charging Data Name |

**Export/Import Charging Data****Table 2-305 Request/Response Body Parameters**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                       |
|------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| date       | string    |                                                 | Current timestamp                                                                                                 |
| exportData | array     |                                                 | Exported list of charging data. For more information, see <a href="#">Get, Create, and Update Charging Data</a> . |

**Table 2-305 (Cont.) Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                           |
|---------------|-----------|-------------------------------------------------|-------------------------------------------------------|
| key           | string    |                                                 | Indicates the ID                                      |
| sourceVersion | string    |                                                 | System version of product from which data is exported |
| topic         | string    |                                                 | Topic of each managed object                          |

**Sample Request Body structure for Import/Export operations:**

```

{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "afChargingIdentifier": 0,
      "appSvcProvId": "string",
      "chgId": "string",
      "description": "string",
      "meteringMethod": "DURATION",
      "name": "string",
      "offline": true,
      "online": true,
      "ratingGroup": 0,
      "reportingLevel": "RAT_GR_LEVEL",
      "sdfHandl": true,
      "serviceId": 0,
      "sponsorId": "string"
    }
  ],
  "key": "string",
  "sourceVersion": "string",
  "topic": "string"
}

```



## 2.60 Service Area Restriction

**Table 2-306 Supported REST APIs**

| Description                          | HTTP Method or Custom Operation | Resource URI                                                                                                 | Possible Result Code          |
|--------------------------------------|---------------------------------|--------------------------------------------------------------------------------------------------------------|-------------------------------|
| Create Service Area Restriction      | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfam/servicearearestrictions                              | See <a href="#">Table A-3</a> |
| Export All Service Area Restrictions | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfam/servicearearestrictions/export                       | See <a href="#">Table A-1</a> |
| Import All Service Area Restrictions | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfam/servicearearestrictions/import                       | See <a href="#">Table A-3</a> |
| Get Service Area Restriction         | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfam/servicearearestrictions/{serviceAreaRestrictionName} | See <a href="#">Table A-1</a> |
| Update Service Area Restriction      | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfam/servicearearestrictions/{serviceAreaRestrictionName} | See <a href="#">Table A-2</a> |
| Delete Service Area Restriction      | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/pcfam/servicearearestrictions/{serviceAreaRestrictionName} | See <a href="#">Table A-4</a> |

## Get, Create, and Update Service Area Restriction s

Table 2-307 Request/Response Body Parameters

| Field Name      | Data Type                           | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                  |
|-----------------|-------------------------------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| areas           | ServiceArea<br>RestrictionAr<br>eas | O                                               | A list of Areas. These areas are: <ul style="list-style-type: none"> <li>allowed areas if RestrictionType is "ALLOWED_AREAS"</li> <li>not allowed areas if RestrictionType is "NOT_ALLOWED_AREAS"</li> </ul> |
| description     | Number                              | O                                               | Specifies description of the Service Area Restriction                                                                                                                                                        |
| maxNumOfTAs     | boolean                             | O                                               | Specifies maximum number of TAs                                                                                                                                                                              |
| name            | string                              | M                                               | Specifies name of the Service Area Restriction                                                                                                                                                               |
| restrictionType | ENUM                                | O                                               | Possible values are: <ul style="list-style-type: none"> <li>ALLOWED_AREAS</li> <li>NOT_ALLOWED_AREAS</li> </ul>                                                                                              |

Table 2-308 ServiceAreaRestrictionAreas

| Field Name | Data Type | Description                                                          |
|------------|-----------|----------------------------------------------------------------------|
| areaCodes  | String    | Specifies area codes.                                                |
| tacs       | String    | List of Type Allocation Codes. A decimal number between 0 and 65535. |

## Sample Request body structure for POST/PUT operation:

```
{
  "areas": [
    {
      "areaCodes": "string",
      "tacs": [
        "string"
      ]
    }
  ],
  "description": "string",
  "maxNumOfTAs": 0,
  "name": "string",
  "restrictionType": "ALLOWED_AREAS"
}
```

**Sample Response body structure for GET, POST, and PUT operations:**

```
[
  {
    "date": "string",
    "errors": [
      {
        "message": "string",
        "name": "string"
      }
    ],
    "exportData": [
      {
        "areas": [
          {
            "areaCodes": "string",
            "tacs": [
              "string"
            ]
          }
        ],
        "description": "string",
        "maxNumOfTAs": 0,
        "name": "string",
        "restrictionType": "ALLOWED_AREAS"
      }
    ],
    "key": "string",
    "sourceVersion": "string",
    "topic": "string"
  }
]
```

**Delete Service Area Restriction s****Table 2-309 Request/Response Body Parameters**

| Field Name                 | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                   |
|----------------------------|-----------|-------------------------------------------------|-------------------------------|
| serviceAreaRestrictionName | string    | M                                               | Service Area Restriction Name |

**Export/Import Service Area Restrictions****Table 2-310 Request/Response Body Parameters**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description       |
|------------|-----------|-------------------------------------------------|-------------------|
| date       | string    |                                                 | Current timestamp |

**Table 2-310 (Cont.) Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                             |
|---------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| exportData    | array     |                                                 | Exported list of service area restrictions. For more information, see <a href="#">Get, Create, and Update Service Area Restrictions</a> |
| key           | string    |                                                 | Indicates the ID                                                                                                                        |
| sourceVersion | string    |                                                 | System version of product from which data is exported                                                                                   |
| systemVersion |           |                                                 |                                                                                                                                         |
| topic         | string    |                                                 | Topic of each managed object                                                                                                            |

**Sample Request Body structure for Import/Export operations:**

```
[
  {
    "date": "string",
    "errors": [
      {
        "message": "string",
        "name": "string"
      }
    ],
    "exportData": [
      {
        "areas": [
          {
            "areaCodes": "string",
            "tacs": [
              "string"
            ]
          }
        ],
        "description": "string",
        "maxNumOfTAs": 0,
        "name": "string",
        "restrictionType": "ALLOWED_AREAS"
      }
    ],
    "key": "string",
    "sourceVersion": "string",
    "topic": "string"
  }
]
```

## 2.61 PCF Presence Reporting Area

**Table 2-311 Supported REST APIs**

| HTTP Method or Custom Operation | Description                    | Resource URI                                                                              | Possible Result Code          |
|---------------------------------|--------------------------------|-------------------------------------------------------------------------------------------|-------------------------------|
| POST                            | Create Presence Reporting Area | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/pras                             | See <a href="#">Table A-3</a> |
| GET                             | Export Presence Reporting Area | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/pras/export                      | See <a href="#">Table A-1</a> |
| POST                            | Import Presence Reporting Area | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/pras/import                      | See <a href="#">Table A-3</a> |
| GET                             | Get Presence Reporting Area    | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/pras/{presenceReportingAreaName} | See <a href="#">Table A-1</a> |
| PUT                             | Update Presence Reporting Area | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/pras/{presenceReportingAreaName} | See <a href="#">Table A-2</a> |
| DELETE                          | Delete Presence Reporting Area | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/pras/{presenceReportingAreaName} | See <a href="#">Table A-4</a> |

### Get, Create, AND Update Presence Reporting Areas

**Table 2-312 Request/Response Body Parameters GET, PUT, and POST operations**

| Field Name | Data Type                     | Mandatory(M)/ Optional(O)/ Conditional(C)aints | Description                                                                                                                                                                                                                              |
|------------|-------------------------------|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ecgiList   | PresenceReportingAreaEcgiList | O                                              | Represents the list of tracking areas that constitutes the area. This IE shall be present if the subscription or the event report is for tracking UE presence in the tracking areas. For non 3GPP access the TAI shall be the N3GPP TAI. |

**Table 2-312 (Cont.) Request/Response Body Parameters GET, PUT, and POST operations**

| Field Name          | Data Type                                | Mandatory(M)/<br>Optional(O)/<br>Conditional(C)aints | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------|------------------------------------------|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| globalRanNodeIdList | PresenceReportingAreaGlobalRanNodeIdList | O                                                    | Represents the list of NG RAN node identifiers that constitutes the area. This IE shall be present if the Area of Interest subscribed is a list of NG RAN node identifiers.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| name                | string                                   | M                                                    | The unique name assigned to the PRA.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| praid               | String                                   | M                                                    | The unique identifying number of the PRA list. The ID must be numeric value between 0 and 16777125.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| ncgiList            | PresenceReportingAreaNcgiList            | O                                                    | Represents the list of NR cell Ids that constitutes the area. This IE shall be present if the Area of Interest subscribed is a list of NR cell Ids.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| presenceState       | ENUM                                     | O                                                    | <p>Indicates whether the UE is inside or outside of the area of interest (e.g presence reporting area or the LADN area), or if the presence reporting area is inactive in the serving node.</p> <p>Select any one of the following values:</p> <ul style="list-style-type: none"> <li>• IN_AREA : Indicates that the UE is inside or enters the presence reporting area.</li> <li>• OUT_OF_AREA : Indicates that the UE is outside or leaves the presence reporting area.</li> <li>• UNKNOWN : Indicates it is unknown whether the UE is in the presence reporting area or not.</li> <li>• INACTIVE : Indicates that the presence reporting area is inactive in the serving node.</li> </ul> |

**Table 2-312 (Cont.) Request/Response Body Parameters GET, PUT, and POST operations**

| Field Name       | Data Type                             | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                              |
|------------------|---------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| trackingAreaList | PresenceReportingAreaTrackingAreaList | O                                               | Represents the list of tracking areas that constitutes the area. This IE shall be present if the subscription or the event report is for tracking UE presence in the tracking areas. For non 3GPP access the TAI shall be the N3GPP TAI. |

**Table 2-313 PresenceReportingAreaEcgiList**

| Field Name            | Data Type                                 | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------|-------------------------------------------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ecgiList. eutraCellId | String, enter a 7 digit hexadecimal value | M                                               | 28-bit string identifying an E-UTRA Cell Id as specified in hexadecimal representation. Each character in the string shall take a value of "0" to "9" or "A" to "F" and shall represent 4 bits. The most significant character representing the 4 most significant bits of the Cell Id shall appear first in the string, and the character representing the 4 least significant bit of the Cell Id shall appear last in the string.<br>Pattern: '[A-Fa-f0-9]{7}\$'<br>Example:<br>An E-UTRA Cell Id 0x5BD6007 shall be encoded as "5BD6007". |
| ecgiList. plmnId      | PlmnId                                    | M                                               | PLMN Identity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

**Table 2-314 PresenceReportingAreaGlobalRanNodeIdList**

| Field Name                  | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                 |
|-----------------------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| globalRanNodeIdList.gNbId   | GNbId     |                                                 | This field is included if the RAN Node Id represents a gNB. When present, this field contains the identifier of the gNB.                    |
| globalRanNodeIdList.n3IwfId | string    |                                                 | This field is included if the RAN node belongs to non 3GPP access (i.e a N3IWF).<br>If included, this field contains the FQDN of the N3IWF. |
| globalRanNodeIdList.ngenBId | string    |                                                 | This field is included if the RAN Node Id represents a NG-eNB. When present, this field contains the identifier of an NG-eNB.               |
| globalRanNodeIdList.plmnId  | PlmnId    | M                                               | Indicates the identity of the PLMN that the RAN node belongs to.                                                                            |

**Table 2-315 PlmnId**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                               |
|------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------|
| PlmnId.mcc | String    | M                                               | Specifies a Mobile Country Code of the PLMN. enter a 2 or 3 digit number. |
| PlmnId.mnc | String    | M                                               | Specifies a Mobile Network Code of the PLMN. enter a 2 or 3 digit number. |



**Table 2-316 PresenceReportingAreaNcgiList**

| Field Name        | Data Type                                 | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------|-------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ncgiList.nrCellId | String, enter a 9 digit hexadecimal value | M                                               | 36-bit string identifying an NR Cell Id as specified in hexadecimal representation. Each character in the string shall take a value of "0" to "9" or "A" to "F" and shall represent 4 bits. The most significant character representing the 4 most significant bits of the Cell Id shall appear first in the string, and the character representing the 4 least significant bit of the Cell Id shall appear last in the string.<br>Pattern: '[A-Fa-f0-9]{9}\$'<br>Example:<br>An NR Cell Id 0x225BD6007 shall be encoded as "225BD6007". |
| ncgiList.plmnlId  | PlmnlId                                   | M                                               | PLMN Identity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

**Table 2-317 PresenceReportingAreaTrackingAreaList**

| Field Name               | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description   |
|--------------------------|-----------|-------------------------------------------------|---------------|
| trackingAreaList.plmnlId | PlmnlId   |                                                 | PLMN Identity |

**Table 2-317 (Cont.) PresenceReportingAreaTrackingAreaList**

| Field Name           | Data Type                                         | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------|---------------------------------------------------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| trackingAreaList.tac | string, enter a 4 or 6<br>digit hexadecimal value |                                                 | 28-bit string identifying<br>an E-UTRA Cell Id as<br>specified, in<br>hexadecimal<br>representation. Each<br>character in the string<br>shall take a value of "0"<br>to "9" or "A" to "F" and<br>shall represent 4 bits.<br>The most significant<br>character representing<br>the 4 most significant<br>bits of the Cell Id shall<br>appear first in the string,<br>and the character<br>representing the 4 least<br>significant bit of the Cell<br>Id shall appear last in<br>the string.<br>Pattern: '^[A-Fa-f0-9]<br>{7}\$'<br>Example:<br>An E-UTRA Cell Id<br>0x5BD6007 shall be<br>encoded as "5BD6007". |

**Sample Request body structure for POST and PUT operations:**

```
{
  "ecgiList": [
    {
      "eutraCellId": "string",
      "plmnId": {
        "mcc": "string",
        "mnc": "string"
      }
    }
  ],
  "globalRanNodeIdList": [
    {
      "gNbId": {
        "bitLength": 0,
        "gNbValue": "string"
      },
      "n3IwfId": "string",
      "ngeNbId": "string",
      "plmnId": {
        "mcc": "string",
        "mnc": "string"
      }
    }
  ]
}
```

```

    ],
    "name": "string",
    "ncgiList": [
      {
        "nrCellId": "string",
        "plmnId": {
          "mcc": "string",
          "mnc": "string"
        }
      }
    ],
    "praId": "string",
    "presenceState": "INACTIVE",
    "trackingAreaList": [
      {
        "plmnId": {
          "mcc": "string",
          "mnc": "string"
        },
        "tac": "string"
      }
    ]
  ]
}

```

**Sample Response body structure for GET, POST, and PUT operations:**

```

{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "ecgiList": [
        {
          "eutraCellId": "string",
          "plmnId": {
            "mcc": "string",
            "mnc": "string"
          }
        }
      ],
      "globalRanNodeIdList": [
        {
          "gNbId": {
            "bitLength": 0,
            "gNbValue": "string"
          },
          "n3IwfId": "string",
          "ngeNbId": "string",
          "plmnId": {
            "mcc": "string",

```

```

        "mnc": "string"
      }
    },
    "name": "string",
    "ncgiList": [
      {
        "nrCellId": "string",
        "plmnId": {
          "mcc": "string",
          "mnc": "string"
        }
      }
    ],
    "praId": "string",
    "presenceState": "INACTIVE",
    "trackingAreaList": [
      {
        "plmnId": {
          "mcc": "string",
          "mnc": "string"
        },
        "tac": "string"
      }
    ]
  },
  "key": "string",
  "sourceVersion": "string",
  "topic": "string"
}

```

### Delete Presence Reporting Areas

**Table 2-318 Request/Response Body Parameters for DELETE operation**

| Field Name                | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                  |
|---------------------------|-----------|-------------------------------------------------|------------------------------|
| presenceReportingAreaName | string    | M                                               | Presence Reporting Area Name |

### Export/Import Presence Reporting Areas

**Table 2-319 Request/Response Body Parameters for Export/Import operations**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description       |
|------------|-----------|-------------------------------------------------|-------------------|
| date       | string    |                                                 | Current timestamp |

**Table 2-319 (Cont.) Request/Response Body Parameters for Export/Import operations**

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                            |
|---------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| exportData    | array     |                                                 | Exported list of presence reporting area. For more information, see <a href="#">Get, Create, AND Update Presence Reporting Areas</a> . |
| key           | string    |                                                 | Indicates the ID                                                                                                                       |
| sourceVersion | string    |                                                 | System version of product from which data is exported                                                                                  |
| topic         | string    |                                                 | Topic of each managed object                                                                                                           |

**Sample Request Body structure for Import/Export operations:**

```
{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "ecgiList": [
        {
          "eutraCellId": "string",
          "plmnId": {
            "mcc": "string",
            "mnc": "string"
          }
        }
      ],
      "globalRanNodeIdList": [
        {
          "gNbId": {
            "bitLength": 0,
            "gNbValue": "string"
          },
          "n3IwfId": "string",
          "ngeNbId": "string",
          "plmnId": {
            "mcc": "string",
            "mnc": "string"
          }
        }
      ],
      "name": "string",
```

```

    "ncgiList": [
      {
        "nrCellId": "string",
        "plmnId": {
          "mcc": "string",
          "mnc": "string"
        }
      }
    ],
    "praId": "string",
    "presenceState": "INACTIVE",
    "trackingAreaList": [
      {
        "plmnId": {
          "mcc": "string",
          "mnc": "string"
        },
        "tac": "string"
      }
    ]
  }
},
"key": "string",
"sourceVersion": "string",
"topic": "string"
}

```

## 2.62 Policy Table

**Table 2-320 Supported REST APIs**

| Description          | HTTP Method or Custom Operation | Resource URI                                                                 | Possible Result Code          |
|----------------------|---------------------------------|------------------------------------------------------------------------------|-------------------------------|
| Get Policy Tables    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/policytables        | See <a href="#">Table A-1</a> |
| Create Policy Tables | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/policytables        | See <a href="#">Table A-3</a> |
| Export Policy Tables | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/policytables/export | See <a href="#">Table A-1</a> |
| Import Policy Tables | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/policytables/import | See <a href="#">Table A-3</a> |

Table 2-320 (Cont.) Supported REST APIs

| Description         | HTTP Method or Custom Operation | Resource URI                                                                                          | Possible Result Code          |
|---------------------|---------------------------------|-------------------------------------------------------------------------------------------------------|-------------------------------|
| Delete Policy Table | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/policytables/{serviceName}/{policyTableName} | See <a href="#">Table A-4</a> |

## Get and Create Policy Tables

Table 2-321 Request/Response Body Parameters

| Field Name  | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                  |
|-------------|-----------|-------------------------------------------|----------------------------------------------|
| columns     | array     | O                                         | Specifies the column of a policy table.      |
| name        | String    | O                                         | Specifies the name of a policy table.        |
| description | name      | O                                         | Specifies the description of a policy table. |
| rows        | array     | O                                         | Specifies the rows of a policy table.        |

## Sample Request body structure for POST operation:

```
[
  {
    "columns": [
      {
        "dataType": "accessType",
        "isKey": true,
        "name": "string"
      }
    ],
    "description": "string",
    "name": "string",
    "rows": [
      {}
    ],
    "serviceName": "string",
    "serviceType": "string"
  }
]
```

## Sample Response body structure for GET and POST operations:

```
{
  "date": "string",
  "errors": [
```

```

    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "columns": [
        {
          "dataType": "accessType",
          "isKey": true,
          "name": "string"
        }
      ],
      "description": "string",
      "name": "string",
      "rows": [
        {}
      ],
      "serviceName": "string"
    }
  ],
  "sourceVersion": "string",
  "topic": "string"
}

```

### Delete Policy Tables

**Table 2-322 Request/Response Body Parameters**

| Field Name      | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description       |
|-----------------|-----------|-------------------------------------------------|-------------------|
| policyTableName | string    | M                                               | Policy Table Name |
| serviceName     | string    | M                                               | Service Name      |

### Export and Import Policy Tables

The following table describes the request and response body parameters for Import and Export operations:

**Table 2-323 Request/Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                              |
|----------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| date           | string    |                                                 | Current timestamp                                                                                        |
| errors:message | string    |                                                 | Error message.                                                                                           |
| errors:name    | string    |                                                 | Error name.                                                                                              |
| exportData     | array     |                                                 | Exported list of policy tables. For more information, see <a href="#">Get and Create Policy Tables</a> . |



Table 2-323 (Cont.) Request/Response Body Parameters

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                           |
|---------------|-----------|-------------------------------------------------|-------------------------------------------------------|
| sourceVersion | string    |                                                 | System version of product from which data is exported |
| topic         | string    |                                                 | Topic of each managed object                          |

**Supported Actions for Importing Policy Tables**

The following table describes the actions supported by Policy when the user imports Policy Tables:

Table 2-324 Supported Actions for Importing Policy Tables

| Action  | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ignore  | On selecting the <code>ignore</code> option, no changes are made to the existing Policy Table. The Policy Table in the imported file is ignored or skipped. No changes are made to the UUIDs and existing policies remain unaffected with this option.                                                                                                                                                                                                                                                                                                                                                                                   |
| retain  | On selecting the <code>retain</code> option, no changes are made to the existing Policy Table. The Policy Table in the imported file is ignored or skipped. No changes are made to the UUIDs and existing policies remain unaffected with this option.                                                                                                                                                                                                                                                                                                                                                                                   |
| replace | On selecting the <code>replace</code> option, the existing Policy Table is completely replaced with the Policy table in the imported file. Since UUIDs are re-generated for rows and columns, the user needs to update the existing policies that use the Policy Table being replaced with the new one.                                                                                                                                                                                                                                                                                                                                  |
| merge   | On selecting the Merge option, rows of the existing Policy Table are merged with the rows of the Policy table in the imported file only if the schema for key and non-key columns is same for both the Policy Tables. All rows of the existing table with conflict are replaced with the new rows from the imported table.<br><b>Note:</b> Two rows are considered to be in conflict when they have same values for the Key columns. In case of a conflict, the rows of the existing Policy Table are replaced with the rows of the new Policy Table. In this case, the UUIDs remain unaffected and do not impact the existing policies. |

**Sample Request Body structure for Import/Export operations:**

```
{
  "date": "string",
  "errors": [
    {
```

```

        "message": "string",
        "name": "string"
    }
],
"exportData": [
    {
        "columns": [
            {
                "dataType": "accessType",
                "isKey": true,
                "name": "string"
            }
        ],
        "description": "string",
        "name": "string",
        "rows": [
            {}
        ],
        "serviceName": "string"
    }
],
"sourceVersion": "string",
"topic": "string"
}

```

## 2.63 Policy Counter Id

**Table 2-325 Supported REST APIs**

| Description              | HTTP Method or Custom Operation | Resource URI                                                                                    | Possible Result Code          |
|--------------------------|---------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------|
| Create Policy Control Id | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/policycounterids                       | See <a href="#">Table A-3</a> |
| Export Policy Control Id | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/policycounterids/export                | See <a href="#">Table A-1</a> |
| Import Policy Control Id | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/policycounterids/import                | See <a href="#">Table A-3</a> |
| Get Policy Control Id    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/policycounterids/{policyCounterIdName} | See <a href="#">Table A-1</a> |
| Update Policy Control Id | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/policycounterids/{policyCounterIdName} | See <a href="#">Table A-2</a> |

**Table 2-325 (Cont.) Supported REST APIs**

| Description              | HTTP Method or Custom Operation | Resource URI                                                                                    | Possible Result Code          |
|--------------------------|---------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------|
| Delete Policy Control Id | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/common/policycounterids/{policyCounterIdName} | See <a href="#">Table A-4</a> |

**Get, Create, and Update Policy Counter Id s****Table 2-326 Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C)aints | Description                                        |
|---------------|-----------|------------------------------------------------|----------------------------------------------------|
| defaultStatus | string    | O                                              | Specifies the default status of Policy Counter Id. |
| desc          | string    | O                                              | Specifies the description of Policy Counter Id.    |
| id            | string    | O                                              | Specifies the ID of Policy Counter Id.             |
| name          | string    | M                                              | Specifies the name of Policy Counter Id.           |

**Sample Request body structure for POST and PUT operations:**

```
[
  {
    "columns": [
      {
        "dataType": "accessType",
        "isKey": true,
        "name": "string"
      }
    ],
    "description": "string",
    "name": "string",
    "rows": [
      {}
    ],
    "serviceName": "string",
    "serviceType": "string"
  }
]
```

**Sample Response body structure for GET, POST, and PUT operations:**

```
{
  "date": "string",
  "errors": [
    {
```

```

        "message": "string",
        "name": "string"
    }
],
"exportData": [
    {
        "columns": [
            {
                "dataType": "accessType",
                "isKey": true,
                "name": "string"
            }
        ],
        "description": "string",
        "name": "string",
        "rows": [
            {}
        ],
        "serviceName": "string"
    }
],
"sourceVersion": "string",
"topic": "string"
}

```

### Delete Policy Counter Id s

**Table 2-327 Request/Response Body Parameters**

| Field Name          | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description              |
|---------------------|-----------|-------------------------------------------------|--------------------------|
| policyControlIdName | string    | M                                               | Policy Counter Id's Name |

### Export/Import Policy Counter Id s

**Table 2-328 Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                 |
|---------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| date          | string    |                                                 | Current timestamp                                                                                                           |
| exportData    | array     |                                                 | Exported list of policy control id. For more information, see <a href="#">Get, Create, and Update Policy Counter Id s</a> . |
| key           | string    |                                                 | Indicates the ID                                                                                                            |
| sourceVersion | string    |                                                 | System version of product from which data is exported                                                                       |
| topic         | string    |                                                 | Topic of each managed object                                                                                                |

**Sample Request Body structure for Import/Export operations:**

```

{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "columns": [
        {
          "dataType": "accessType",
          "isKey": true,
          "name": "string"
        }
      ],
      "description": "string",
      "name": "string",
      "rows": [
        {}
      ],
      "serviceName": "string"
    }
  ],
  "sourceVersion": "string",
  "topic": "string"
}

```

## 2.64 Diameter Settings

This section describes the available service URIs to retrieve and update diameter settings.

**Table 2-329 Supported REST APIs**

| Description              | HTTP Method or Custom Operation | Resource URI                                                    | Possible Result Code          |
|--------------------------|---------------------------------|-----------------------------------------------------------------|-------------------------------|
| Get Diameter Settings    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/settings        | See <a href="#">Table A-1</a> |
| Update Diameter Settings | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/settings        | See <a href="#">Table A-2</a> |
| Export Diameter Settings | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/settings/export | See <a href="#">Table A-1</a> |
| Import Diameter Settings | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/settings/import | See <a href="#">Table A-3</a> |

**Get and Update Operations**

This section describes the body parameters for APIs for diameter settings.

**Table 2-330 Request and Response Body Parameters**

| Field Name        | Data Type                       | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                           |
|-------------------|---------------------------------|-------------------------------------------------|-----------------------------------------------------------------------|
| congestionControl | DiamSettingsCongestionControl   | O                                               | Specifies the congestion control configurations.                      |
| overloadControl   | DiamSettingsOverloadControl     | O                                               | Specifies the overload control configurations.                        |
| timer             | DiamSettingsTimer               | O                                               | Specifies the timer configurations for Diameter Gateway.              |
| transport         | DiamSettingsTransport           | O                                               | Specifies the transport protocol configurations for Diameter Gateway. |
| topologyhiding    | DiamSettingTopologyhiding       | O                                               | Specifies the topology hiding configurations for Diameter Gateway.    |
| messageTimers     | DiamSettingsMessageTimers       | O                                               | Specifies the request timer configurations for Diameter applications. |
| messagePriority   | DiameterSettingsMessagePriority | O                                               | Specifies the message priority profile.                               |
| advancedSettings  | DiamAdvancedSettings            | O                                               | Specifies the list of key/value pair.                                 |

**Table 2-331 DiamSettingsCongestionControl**

| Field Name                    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                      |
|-------------------------------|-----------|-------------------------------------------------|------------------------------------------------------------------|
| congestionLoadSheddingProfile | string    | O                                               | Specifies the load shedding profile name for congestion control. |

**Table 2-332 DiamSettingsOverloadControl**

| Field Name                  | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                    |
|-----------------------------|-----------|-------------------------------------------------|----------------------------------------------------------------|
| overloadLoadSheddingProfile | string    | Optional                                        | Specifies the load shedding profile name for overload control. |

Table 2-333 messagePriority

| Field Name             | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                              |
|------------------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------------|
| messagePriorityProfile | string    | Optional                                        | Specifies the message priority profile name for overload control and congestion control. |

Table 2-334 DiamSettingsTimer

| Field Name        | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                           |
|-------------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| connectionTimeout | Number    | M                                               | Defines the connection timeout interval in seconds. The default value is 3 seconds.                                                   |
| reconnectDelay    | Number    | M                                               | Defines the time frame to delay before attempting to reconnect after a connection failure in seconds. The default value is 3 seconds. |
| responseTimeout   | Number    | M                                               | Defines the response timeout interval in milliseconds. The default value is 5000 ms.                                                  |
| watchdogInterval  | Number    | M                                               | Defines the watchdog interval in seconds. The default value is 6 seconds.                                                             |

Table 2-335 DiamSettingsTransport

| Field Name | Data Type             | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                               |
|------------|-----------------------|-------------------------------------------------|-----------------------------------------------------------|
| protocol   | string, Enum: Array[] | O                                               | Specifies the Diameter protocol. The values: [TCP, SCTP]. |

**Table 2-336 DiamSettingsMessageTimers**

| Field Name                     | Data Type          | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                             |
|--------------------------------|--------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| applId                         | intger             | O                                               | Specifies the diameter application ID for which topology hiding feature is to be enabled.<br>Example: 16777236          |
| appResponseTimeoutValue        | integer            | O                                               | Specifies the application response timeout value in milliseconds.<br>Minimum: 3<br>Maximum: 2147483647<br>Example: 5000 |
| cmdCodeResponseTimeoutValueMap | Map(String:String) | O                                               | Specifies Command Code Response Timeout for AAR, STR, RAR and ASR.                                                      |

**Table 2-337 DiamAdvancedSettings**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                     |
|------------|-----------|-------------------------------------------------|---------------------------------|
| key        | string    | O                                               | Specifies the key name.         |
| value      | string    | O                                               | Specifies the value of the key. |

**Sample Request body structure for GET and PUT operations:**

```
{
  "timer": {
    "reconnectDelay": "3",
    "responseTimeout": "5000",
    "connectionTimeout": "3",
    "watchdogInterval": "6"
  },
  "transport": {
    "protocol": "TCP"
  },
  "congestionControl": {
    "congestionLoadSheddingProfile": "string",
  },
  "overloadControl": {
    "overloadLoadSheddingProfile": "string",
  },
  "messagePriority": {
    "messagePriorityProfile": "string"
  },
  "topologyhiding": {
    "EnableTopologyHiding": true,

```



```

    "AppsToHide": [
      "Gx"
    ]
  },
  "messageTimers": [
    {
      "appId": 16777236,
      "appResponseTimeoutValue": 5000,
      "cmdCodeResponseTimeoutValueMap": {
        "258": 5000,
        "265": 5000,
        "272": 5000,
        "274": 5000,
        "275": 5000,
        "8388635": 5000,
        "8388636": 5000,
        "8388637": 5000
      }
    }
  ],
  "advancedSettings": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}

```

## Export and Import Diameter Settings

The following table describes the request and response parameters for export and import operations:

**Table 2-338 Request and Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                               |
|----------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| date           | string    | Optional                                        | Specifies the current timestamp.                                                                          |
| errors.message | string    | Optional                                        | The reason of the failure.                                                                                |
| error.name     | string    | Optional                                        | Name of the components that the user is unable to export or import successfully.                          |
| exportData     | array     | Mandatory                                       | Exported list of diameter settings. For more information, see <a href="#">Get and Update Operations</a> . |
| sourceVersion  | string    | Optional                                        | System version of product from which data is exported.                                                    |

**Table 2-338 (Cont.) Request and Response Body Parameters**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                   |
|------------|-----------|-------------------------------------------------|-------------------------------|
| topic      | string    | Mandatory                                       | Topic of each managed object. |

**Sample Request Body structure for Import/Export operations:**

```

{
  "topic": "string",
  "sourceVersion": "string",
  "date": "string",
  "exportData": {
    "timer": {
      "reconnectDelay": "3",
      "responseTimeout": "5000",
      "connectionTimeout": "3",
      "watchdogInterval": "6"
    },
    "transport": {
      "protocol": "TCP"
    },
    "congestionControl": {
      "congestionLoadSheddingProfile": "string",
    },
    "overloadControl": {
      "overloadLoadSheddingProfile": "string",
    },
    "messagePriority": {
      "messagePriorityProfile": "string"
    },
    "topologyhiding": {
      "EnableTopologyHiding": true,
      "AppsToHide": [
        "Gx"
      ]
    },
    "messageTimers": [
      {
        "appId": 16777236,
        "appResponseTimeoutValue": 5000,
        "cmdCodeResponseTimeoutValueMap": {
          "258": 5000,
          "265": 5000,
          "272": 5000,
          "274": 5000,
          "275": 5000,
          "8388635": 5000,
          "8388636": 5000,
          "8388637": 5000
        }
      }
    ]
  }
}

```

```

    ],
    "advancedSettings": [
      {
        "key": "string",
        "value": "string"
      }
    ],
    "errors": [
      {
        "name": "string",
        "message": "string"
      }
    ]
  }
}

```

## 2.65 Diameter Routing Table

**Table 2-339 Supported REST APIs**

| Description                   | HTTP Method or Custom Operation | Resource URI                                                        | Possible Result Code          |
|-------------------------------|---------------------------------|---------------------------------------------------------------------|-------------------------------|
| Export Diameter Routing Table | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/routingTable/export | See <a href="#">Table A-1</a> |
| Import Diameter Routing Table | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/routingTable/import | See <a href="#">Table A-3</a> |
| Get Diameter Routing Table    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/routingTable        | See <a href="#">Table A-1</a> |
| Update Diameter Routing Table | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/routingTable        | See <a href="#">Table A-2</a> |

### Get and Update Operations

**Table 2-340 Request/Response Body Parameters**

| Field Name   | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description |
|--------------|-----------|-------------------------------------------|-------------|
| defaultRoute |           |                                           |             |
| routeTable   |           |                                           |             |

**Table 2-341 defaultRoute**

| Field Name | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description |
|------------|-----------|-------------------------------------------|-------------|
| serverID   | string    | O                                         |             |

**Table 2-342 routeTable**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|------------|-----------|-------------------------------------------------|-------------|
| appIDs     |           |                                                 |             |
| hosts      | string    |                                                 |             |
| name       | string    | O                                               |             |
| priority   | string    | O                                               |             |
| realms     | string    |                                                 |             |
| type       | Realm     |                                                 |             |

**Sample Request body structure for PUT operations:**

```

"defaultRoute": {
  "serverId": "string"
},
"routeTable": [
  {
    "appIds": [
      "All"
    ],
    "hosts": [
      "string"
    ],
    "name": "string",
    "priority": "string",
    "realms": [
      "string"
    ],
    "serverIds": [
      "string"
    ],
    "type": "Host"
  }
]

```

**Sample Response body structure for GET and PUT operations:**

```

{
  "defaultRoute": {
    "serverId": "string"
  },
  "routeTable": [
    {
      "appIds": [
        "All"
      ],
      "hosts": [
        "string"
      ],

```

```

        "name": "string",
        "priority": "string",
        "realms": [
            "string"
        ],
        "serverIds": [
            "string"
        ],
        "type": "Host"
    }
}

```

## Export/Import Diameter Routing Table

**Table 2-343 Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                    |
|---------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| date          | string    |                                                 | Current timestamp                                                                                              |
| exportData    | array     |                                                 | Exported list of diameter routing table. For more information, see <a href="#">Get and Update Operations</a> . |
| sourceVersion | string    |                                                 | System version of product from which data is exported                                                          |
| topic         | string    |                                                 | Topic of each managed object                                                                                   |

### Sample Request Body structure for Import/Export operations:

```

{
  "date": "string",
  "exportData": {
    "defaultRoute": {
      "serverId": "string"
    },
    "routeTable": [
      {
        "appIds": [
          "All"
        ],
        "hosts": [
          "string"
        ],
        "name": "string",
        "priority": "string",
        "realms": [
          "string"
        ],
        "serverIds": [
          "string"
        ],
      },
    ],
  },
}

```

```

        "type": "Host"
      }
    ]
  },
  "sourceVersion": "string",
  "topic": "string"
}

```

## 2.66 Data Sources

**Table 2-344 Supported REST APIs**

| Create Data Sources | HTTP Method or Custom Operation | Resource URI                                                        | Possible Result Code          |
|---------------------|---------------------------------|---------------------------------------------------------------------|-------------------------------|
| Get Data Sources    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/datasources/{datasourceName} | See <a href="#">Table A-1</a> |
| Update Data Sources | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/datasources/{datasourceName} | See <a href="#">Table A-2</a> |
| Delete Data Source  | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/datasources/{datasourceName} | See <a href="#">Table A-4</a> |
| Create Data Sources | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/datasources                  | See <a href="#">Table A-3</a> |
| Import Data Sources | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/datasources/import           | See <a href="#">Table A-3</a> |
| Export Data Sources | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/datasources/export           | See <a href="#">Table A-1</a> |

### Get, Create, and Update Data Sources

**Table 2-345 Request/Response Body Parameters**

| Field Name  | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                       |
|-------------|-----------|-----------------------------------------|---------------------------------------------------------------------------------------------------|
| name        | string    | M                                       | Data Source Name                                                                                  |
| description | string    | O                                       | Details about the data source.                                                                    |
| type        | string    | O                                       | Type of data source. Possible values are: Enum:[ LDAP, Sy]                                        |
| admin_state | boolean   | O                                       | when value is set to true, datasource (Sy) interaction takes place.<br><b>Default Value:</b> true |

Table 2-345 (Cont.) Request/Response Body Parameters

| Field Name            | Data Type     | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                 |
|-----------------------|---------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| realm                 | string        | O                                               | Defines the realm of the primary and optional secondary servers to connect (required).                                                                                                                                                                                                                      |
| enable_subscription   | boolean       | O                                               | Indicates whether MPE needs to subscribe to notifications from SH.<br><b>Default Value:</b> true                                                                                                                                                                                                            |
| use_notif_eff         | boolean       | O                                               | Specifies the User Data Request / Answer will allow multiple data references, Service Indications, and Identity Sets. The User Data Answer will be able to combine DataReference items resulting in the User Data Answer contents including a single XML document with the separate XML sections populated. |
| ocs_from_peer_nodes   | boolean       | O                                               | Selecting diameter peer nodes as primary, secondary, tertiary, and quaternary servers for Sy data source type.                                                                                                                                                                                              |
| refPeerNodePrimary    | string        | O                                               | Primary diameter peer node server.                                                                                                                                                                                                                                                                          |
| refPeerNodeSecondary  | string        | O                                               | Secondary diameter peer node server.                                                                                                                                                                                                                                                                        |
| refPeerNodeTertiary   | string        | O                                               | Tertiary diameter peer node server.                                                                                                                                                                                                                                                                         |
| refPeerNodeQuaternary | string        | O                                               | Quaternary diameter peer node server.                                                                                                                                                                                                                                                                       |
| timer_profile         | string        | -                                               | -                                                                                                                                                                                                                                                                                                           |
| read_connection       | string        | O                                               | Number of read connections established with data source. Possible values are: Enum:[ 1, 2, 3, 4, 5, 6, 7, 8, 9, 10]                                                                                                                                                                                         |
| primary_server        | PrimaryServer | M                                               | Primary data source server. The LDAP connection will be established with primary data source.                                                                                                                                                                                                               |
| secondary_server      | CommonServer  | O                                               | Secondary data source server. If Primary server is not reachable, then LDAP connection will be established with secondary (if available).                                                                                                                                                                   |
| tertiary_server       | CommonServer  | O                                               | Tertiary data source server. If primary and secondary are not reachable, then LDAP connection will be established with tertiary (if available) .                                                                                                                                                            |

**Table 2-345 (Cont.) Request/Response Body Parameters**

| Field Name        | Data Type      | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                  |
|-------------------|----------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| quaternary_server | CommonServer   | O                                               | Quaternary data source server. If primary , secondary and tertiary are not reachable then LDAP connection will be established with tertiary (if available) . |
| search_criteria   | SearchCriteria | O                                               | The criteria on which the data source search will be performed.                                                                                              |
| search_filter     | SearchFilter   | O                                               | The search filter during the data source search.                                                                                                             |
| ldap_retry        | LdapRetry      | O                                               | The retry configuration for LDAP requests.                                                                                                                   |

**Table 2-346 PrimaryServer**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                        |
|------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------|
| identity   | string    | M                                               | Primary server identity.                                                           |
| addr       | string    | M                                               | Load balancer IP of Diameter gateway.                                              |
| port       | string    | M                                               | Primary server Port.<br>Possible values are:<br>Enter a range in [0-65535] number. |

**Table 2-347 CommonServer**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                       |
|------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------|
| identity   | string    | O                                               | Common server identity.                                                           |
| addr       | string    | O                                               | Load balancer IP of Diameter gateway.                                             |
| port       | string    | M                                               | Common server Port.<br>Possible values are:<br>Enter a range in [0-65535] number. |

**Table 2-348 SearchCriteria**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|------------|-----------|-------------------------------------------------|-------------|
| rootDN     | string    | O                                               | -           |
| baseDN     | string    | O                                               | -           |



**Table 2-348 (Cont.) SearchCriteria**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                           |
|------------|-----------|-------------------------------------------------|-------------------------------------------------------|
| type       | string    | O                                               | Possible values are:<br>Enum:[ NAI, MSISDN,<br>IMSI ] |

**Table 2-349 SearchFilter**

| Field Name      | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                           |
|-----------------|-----------|-------------------------------------------------|-------------------------------------------------------|
| id_filters_type | string    | O                                               | Possible values are:<br>Enum:[ NAI, MSISDN,<br>IMSI ] |

**Table 2-350 LdapRetry**

| Field Name             | Data Type        | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                               |
|------------------------|------------------|-------------------------------------------------|-------------------------------------------|
| retry_enabled          | Boolean          | O                                               | Possible values are:<br>True, False.      |
| max_retry_count        | Integer          | O                                               | Possible values are: 1,<br>2.             |
| retry_on_error_timeout | List of Integers | O                                               | Possible values are:<br>Positive Integers |

**Sample Request body structure for GET, POST, and PUT operations:**

```
{
  "name": "string",
  "description": "string",
  "type": "LDAP",
  "admin_state": true,
  "realm": "string",
  "enable_subscription": true,
  "use_notif_eff": true,
  "ocs_from_peer_nodes": true,
  "refPeerNodePrimary": "string",
  "refPeerNodeSecondary": "string",
  "refPeerNodeTertiary": "string",
  "refPeerNodeQuaternary": "string",
  "sh_profile": "v1",
  "timer_profile": "string",
  "read_connection": "1",
  "primary_server": {
    "identity": "string",
    "addr": "string",
    "port": "string"
  }
}
```

```

    },
    "secondary_server": {
      "identity": "string",
      "addr": "string",
      "port": "string"
    },
    "tertiary_server": {
      "identity": "string",
      "addr": "string",
      "port": "string"
    },
    "quaternary_server": {
      "identity": "string",
      "addr": "string",
      "port": "string"
    },
    "search_criteria": {
      "rootDN": "string",
      "baseDN": "string",
      "type": "NAI"
    },
    "search_filter": {
      "id_filters_type": "NAI"
    }
  }
  "ldap_retry": {
    "retry_enabled": true,
    "max_retry_count": 0,
    "retry_on_error_timeout": [0]
  }
}

```

## Delete Data Sources

**Table 2-351 Request/Response Body Parameters**

| Field Name       | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description      |
|------------------|-----------|-------------------------------------------------|------------------|
| Data Source Name | string    | M                                               | Data Source Name |

## Export/Import Data Sources

**Table 2-352 Request/Response Body Parameters**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                     |
|------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| date       | string    | -                                               | Current timestamp                                                                                               |
| exportData | array     | -                                               | Exported list of data sources. For more information, see <a href="#">Get, Create, and Update Data Sources</a> . |
| key        | string    | -                                               | Indicates the ID                                                                                                |

**Table 2-352 (Cont.) Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                               |
|---------------|-----------|-------------------------------------------------|-----------------------------------------------------------|
| sourceVersion | string    | -                                               | System version of the product from which data is exported |
| systemVersion | string    | -                                               |                                                           |
| topic         | string    | -                                               | Topic of each managed object                              |

**Sample Request Body structure for Import/Export operations:**

```

{
  "systemVersion": "string",
  "topic": "string",
  "sourceVersion": "string",
  "date": "string",
  "exportData": [
    {
      "name": "string",
      "description": "string",
      "type": "LDAP",
      "admin_state": true,
      "realm": "string",
      "enable_subscription": true,
      "use_notif_eff": true,
      "ocs_from_peer_nodes": true,
      "refPeerNodePrimary": "string",
      "refPeerNodeSecondary": "string",
      "refPeerNodeTertiary": "string",
      "refPeerNodeQuaternary": "string",
      "sh_profile": "v1",
      "timer_profile": "string",
      "read_connection": "1",
      "primary_server": {
        "identity": "string",
        "addr": "string",
        "port": "string"
      },
      "secondary_server": {
        "identity": "string",
        "addr": "string",
        "port": "string"
      },
      "tertiary_server": {
        "identity": "string",
        "addr": "string",
        "port": "string"
      },
      "quaternary_server": {
        "identity": "string",

```

```

        "addr": "string",
        "port": "string"
    },
    "search_criteria": {
        "rootDN": "string",
        "baseDN": "string",
        "type": "NAI"
    },
    "search_filter": {
        "id_filters_type": "NAI"
    }
}
],
"errors": [
    {
        "name": "string",
        "message": "string"
    }
]
}

```

## 2.67 Bulk Import Export Controller

**Table 2-353 Supported REST APIs**

| Description         | HTTP Method or Custom Operation | Resource URI                                                                           | Possible Result Code                                                             |
|---------------------|---------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| Bulk Import         | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/administration/import                           | 200: OK<br>201: Created<br>401: Unauthorized<br>403: Forbidden<br>404: Not Found |
| Import Status       | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/administration/import/{importResourceId}/status | 200: OK<br>401: Unauthorized<br>403: Forbidden<br>404: Not Found                 |
| Import Report       | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/administration/import/{importResourceId}/report | 200: OK<br>401: Unauthorized<br>403: Forbidden<br>404: Not Found                 |
| Import Resource Ids | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/administration/import                           | 200: OK<br>401: Unauthorized<br>403: Forbidden<br>404: Not Found                 |
| Bulk Export         | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/administration/export                           | 200: OK<br>201: Created<br>401: Unauthorized<br>403: Forbidden<br>404: Not Found |

Table 2-353 (Cont.) Supported REST APIs

| Description              | HTTP Method or Custom Operation | Resource URI                                                                             | Possible Result Code                                             |
|--------------------------|---------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| Export Status for Policy | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/administration/export/{exportResourceId}/status   | 200: OK<br>401: Unauthorized<br>403: Forbidden<br>404: Not Found |
| Export Report for Policy | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/administration/export/{exportResourceId}/report   | 200: OK<br>401: Unauthorized<br>403: Forbidden<br>404: Not Found |
| Download Exported File   | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/administration/export/{exportResourceId}/download | 200: OK<br>401: Unauthorized<br>403: Forbidden<br>404: Not Found |
| Export Resource Ids      | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/administration/export                             | 200: OK<br>401: Unauthorized<br>403: Forbidden<br>404: Not Found |

**Note**

The **Bulk Import/Export** APIs return a ResourceId in response to the POST request. The ResourceId is the background task id for the POST operations. This id can be used to track the import or export requests, and download the export data. For example, the POST API for bulk export operation takes MO name as input. The response of this API contains the resource id of the file created for export. You can use this resource Id to download the export data at any point of time.

Below are the status displayed by Bulk import/export:

- **IN\_PROGRESS**: The import/export is running.
- **DONE**: The import/export is finished. Following are the possible status if the import/export is in DONE status:
  - **SUCCESS** : The import/export is successful
  - **FAILED** : The import/export is failed
  - **PARTIAL\_SUCCESS** : The import/export is partially successful

## 2.68 Consistent Logging Level

**Table 2-354 Supported REST APIs - Consistent Logging Level**

| Description                               | HTTP Method or Custom Operation | Resource URI                                                             | Possible Result Code          |
|-------------------------------------------|---------------------------------|--------------------------------------------------------------------------|-------------------------------|
| Get All (Export) Consistent Logging Level | GET                             | /oc-cnpolicy-configuration/v1/conLoggingLevelConfig/export/{serviceType} | See <a href="#">Table A-1</a> |
| Import Consistent Logging Level           | POST                            | /oc-cnpolicy-configuration/v1/conLoggingLevelConfig/import/{serviceType} | See <a href="#">Table A-3</a> |
| Get Consistent Logging Level              | GET                             | /oc-cnpolicy-configuration/v1/conLoggingLevelConfig/{serviceType}        | See <a href="#">Table A-1</a> |
| Update Consistent Logging Level           | PUT                             | /oc-cnpolicy-configuration/v1/conLoggingLevelConfig/{serviceType}        | See <a href="#">Table A-2</a> |

### Get and Update Consistent Logging Level

**Table 2-355 Request/Response Body Parameters**

| Field Name                          | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------|-----------|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| appLogLevel                         | String    | M                                         | Defines the application's root log level.                                                                                                                                                                                                                                                                                        |
| packageLogLevel: logLevelForPackage | String    | O                                         | Defines the log level for the package.                                                                                                                                                                                                                                                                                           |
| packageLogLevel: packageName        | String    | O                                         | Defines the package name.                                                                                                                                                                                                                                                                                                        |
| serviceType                         | String    | M                                         | Specifies the following supported service types: <ul style="list-style-type: none"> <li>• PCRF Core</li> <li>• PCF Session Management</li> <li>• PCF Access and Mobility</li> <li>• PCF UE Policy</li> <li>• PCF User Connector</li> <li>• NRF Discovery Client</li> <li>• NRF Management Client</li> <li>• Policy DS</li> </ul> |

### Sample Request body for Consistent Logging Level PUT operation:

```
{
  "appLogLevel": "DEBUG",
  "packageLogLevel": [
```

```

    {
      "logLevelForPackage": "DEBUG",
      "packageName": "string"
    }
  ]
}

```

**Sample Response body structure for Consistent Logging Level GET and PUT operation:**

```

{
  "appLogLevel": "DEBUG",
  "packageLogLevel": [
    {
      "logLevelForPackage": "DEBUG",
      "packageName": "string"
    }
  ]
}

```

**Import and Export Consistent Logging Level**

**Table 2-356 Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                    |
|---------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| date          | string    |                                                 | Current timestamp                                                                                                              |
| exportData    | array     |                                                 | Exported list of Consistent Logging Level. For more information, see <a href="#">Get and Update Consistent Logging Level</a> . |
| key           | string    |                                                 | Indicates the ID                                                                                                               |
| sourceVersion | string    |                                                 | System version of product from which data is exported                                                                          |
| topic         | string    |                                                 | Topic of each managed object                                                                                                   |

**Sample Request Body structure for Consistent Logging Level Import and Export operations:**

```

{
  "date": "string",
  "exportData": {
    "appLogLevel": "DEBUG",
    "packageLogLevel": [
      {
        "logLevelForPackage": "DEBUG",
        "packageName": "string"
      }
    ]
  },
}

```

```

    "key": "string",
    "sourceVersion": "string",
    "topic": "string"
  }

```

## 2.69 Load Shedding Profile

This section describes the available service URIs to create and configure load shedding profiles for CNC Policy.

**Table 2-357 Supported REST APIs - Load Shedding Profile**

| Description                   | HTTP Method or Custom Operation | Resource URI                                                                            | Possible Result Code          |
|-------------------------------|---------------------------------|-----------------------------------------------------------------------------------------|-------------------------------|
| Create Load Shedding Profile  | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/loadsheddingprofiles                    | See <a href="#">Table A-3</a> |
| Get Load Shedding Profile     | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/loadsheddingprofiles/{loadsheddingName} | See <a href="#">Table A-1</a> |
| Update Load Shedding Profile  | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/loadsheddingprofiles/{loadsheddingName} | See <a href="#">Table A-2</a> |
| Export Load Shedding Profiles | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/loadsheddingprofiles/export             | See <a href="#">Table A-1</a> |
| Import Load Shedding Profiles | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/loadsheddingprofiles/import             | See <a href="#">Table A-3</a> |
| Delete Load Shedding Profile  | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/loadsheddingprofiles/{loadsheddingName} | See <a href="#">Table A-4</a> |

### Get, Create, and Update Load Shedding Profile

The following table describes the request and response body parameters used in APIs for load shedding profiles.



Table 2-358 Request and Response Body Parameters

| Field Name                | Data Type                                                                                                                | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                              |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| loadSheddingRules         | CongestionLoadSheddingRules                                                                                              | Optional                                        | Specifies the list of configured Congestion Load Shedding Rules.                                                                                                                                         |
| name                      | string                                                                                                                   | Mandatory                                       | Specifies the unique name of the load shedding profile.                                                                                                                                                  |
| overloadLoadSheddingRules | OverloadLoadSheddingRules                                                                                                | Optional                                        | Specifies the list of configured Overload Load Shedding Rules.                                                                                                                                           |
| type                      | Enum<br>The supported values are: <ul style="list-style-type: none"> <li>Overload Control</li> <li>congestion</li> </ul> | Optional                                        | Specifies the type of load shedding profile. The load shedding profile can be one of the following types: <ul style="list-style-type: none"> <li>Congestion Control</li> <li>Overload Control</li> </ul> |

Table 2-359 CongestionLoadSheddingRules

| Field Name        | Data Type                                                                                                                                                                                                       | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ansWithResultCode | Enum<br>The supported values are: <ul style="list-style-type: none"> <li>DIAMETER_TO_O_BUSY</li> <li>DIAMETER_UNABLE_TO_COMPLY</li> <li>DIAMETER_UNABLE_TO_DELIVER</li> <li>EXPERIMENTAL_RESULT_CODE</li> </ul> | Optional                                        | Specifies the result code, returned in the answer response, when request message is rejected as part of congestion control.                                                                                                                                                |
| discardPriority   | integer                                                                                                                                                                                                         | Mandatory                                       | Specifies the discard priority for the congestion load shedding rule. The discard priority value can be a number from 0 to 15. Any request message with equal or lower priority is rejected.                                                                               |
| resultCode        | integer                                                                                                                                                                                                         | Conditional                                     | <b>Note:</b> Specify a value for this parameter when you choose EXPERIMENTAL_RESULT_CODE value for the ansWithResultCode parameter. Specifies the custom result code, which is returned in the answer response when service request is rejected due to congestion control. |

Table 2-359 (Cont.) CongestionLoadSheddingRules

| Field Name | Data Type                                                                                                                       | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                       |
|------------|---------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| state      | Enum<br>The supported values are: <ul style="list-style-type: none"> <li>• CONGESTED</li> <li>• DANGER_OF_CONGESTION</li> </ul> | Optional                                        | Specifies the type of state for which you are defining the rule.                                                                                                                                                                                                  |
| vendorId   | integer                                                                                                                         | Conditional                                     | <b>Note:</b> Specify a value for this parameter when you choose EXPERIMENTAL_RESULT_CODE value for the ansWithResultCode parameter. Specifies the vendor ID, which is returned in the answer response when service request is rejected due to congestion control. |

Table 2-360 OverloadLoadSheddingRules

| Field Name        | Data Type                                                                                                                                                                                                              | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                           |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ansWithResultCode | Enum<br>The supported values are: <ul style="list-style-type: none"> <li>• DIAMETER_TOO_BUSY</li> <li>• DIAMETER_UNABLE_TO_COMPLY</li> <li>• DIAMETER_UNABLE_TO_DELIVER</li> <li>• EXPERIMENTAL_RESULT_CODE</li> </ul> | Optional                                        | Specifies the result code, returned in the answer response, when request message is rejected as part of overload control.                                                             |
| discardPriority   | integer                                                                                                                                                                                                                | Mandatory                                       | Specifies the discard priority for the overload shedding rule. The discard priority value can be a number from 0 to 15. Any request message with equal or lower priority is rejected. |
| level             | Enum<br>The supported values are: <ul style="list-style-type: none"> <li>• L1</li> <li>• L2</li> <li>• L3</li> <li>• L4</li> </ul>                                                                                     | Mandatory                                       | Specifies the name of the level. The name specified in this parameter must match the level name in Ingress Gateway's ocdiscardpolicies.                                               |

Table 2-360 (Cont.) OverloadLoadSheddingRules

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                   |
|------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| resultCode | integer   | Conditional                                     | <b>Note:</b> Specify a value for this parameter when you choose EXPERIMENTAL_RESULT_CODE value for the ansWithResultCode parameter. Specifies the custom result code, which is returned in the answer response when service request is rejected due to overload control.<br>. |
| vendorId   | integer   | Conditional                                     | <b>Note:</b> Specify a value for this parameter when you choose EXPERIMENTAL_RESULT_CODE value for the ansWithResultCode parameter. Specifies the vendor ID, which is returned in the answer response when service request is rejected due to overload control.<br>.          |

**Sample Request body for Load Shedding Profile (PUT and POST operations):**

```

{
  "loadSheddingRules": [
    {
      "ansWithResultCode": "DIAMETER_TOO_BUSY",
      "discardPriority": 0,
      "resultCode": 0,
      "state": "CONGESTED",
      "vendorId": 0
    }
  ],
  "name": "string",
  "overloadLoadSheddingRules": [
    {
      "ansWithResultCode": "DIAMETER_TOO_BUSY",
      "discardPriority": 0,
      "level": "L1",
      "resultCode": 0,
      "vendorId": 0
    }
  ],
  "type": "DIAMETER_TOO_BUSY"
}

```

**Sample Response body for Load Shedding Profile (PUT, GET, and POST operation):**

```

{
  "loadSheddingRules": [
    {
      "ansWithResultCode": "DIAMETER_TOO_BUSY",
      "discardPriority": 0,
      "resultCode": 0,
      "state": "CONGESTED",
      "vendorId": 0
    }
  ],
  "name": "string",
  "overloadLoadSheddingRules": [
    {
      "ansWithResultCode": "DIAMETER_TOO_BUSY",
      "discardPriority": 0,
      "level": "L1",
      "resultCode": 0,
      "vendorId": 0
    }
  ],
  "type": "DIAMETER_TOO_BUSY"
}

```

**Import and Export Load Shedding Profile****Table 2-361 Request and Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                        |
|----------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| date           | string    | Optional                                        | Specifies the current timestamp.                                                                                                   |
| errors.message | string    | Optional                                        | The reason of the failure.                                                                                                         |
| error.name     | string    | Optional                                        | Name of the components that the user is unable to export or import successfully.                                                   |
| exportData     | array     | Mandatory                                       | Exported list of Load Shedding Profiles. For more information, see <a href="#">Get, Create, and Update Load Shedding Profile</a> . |
| key            | string    | Optional                                        | Indicates the ID of the load shedding profile.                                                                                     |
| sourceVersion  | string    | Optional                                        | System version of product from which data is exported.                                                                             |
| topic          | string    | Mandatory                                       | Topic of each managed object.                                                                                                      |

**Sample Request Body structure for Load Shedding Profile Import and Export operations:**

```

{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "loadSheddingRules": [
        {
          "ansWithResultCode": "DIAMETER_T00_BUSY",
          "discardPriority": 0,
          "resultCode": 0,
          "state": "CONGESTED",
          "vendorId": 0
        }
      ],
      "name": "string",
      "overloadLoadSheddingRules": [
        {
          "ansWithResultCode": "DIAMETER_T00_BUSY",
          "discardPriority": 0,
          "level": "L1",
          "resultCode": 0,
          "vendorId": 0
        }
      ],
      "type": "DIAMETER_T00_BUSY"
    }
  ],
  "key": "string",
  "sourceVersion": "string",
  "topic": "string"
}

```

## 2.70 Message Priority Profile

**Table 2-362 Supported REST APIs - Message Priority Profile**

| Description                     | HTTP Method or Custom Operation | Resource URI                                                            | Possible Result Code          |
|---------------------------------|---------------------------------|-------------------------------------------------------------------------|-------------------------------|
| Create Message Priority Profile | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/messagepriorityprofiles | See <a href="#">Table A-3</a> |

**Table 2-362 (Cont.) Supported REST APIs - Message Priority Profile**

| Description                      | HTTP Method or Custom Operation | Resource URI                                                                                     | Possible Result Code          |
|----------------------------------|---------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------|
| Get Message Priority Profile     | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/messagepriorityprofiles / {messagepriorityName } | See <a href="#">Table A-1</a> |
| Update Message Priority Profile  | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/messagepriorityprofiles / {messagepriorityName } | See <a href="#">Table A-2</a> |
| Export Message Priority Profiles | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/messagepriorityprofiles /export                  | See <a href="#">Table A-1</a> |
| Import Message Priority Profiles | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/messagepriorityprofiles /import                  | See <a href="#">Table A-3</a> |
| Delete Message Priority Profile  | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/messagepriorityprofiles / {messagepriorityName } | See <a href="#">Table A-4</a> |

**Get, Create, and Update Message Priority Profile****Table 2-363 Request/Response Body Parameters**

| Field Name                              | Data Type  | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                                 |
|-----------------------------------------|------------|-------------------------------------------|-------------------------------------------------------------|
| name                                    | string     | Mandatory                                 | Unique name of the message priority profile.                |
| priorityRules []                        | array      | Optional                                  | Specifies configured message priority rules.                |
| priorityRules [].conditions             | conditions | Optional                                  | Specifies the conditions for message priority rule.         |
| priorityRules [].conditions.application | string     | Mandatory                                 | Specifies the type of application.                          |
| priorityRules [].conditions.message     | string     | Mandatory                                 | Specifies the type of message for the selected application. |

Table 2-363 (Cont.) Request/Response Body Parameters

| Field Name                                             | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                           |
|--------------------------------------------------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| priorityRules<br>[].conditions.preDefinedAVPConditions | array     | Optional                                        | Specifies the pre-defined AVP conditions.                                                                                                                                                                                                                                                                                             |
| enableDRMPPriority                                     | boolean   | Optional                                        | When this switch is enabled, the priority for the message rule is assigned from DRMP AVP.                                                                                                                                                                                                                                             |
| enableOCMessagePriority                                | boolean   | Optional                                        | When this switch is enabled, the priority for the message rule is assigned from OC-Message-Priority header attribute.<br><b>Note:</b> In case both Use DRMP Priority and Use OC-Message-Priority is enabled, then OC-Message-Priority value is considered. In case both are disabled then the default message priority is considered. |
| messagePriority                                        | integer   | Mandatory                                       | Specifies the priority assigned to the message. It can be a number from 0 to 15.                                                                                                                                                                                                                                                      |
| ruleName                                               | string    | Mandatory                                       | Specifies the unique name of the message priority rule.                                                                                                                                                                                                                                                                               |
| rulePriority                                           | integer   | Mandatory                                       | Specifies the priority assigned to the message priority rule.                                                                                                                                                                                                                                                                         |

**Sample Request body for Message Priority Profile PUT operation:**

```
{
  "name": "string",
  "priorityRules": [
    {
      "ruleName": "string",
      "messagePriority": 8,
      "rulePriority": 3,
      "enableDRMPPriority": true,
      "enableOCMessagePriority": true,
      "conditions": {
        "application": "Gx",
        "message": "CCR",
        "preDefinedAVPConditions": [
          {
            "conditionName": "CC-Request-Type",
            "conditionOperator": "EQUALS",
            "conditionCSIDValue": [
              "string"
            ],
            "conditionCCRTValue": "UPDATE_REQUEST",
            "conditionRxRTValue": [
              "INITIAL_REQUEST"
            ]
          }
        ]
      }
    }
  ]
}
```

```
[
    {
        "conditionServiceURNIDValue": [
            "string"
        ],
        "conditionMPSIdValue": [
            "string"
        ],
        "conditionMCPTTIdValue": [
            "string"
        ],
        "conditionMCVideoIdValue": [
            "string"
        ],
        "conditionReservPriorityValue": [
            "string"
        ],
        "conditionSNRTypeValue": [
            "ABORT_SESSION_REQUEST"
        ],
        "conditionDRMPValue": [
            "string"
        ],
        "conditionOcmMsgPriorityValue": [
            "string"
        ]
    }
]
```

**Sample Response body structure for Message Priority Profile GET and PUT operation:**

```
{
  "name": "string",
  "priorityRules": [
    {
      "ruleName": "string",
      "messagePriority": 8,
      "rulePriority": 3,
      "enableDRMPPriority": true,
      "enableOCMessagePriority": true,
      "conditions": {
        "application": "Gx",
        "message": "CCR",
        "preDefinedAVPConditions": [
          {
            "conditionName": "CC-Request-Type",
            "conditionOperator": "EQUALS",
            "conditionCSIDValue": [
              "string"
            ],
            "conditionCCRTValue": "UPDATE_REQUEST",
            "conditionRxRTValue": [
```



```
        "INITIAL_REQUEST"  
    ],  
    "conditionServiceURNIDValue": [  
        "string"  
    ],  
    "conditionMPSIdValue": [  
        "string"  
    ],  
    "conditionMCPTTIdValue": [  
        "string"  
    ],  
    "conditionMCVideoIdValue": [  
        "string"  
    ],  
    "conditionReservPriorityValue": [  
        "string"  
    ],  
    "conditionSNRTypeValue": [  
        "ABORT_SESSION_REQUEST"  
    ],  
    "conditionDRMPValue": [  
        "string"  
    ],  
    "conditionOcmMsgPriorityValue": [  
        "string"  
    ]  
}  
]  
}  
}  
}
```

## Import and Export Message Priority Profile

### Table 2-364 Request/Response Body Parameters

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                             |
|----------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| date           | string    |                                                 | Current timestamp                                                                                                                       |
| errors.message | string    |                                                 | The reason of the failure.                                                                                                              |
| errors.name    | string    |                                                 | Name of the components that failed to export or import.                                                                                 |
| exportData     | array     |                                                 | Exported list of Message Priority Profile. For more information, see <a href="#">Get, Create, and Update Message Priority Profile</a> . |
| key            | string    |                                                 | Indicates the ID                                                                                                                        |
| sourceVersion  | string    |                                                 | System version of product from which data is exported                                                                                   |

Table 2-364 (Cont.) Request/Response Body Parameters

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                  |
|------------|-----------|-------------------------------------------------|------------------------------|
| topic      | string    |                                                 | Topic of each managed object |

**Sample Request Body structure for Message Priority Profile Import and Export operations:**

```
{
  "topic": "string",
  "sourceVersion": "string",
  "date": "string",
  "exportData": [
    {
      "name": "string",
      "priorityRules": [
        {
          "ruleName": "string",
          "messagePriority": 8,
          "rulePriority": 3,
          "enableDRMPPriority": true,
          "enableOCMessagePriority": true,
          "conditions": {
            "application": "Gx",
            "message": "CCR",
            "preDefinedAVPConditions": [
              {
                "conditionName": "CC-Request-Type",
                "conditionOperator": "EQUALS",
                "conditionCSIDValue": [
                  "string"
                ],
                "conditionCCRTValue": "UPDATE_REQUEST",
                "conditionRxRTValue": [
                  "INITIAL_REQUEST"
                ],
                "conditionServiceURNIDValue": [
                  "string"
                ],
                "conditionMPSIdValue": [
                  "string"
                ],
                "conditionMCPTTIdValue": [
                  "string"
                ],
                "conditionMCVideoIdValue": [
                  "string"
                ],
                "conditionReservPriorityValue": [
                  "string"
                ]
              ],
            ]
          }
        }
      ]
    }
  ]
}
```

```

        "conditionSNRTypeValue": [
            "ABORT_SESSION_REQUEST"
        ],
        "conditionDRMPValue": [
            "string"
        ],
        "conditionOcMsgPriorityValue": [
            "string"
        ]
    }
}
]
}
],
"errors": [
    {
        "name": "string",
        "message": "string"
    }
]
}

```

## 2.71 Congestion Threshold

**Table 2-365 Supported REST APIs - Congestion Threshold**

| Description                  | HTTP Method or Custom Operation | Resource URI                                                                                                           | Possible Result Code          |
|------------------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Get Congestion Threshold     | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/threshold/{serviceType}<br>{serviceType} available value is "diam-gateway"      | See <a href="#">Table A-1</a> |
| Update Congestion Threshold  | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/threshold/{serviceType}<br>{serviceType} available value: "diam-gateway"        | See <a href="#">Table A-2</a> |
| Export Congestion Thresholds | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/threshold/export/{serviceType}<br>{serviceType} available value: "diam-gateway" | See <a href="#">Table A-1</a> |

**Table 2-365 (Cont.) Supported REST APIs - Congestion Threshold**

| Description                  | HTTP Method or Custom Operation | Resource URI                                                                                                           | Possible Result Code          |
|------------------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Import Congestion Thresholds | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/threshold/import/{serviceType}<br>{serviceType} available value: "diam-gateway" | See <a href="#">Table A-3</a> |

**Get and Update Congestion Threshold****Table 2-366 Request/Response Body Parameters**

| Field Name               | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                                                         |
|--------------------------|-----------|-------------------------------------------|-------------------------------------------------------------------------------------|
| stateCalculationInterval | integer   | Mandatory                                 | Specifies the interval at which congestion state is calculated.                     |
| stateChangeSampleCount   | integer   | Mandatory                                 | Specifies the continuous sample counts for which calculated state remains the same. |
| thresholds               | Threshold | Mandatory                                 | An array to define threshold values for each resource for a given state,            |

**Table 2-367 Request/Response Body Parameters for Thresholds**

| Field Name         | Data Type          | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                                                                    |
|--------------------|--------------------|-------------------------------------------|------------------------------------------------------------------------------------------------|
| state              | string             | Optional                                  | Specifies the congestion state. The state can be in either DANGER_OF_CONGESTION and CONGESTED. |
| resourceUsageLimit | ResourceUsageLimit | Mandatory                                 | Specifies the resource usage limit for a defined state.                                        |

**Table 2-368 Request/Response Body Parameters for ResourceUsageLimit**

| Field Name | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                                                                                                                                 |
|------------|-----------|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| cpu        | integer   | Mandatory                                 | Specifies the threshold value for CPU message.<br>For DANGER_OF_CONGESTION (DOC) state, CPU default value: 60<br>For CONGESTED state, CPU default value: 80 |

**Table 2-368 (Cont.) Request/Response Body Parameters for ResourceUsageLimit**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                        |
|------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| memory     | integer   | Mandatory                                       | Specifies the threshold value for memory message.<br><b>Default Value: 60</b>                                                                                                                      |
| queue      | integer   | Mandatory                                       | Specifies the threshold value for number of messages in the queue<br><br>For DANGER_OF_CONGESTION (DOC) state, Queue count default value: 20<br>For CONGESTED state, Queue count default value: 50 |

**Sample Request body for Congestion Threshold GET and PUT operation:**

```
{
  "stateCalculationInterval": 100,
  "stateChangeSampleCount": 10,
  "thresholds": [
    {
      "state": "CONGESTED",
      "resourceUsageLimit": {
        "cpu": 80,
        "memory": 60,
        "queue": 50
      }
    },
    {
      "state": "DANGER_OF_CONGESTION",
      "resourceUsageLimit": {
        "cpu": 60,
        "memory": 60,
        "queue": 20
      }
    }
  ]
}
```

### Import and Export Congestion Threshold

**Table 2-369 Request/Response Body Parameters**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description       |
|------------|-----------|-------------------------------------------------|-------------------|
| date       | string    |                                                 | Current timestamp |

Table 2-369 (Cont.) Request/Response Body Parameters

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                            |
|----------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| errors.message |           |                                                 | The reason of the failure.                                                                                             |
| errors.name    |           |                                                 | Name of the components that failed to export or import.                                                                |
| exportData     | array     |                                                 | Exported list of Congestion Threshold. For more information, see <a href="#">Get and Update Congestion Threshold</a> . |
| key            | string    |                                                 | Indicates the ID                                                                                                       |
| sourceVersion  | string    |                                                 | System version of product from which data is exported                                                                  |
| topic          | string    |                                                 | Topic of each managed object                                                                                           |

**Sample Request Body structure for Congestion Threshold Import and Export operations:**

```
{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": {
    "stateCalculationInterval": 100,
    "stateChangeSampleCount": 10,
    "thresholds": [
      {
        "state": "CONGESTED",
        "resourceUsageLimit": {
          "cpu": 80,
          "memory": 80,
          "queue": 50
        }
      },
      {
        "state": "DANGER_OF_CONGESTION",
        "resourceUsageLimit": {
          "cpu": 60,
          "memory": 60,
          "queue": 30
        }
      }
    ]
  }
}
```

```

    },
    "sourceVersion": "string",
    "topic": "string"
  }

```

## 2.72 Peer Node Sets

(Required) <Enter introductory text here, including the definition and purpose of the concept.>

**Table 2-370 Supported REST APIs**

| Description          | HTTP Method or Custom Operation | Resource URI                                                                   | Possible Result Code          |
|----------------------|---------------------------------|--------------------------------------------------------------------------------|-------------------------------|
| Create Peer Node Set | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/peernodesets                   | See <a href="#">Table A-3</a> |
| Get Peer Node Set    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/peernodesets/{peerNodeSetName} | See <a href="#">Table A-1</a> |
| Update Peer Node Set | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/peernodesets/{peerNodeSetName} | See <a href="#">Table A-2</a> |
| Delete Peer Node Set | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/peernodesets/{peerNodeSetName} | See <a href="#">Table A-4</a> |

### Get, Create, and Update Peer Nodes

**Table 2-371 Request/Response Body Parameters**

| Field Name        | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                             |
|-------------------|-----------|-----------------------------------------|-----------------------------------------------------------------------------------------|
| description       | String    | O                                       | Description of the Peer Node Set                                                        |
| name              | String    | O                                       | Unique Name of the Peer Node Set.                                                       |
| realm             | String    | O                                       | The realm name, that is, FQDNs to all of that computers that transact diameter traffic. |
| Primary Server    | String    | O                                       | The primary server for a TDF client.                                                    |
| Secondary Server  | String    | O                                       | The Secondary server for a TDF client.                                                  |
| Tertiary Server   | String    | O                                       | The Tertiary server for a TDF client.                                                   |
| Quaternary Server | String    | O                                       | The Quaternary server for a TDF client.                                                 |

**Sample Request body structure for POST and PUT operations:**

```
{
  "description": "string",
  "name": "string",
  "realm": "string",
  "refPeerNodePrimary": "string",
  "refPeerNodeQuaternary": "string",
  "refPeerNodeSecondary": "string",
  "refPeerNodeTertiary": "string",
  "type": "tdf"
}
```

**Sample Response body structure for GET, POST, and PUT operations:**

```
{
  "description": "string",
  "name": "string",
  "realm": "string",
  "refPeerNodePrimary": "string",
  "refPeerNodeQuaternary": "string",
  "refPeerNodeSecondary": "string",
  "refPeerNodeTertiary": "string",
  "type": "tdf"
}
```

## 2.73 Peer Nodes

**Table 2-372 Supported REST APIs**

| Description                 | HTTP Method or Custom Operation | Resource URI                                                             | Possible Result Code          |
|-----------------------------|---------------------------------|--------------------------------------------------------------------------|-------------------------------|
| Create Peer Node            | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/peernodes                | See <a href="#">Table A-3</a> |
| Get All (Export) Peer Nodes | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/peernodes/export         | See <a href="#">Table A-1</a> |
| Import Peer Nodes           | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/peernodes/import         | See <a href="#">Table A-3</a> |
| Get Peer Node               | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/peernodes/{peernodeName} | See <a href="#">Table A-1</a> |
| Update Peer Node            | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/peernodes/{peernodeName} | See <a href="#">Table A-2</a> |



Table 2-372 (Cont.) Supported REST APIs

| Description      | HTTP Method or Custom Operation | Resource URI                                                             | Possible Result Code          |
|------------------|---------------------------------|--------------------------------------------------------------------------|-------------------------------|
| Delete Peer Node | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/peernodes/{peernodeName} | See <a href="#">Table A-4</a> |

## Get, Create, and Update Peer Nodes

Table 2-373 Request/Response Body Parameters

| Field Name         | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                                 |
|--------------------|-----------|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| diamName           | String    | O                                       | Unique Name of the Peer Node                                                                                                                                                                                                                                |
| dtype              | String    | O                                       | Defines which type of Diameter Service it should take up. Possible values are: <ul style="list-style-type: none"> <li>af</li> <li>tdf</li> <li>dra</li> <li>ocs</li> </ul>                                                                                  |
| host               | String    | O                                       | The host name. Enter a FQDN, ipv4 or ipv6 address available for establishing diameter transport connections to the peer node.                                                                                                                               |
| identity           | String    | O                                       | An identity to define a node in a realm.<br><b>Note:</b> It is mandatory if <b>Type</b> is set to <i>TDF</i> .                                                                                                                                              |
| initiateConnection | boolean   | O                                       | Set it to True to initiate a connection for this peer node.<br><b>Default Value:</b> FALSE                                                                                                                                                                  |
| port               | Number    | O                                       | The port number. Enter a number from 0 to 65535.                                                                                                                                                                                                            |
| transport          | String    | O                                       | Type of transport ways for configuring a peer. The values can be: <ul style="list-style-type: none"> <li>TCP</li> <li>TLSv1.2</li> <li>TLSv1.3</li> <li>TLSv1.2_OR_TLSv1.3</li> </ul>                                                                       |
| realm              | String    | O                                       | The realm name, that is, FQDNs to all of that computers that transact diameter traffic.                                                                                                                                                                     |
| reconnectLimit     | Number    | O                                       | The reconnect limit. This value must be configured as the Diameter peer configuration.<br>Currently, all the Gateway pods reconnect for infinite time for the cloud native environment. Hence, this variable is of no use. This value can be kept as it is. |

**Sample Request body structure for POST and PUT operations:**

```
{
  "diamName": "string",
  "dtype": "af",
  "host": "string",
  "identity": "string",
  "initiateConnection": true,
  "port": "3868",
  "realm": "string",
  "reconnectLimit": "3"
}
```

**Sample Response body structure for GET, POST, and PUT operations:**

```
{
  "diamName": "string",
  "dtype": "af",
  "host": "string",
  "identity": "string",
  "initiateConnection": true,
  "port": "3868",
  "realm": "string",
  "reconnectLimit": "3"
}
```

**Delete Peer Nodes****DELETE - delete peer node****Table 2-374 Request/Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description    |
|----------------|-----------|-------------------------------------------------|----------------|
| Peer Node Name | string    | M                                               | Peer Node Name |

**Export/Import Peer Nodes****Table 2-375 Request/Response Body Parameters**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                 |
|------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| date       | string    |                                                 | Current timestamp                                                                                           |
| exportData | array     |                                                 | Exported list of peer nodes. For more information, see <a href="#">Get, Create, and Update Peer Nodes</a> . |
| key        | string    |                                                 | Indicates the ID                                                                                            |

**Table 2-375 (Cont.) Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                           |
|---------------|-----------|-------------------------------------------------|-------------------------------------------------------|
| sourceVersion | string    |                                                 | System version of product from which data is exported |
| topic         | string    |                                                 | Topic of each managed object                          |

**Sample Request Body structure for Import/Export operations:**

```
[
  {
    "date": "string",
    "errors": [
      {
        "message": "string",
        "name": "string"
      }
    ],
    "exportData": [
      {
        "diamName": "string",
        "dtype": "af",
        "host": "string",
        "identity": "string",
        "initiateConnection": true,
        "port": "3868",
        "realm": "string",
        "reconnectLimit": "3"
      }
    ],
    "key": "string",
    "sourceVersion": "string",
    "topic": "string"
  }
]
```

## 2.74 Access and Mobility Service

**Table 2-376 Supported REST APIs**

| Description                        | HTTP Method or Custom Operation | Resource URI                                          | Possible Result Code          |
|------------------------------------|---------------------------------|-------------------------------------------------------|-------------------------------|
| Get Access and Mobility Service    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcfam | See <a href="#">Table A-1</a> |
| Update Access and Mobility Service | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcfam | See <a href="#">Table A-2</a> |

Table 2-376 (Cont.) Supported REST APIs

| Description                                   | HTTP Method or Custom Operation | Resource URI                                                 | Possible Result Code          |
|-----------------------------------------------|---------------------------------|--------------------------------------------------------------|-------------------------------|
| Export Access and Mobility Management Service | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcfam/export | See <a href="#">Table A-1</a> |
| Import Access and Mobility Service            | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcfam/import | See <a href="#">Table A-3</a> |

## Get and Update Access and Mobility Service

Table 2-377 Request/Response Body Parameters

| Field Name         | Data Type                       |
|--------------------|---------------------------------|
| System             | SystemConfiguration             |
| User               | AmUserConfiguration             |
| Policy             | Policy                          |
| rules              | RuleConfiguration               |
| audit              | AuditConfiguration              |
| pendingTransaction | PendingTransactionConfiguration |
| advancedSettings   | AdvancedSettings                |

Table 2-378 System

| Field Name                  | Data Type                           | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                        |
|-----------------------------|-------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| amfNotificationRetryProfile | string                              | O                                       | Specifies the retry profile configuration for Access and Mobility service.                                                                                         |
| amNfCommProfile             | string                              | O                                       | Specifies the NF communication profile used by AMF.                                                                                                                |
| enableHttp2Client           | boolean                             | O                                       | Enables http2 client. <b>Default Value:</b> TRUE                                                                                                                   |
| isSubscribe                 | boolean                             | O                                       | Indicates whether service is subscribed. <b>Default Value:</b> TRUE                                                                                                |
| isValidateUser              | boolean                             | O                                       | Determines if user validate is enabled. HTTP 400 with cause <b>USER_UNKNOWN</b> returns, if this is enabled and user not found in UDR. <b>Default Value:</b> FALSE |
| logList                     | AMServiceSystemConfigurationLogList | O                                       |                                                                                                                                                                    |

Table 2-378 (Cont.) System

| Field Name                     | Data Type    | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                    |
|--------------------------------|--------------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| rootLogLevel                   | string, ENUM | M                                               | Indicates the log level of PCF Session Management (SM) service. Default Value: <b>WARN</b>                                                                                                                                                     |
| usePolicyService               | boolean      | O                                               | If selected, uses the policy service. Component tracing is used to evaluate system process latency in detail level. <b>Default Value:</b> TRUE                                                                                                 |
| useUserPolicy                  | boolean      | O                                               | If selected uses the user service. <b>Default Value:</b> TRUE                                                                                                                                                                                  |
| enableLimitingSessionByPerUser | boolean      | O                                               | Specifies whether to enable the Limiting the Number of Sessions functionality. <b>Default value:</b> false                                                                                                                                     |
| maxSessionLimitUser            | integer      | C                                               | Enables to configure the maximum number of sessions to be limited by the user if <b>Enable Max Session Limit</b> flag is enabled. The value of this parameter ranges between 1 and 2. <b>Default value:</b> 1                                  |
| overrideSupportedFeatures      | string, ENUM | O                                               | Indicates a list of supported features that can be configured to override system embedded values. For example: <ul style="list-style-type: none"> <li>• PendingTransaction</li> <li>• DNNReplacementControl</li> <li>• SliceSupport</li> </ul> |
| dataCompressionScheme          |              |                                                 |                                                                                                                                                                                                                                                |

Table 2-379 User Configuration

| Field Name                      | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                 |
|---------------------------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| validateUser                    |           | O                                               | Determines if user validate is enabled. HTTP 400 with cause <b>USER_UNKNOWN</b> returns, if this is enabled and user not found in UDR. <b>Default Value:</b> FALSE                                                                                                          |
| subscriberStateVariablesEnabled | Boolean   | O                                               | If this parameter is enabled, AM Service controls the querying and saving of local and remote subscriber state variables (SSV) on PDS. <b>Default value:</b> false.                                                                                                         |
| amPolicyDataEnabled             | Boolean   | O                                               | If this parameter is enabled, PCF fetches AMPolicyData from nUDR.                                                                                                                                                                                                           |
| queryUserOnCreate               | boolean   | O                                               | Determines if user query from UDR is enabled. When this option is enabled, PDS queries the UDR about the subscriber contained in the UE Association create request by sending a GET request for "ue-policy-set" resource on the nudr-dr service. <b>Default Value:</b> true |
| subscribeToNotify               | boolean   | O                                               | When Subscribe to Notify is enabled, Policy subscribes with the UDR to get notified on changes in subscriber profile. <b>Default Value:</b> false                                                                                                                           |

Table 2-379 (Cont.) User Configuration

| Field Name           | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                      |
|----------------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| queryUserOnUpdate    | boolean   | O                                               | Determines if user query from UDR on update is enabled. When this option is enabled, PDS queries the UDR about the subscriber present in the UE Association update request by sending a GET request for "ue-policy-set" resource on the nudr-dr service.<br>Default Value: false |
| queryUserOnTerminate | boolean   | O                                               | Determines if user query from UDR on delete is enabled. When this option is enabled, PCF queries the UDR about the subscriber present in the UE Association delete request by sending a GET request for "ue-policy-set" resource on the nudr-dr service.<br>Default Value: false |
| isChfQueryEnabled    | Boolean   | O                                               | If this parameter is enabled, PCF fetches policy counters from CHF.                                                                                                                                                                                                              |
| asyncChfQueryEnabled | Boolean   | O                                               | When this parameter is enabled, PCF interacts with CHF in Asynchronous mode.                                                                                                                                                                                                     |

Table 2-380 Policy

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                         |
|------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| evaluate   | Boolean   | O                                               | This parameter determines if policy evaluation is enabled on AM Policy Data. By default, this parameter is enabled. |

Table 2-381 Rules

| Field Name                  | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                    |
|-----------------------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| defaultRfsp                 | string    | O                                               | RFSP (Rat Frequency Selection Priority)                                                                                                                                                                                                                                        |
| defaultServAreaResCfgl<br>d | string    | O                                               | SAR (Service Area Restriction)                                                                                                                                                                                                                                                 |
| defaultTriggers             | ENUM      | O                                               | This parameter specifies the default triggers. The supported values are: <ul style="list-style-type: none"> <li>• LOC_CH, that is, change in location</li> <li>• PRA_CH, that is, change of UE presence in PRA</li> <li>• ALLOWED_NSSAI_CH</li> <li>• SMF_SELECT_CH</li> </ul> |

Table 2-382 Audit Configuration

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enable     | Boolean   | O                                               | Determines whether to send registration request to Audit service or not. Default Value: True                                                                                                                                                                                                                                                                                                                                                                                                   |
| queryAMF   | Boolean   |                                                 | When this flag is set to true, audit service sends notification to AMF to check the presence of a stale session. If a stale session is present, AMF sends a 404 response to audit service. Then, audit service deletes the AM Policy association from the database. Default Value: False<br><br><b>Note:</b> When Minimum Audit Attempts is 1 and Query AMF is false, Audit service removes the AM session after the maxTTL expiry and the Minimum Audit Attempts remains 0 in Audit database. |



Table 2-382 (Cont.) Audit Configuration

| Field Name       | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                        |
|------------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| notificationRate | Integer   |                                                 | <p>Defines the number of stale records which Audit service notifies to AM service in one second. Value of this parameter ranges between 20 and 700.</p> <p><b>Default and Recommended Value:</b> 50</p> <p><b>Note:</b> To configure higher number than the recommended value, contact My Oracle Support (<a href="https://support.oracle.com">https://support.oracle.com</a>)</p> |
| ttl              | Integer   |                                                 | <p>Defines the age of an AM policy association after which a record is considered to be stale on PCF and the AMF is queried for presence of such associations. Value of this parameter ranges between 1 and 10080.</p> <p><b>Default Value:</b> 1440</p>                                                                                                                           |
| maxTtl           | Integer   |                                                 | <p>Defines the maximum age of an AM policy association after which a record is purged from PCF AMPolicyAssociation database. Value of this parameter ranges between 1 and 20160.</p> <p><b>Default Value:</b> 2880</p>                                                                                                                                                             |

Table 2-382 (Cont.) Audit Configuration

| Field Name       | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| minAuditAttempts | Integer   |                                                 | <p>Specifies the minimum number of consecutive failed audit attempts until maxTTL / forceTTL is reached. If maxTTL is reached and audit_attempts &gt;= Minimum Audit Attempts for maxTTL, Audit service sends notification to AM service with maxTTL flag set to true. AM Service sends DELETE request to PDS.</p> <p><b>Range:</b> 0-255</p> <p><b>Default Value:</b> 0</p> <p><b>Note:</b> If maxTTL is not reached and if audit attempts are reached, the number of audit attempts are incremented until maxTTL is reached.</p> |
| frequency        | Integer   |                                                 | <p>Defines the time when next audit for the AM service table begins after delta time if auditing this table has been finished before this specified time.</p> <p><b>Default Value:</b> 330</p>                                                                                                                                                                                                                                                                                                                                     |

Table 2-383 pendingTransaction

| Field Name                   | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                            |
|------------------------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| updateNotifyRetryBackoff     |           |                                                 | <p>Defines the retry backoff for UpdateNotify in milliseconds.</p> <p><b>Default Value:</b> 0 - 10000 milliseconds</p> |
| updateNotifyRetryCount       |           |                                                 | <p>Defines the total number of retries for UpdateNotify.</p> <p>Default Value: 0 - 5</p>                               |
| errorUpdateNotifyHandlingApp |           |                                                 |                                                                                                                        |

**Table 2-383 (Cont.) pendingTransaction**

| Field Name           | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|----------------------|-----------|-------------------------------------------------|-------------|
| updateNotifyHandling |           |                                                 |             |

**Table 2-384 AdvancedSettings**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                     |
|------------|-----------|-------------------------------------------------|---------------------------------|
| Key        | string    | O                                               | Specifies the key name.         |
| Value      | string    | O                                               | Specifies the value of the key. |

For more information on the Advanced Settings Keys and Values, see *PCF Access and Mobility* section of *Configuring Policy Using CNC Console* chapter in *Oracle Communications Cloud Native Core, Converged Policy User Guide*.

**Table 2-385 AMServiceSystemConfigurationLogList**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|------------|-----------|-------------------------------------------------|-------------|
| level      | ENUM      | O                                               |             |
| name       | string    | M                                               |             |

**Sample Request body structure for POST and PUT operations:**

```
{
  "system": {
    "amfNotificationRetryProfile": "string",
    "amNfCommProfile": "string",
    "enableLimitingSessionByPerUser": false,
    "maxSessionLimitUser": 1,
    "overrideSupportedFeatures": [
      "PendingTransaction"
    ],
    "dataCompressionScheme": "0"
  },
  "user": {
    "validateUser": true,
    "subscriberStateVariablesEnabled": true,
    "amPolicyDataEnabled": true,
    "queryUserOnCreate": true,
    "subscribeToNotify": true,
    "queryUserOnUpdate": true,
    "queryUserOnTerminate": true,
    "isChfQueryEnabled": true,
    "asyncChfQueryEnabled": true
  }
},
```

```

    "policy": {
      "evaluate": true
    },
    "rules": {
      "defaultServAreaResCfgId": "string",
      "defaultRfsp": 3,
      "defaultTriggers": [
        "LOC_CH"
      ]
    },
    "audit": {
      "enable": true,
      "queryAMF": true,
      "notificationRate": 50,
      "ttl": 1440,
      "maxTtl": 2880,
      "frequency": 330,
      "minAuditAttempts": 0
    },
    "pendingTransaction": {
      "updateNotifyRetryBackoff": 1000,
      "updateNotifyRetryCount": 2,
      "errorUpdateNotifyHandlingApp": "string",
      "updateNotifyHandling": "string"
    },
    "advancedSettings": [
      {
        "key": "z9juPMutruXy%t2#(q:zG^6iIky~u)~szTX& CMEok^uzF\\
{gTML..@V-:6&:w\"w5",
        "value": ""
      }
    ]
  }
}

```

#### Sample Response body structure for GET, POST, and PUT operations:

```

{
  "system": {
    "amfNotificationRetryProfile": "string",
    "amNfCommProfile": "string",
    "enableLimitingSessionByPerUser": false,
    "maxSessionLimitUser": 1,
    "overrideSupportedFeatures": [
      "PendingTransaction"
    ],
    "dataCompressionScheme": "2"
  },
  "user": {
    "validateUser": true,
    "subscriberStateVariablesEnabled": true,
    "amPolicyDataEnabled": true,
    "queryUserOnCreate": true,
    "subscribeToNotify": true,
    "queryUserOnUpdate": true,
    "queryUserOnTerminate": true,
  }
}

```

```

    "isChfQueryEnabled": true,
    "asyncChfQueryEnabled": true
  },
  "policy": {
    "evaluate": true
  },
  "rules": {
    "defaultServAreaResCfgId": "string",
    "defaultRfsp": 3,
    "defaultTriggers": [
      "LOC_CH"
    ]
  },
  "audit": {
    "enable": true,
    "queryAMF": true,
    "notificationRate": 50,
    "ttl": 1440,
    "maxTtl": 2880,
    "frequency": 330,
    "minAuditAttempts": 0
  },
  "pendingTransaction": {
    "updateNotifyRetryBackoff": 1000,
    "updateNotifyRetryCount": 2,
    "errorUpdateNotifyHandlingApp": "string",
    "updateNotifyHandling": "string"
  },
  "advancedSettings": [
    {
      "key": "T",
      "value": "M"
    }
  ]
}

```

## Export/Import Access and Mobility Service

**Table 2-386 Request/Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                     |
|----------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| date           | string    |                                                 | Current timestamp                                                                                                                               |
| errors:message | string    |                                                 |                                                                                                                                                 |
| errors:name    | string    |                                                 |                                                                                                                                                 |
| exportData     | array     |                                                 | Exported list of access and mobility management service. For more information, see <a href="#">Get and Update Access and Mobility Service</a> . |

**Table 2-386 (Cont.) Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                           |
|---------------|-----------|-------------------------------------------------|-------------------------------------------------------|
| sourceVersion | string    |                                                 | System version of product from which data is exported |
| topic         | string    |                                                 | Topic of each managed object                          |

**Sample Request Body structure for Import/Export operations:**

```

{
  "topic": "string",
  "sourceVersion": "string",
  "date": "string",
  "exportData": {
    "system": {
      "amfNotificationRetryProfile": "string",
      "amNfCommProfile": "string",
      "enableLimitingSessionByPerUser": false,
      "maxSessionLimitUser": 1,
      "overrideSupportedFeatures": [
        "PendingTransaction"
      ],
      "dataCompressionScheme": "0"
    },
    "user": {
      "validateUser": true,
      "subscriberStateVariablesEnabled": true,
      "amPolicyDataEnabled": true,
      "queryUserOnCreate": true,
      "subscribeToNotify": true,
      "queryUserOnUpdate": true,
      "queryUserOnTerminate": true,
      "isChfQueryEnabled": true,
      "asyncChfQueryEnabled": true
    },
    "policy": {
      "evaluate": true
    },
    "rules": {
      "defaultServAreaResCfgId": "string",
      "defaultRfsp": 3,
      "defaultTriggers": [
        "LOC_CH"
      ]
    },
    "audit": {
      "enable": true,
      "queryAMF": true,
      "notificationRate": 50,
      "ttl": 1440,

```

```

        "maxTtl": 2880,
        "frequency": 330,
        "minAuditAttempts": 0
    },
    "pendingTransaction": {
        "updateNotifyRetryBackoff": 1000,
        "updateNotifyRetryCount": 2,
        "errorUpdateNotifyHandlingApp": "string",
        "updateNotifyHandling": "string"
    },
    "advancedSettings": [
        {
            "key": "|",
            "value": ">"
        }
    ]
},
"errors": [
    {
        "name": "string",
        "message": "string"
    }
]
}

```

## 2.75 Policy Authorization Service

**Table 2-387 Supported REST APIs**

| Description                             | HTTP Method or Custom Operation | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcfpa        | Possible Result Code          |
|-----------------------------------------|---------------------------------|--------------------------------------------------------------|-------------------------------|
| Get Policy Authorization Service        | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcfpa        | See <a href="#">Table A-1</a> |
| Update Policy Authorization Service     | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcfpa        | See <a href="#">Table A-2</a> |
| Export All Policy Authorization Service | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcfpa/export | See <a href="#">Table A-1</a> |
| Import Policy Authorization Service     | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcfpa/import | See <a href="#">Table A-3</a> |

## Get and Update Policy Authorization Service

Table 2-388 Request/Response Body Parameters

| Field Name          | Data Type                                 | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|---------------------|-------------------------------------------|-------------------------------------------------|-------------|
| imsEmergencySession | IMSEmergencySessionPAServiceConfiguration | O                                               |             |
| system              | System Configuration                      | O                                               |             |

Table 2-389 IMSEmergencySessionPAServiceConfiguration

| Field Name               | Data Type                                                               | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                   |
|--------------------------|-------------------------------------------------------------------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------|
| emergencyServiceURNs     | string<br>Any number of values are permitted for Emergency Service URNs | O                                               | Specifies the Uniform Resource Name (URN) values for emergency and other well-known services. |
| reservationPriorityTypes | ENUM                                                                    | O                                               | Specifies the IMS Signalling Priority.                                                        |

Table 2-390 System Configuration

| Field Name                  | Data Type                   | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                          |
|-----------------------------|-----------------------------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| afDirectReply               | Boolean                     | O                                               | Specifies, if reply must be sent to AF before the PCF that sends the policy decision to SMF, after successful session binding.                                       |
| afNotificationsRetryProfile | string                      |                                                 | Specifies the retry profile configuration for Policy Authorization.                                                                                                  |
| afSubsNotifySegment         | string example: termination | O                                               | Specifies AF subscription notify uri segment appended to AF subs notify uri. For example, {NotificationUri}/notify. "notify" is the subscription notify uri segment. |



Table 2-390 (Cont.) System Configuration

| Field Name                | Data Type                      | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                   |
|---------------------------|--------------------------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| afTerminateUriSegment     | string example:<br>termination | O                                               | Specifies AF notify to terminate uri segment appended to AF notify uri. For example, {NotificationUri}/termination. "termination" is the terminate uri segment.                                                                               |
| overrideSupportedFeatures | string                         | O                                               | Defines the supported features that can be configured to override system embedded values. Represent a string separated by comma. For example, "InfluenceOnTrafficRouting,SponsoredConnectivity". The "" means an empty supported feature set. |
| paNfCommProfile           | string                         | O                                               | Specifies the NF communication profile used by AF.                                                                                                                                                                                            |
| dataCompressionScheme     | string                         | O                                               |                                                                                                                                                                                                                                               |
| authorizationLifetime     | Long                           | O                                               | If included implies authorization lifetime feature is to be negotiated, includes a value higher than 0 specifying Authorization Lifetime AVP.<br><b>Default Value:</b> null                                                                   |
| reportPartialFailedEvent  |                                |                                                 |                                                                                                                                                                                                                                               |

**Sample Request body structure for PUT operations:**

```
{
  "imsEmergencySession": {
    "emergencyServiceURNs": [
      "string"
    ],
    "reservationPriorityTypes": [
      "PRIO_1"
    ]
  },
  "system": {
    "afDirectReply": true,
    "overrideSupportedFeatures": "string",
    "afTerminateUriSegment": "terminate",
  }
}
```

```

    "afSubsNotifySegment": "notify",
    "afNotificationsRetryProfile": "string",
    "paNfCommProfile": "string",
    "dataCompressionScheme": "string",
    "authLifetime": true,
    "reportPartialFailedEvent": "INDICATION_OF_LOSS_OF_BEARER"
  }
}

```

#### Sample Response body structure for GET, POST, and PUT operations:

```

{
  "imsEmergencySession": {
    "emergencyServiceURNs": [
      "string"
    ],
    "reservationPriorityTypes": [
      "PRIO_1"
    ]
  },
  "system": {
    "afDirectReply": true,
    "overrideSupportedFeatures": "string",
    "afTerminateUriSegment": "terminate",
    "afSubsNotifySegment": "notify",
    "afNotificationsRetryProfile": "string",
    "paNfCommProfile": "string",
    "dataCompressionScheme": "string",
    "authLifetime": true,
    "reportPartialFailedEvent": "INDICATION_OF_LOSS_OF_BEARER"
  }
}

```

#### Export/Import Policy Authorization Service

**Table 2-391 Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                            |
|---------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| date          | string    |                                                 | Current timestamp                                                                                                                      |
| exportData    | array     |                                                 | Exported list of policy authorization service. For more information, see <a href="#">Get and Update Policy Authorization Service</a> . |
| sourceVersion | string    |                                                 | System version of product from which data is exported                                                                                  |
| topic         | string    |                                                 | Topic of each managed object                                                                                                           |

**Sample Request Body structure for Import/Export operations:**

```

{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": {
    "imsEmergencySession": {
      "emergencyServiceURNs": [
        "string"
      ],
      "reservationPriorityTypes": [
        "PRIO_1"
      ]
    },
    "system": {
      "afDirectReply": true,
      "afNotificationsRetryProfile": "string",
      "afSubsNotifySegment": "notify",
      "afTerminateUriSegment": "terminate",
      "overrideSupportedFeatures": "string",
      "paNfCommProfile": "string",
      "reportPartialFailedEvent": "INDICATION_OF_FAILED_RESOURCES_ALLOCATION"
    }
  },
  "sourceVersion": "string",
  "topic": "string"
}

```

**Audit Authorization Service****Table 2-392 Request/Response Body Parameters**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                    |
|------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enable     | Boolean   | O                                               | Specifies whether to enable or disable the stale Rx session audit and deletion.<br><br>When this parameters is enabled, SM Service registers with Audit service for monitoring Rx sessions.<br><br><b>Default Value:</b> false |

Table 2-392 (Cont.) Request/Response Body Parameters

| Field Name       | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                            |
|------------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ttl              | integer   | O                                               | Specifies the Time To Live (TTL) of Rx sessions.<br><b>Range:</b> 0-21600<br><b>Default Value:</b> 1440                                                                                |
| maxTtl           | integer   | O                                               | Specifies the maximum Time To Live (TTL) of Rx sessions.<br><b>Default Value:</b> 4320<br><b>Range:</b> 0-21600                                                                        |
| notificationRate | integer   | O                                               | Maximum amount of app session cleanup requests per second.<br><b>Default Value:</b> 50                                                                                                 |
| frequency        | integer   | O                                               | Specifies how long the Audit Service waits for next audit cycle.<br><b>Default Value:</b> 10                                                                                           |
| nullAsStale      | Boolean   | O                                               | If EXPIRY_TIMESTAMP or SITEID contains NULL value, (legacy stale records after upgrade) they will be considered in the next audit cycle as TTL expired.<br><b>Default Value:</b> false |

**Sample Request Body structure for GET/PUT operations:**

```
{
  "system": {
    "afDirectReply": true,
    "overrideSupportedFeatures": "string",
    "afTerminateUriSegment": "terminate",
    "afSubsNotifySegment": "notify",
    "afNotificationsRetryProfile": "string",
    "paNfCommProfile": "string",
    "dataCompressionScheme": "string",
    "authLifetime": true,
    "reportPartialFailedEvent": "INDICATION_OF_LOSS_OF_BEARER"
  },
  "imsEmergencySession": {
    "Any number of values are permitted for Emergency Service URNs": [
      "string"
    ],
    "reservationPriorityTypes": [
      "PRIO_1"
    ]
  }
}
```

```

    ]
  },
  "nwda": {
    "enableNwdaData": true
  },
  "audit": {
    "enable": true,
    "ttl": 1440,
    "maxTtl": 4320,
    "notificationRate": 50,
    "frequency": 10,
    "nullAsStale": true
  },
  "advancedSettings": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}
}

```

## 2.76 UE Policy

**Table 2-393 Supported REST APIs**

| Description                  | HTTP Method or Custom Operation | Resource URI                                                  | Possible Result Code          |
|------------------------------|---------------------------------|---------------------------------------------------------------|-------------------------------|
| Get UE Policy Service        | GET                             | {apiRoot}/oc-cn-policy-configuration/v1/services/pcfue        | See <a href="#">Table A-1</a> |
| Update UE Policy Service     | PUT                             | {apiRoot}/oc-cn-policy-configuration/v1/services/pcfue        | See <a href="#">Table A-2</a> |
| Export All UE Policy Service | GET                             | {apiRoot}/oc-cn-policy-configuration/v1/services/pcfue/export | See <a href="#">Table A-1</a> |
| Import UE Policy Service     | POST                            | {apiRoot}/oc-cn-policy-configuration/v1/services/pcfue/import | See <a href="#">Table A-3</a> |

### Get and Update UE Policy

**Table 2-394 Request/Response Body Parameters**

| Field Name | Data Type                          | Mandatory(M)/ Optional(O)/ Conditional(C) aints | Description |
|------------|------------------------------------|-------------------------------------------------|-------------|
| amf        | AMFConfiguration                   | O                                               |             |
| system     | UEPolicyServiceSystemConfiguration | O                                               |             |
| user       | UserUEPolicyServiceConfiguration   | O                                               |             |

**Table 2-394 (Cont.) Request/Response Body Parameters**

| Field Name                  | Data Type                                    | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|-----------------------------|----------------------------------------------|-------------------------------------------------|-------------|
| homePLMN                    | HomePLMNConfiguration                        | O                                               |             |
| rule                        | rule                                         | O                                               |             |
| n1MsgTransferSettings       | N1MessageTransferSettingsConfiguration       | O                                               |             |
| timerSettings               | TimerSettingsConfiguration                   | O                                               |             |
| n1MsgRetransmissionSettings | N1MessageRetransmissionSettingsConfiguration | O                                               |             |
| audit                       | AuditConfiguration                           | O                                               |             |

**Table 2-395 AMFConfiguration**

| Field Name                        | Data Type         | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                         |
|-----------------------------------|-------------------|-------------------------------------------------|-----------------------------------------------------|
| enableHttp11Client                | boolean           | O                                               |                                                     |
| naSMsgTransferMaxSize             | integer (\$int32) | O                                               | Enter a range in [0-65535] number                   |
| amf.ueAMFCommProfile              | string            | O                                               | Specifies the NF communication profile used by AMF. |
| amf.ueNASCommProfile              | string            | O                                               | Specifies the NF communication profile used by NAS. |
| amf.ueAMFRetryProfileNotification | string            | O                                               |                                                     |
| amf.ueNASRetryProfileInitial      | string            | O                                               |                                                     |
| amf.ueNASRetryProfileSubs         | string            | O                                               |                                                     |
| amf.ueAMFDiscoveryCriteria        | string            | O                                               |                                                     |

Table 2-395 (Cont.) AMFConfiguration

| Field Name                      | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| amf.sendSbiBhForN1N2TransferReq | String    | O                                               | <p>Indicates when to send the SBI binding header for N1N2Transfer request. The options can be:</p> <ul style="list-style-type: none"> <li>• When binding information changes: Sends the binding header in the HTTP request only whenever there is a change in the binding information.</li> <li>• Always: Sends the binding header in all the N1N2Transfer requests.</li> <li>• Never: Never includes the binding header in any N1N2Transfer request.</li> </ul> <p><b>Default value:</b> When binding information changes</p> <p><b>Note:</b> This configuration will override the values being set towards <b>NF Communication Profile</b> under NAS (The NF Communication Profile for NAS is mandatory to be set in UE service configuration).</p> |

Table 2-395 (Cont.) AMFConfiguration

| Field Name                          | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| amf.sendRoutingBhForN1N2TransferReq | String    | O                                               | <p>Indicates when to send the routing binding header for N1N2Transfer request. The options can be:</p> <ul style="list-style-type: none"> <li>• Always: Sends the routing binding header in all the N1N2Transfer requests.</li> <li>• Never: Never sends the routing binding header in any N1N2Transfer request.</li> </ul> <p><b>Default value:</b> There is no default value configured for this field.</p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>• This configuration will override the values being set towards <b>NF Communication Profile</b> under NAS (The NF Communication Profile for NAS is mandatory to be set in UE service configuration).</li> <li>• To rollback the value of the parameter from "ALWAYS"/"NEVER" to default value, click <b>Please Select</b>.</li> </ul> |



Table 2-395 (Cont.) AMFConfiguration

| Field Name                               | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------------------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| amf.sendDiscHeaderFor<br>N1N2TransferReq | String    | O                                               | <p>Indicates whether to send the discovery header for N1N2Transfer request when the routing binding information is not present. The options can be:</p> <ul style="list-style-type: none"> <li>• Always: Sends the discovery header in all the N1N2Transfer requests when the routing binding header is not included.</li> <li>• Never: Never sends the discovery header in any N1N2Transfer request.</li> </ul> <p><b>Default value:</b> There is no default value configured for this field.</p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>• This configuration will override the values being set towards <b>NF Communication Profile</b> under NAS (The NF Communication Profile for NAS is mandatory to be set in UE service configuration).</li> <li>• To rollback the value of the parameter from "ALWAYS"/"NEVER" to default value, click <b>Please Select</b>.</li> </ul> |
| amf.enableConsolidation                  | Boolean   | O                                               | <p>Specifies whether to enable consolidation of policy decisions for a UE. When enabled, multiple sequenced policy decisions are consolidated as part of the next UE Policy Management Procedure.</p> <p><b>Default value:</b> False</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

Table 2-395 (Cont.) AMFConfiguration

| Field Name                     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| amf.amfResubscriptionCondition | String    | O                                               | <p>Possible values are:</p> <ul style="list-style-type: none"> <li>DISABLED</li> <li>AMF Set ID and AMF Region ID</li> <li>AMF Set ID</li> <li>GUAMI</li> </ul> <p>If the value of this field is configured to any of the below mentioned values other than DISABLED, when the set ID is different in the UE Update received from AMF, PCF sends unsubscribe to old AMF and subscribes to new AMF.</p> <p><b>Default value:</b> DISABLED</p> |

Table 2-396 UEPolicyServiceSystemConfiguration

| Field Name                     | Data Type    | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                         |
|--------------------------------|--------------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| loglevel                       | String, ENUM | O                                               | Indicates the log level of PCF Session Management (SM) service. Default Value: <b>WARN</b>                                                                                                                          |
| notifUriRoot                   | string       | O                                               |                                                                                                                                                                                                                     |
| enableLimitingSessionByPerUser | boolean      | O                                               | Specifies whether to enable the Limiting the Number of Sessions functionality.<br><b>Default value:</b> false                                                                                                       |
| maxSessionLimitUser            | integer      | C                                               | Enables to configure the maximum number of sessions to be limited by the user if <b>Enable Max Session Limit</b> flag is enabled.<br>The value of this parameter ranges between 1 and 2.<br><b>Default value:</b> 1 |

Table 2-397 UserUEPolicyServiceConfiguration

| Field Name           | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                             |
|----------------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| asyncChfQueryEnabled | Boolean   | O                                               | When this button is enabled, PCF interacts with CHF in Asynchronous mode.                                                                                                                                                                                               |
| chfQueryEnabled      | Boolean   | O                                               | If this switch is enabled, PCF fetches policy counters from CHF.                                                                                                                                                                                                        |
| isChfQueryEnabled    | Boolean   | O                                               | If this switch is enabled, PCF fetches policy counters from CHF.                                                                                                                                                                                                        |
| queryUser            | boolean   | O                                               | Determines if user query from UDR is enabled.<br><b>Default Value:</b> TRUE                                                                                                                                                                                             |
| validateUser         | boolean   | O                                               | Determines if user validate is enabled. HTTP 400 with cause <b>USER_UNKNOWN</b> returns, if this is enabled and user not found in UDR. <b>Default Value:</b> FALSE                                                                                                      |
| queryUserOnCreate    | boolean   | O                                               | Determines if user query from UDR is enabled. When this option is enabled, PDS queries the UDR about the subscriber contained in the UE Association create request by sending a GET request for "ue-policy-set" resource on the nudr-dr service.<br>Default Value: true |
| subscribeToNotify    | boolean   | O                                               | When Subscribe to Notify is enabled, Policy subscribes with the UDR to get notified on changes in subscriber profile.<br>Default Value: true                                                                                                                            |

Table 2-397 (Cont.) UserUEPolicyServiceConfiguration

| Field Name           | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                      |
|----------------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| queryUserOnUpdate    | boolean   | O                                               | Determines if user query from UDR on update is enabled. When this option is enabled, PDS queries the UDR about the subscriber present in the UE Association update request by sending a GET request for "ue-policy-set" resource on the nudr-dr service.<br>Default Value: false |
| queryUserOnTerminate | boolean   | O                                               | Determines if user query from UDR on delete is enabled. When this option is enabled, PCF queries the UDR about the subscriber present in the UE Association delete request by sending a GET request for "ue-policy-set" resource on the nudr-dr service.<br>Default Value: false |
| uePolicyDataEnabled  | Boolean   | O                                               | If this switch is enabled, PCF fetches UEPolicyData from nUDR.                                                                                                                                                                                                                   |

Table 2-398 HomePLMNConfiguration

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                       |
|------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------|
| mcc        | Number    | O                                               | The Mobile Country Code and Mobile Network Code of the Home PLMN.<br><br><b>Default Value:</b> NA |
| mnc        | Number    | O                                               | The Mobile Country Code and Mobile Network Code of the Home PLMN.<br><br><b>Default Value:</b> NA |

Table 2-399 rule

| Field Name                 | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                   |
|----------------------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| conflictResolutionStrategy | String    | O                                               | A new functionality "Conflict Resolution Strategy" is added and the values are: <ul style="list-style-type: none"> <li>• Install</li> <li>• Remove</li> <li>• Drop</li> </ul> |

Table 2-400 N1MessageTransferSettings

| Field Name             | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                       |
|------------------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| n1MsgMaxSize           | Number    | O                                               | Maximum number of URSP Rules to be encoded in a single UE Policy Section (UPSI) container.<br><br><b>Default Value:</b> 2000                      |
| uePolicySectionMaxSize | Number    | O                                               | The maximum size in bytes of a "MANAGE UE POLICY COMMAND" after encoding to send out to AMF for delivery to UE.<br><br><b>Default Value:</b> 2000 |
| maxNoOfURSPRules       | Number    | O                                               | Maximum number of URSP Rules to be encoded in a single UE Policy Section (UPSI) container.<br><br><b>Default Value:</b> 4                         |

Table 2-400 (Cont.) N1MessageTransferSettings

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| upscStart  | Number    | O                                               | <p>This fields indicate the range of UPSC allocation by PCF and can be used to maintain a dedicated range of UPSCs used by PCF generated UPSIs. Configuring these fields avoids the conflict of UPSCs between the UE built-in UPSC and the PCF delivered UPSC.</p> <p><b>Note:</b> If the UPSI based policy action is also used for non-fragmented URSP delivery, then the range of UPSCs used by that method should be outside the range configured here.</p> <p><b>Default Value:</b> Start: 0</p>   |
| upscEnd    | Number    | O                                               | <p>This fields indicate the range of UPSC allocation by PCF and can be used to maintain a dedicated range of UPSCs used by PCF generated UPSIs. Configuring these fields avoids the conflict of UPSCs between the UE built-in UPSC and the PCF delivered UPSC.</p> <p><b>Note:</b> If the UPSI based policy action is also used for non-fragmented URSP delivery, then the range of UPSCs used by that method should be outside the range configured here.</p> <p><b>Default Value:</b> End: 65535</p> |

Table 2-401 TimerSettings

| Field Name            | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                   |
|-----------------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| T 3501 Timer Duration | Number    | O                                               | If it's value is zero, T 3501 Timer handling functionality will be disabled. If a non-zero value is configured, then the timer will be initiated after every N1 transfer received successfully from AMF from the N1 Notify.<br><br><b>Default Value:</b> 5000 |
| backOffTimerDuration  | Number    | O                                               | The action to be taken by PCF when the AMF notifies the PCF that it could not deliver the "MANAGE UE POLICY COMMAND" message to UE.<br><br><b>Default Value:</b> 15000                                                                                        |

Table 2-402 N1MessageRetransmissionSettings

| Field Name             | Data Type   | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                    |
|------------------------|-------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| On T 3501 Timer Expiry | Enumeration | O                                               | The action to be taken by PCF when N1 notification is not received within configured duration defined in T 3501 Timer Duration.<br><br><b>Default Value:</b> Abort N1 Delivery |

Table 2-402 (Cont.) N1MessageRetransmissionSettings

| Field Name                       | Data Type   | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------|-------------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| onTransactionFailureNotification | Number      | O                                               | <p>The action to be taken by PCF when the AMF notifies the PCF that it could not deliver the "MANAGE UE POLICY COMMAND" message to UE.</p> <p><b>Default Value:</b> Abort</p> <p>The value for the Skip Fragment label must be "SKIP".</p> <p>The value for the Re-Transmit N1 Message label must be "RETRANSMIT".</p> <p>The value for the Abort N1 Delivery label must be "ABORT".</p> |
| onUEPolicyCommandReject          | Enumeration | O                                               | <p>The action to be taken by PCF when the UE notifies the PCF that it could not process the "MANAGE UE POLICY COMMAND" message.</p> <p><b>Default Value:</b> Abort</p> <p>The value for the Skip Fragment label must be "SKIP".</p> <p>The value for the Re-Transmit N1 Message label must be "RETRANSMIT".</p> <p>The value for the Abort N1 Delivery label must be "ABORT".</p>        |



Table 2-402 (Cont.) N1MessageRetransmissionSettings

| Field Name                            | Data Type   | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------------------|-------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| maxNoOfRetransmissions                | Enumeration | O                                               | <p>Maximum number of re-transmissions to be attempted (excluding the initial attempt) after which UE service shall not try further to re-send the same fragment to AMF</p> <p><b>Default Value: 2</b></p> <p>The value of the drop down items are as follows:</p> <ul style="list-style-type: none"> <li>• Re-Transmit N1 Message-RETRANSMIT</li> <li>• Skip Fragment-SKIP</li> <li>• Abort N1 Delivery-ABORT</li> </ul> |
| reTransmissionFailureBehavior         | Enumeration | O                                               | <p>The behavior of PCF UE service if the N1 message is not delivered to the UE after a maximum number of re-transmissions have been tried.</p> <p><b>Default Value: Abort</b></p> <p>The value for the Skip Fragment label must be "SKIP".</p> <p>The value for the Abort N1 Delivery label must be "ABORT".</p>                                                                                                         |
| allowT3501RetransmissionConsolidation | Boolean     | O                                               | <p>Specifies whether to enable consolidation of UE policy decisions for re-transmission on T3501 expiration. When disabled, no consolidation is performed and sequenced policy decisions are processed after the current UE policy management procedure or re-transmission completes.</p> <p><b>Default value: False</b></p>                                                                                             |

Table 2-403 AuditConfiguration

| Field Name       | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                      |
|------------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enable           | boolean   | O                                               | If this flag is enabled, UE service registers with Audit service for auditing the records in UEPolicyAssociation table. Once the registration is successful, a record for UE service is created in the AuditRegistration table.<br><b>Default Value:</b> False                   |
| query AMF        | boolean   | O                                               | If this flag is enabled, the UE service sends the stale session notification received from Audit service to AMF to check if the session is present in AMF.<br><b>Default Value:</b> False                                                                                        |
| notificationRate | integer   | M                                               | Defines the maximum number of stale records, which Audit Service notifies to UE service in one second.<br>Value of this parameter ranges between 20 and 700.<br><b>Default Value:</b> 50                                                                                         |
| ttl              | integer   | M                                               | Defines the age of the UE Policy Association, after which a record is considered to be stale on PCF and the AMF is queried (if query AMF is set to TRUE) for presence of such associations.<br>Value of this parameter ranges between 1 and 10080.<br><b>Default Value:</b> 1440 |

Table 2-403 (Cont.) AuditConfiguration

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                         |
|------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| maxTtl     | integer   | M                                               | Defines the maximum age of a UE Policy Association, after which a record is considered as stale and is purged from PCF UE database without sending further queries to AMF.<br><br>Value of this parameter ranges between 1 and 20160.<br><b>Default Value:</b> 2880 |
| frequency  | integer   | M                                               | Defines the time when next audit for the UE service table is done after delta time if auditing this table has been finished before this specified time.<br><br>Value of this parameter ranges between 1 and 1440.<br><b>Default Value:</b> 10                       |

**Sample Request body structure for PUT operations:**

```
{
  "amf": {
    "ueAMFCommProfile": "string",
    "ueAMFRetryProfileNotification": "string",
    "ueNASCommProfile": "string",
    "ueNASRetryProfileInitial": "string",
    "ueNASRetryProfileSubs": "string"
    "amfResubscriptionCondition": "amfSetIdAndRegionId"
  },
  "audit": {
    "enable": true,
    "frequency": 5,
    "maxTtl": 2880,
    "notificationRate": 50,
    "queryAMF": true,
    "ttl": 1440
  },
  "homePLMN": {
    "mcc": 0,
    "mnc": 0
  },
  "rule": "INSTALL, REMOVE OR DROP",
  "n1MsgRetransmissionSettings": {
    "maxNoOfRetransmissions": 2,

```

```

    "onT3501TimerExpiry": "ABORT",
    "onTransactionFailureNotification": "ABORT",
    "onUEPolicyCommandReject": "ABORT",
    "reTransmissionFailureBehavior": "ABORT"
  },
  "n1MsgTransferSettings": {
    "maxNoOfURSPRules": 4,
    "n1MsgMaxSize": 2000,
    "uePolicySectionMaxSize": 2000,
    "upscEnd": 65535,
    "upscStart": 0
  },
  "system": {
    "enableLimitingSessionByPerUser": true,
    "maxSessionLimitUser": 1,
    "notifUriRoot": "string"
  },
  "timerSettings": {
    "backOffTimerDuration": 15000,
    "t3501TimerDuration": 5000
  },
  "user": {
    "asyncChfQueryEnabled": true,
    "chfQueryEnabled": true,
    "isChfQueryEnabled": true,
    "queryUserOnCreate": true,
    "queryUserOnTerminate": true,
    "queryUserOnUpdate": true,
    "subscribeToNotify": true,
    "uePolicyDataEnabled": true,
    "validateUser": true
  }
}

```

#### Sample Response body structure for GET and PUT operations:

```

{
  "system": {
    "enableLimitingSessionByPerUser": true,
    "maxSessionLimitUser": 1
  },
  "user": {
    "validateUser": false,
    "queryUserOnCreate": false,
    "subscribeToNotify": false,
    "queryUserOnUpdate": false,
    "queryUserOnTerminate": false
  },
  "homePLMN": {
    "mcc": "0",
    "mnc": "0"
  },
  "rule": "INSTALL, REMOVE OR DROP",
  "n1MsgTransferSettings": {
    "n1MsgMaxSize": 2000,

```

```

        "uePolicySectionMaxSize": 2000,
        "maxNoOfURSPRules": 4,
        "upscStart": 0,
        "upscEnd": 65535
    },
    "timerSettings": {
        "backOffTimerDuration": 15000
        "t3501TimerDuration": 5000
    },
    "n1MsgRetransmissionSettings": {
        "onTransactionFailureNotification": "ABORT",
        "onT3501TimerExpiry": "ABORT",
        "onUEPolicyCommandReject": "ABORT",
        "maxNoOfRetransmissions": 2,
        "reTransmissionFailureBehavior": "ABORT"
    },
    "audit": {
        "enable": false,
        "queryAMF": false,
        "notificationRate": 50,
        "ttl": 1440,
        "maxTtl": 2880,
        "frequency": 10
    }
}

```

## Export/Import UE Policy

**Table 2-404 Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                            |
|---------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| date          | string    |                                                 | Current timestamp                                                                                      |
| exportData    | array     |                                                 | Exported list of UE policy service. For more information, see <a href="#">Get and Update UE Policy</a> |
| sourceVersion | string    |                                                 | System version of product from which data is exported                                                  |
| topic         | string    |                                                 | Topic of each managed object                                                                           |

## Sample Request Body structure for Import/Export operations:

```

{
  "amf": {
    "ueAMFCommProfile": "string",
    "ueAMFRetryProfileNotification": "string",
    "ueNASCommProfile": "string",
    "ueNASRetryProfileInitial": "string",
    "ueNASRetryProfileSubs": "string"
    "amfResubscriptionCondition": "string"
  }
}

```

```

    },
    "audit": {
      "enable": true,
      "frequency": 5,
      "maxTtl": 2880,
      "notificationRate": 50,
      "queryAMF": true,
      "ttl": 1440
    },
    "homePLMN": {
      "mcc": 0,
      "mnc": 0
    },
    "rule": "INSTALL, REMOVE OR DROP",
    "n1MsgRetransmissionSettings": {
      "maxNoOfRetransmissions": 2,
      "onT3501TimerExpiry": "ABORT",
      "onTransactionFailureNotification": "ABORT",
      "onUEPolicyCommandReject": "ABORT",
      "reTransmissionFailureBehavior": "ABORT"
    },
    "n1MsgTransferSettings": {
      "maxNoOfURSPRules": 4,
      "n1MsgMaxSize": 2000,
      "uePolicySectionMaxSize": 2000,
      "upscEnd": 65535,
      "upscStart": 0
    },
    "system": {
      "enableLimitingSessionByPerUser": true,
      "maxSessionLimitUser": 1,
      "notifUriRoot": "string"
    },
    "timerSettings": {
      "backOffTimerDuration": 15000,
      "t3501TimerDuration": 5000
    },
    "user": {
      "asyncChfQueryEnabled": true,
      "chfQueryEnabled": true,
      "isChfQueryEnabled": true,
      "queryUserOnCreate": true,
      "queryUserOnTerminate": true,
      "queryUserOnUpdate": true,
      "subscribeToNotify": true,
      "uePolicyDataEnabled": true,
      "validateUser": true
    }
  }
}

```

## 2.77 PCRF Core Service

**Table 2-405 Supported REST APIs**

| Description              | HTTP Method or Custom Operation | Resource URI                                                             | Possible Result Code          |
|--------------------------|---------------------------------|--------------------------------------------------------------------------|-------------------------------|
| Get PCRF Core Service    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcrfcore/settings        | See <a href="#">Table A-1</a> |
| Update PCRF Core Service | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcrfcore/settings        | See <a href="#">Table A-2</a> |
| Export PCRF Core Service | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcrfcore/settings/export | See <a href="#">Table A-1</a> |
| Import PCRF Core Service | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcrfcore/settings/import | See <a href="#">Table A-3</a> |

### Get and Update Core Service

**Table 2-406 Request/Response Body Parameters**

| Field Name         | Data Type                       | Mandatory(M)/ Optional(O)/ Conditional(C) | Description |
|--------------------|---------------------------------|-------------------------------------------|-------------|
| advancedSettings   | AdvanceSettingsConfiguration    | O                                         |             |
| user               | UserConfiguration               | O                                         |             |
| mcptt              | MCPTTConfiguration              | O                                         |             |
| audit              | AuditConfiguration              | O                                         |             |
| usageMonService    | UsageMonServiceConfiguration    | O                                         |             |
| pendingTransaction | pendingTransactionConfiguration | O                                         |             |

**Table 2-407 AdvancedSettings**

| Field Name | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description |
|------------|-----------|-------------------------------------------|-------------|
| key        | string    | O                                         |             |
| value      | string    | O                                         |             |

For more information on the Advanced Settings "Keys" and "Values", see PCRF Core Service Configurations "**Settings**" section of "Configuring Policy Using CNC Console" in *Oracle Communications Cloud Native Core, Converged Policy User Guide*.

**Table 2-408 UserConfiguration**

| Field Name                   | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                 |
|------------------------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enableSubscriberVariables    | boolean   | O                                               | If this switch is enabled, PCRF Core controls the querying and saving of remote subscriber state variables (SSV) on PDS.<br><br>When CCR message is received by PCRF Core, then it queries PDS to fetch SSV for the user, instead of retrieving it locally.<br><br>By default, the switch remains disabled. |
| ldapData.enable              | boolean   | O                                               | If this is true, PCRF-Core fetches user profile from LDAP through PDS.                                                                                                                                                                                                                                      |
| ocsSpendingLimit.enable      | boolean   | O                                               | If this is true, PCRF-Core fetches user profile from 4G OCS.                                                                                                                                                                                                                                                |
| ocsSpendingLimit.asyncQuery  | boolean   | O                                               | When this switch is enabled, PCRF Core performs on-demand lookup of Policy Counters for a subscriber.                                                                                                                                                                                                       |
| ocsSpendingLimit.forceLookup | boolean   | O                                               | When this switch is enabled, PCRF Core forces OCS lookup for Policy counters for a subscriber.                                                                                                                                                                                                              |
| smPolicyData.enable          | boolean   | O                                               | If this value is true, PCRF-Core fetches SMPolicyData from nUDR.                                                                                                                                                                                                                                            |
| smPolicyData.queryOnDelete   | boolean   | O                                               | Determines if user query from UDR on delete is enabled. When this option is true, PCRF Core queries the UDR about the subscriber present in the SM Association delete request by sending a GET request for "SmPolicyData" resource on the nudr-dr service.                                                  |
| smPolicyData.queryOnReauth   | boolean   | O                                               | Determines if user query from UDR on reauth is enabled. When this option is true, PCRF Core queries the UDR about the subscriber, when it receives a Reauthorization request, such as Rx or Policy Authorization request by sending a GET request for "SmPolicyData" resource on the nudr-dr service.       |



Table 2-408 (Cont.) UserConfiguration

| Field Name                             | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------------------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| smPolicyData.queryOnUpdate             | boolean   | O                                               | Determines if user query from UDR on update is enabled. When this value is true, PCRF Core queries the UDR about the subscriber present in the SM Association update request by sending a GET request for “SmPolicyData” resource on the nudr-dr service.<br><br><b>Note:</b> The PDS caches the subscriber profile when the “Subscribe To Notify” option is enabled, in that case, the PCRF core may not always reach the UDR when the subscriber profile is found in the local cache.                                                 |
| smPolicyData.subscribeToNotify         | boolean   | O                                               | When this value is true, the PCRF Core subscribes with UDR to get notified for any changes in subscriber profile.                                                                                                                                                                                                                                                                                                                                                                                                                       |
| validateUser                           | boolean   | O                                               | If the User profile, for any of the User Data types given under the User Data Types group, is fetched successfully, the user is considered to be a known user. However, if the user profile lookup has failed on all the configured data sources, the user profile is marked as Unknown. If this value is true and user is marked as Unknown, the session creation requests are rejected.<br><br>If this value is false and user is marked as Unknown, the session creation requests are handled and sessions are created successfully. |
| smPolicyData.autoEnrollment            | boolean   | O                                               | To specify whether to enable or disable the autoprovisioning of the subscriber profile at UDR when the subscriber profile is not available.                                                                                                                                                                                                                                                                                                                                                                                             |
| smPolicyData.default.snsai             | string    | O                                               | To configure a default S-NSSAI, which will be used when a subscriber is auto-enrolled on the UDR. This parameter is applicable only when Auto-Enrollment on UDR is set to true. The value configured here must match the Default S-NSSAI configured on UDR.                                                                                                                                                                                                                                                                             |
| operatorSpecificData.enable            | boolean   | O                                               | If this switch is enabled, PCRF fetches OperatorSpecificData (imported using Custom Schema) from nUDR.                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| operatorSpecificData.subscribeToNotify | boolean   | O                                               | When this switch is enabled, PCRF Core subscribes to get notified of any changes in the profile.<br>Default Value: true                                                                                                                                                                                                                                                                                                                                                                                                                 |

Table 2-409 MCPTT

| Field Name                                                       | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                               |
|------------------------------------------------------------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| mcptt.defaultBeare<br>rARP                                       |           |                                                 |                                                                                                                                                                                                                                                                                                           |
| mcptt.defaultBeare<br>rARP.arpPriorityLe<br>vel                  | integer   | O                                               | Indicates the priority level. It ranges<br>between 1-15.<br>Default Value: 1                                                                                                                                                                                                                              |
| mcptt.defaultBeare<br>rARP.arpPreemptC<br>ap                     | Array     | O                                               | Indicates if the preemption cabaility is<br>enabled or disabled. It can take the<br>following values: <ul style="list-style-type: none"> <li>PREEMPTION_CAPABILITY_ENA<br/>BLED</li> <li>PREEMPTION_CAPABILITY_DISA<br/>BLED</li> </ul> Default Value:<br>PREEMPTION_CAPABILITY_ENABLE<br>D               |
| mcptt.defaultBeare<br>rARP.arpPreemptV<br>uln                    | Array     | O                                               | Indicates if the preemption vulnerability<br>is enabled or disabled. It can take the<br>following values: <ul style="list-style-type: none"> <li>PREEMPTION_VULNERABILITY_<br/>ENABLED</li> <li>PREEMPTION_VULNERABILITY_<br/>DISABLED</li> </ul> Default Value:<br>PREEMPTION_VULNERABILITY_DISA<br>BLED |
| mcptt.defaultPreem<br>ptionControl                               |           |                                                 |                                                                                                                                                                                                                                                                                                           |
| mcptt.defaultPreem<br>ptionControl.default<br>PreemptControlInfo | Array     | O                                               | Includes the Default Preemption Control<br>information: <ul style="list-style-type: none"> <li>LEAST_RECENT_ADDED_FLOW</li> <li>MOST_RECENT_ADDED_FLOW</li> <li>HIGHEST_BANDWIDTH_FLOW</li> </ul> Default Value:<br>LEAST_RECENT_ADDED_FLOW                                                               |

Table 2-410 AuditConfiguration

| Field Name      | Data Type | Mandato<br>ry(M)/<br>Optional(<br>O)/<br>Conditio<br>nal(C) | Description                                                                                                        |
|-----------------|-----------|-------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| audit.enable    | boolean   | M                                                           | Determines whether to send registration<br>request to Audit service or not.<br>By default, this switch is enabled. |
| audit.frequency | integer   |                                                             | Defines the frequency by which Audit service<br>notifies to PCRF Core service in one second.                       |

Table 2-410 (Cont.) AuditConfiguration

| Field Name             | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                |
|------------------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| audit.gxSessionMaxTtl  | integer   |                                                 | Defines the maximum age of a Gx session after which a record is purged from PCRF Core database (Gx Session table) without sending further queries to PGW.  |
| audit.gxSessionTtl     | integer   |                                                 | Defines the age of a Gx session after which a record is considered to be stale on PCRF Core and the PGW is queried for presence of such associations.      |
| audit.notificationRate | integer   |                                                 | Defines the number of stale records which Audit service notifies to PCRF Core service in one second.<br>Default Value: 50                                  |
| audit.rxSessionMaxTtl  | integer   |                                                 | Defines the maximum age of an Rx session after which a record is purged from PCRF Core database (Rx Session table) without sending further queries to PGW. |
| rxSessionTtl           | integer   |                                                 | Defines the age of an Rx session after which a record is considered to be stale on PCRF Core and the PGW is queried for presence of such associations.     |
| sessionMaxTtl          | integer   |                                                 |                                                                                                                                                            |

Table 2-411 UsageMonServiceConfiguration

| Field Name          | Data Type     | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                |
|---------------------|---------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| enable              | boolean       |                                                 | Specifies whether to enable or disable Usage Monitoring service for PCRF.<br>By default, this switch is disabled.                          |
| apnList             | List [string] |                                                 | Specifies the list of APNs for which usage monitoring is enabled. If you leave this field empty, Usage Monitoring is enabled for all APNs. |
| attributeForwarding |               |                                                 |                                                                                                                                            |
| interfaceType       | string        |                                                 | Indicates the interface type for which the profile applies.                                                                                |
| messageType         | string        |                                                 | Indicates the message type for which the profile applies                                                                                   |
| forwardingProfile   | string        |                                                 | Refers to the configured attribute forwarding Profile.                                                                                     |

**Table 2-412 pendingTransactionConfiguration**

| Field Name                    | Data Type     | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                 |
|-------------------------------|---------------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enabled                       | boolean       |                                                 | Specifies whether to enable or disable pending transaction service for PCRF. By default, this switch is disabled.                                                                           |
| rarRetryBackoff               | Integer       |                                                 | Specifies the time gap between the consecutive retry RAR messages when PGW is sending error response with cause of DIAMETER_PENDING_TRANSACTION and RAR message is triggered by PDS/AF/PRE. |
| rarRetryCount                 | Integer       |                                                 | Specifies the count for RAR messages when P-GW is sending error response with cause of DIAMETER_PENDING_TRANSACTION and RAR message is triggered by Notification message from PDS/AF/PRE    |
| userNotifyReauthErrorHandling | List [string] |                                                 | Specifies if an RAR initiated by User Notification message need to be discarded or retried when it is responded by P-GW with an error of DIAMETER_PENDING_TRANSACTION.                      |
| afReauthErrorHandling         | List [string] |                                                 | Specifies if an RAR initiated by AF message should be discarded or retried when it is responded by P-GW with an error of DIAMETER_PENDING_TRANSACTION.                                      |
| reauthErrorHandling           | List [string] |                                                 | Specifies if an RAR initiated by any message should be discarded or retried when it is responded by P-GW with an error of DIAMETER_PENDING_TRANSACTION.                                     |

Sample Request body structure for GET and PUT operations:

```
{
  "advancedSettings": [
    {
      "key": "!",
      "value": "H"
    }
  ],
  "user": {
    "validateUser": false,
    "enableSubscriberVariables": false,
    "smPolicyData.enable": false,
    "ldapData.enable": false,
    "ocsSpendingLimit.enable": false,
    "ocsSpendingLimit.forceLookupOnUpdate": false,
    "smPolicyData.subscribeToNotify": false,
    "smPolicyData.queryOnUpdate": false,
    "smPolicyData.queryOnDelete": false,
    "smPolicyData.queryOnReauth": false,
  }
}
```

```

    "smPolicyData.autoEnrollment": false,
    "smPolicyData.default.snssai": "string",
    "ocsSpendingLimit.asyncQuery": false,
    "operatorSpecificData.enable": false,
    "operatorSpecificData.subscribeToNotify": true
  },
  "mcptt": {
    "defaultBearerARP": {
      "arpPriorityLevel": 1,
      "arpPreemptCap": "PREEMPTION_CAPABILITY_ENABLED",
      "arpPreemptVuln": "PREEMPTION_VULNERABILITY_DISABLED"
    },
    "defaultPreemptionControl": {
      "defaultPreemptControlInfo": "LEAST_RECENT_ADDED_FLOW"
    }
  },
  "audit": {
    "enable": true,
    "notificationRate": 50,
    "gxSessionTtl": 1440,
    "sessionMaxTtl": 0,
    "gxMinAuditAttempts": 5,
    "rxSessionTtl": 1440,
    "rxSessionMaxTtl": 2880,
    "sdSessionTtl": 1440,
    "sdSessionMaxTtl": 2880,
    "sdMinAuditAttempts": 5,
    "frequency": 330
  },
  "usageMonService": {
    "enable": true,
    "disableMonitoringKeyAVP": true,
    "apnList": [
      "string"
    ],
    "attributeForwarding": [
      {
        "interfaceType": {},
        "messageType": {},
        "forwardingProfile": "string"
      }
    ]
  },
  "pendingTransaction": {
    "enabled": true,
    "skipPolicyOnReauthRetry": false,
    "rarRetryBackoff": 1000,
    "rarRetryCount": 2,
    "userNotifyReauthErrorHandling": "string",
    "reauthErrorHandling": "string",
    "afReauthErrorHandling": "string"
  }
}

```

## Export/Import Core Service

Table 2-413 Request/Response Body Parameters

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                       |
|---------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------|
| date          | string    |                                                 | Current timestamp                                                                                 |
| exportData    | array     |                                                 | Exported list of core service. For more information, see <a href="#">Get and Update UE Policy</a> |
| sourceVersion | string    |                                                 | System version of product from which data is exported                                             |
| topic         | string    |                                                 | Topic of each managed object                                                                      |

## Sample Request Body structure for Import/Export operations:

```
{
  "topic": "string",
  "sourceVersion": "string",
  "date": "string",
  "exportData": {
    "advancedSettings": [
      {
        "key": "5PWl4;b6_I|ny:2B$\"U13x5t2U2I>G$kfFbq!}}x=0>[o2Q/#Eea9l w/
E3UnIdCa0vB!yp]%s>Kbp0=| cI1U1`$99t7kBxgUXC}",
        "value": "/cBV7m^~PA6v\"I'Z:Kx\"JKEKP3rvBH)ZP?/"
      }
    ],
    "user": {
      "validateUser": false,
      "enableSubscriberVariables": false,
      "smPolicyData.enable": false,
      "ldapData.enable": false,
      "ocsSpendingLimit.enable": false,
      "ocsSpendingLimit.forceLookupOnUpdate": false,
      "smPolicyData.subscribeToNotify": false,
      "smPolicyData.queryOnUpdate": false,
      "smPolicyData.queryOnDelete": false,
      "smPolicyData.queryOnReauth": false,
      "smPolicyData.autoEnrollment": false,
      "smPolicyData.default.snssai": "string",
      "ocsSpendingLimit.asyncQuery": false,
      "operatorSpecificData.enable": false,
      "operatorSpecificData.subscribeToNotify": true
    },
    "mcptt": {
      "defaultBearerARP": {
        "arpPriorityLevel": 1,
        "arpPreemptCap": "PREEMPTION_CAPABILITY_ENABLED",
        "arpPreemptVuln": "PREEMPTION_VULNERABILITY_DISABLED"
      }
    }
  }
}
```

```

    },
    "defaultPreemptionControl": {
      "defaultPreemptControlInfo": "LEAST_RECENT_ADDED_FLOW"
    }
  },
  "audit": {
    "enable": true,
    "notificationRate": 50,
    "gxSessionTtl": 1440,
    "sessionMaxTtl": 0,
    "gxMinAuditAttempts": 5,
    "rxSessionTtl": 1440,
    "rxSessionMaxTtl": 2880,
    "sdSessionTtl": 1440,
    "sdSessionMaxTtl": 2880,
    "sdMinAuditAttempts": 5,
    "frequency": 330
  },
  "usageMonService": {
    "enable": true,
    "disableMonitoringKeyAVP": true,
    "apnList": [
      "string"
    ],
    "attributeForwarding": [
      {
        "interfaceType": {},
        "messageType": {},
        "forwardingProfile": "string"
      }
    ]
  },
  "pendingTransaction": {
    "enabled": true,
    "skipPolicyOnReauthRetry": false,
    "rarRetryBackoff": 1000,
    "rarRetryCount": 2,
    "userNotifyReauthErrorHandling": "string",
    "reauthErrorHandling": "string",
    "afReauthErrorHandling": "string"
  }
}
}
}

```

## 2.78 Serving Gateway

**Table 2-414 Supported REST APIs**

| Description            | HTTP Method or Custom Operation | Resource URI                                                  | Possible Result Code          |
|------------------------|---------------------------------|---------------------------------------------------------------|-------------------------------|
| Create Serving Gateway | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcrfcore/sgws | See <a href="#">Table A-3</a> |

**Table 2-414 (Cont.) Supported REST APIs**

| Description            | HTTP Method or Custom Operation | Resource URI                                                                       | Possible Result Code          |
|------------------------|---------------------------------|------------------------------------------------------------------------------------|-------------------------------|
| Export Serving Gateway | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcrfcore/sgws/export               | See <a href="#">Table A-1</a> |
| Import Serving Gateway | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcrfcore/sgws/import               | See <a href="#">Table A-3</a> |
| Get Serving Gateway    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcrfcore/sgws/{servingGatewayName} | See <a href="#">Table A-1</a> |
| Update Serving Gateway | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcrfcore/sgws/{servingGatewayName} | See <a href="#">Table A-2</a> |
| Delete Serving Gateway | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcrfcore/sgws/{servingGatewayName} | See <a href="#">Table A-4</a> |

**Create, Get, and Update Serving Gateway****Table 2-415 Data structures supported by the POST, GET, and PUT Response Body**

| Field Name   | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description |
|--------------|-----------|-----------------------------------------|-------------|
| description  | string    |                                         |             |
| mccMnc       | string    |                                         |             |
| name         | string    | M                                       |             |
| sgwIpAddress | array     |                                         |             |

**Sample Request Body structure for POST and PUT operations:**

```
{
  "description": "string",
  "mccMnc": "string",
  "name": "string",
  "sgwIpAddress": [
    "string"
  ]
}
```



**Sample Response Body structure for GET, POST and PUT operations:**

```
{
  "description": "string",
  "mccMnc": "string",
  "name": "string",
  "sgwIpAddress": [
    "string"
  ]
}
```

**Export/Import Serving Gateway****Table 2-416 Request/Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                               |
|----------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------|
| date           | string    |                                                 | Current timestamp                                                                         |
| errors         | array     |                                                 |                                                                                           |
| errors:message | string    |                                                 |                                                                                           |
| errors:name    | string    |                                                 |                                                                                           |
| exportData     | array     | M                                               | Exported list of serving gateway. For more information, see <a href="#">Table 2-415</a> . |
| key            | string    |                                                 | Indicates the ID                                                                          |
| sourceVersion  | string    |                                                 | System version of the product from which data is exported                                 |
| topic          | string    | M                                               | Topic of each managed object                                                              |

**Sample Request Body structure for Import/Export operations:**

```
{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "description": "string",
      "mccMnc": "string",
      "name": "string",
      "sgwIpAddress": [
        "string"
      ]
    }
  ],
  "key": "string",
```

```

    "sourceVersion": "string",
    "topic": "string"
  }

```

### Delete Serving Gateway

**Table 2-417 Request/Response Body Parameters**

| Field Name         | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description          |
|--------------------|-----------|-------------------------------------------------|----------------------|
| servingGatewayName | string    | M                                               | Serving Gateway Name |

## 2.79 Network for PGW

**Table 2-418 Supported REST APIs**

| Description        | HTTP Method or<br>Custom Operation | Resource URI                                                                           | Possible Result Code          |
|--------------------|------------------------------------|----------------------------------------------------------------------------------------|-------------------------------|
| Create Network PGW | POST                               | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcrfcore/network/pgws                  | See <a href="#">Table A-3</a> |
| Export Network PGW | GET                                | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcrfcore/network/pgws/export           | See <a href="#">Table A-1</a> |
| Import Network PGW | POST                               | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcrfcore/network/pgws/import           | See <a href="#">Table A-3</a> |
| Get Network PGW    | GET                                | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcrfcore/network/pgws/{networkPGWName} | See <a href="#">Table A-1</a> |
| Update Network PGW | PUT                                | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcrfcore/network/pgws/{networkPGWName} | See <a href="#">Table A-2</a> |
| Delete Network PGW | DELETE                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcrfcore/network/pgws/{networkPGWName} | See <a href="#">Table A-4</a> |

**Create, Get, and Update Network for PGW****Table 2-419 Data structures supported by the POST, GET, and PUT Response Body**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|----------------|-----------|-------------------------------------------------|-------------|
| backupHostName |           | O                                               |             |
| capabilities   | array     | O                                               |             |
| capacity       | string    | O                                               |             |
| description    | string    | O                                               |             |
| diameterRealm  | string    | O                                               |             |
| fqdn           | string    | O                                               |             |
| hostName       | string    | O                                               |             |
| ipDomainId     | string    | O                                               |             |
| name           | string    | M                                               |             |
| neDiameterId   | array     | O                                               |             |

**Sample Request Body structure for POST and PUT operations:**

```
{
  "backupHostName": "string",
  "capabilities": [
    "string"
  ],
  "capacity": "string",
  "description": "string",
  "diameterRealm": "string",
  "fqdn": "string",
  "hostName": "string",
  "ipDomainId": "string",
  "name": "string",
  "neDiameterId": [
    "string"
  ]
}
```

**Sample Response Body structure for GET, POST and PUT operations:**

```
{
  "backupHostName": "string",
  "capabilities": [
    "string"
  ],
  "capacity": "string",
  "description": "string",
  "diameterRealm": "string",
  "fqdn": "string",
  "hostName": "string",
  "ipDomainId": "string",
  "name": "string",
  "neDiameterId": [
```

```

    "string"
  ]
}

```

## Export/Import Network for PGW

**Table 2-420 Request/Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                               |
|----------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------|
| date           | string    |                                                 | Current timestamp                                                                         |
| errors         | array     |                                                 |                                                                                           |
| errors:message | string    |                                                 |                                                                                           |
| errors:name    | string    |                                                 |                                                                                           |
| exportData     | array     | M                                               | Exported list of network for PGW. For more information, see <a href="#">Table 2-419</a> . |
| key            | string    |                                                 | Indicates the ID                                                                          |
| sourceVersion  | string    |                                                 | System version of the product from which data is exported                                 |
| topic          | string    | M                                               | Topic of each managed object                                                              |

Sample Request Body structure for Import/Export operations:

```

{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "backupHostName": "string",
      "capabilities": [
        "string"
      ],
      "capacity": "string",
      "description": "string",
      "diameterRealm": "string",
      "fqdn": "string",
      "hostname": "string",
      "ipDomainId": "string",
      "name": "string",
      "neDiameterId": [
        "string"
      ]
    }
  ]
},

```

```

    "key": "string",
    "sourceVersion": "string",
    "topic": "string"
  }

```

### Delete Network for PGW

**Table 2-421 Request/Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description      |
|----------------|-----------|-------------------------------------------------|------------------|
| networkPGWName | string    | M                                               | Network PGW Name |

## 2.80 Network for GGSN

**Table 2-422 Supported REST APIs**

| Description         | HTTP Method or<br>Custom Operation | Resource URI                                                                             | Possible Result Code          |
|---------------------|------------------------------------|------------------------------------------------------------------------------------------|-------------------------------|
| Create Network GGSN | POST                               | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcrfcore/network/ggsns                   | See <a href="#">Table A-3</a> |
| Export Network GGSN | GET                                | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcrfcore/network/ggsns/export            | See <a href="#">Table A-1</a> |
| Import Network GGSN | POST                               | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcrfcore/network/ggsns/import            | See <a href="#">Table A-3</a> |
| Get Network GGSN    | GET                                | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcrfcore/network/ggsns/{networkGGSNName} | See <a href="#">Table A-1</a> |
| Update Network GGSN | PUT                                | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcrfcore/network/ggsns/{networkGGSNName} | See <a href="#">Table A-2</a> |
| Delete Network GGSN | DELETE                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcrfcore/network/ggsns/{networkGGSNName} | See <a href="#">Table A-4</a> |

## Create, Get, and Update Network for GGSN

Table 2-423 Data structures supported by the POST, GET, and PUT Response Body

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description |
|----------------|-----------|-------------------------------------------------|-------------|
| backupHostName |           | O                                               |             |
| capabilities   | array     | O                                               |             |
| capacity       | string    | O                                               |             |
| description    | string    | O                                               |             |
| diameterRealm  | string    | O                                               |             |
| hostName       | string    | O                                               |             |
| ipDomainId     | string    | O                                               |             |
| name           | string    | M                                               |             |
| neDiameterId   | array     | O                                               |             |

## Sample Request Body structure for POST and PUT operations:

```
{
  "backupHostName": "string",
  "capabilities": [
    "string"
  ],
  "capacity": "string",
  "description": "string",
  "diameterRealm": "string",
  "hostName": "string",
  "ipDomainId": "string",
  "name": "string",
  "neDiameterId": [
    "string"
  ]
}
```

## Sample Response Body structure for GET, POST and PUT operations:

```
{
  "backupHostName": "string",
  "capabilities": [
    "string"
  ],
  "capacity": "string",
  "description": "string",
  "diameterRealm": "string",
  "hostName": "string",
  "ipDomainId": "string",
  "name": "string",
  "neDiameterId": [
    "string"
  ]
}
```

```

    ]
  }

```

## Export/Import Network for GGSN

**Table 2-424 Request/Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                |
|----------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------|
| date           | string    |                                                 | Current timestamp                                                                          |
| errors         | array     |                                                 |                                                                                            |
| errors:message | string    |                                                 |                                                                                            |
| errors:name    | string    |                                                 |                                                                                            |
| exportData     | array     | M                                               | Exported list of network for GGSN. For more information, see <a href="#">Table 2-423</a> . |
| key            | string    |                                                 | Indicates the ID                                                                           |
| sourceVersion  | string    |                                                 | System version of the product from which data is exported                                  |
| topic          | string    | M                                               | Topic of each managed object                                                               |

### Sample Request Body structure for Import/Export operations:

```

{
  "date": "string",
  "errors": [
    {
      "message": "string",
      "name": "string"
    }
  ],
  "exportData": [
    {
      "backupHostName": "string",
      "capabilities": [
        "string"
      ],
      "capacity": "string",
      "description": "string",
      "diameterRealm": "string",
      "hostname": "string",
      "ipDomainId": "string",
      "name": "string",
      "neDiameterId": [
        "string"
      ]
    }
  ],
  "key": "string",
  "sourceVersion": "string",

```

```
"topic": "string"
}
```

### Delete Network for GGSN

**Table 2-425 Request/Response Body Parameters**

| Field Name      | Data Type | Constraints | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description       |
|-----------------|-----------|-------------|-------------------------------------------------|-------------------|
| networkGGSNName | string    |             | M                                               | Network GGSN Name |

## 2.81 Audit Service

**Table 2-426 Supported REST APIs**

| Description                        | HTTP Method or Custom Operation | Resource URI                                                 | Possible Result Code          |
|------------------------------------|---------------------------------|--------------------------------------------------------------|-------------------------------|
| Get Audit Service                  | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/audit        | See <a href="#">Table A-1</a> |
| Update Audit Service               | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/audit        | See <a href="#">Table A-2</a> |
| Export Audit Service Configuration | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/audit/export | See <a href="#">Table A-1</a> |
| Import Audit Service Configuration | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/services/audit/import | See <a href="#">Table A-3</a> |

### Get and Update Audit Services

**Table 2-427 Request/Response Body Parameters**

| Field Name   | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                     |
|--------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------|
| auditEnabled | boolean   | O                                               | Determines whether to send registration request to Audit service or not.<br>Default Value: True |
| logLevel     | String    | O                                               | Indicates the log level of PCF Session Management (SM) service.                                 |



Table 2-427 (Cont.) Request/Response Body Parameters

| Field Name                                      | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------------------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| forcedDeletion.minAttempts<br>BeforeForceDelete | integer   | O                                               | <p>Specifies the minimum number of consecutive failed audit attempts until maxTTL / forceTTL is reached.</p> <p>If maxTTL is reached and audit_attempts + 1 &gt;= Minimum Audit Attempts for maxTTL, Audit service sends notification to SM service with maxTTL flag set to true. SM Service sends DELETE request to PDS and Binding Service.</p> <p><b>Range:</b> 0-255</p> <p><b>Default Value:</b> 0</p> <p><b>Note:</b> If maxTTL is not reached and if audit attempts are reached, the number of audit attempts are incremented until maxTTL is reached.</p> |

**Sample Request body structure for PUT operation:**

```
{
  "auditEnabled": true,
  "forcedDeletion": {
    "minAttemptsBeforeForceDelete": 5
  }
}
```

**Sample Response body structure for GET, POST, and PUT operations:**

```
{
  "auditEnabled": true,
  "forcedDeletion": {
    "minAttemptsBeforeForceDelete": 5
  }
}
```

## Export/Import Audit Services

Table 2-428 Request/Response Body Parameters

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                      |
|---------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| date          | string    |                                                 | Current timestamp                                                                                                |
| exportData    | array     |                                                 | Exported list of policy audit service. For more information, see <a href="#">Get and Update Audit Services</a> . |
| sourceVersion | string    |                                                 | System version of the product from which data is exported                                                        |
| topic         | string    | M                                               | Topic of each managed object                                                                                     |

## Sample Request Body structure for Import/Export operations:

```
{
  "topic": "common.audit-service.cfg",
  "sourceVersion": "24.3.0-rc.11",
  "date": "2024-10-28T06:05:29Z",
  "exportData": {
    "auditEnabled": true,
    "forcedDeletion": {
      "minAttemptsBeforeForceDelete": 35
    }
  }
}
```

## Audits Scheduled REST API

**Note**

The "Audits Scheduled REST API" must be accessed through Audit port.

Table 2-429 Services Audits Scheduled API description:

| Description                     | HTTP Method or Custom Operation | Resource URI                                                    | Possible Result Code          |
|---------------------------------|---------------------------------|-----------------------------------------------------------------|-------------------------------|
| Audit Service Fetch             | GET                             | {apiRoot}/audits/{serviceName}                                  | See <a href="#">Table A-1</a> |
| Get Audit Table Data for CM GUI | GET                             | {apiRoot}/audit?serviceName={serviceName}&tableName={tableName} | See <a href="#">Table A-1</a> |
| Get Statistics for a table      | GET                             | {apiRoot}/audits/stats/{serviceName}                            | See <a href="#">Table A-1</a> |

**Table 2-429 (Cont.) Services Audits Scheduled API description:**

| Description                  | HTTP Method or Custom Operation | Resource URI                    | Possible Result Code          |
|------------------------------|---------------------------------|---------------------------------|-------------------------------|
| Operation Name for Audit     | PUT                             | {apiRoot}/audit/{operationName} | See <a href="#">Table A-2</a> |
| Audit Service Registration   | PUT                             | {apiRoot}/audits/{serviceName}  | See <a href="#">Table A-2</a> |
| Audit Service Deregistration | DELETE                          | {apiRoot}/audits/{serviceName}  | See <a href="#">Table A-4</a> |
| GET Audit for all services   | GET                             | {apiRoot}/audit                 | See <a href="#">Table A-1</a> |

**Table 2-430 Request/Response Parameters**

| Field Name    | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                         |
|---------------|-----------|-------------------------------------------|-----------------------------------------------------|
| serviceName   | string    | M                                         | Identifier of the requestor NF service, e.g. pcf-sm |
| operationName | string    | M                                         | Operation name for audit , e.g. NOW/ PAUSE/RESUME   |
| tableName     | string    | M                                         | Table name thats need to be audited.                |

## 2.82 Binding Service

**Table 2-431 Supported REST APIs - Binding Service**

| Description             | HTTP Method or Custom Operation | Resource URI                                                   | Possible Result Code          |
|-------------------------|---------------------------------|----------------------------------------------------------------|-------------------------------|
| Get Binding Service     | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/binding        | See <a href="#">Table A-1</a> |
| Update Binding Service  | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/binding        | See <a href="#">Table A-2</a> |
| Export Binding Services | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/binding/export | See <a href="#">Table A-1</a> |
| Import Binding Services | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/services/binding/import | See <a href="#">Table A-3</a> |

## Get and Update Binding Service

Table 2-432 Request/Response Body Parameters

| Field Name                             | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                          |
|----------------------------------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| abortOnBindingError                    | boolean   | O                                               | Determines if PCF (SM service) should abort terminate session when binding error is received.                                        |
| bindingOperationEnabled                | boolean   | O                                               | This determines if binding operation (register and deregister) to the BSF is enabled.<br><b>Default Value:</b> TRUE                  |
| bsfEnabled                             | boolean   | O                                               | Determines if BSF is enabled or disabled.                                                                                            |
| bsfNfCommProfile                       | String    | O                                               | Specifies the NF communication profile used by BSF.                                                                                  |
| bsfRetryProfileForInitMsgs             | string    | O                                               | Retry Profile to be used when PCF fails to send a create message to a producer node .                                                |
| bsfRetryProfileForSubsqMsgs            | string    | O                                               | Retry Profile to be used when PCF fails to send an in-session message to a producer node.                                            |
| defaultBindingOperationMode            | Enum      | O                                               | Allows users to configure binding operation mode as synchronous or asynchronous.                                                     |
| enableApnFilterBySnssai                | boolean   | O                                               | This parameter can be used to enable or disable limiting of number of bindings at DNN + SNSSAI + IP domain level at Binding service. |
| enableSessionLimitByUser               | boolean   | O                                               | This parameter can be used to enable or disable user level limiting for bindings at Binding service.                                 |
| maxSessionLimitByApn                   | integer   | O                                               | This parameter can be used to specify the maximum session limit for DNN + SNSSAI + IP domain level.                                  |
| maxSessionLimitByUser                  | integer   | O                                               | This parameter can be used to specify the maximum session limit for a particular user.                                               |
| useHttp2                               | boolean   | O                                               | Determines if using http/2 to communicate with BSF. Otherwise use http/1.1. <b>Default Value:</b> TRUE                               |
| useLocalConfiguredBsfAlways            | boolean   | O                                               | Whether to use local configured BSF without Always discovering. <b>Default Value:</b> FALSE                                          |
| useLocalConfiguredBsfWhenNotDiscovered | boolean   | O                                               | Whether to use local configured (if having) BSF when not discovered or discover failed. <b>Default Value:</b> FALSE                  |

Table 2-432 (Cont.) Request/Response Body Parameters

| Field Name                               | Data Type                      | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------------------------|--------------------------------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enableVSAInRegisterRequest               | boolean                        | O                                               | Determines if PCF sends Vendor-Specific-Attribute in the Binding Create or Register request. By default, the value is set to false.                                                                                                                                                                                                                                              |
| vendorID                                 | integer                        | O                                               | <b>Note:</b> This field becomes active only when <b>Enable Vendor Specific Attribute in Register Request</b> switch is enabled. Specifies the Vendor ID that is mapped to the vendorId in the Vendor-Specific-Attribute.                                                                                                                                                         |
| dataCompressionScheme                    |                                |                                                 | Specifies the data compression scheme used by Binding Service. Following are the allowed values for this field: <ul style="list-style-type: none"> <li>• Disabled</li> <li>• Zlib_Compressed</li> </ul> By default, this value remains disabled.                                                                                                                                 |
| audit                                    | BindingAuditConfiguration      | O                                               | Provide Binding Audit Configuration details.                                                                                                                                                                                                                                                                                                                                     |
| maxSessionCleanupMode                    | String<br>Enum:[Local, Remote] | O                                               | Binding service uses this flag to send request to SM service for either local or remote session clean up. The allowed values for this flag are: <ul style="list-style-type: none"> <li>• Local</li> <li>• Remote</li> </ul> On choosing the flag to Local, PCF deletes the session locally and does not send notify terminate request toward SMF.<br><b>Default Value:</b> Local |
| maxSessionForceDeleteOnExpiryOfWaitTimer | integer                        | O                                               | On Max Session Cleanup Mode set to Remote this toggle flag appears. It makes forceDeleteOnExpiryOfWaitTimer flag to true or false which is used in SM service request for remote cleanup.<br><b>Default Value:</b> false                                                                                                                                                         |

Table 2-432 (Cont.) Request/Response Body Parameters

| Field Name                   | Data Type       | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------------|-----------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| maxSessionForceDeleteOnError | boolean         | O                                               | On Max Session Cleanup Mode set to Remote this toggle flag appears. It makes forceDeleteOnError flag to true or false which is used in SM service request for remote cleanup.<br>On SM service notify terminate request failure and based on forceDeleteOnError flag, the session with 4xx and 5xx response status codes are deleted except for the 404 status code.<br><b>Default Value:</b> false |
| advancedSettings             | AdvanceSettings | O                                               |                                                                                                                                                                                                                                                                                                                                                                                                     |

Table 2-433 BindingAuditConfiguration

| Field Name       | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                |
|------------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enable           | boolean   | O                                               | Determines whether to send registration request to Audit service or not.<br><b>Default Value:</b> True                                                                                                     |
| notificationRate | integer   | M                                               | Defines the number of stale records which Audit service notifies to Binding service in one second. The allowed value ranges 20 to 700 seconds.<br><b>Default Value:</b> 50<br><b>Range:</b> 20-700 seconds |
| maxTtl           | integer   | M                                               | Defines the binding age in minutes, of the binding entry after which Binding service deletes the stale sessions.<br><b>Default Value:</b> 7200<br><b>Range:</b> 1-10080                                    |

Table 2-433 (Cont.) BindingAuditConfiguration

| Field Name          | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| minAuditAttempts    | integer   | M                                               | <p>Specifies the minimum number of consecutive failed audit attempts until maxTTL / forceTTL is reached.</p> <p>If maxTTL is reached and audit_attempts + 1 &gt;= Minimum Audit Attempts for maxTTL, Audit service sends notification to Binding Service with maxTTL flag set to <i>true</i>. Binding Service deletes the corresponding contextbinding information from its database.</p> <p><b>Range:</b> 0-255</p> <p><b>Default Value:</b> 0</p> <p><b>Note:</b> If maxTTL is not reached and if audit attempts are reached, the number of audit attempts are incremented until maxTTL is reached.</p> |
| ttl                 | integer   |                                                 | <p>Minimum audit passes interval in minutes.</p> <p><b>Range:</b> 1-1440</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| revalidateEnable    | boolean   | O                                               | <p>Determines whether to revalidate the binding session details with BSF.</p> <p>When this field is enabled, Binding service sends a request for revalidating the binding session records for valid PDU sessions in BSF.</p> <p><b>Default value:</b> False</p>                                                                                                                                                                                                                                                                                                                                           |
| bsfRetryProfRevalid | string    | O                                               | <p>Specifies the retry profile for revalidating the session binding records with BSF.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

**Table 2-434 AdvancedSettings**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                     |
|------------|-----------|-------------------------------------------------|---------------------------------|
| key        | string    | O                                               | Specifies the key name.         |
| value      | string    | O                                               | Specifies the value of the key. |

For more information on the Advanced Settings "Keys" and "Values", see "Binding Service" section of "Configuring Policy Using CNC Console" in *Oracle Communications Cloud Native Core, Converged Policy User Guide*.

**Sample Response body structure for Binding Service GET and PUT operation:**

```
{
  "useLocalConfiguredBsfcAlways": true,
  "useLocalConfiguredBsfcWhenNotDiscovered": true,
  "useHttp2": true,
  "abortOnBsfcError": true,
  "bsfcRetryProfileForInitMsgs": "string",
  "bsfcRetryProfileForSubseqMsgs": "string",
  "maxSessionLimitByUser": 10,
  "maxSessionLimitByApn": 2,
  "enableSessionLimitByUser": true,
  "enableApnFilterBySnsai": true,
  "bindingServiceNfCommProfile": "string",
  "enableVSAInRegisterRequest": true,
  "vendorId": "000111",
  "dataCompressionScheme": "disabled",
  "optimization": {
    "enableIndexMigration": false,
    "enableQueryOptimization": false,
    "preferredSubscriberId": "SUPI_OR_GPSI"
  },
  "audit": {
    "enable": true,
    "notificationRate": 50,
    "ttl": 1440,
    "maxTtl": 7200,
    "frequency": 330,
    "minAuditAttempts": 5,
    "revalidateEnable": false,
    "bsfcRetryProfRevalid": "string"
  },
  "maxSessionCleanupMode": "Local",
  "maxSessionForceDeleteOnExpiryOfWaitTimer": false,
  "maxSessionForceDeleteOnError": false,
  "messagePriority": {
    "messagePriorityProfile": "string"
  },
  "advancedSettings": [
    {
      "key": "&",
```



```

    "value": "AE<"
  }
]
}

```

## Import and Export Binding Service

**Table 2-435 Request/Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                  |
|----------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| date           | string    |                                                 | Current timestamp                                                                                            |
| errors.message |           |                                                 | The reason of the failure.                                                                                   |
| errors.name    |           |                                                 | Name of the components that failed to export or import.                                                      |
| exportData     | array     |                                                 | Exported list of Binding Service. For more information, see <a href="#">Get and Update Binding Service</a> . |
| key            | string    |                                                 | Indicates the ID                                                                                             |
| sourceVersion  | string    |                                                 | System version of product from which data is exported                                                        |
| topic          | string    |                                                 | Topic of each managed object                                                                                 |

### Sample Request Body structure for Binding Service Import and Export operations:

```

{
  "topic": "string",
  "sourceVersion": "string",
  "date": "string",
  "exportData": {
    "useLocalConfiguredBsAlways": true,
    "useLocalConfiguredBsWhenNotDiscovered": true,
    "useHttp2": true,
    "abortOnBsError": true,
    "bsfRetryProfileForInitMsgs": "string",
    "bsfRetryProfileForSubsqMsgs": "string",
    "maxSessionLimitByUser": 10,
    "maxSessionLimitByApn": 2,
    "enableSessionLimitByUser": true,
    "enableApnFilterBySnssai": true,
    "bindingServiceNfCommProfile": "string",
    "enableVSAInRegisterRequest": true,
    "vendorId": "000111",
    "dataCompressionScheme": "disabled",
    "optimization": {
      "enableIndexMigration": false,
      "enableQueryOptimization": false,
      "preferredSubscriberId": "SUPI_OR_GPSI"
    }
  }
}

```

```

    },
    "audit": {
      "enable": true,
      "notificationRate": 50,
      "ttl": 1440,
      "maxTtl": 7200,
      "frequency": 330,
      "minAuditAttempts": 5,
      "revalidateEnable": false,
      "bsfRetryProfRevalid": "string"
    },
    "maxSessionCleanupMode": "Local",
    "maxSessionForceDeleteOnExpiryOfWaitTimer": false,
    "maxSessionForceDeleteOnError": false,
    "messagePriority": {
      "messagePriorityProfile": "string"
    },
    "advancedSettings": [
      {
        "key": "?T~|",
        "value": "Z"
      }
    ]
  },
  "errors": [
    {
      "name": "string",
      "message": "string"
    }
  ]
}

```

## 2.83 NF Communication Profiles

This section describes the service URIs available to create and configure NF communication profiles for CNC Policy.

**Table 2-436 Policy NF Communication Profiles APIs**

| Description                     | HTTP Method or Custom Operation | Resource URI                                                                                        | Possible Result Code          |
|---------------------------------|---------------------------------|-----------------------------------------------------------------------------------------------------|-------------------------------|
| Create NF Communication Profile | POST                            | {apiRoot}/oc-cnppolicy-configuration/v1/services/common/nfcommprofiles                              | See <a href="#">Table A-3</a> |
| Get NF Communication Profile    | GET                             | {apiRoot}/oc-cnppolicy-configuration/v1/services/common/nfcommprofiles/{nfCommunicationProfileName} | See <a href="#">Table A-1</a> |

**Table 2-436 (Cont.) Policy NF Communication Profiles APIs**

| Description                      | HTTP Method or Custom Operation | Resource URI                                                                                       | Possible Result Code          |
|----------------------------------|---------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------|
| Update NF Communication Profile  | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/nfcommprofiles/{nfCommunicationProfileName} | See <a href="#">Table A-2</a> |
| Export NF Communication Profiles | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/nfcommprofiles/export                       | See <a href="#">Table A-1</a> |
| Import NF Communication Profiles | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/nfcommprofiles/import                       | See <a href="#">Table A-3</a> |
| Delete NF Communication Profile  | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/nfcommprofiles/{nfCommunicationProfileName} | See <a href="#">Table A-4</a> |

**Get, Create, and Update NF Communication Profile**

This section describes the request and response parameters used in NF communication profile APIs.

**Table 2-437 Request and Response Body Parameters**

| Field Name                 | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                                                                                                                                                                                                                                                                                                       |
|----------------------------|-----------|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| nfCommunicationProfileName | string    | M                                         | The unique name for the NF communication profile. This name is used to refer to the profile in other service configuration screen, such as SM Service, User Connector, and so on.<br><br>The name can only contain the characters A–Z, a–z, 0–9, period (.), hyphen (-), and underline (_). The maximum length is 255 characters. |
| policyNfCommunicationModel | String    | O                                         | Indicates the communication model, in which the Policy NF is deployed.<br>Provide any of the following values: <ul style="list-style-type: none"> <li>CUSTOM</li> <li>Model_B</li> <li>Model_C</li> <li>Mode_D</li> </ul> Default value: CUSTOM                                                                                   |

Table 2-437 (Cont.) Request and Response Body Parameters

| Field Name                                     | Data Type      | Mandatory(M)/Optional(O)/Conditional(C)                                                                                                                                                                                        | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------------------------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| nfDiscoverySettings.discoveryParameters        | DiscoveryParam | M<br><b>Note:</b> This parameter is mandatory when either of the following attributes is set to true: <ul style="list-style-type: none"> <li>sendDiscoveryHeaderInItMsg</li> <li>sendDiscoveryHeaderSubscriptionMsg</li> </ul> | Indicates the discovery parameter to be used in the 3gpp-sbi-discovery-<discovery-parameter>. This parameter is ignored when the "policyNfCommunicationModel" is set to <b>MODEL_B</b> .                                                                                                                                                                                                                                                                                                 |
| nfDiscoverySettings.sendDiscoveryHeaderInItMsg | boolean        | O                                                                                                                                                                                                                              | This value indicates if PCF must include the following 3gpp-sbi-discovery-<discovery-parameter> parameters in SBI messages: <ul style="list-style-type: none"> <li>Parameters that create a subscription, such as POST messages</li> <li>Parameters that do not belong to a subscription, such as GET or PATCH messages</li> </ul> Default value: False, for Custom model.<br>This attribute is ignored when "policyNfCommunicationModel" is set to any value other than <b>CUSTOM</b> . |

Table 2-437 (Cont.) Request and Response Body Parameters

| Field Name                                         | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------------------------|-----------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| nfDiscoverySettings.sendDiscoveryHeaderSubsMsg     | boolean   | O                                       | <p>This value indicates if PCF must include the following 3gpp-sbi-discovery-&lt;discovery-parameter&gt; parameters in SBI messages:</p> <ul style="list-style-type: none"> <li>Parameters to update a subscription, such as PUT messages when unable to fill in a 3gpp-sbi-routing-binding header.</li> <li>Parameters to delete a subscription, such as DELETE messages when unable to fill in a 3gpp-sbi-routing-binding header.</li> </ul> <p>Default value: False, for Custom model.</p> <p>This attribute is ignored when "policyNfCommunicationModel" is set to any value other than <b>CUSTOM</b>.</p>                 |
| nfDiscoverySettings.sendTargetApiRootHeaderInitMsg | boolean   | false                                   | <p>Indicates if PCF must include 3gpp-sbi-target-apiroot header in initial request messages.</p> <p>If the user selects Model D for Policy NF Communication Model, the value for this parameter must be set to false. For other Policy NF Communication Model values, the default value is true.</p>                                                                                                                                                                                                                                                                                                                           |
| onDemandDiscoveryCaching.forceDiscovery            | String    | O                                       | <p>Indicates whether to cache the NF profiles in NRF client or to skip caching and receive the response directly from NRF.</p> <p>Value of this parameter can be 0 or 1.</p> <ul style="list-style-type: none"> <li>When the value of OC-Force-Rediscovery parameter is set to 0, it enables the feature and caches the NF profiles details received from NRF in NRF Client.</li> <li>When the value of OC-Force-Rediscovery parameter is set to 1, it disables the feature and retrieves the NF profiles directly from NRF while responding to the query from the backend services.</li> </ul> <p><b>Default value: 0</b></p> |

Table 2-437 (Cont.) Request and Response Body Parameters

| Field Name                               | Data Type | Mandatory(M)/Optional(O)/Conditional(C)                                                            | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------|-----------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| onDemandDiscoveryCaching.retentionPeriod | String    | O                                                                                                  | <p>Indicates whether to cache the NF profiles in NRF client or to skip caching and receive the response directly from NRF.</p> <p>Value of this parameter can be 0 or 1.</p> <ul style="list-style-type: none"> <li>— When the value of OC-Force-Rediscovery parameter is set to 0, it enables the feature and caches the NF profiles details received from NRF in NRF Client.</li> <li>— When the value of OC-Force-Rediscovery parameter is set to 1, it disables the feature and retrieves the NF profiles directly from NRF while responding to the query from the backend services.</li> </ul> <p><b>Default value:</b> 0</p> |
| nfBindingSettings.bindingLevel           | boolean   | M<br><b>Note:</b> This parameter is mandatory when the sendBindingHeader parameter is set to true. | <p>Indicates the binding level that must to be included in the 3gpp-sbi-binding header when PCF adds this header in a message to another NF.</p> <p>Provide any of the following values:</p> <ul style="list-style-type: none"> <li>NF_SET</li> <li>NF_INSTANCE</li> </ul>                                                                                                                                                                                                                                                                                                                                                         |
| nfBindingSettings.sendBindingHeader      | boolean   | O                                                                                                  | <p>Indicates if PCF includes the 3gpp-sbi-binding header in SBI messages for the subscription creation, modification, or notification requests and responses, as applicable.</p> <p>Default value: False, for Custom model.</p> <p>This attribute is ignored when "policyNfCommunicationModel" is set to any value other than "Custom".</p>                                                                                                                                                                                                                                                                                        |

Table 2-437 (Cont.) Request and Response Body Parameters

| Field Name                                           | Data Type        | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------------------------|------------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| nfBindingSettings.sendServiceName                    | boolean          | O                                       | Indicates whether to enable or disable the support for sending service name in binding header.<br><br>Possible values: <ul style="list-style-type: none"> <li>true: includes svcname in the Binding Header sent towards NFs such as UDR, AMF, or BSF (customized) except for CHF, which contains the 3GPP defined PCF service name.</li> <li>false: does not include svcname in the Binding Header.</li> </ul> <b>Default value</b> : false |
| nfBindingSettings.sendRoutingBindingHeader           | boolean          | O                                       | Indicates if PCF includes the <i>3gpp-sbi-routing-binding</i> header in SBI messages for the subscription creation, modification, or notification requests, as applicable.<br>Default value: False                                                                                                                                                                                                                                          |
| nfBindingSettings.sendCallbackHeader                 | boolean          | O                                       | Indicates if PCF includes the <i>3gpp-sbi-callback</i> header in SBI messages for the subscription creation, modification, or notification requests, as applicable.<br>Default value: False, for Custom model.<br><br>This attribute is ignored when "policyNfCommunicationModel" is set to any value other than <b>CUSTOM</b> . For more information, see <a href="#">Table 2-440</a>                                                      |
| nfServerSettings                                     | NFServerSettings | O                                       | Specifies the server header settings for the NF communication profile.                                                                                                                                                                                                                                                                                                                                                                      |
| nfServerSettings.sendServerHeader                    | Boolean          | O                                       | Indicates if services Converged Policy microservices include server header while sending an error response.                                                                                                                                                                                                                                                                                                                                 |
| nfServerSettings.serverHeaderErrorCodes              | String           | O                                       | Specifies the error codes for which service header is generated. The error codes can be from 100 to 999.<br><b>Note:</b> If no error is specified, then Converged Policy sends server header for all error responses.                                                                                                                                                                                                                       |
| retryAndAlternateRoutingSettings.retryProfileInitMsg | string           | O                                       | Specifies the retry or alternate routing options when an SBI message is not delivered successfully in any of the following scenarios: <ul style="list-style-type: none"> <li>POST operation to create a subscription</li> <li>GET or PATCH request not belonging to a subscription</li> </ul>                                                                                                                                               |

Table 2-437 (Cont.) Request and Response Body Parameters

| Field Name                                           | Data Type         | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                           |
|------------------------------------------------------|-------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| retryAndAlternateRoutingSettings.retryProfileSubsMsg | string            | O                                               | Specifies the retry or alternate routing options when an SBI message that updates, deletes or notifies a subscription is not delivered successfully.  |
| nfCorrelationSettings.sendCorrelationHeader          | string            | O                                               | Indicates whether to carry subscriber identifier included in SBI messages and can be used for SBI message correlation.<br><b>Default Value:</b> false |
| nfCorrelationSettings.allowedCorrelationInfoType     | string            | O                                               | Displays the types of values that can be included in Correlation-info Header. Currently only SUPI and GPSI are supported.                             |
| reattemptSettings                                    | ReattemptSettings | O                                               | Provide Re-attempt Settings details.                                                                                                                  |

Table 2-438 ReattemptSettings

| Field Name                        | Data Type                  | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                          |
|-----------------------------------|----------------------------|-------------------------------------------------|------------------------------------------------------------------------------------------------------|
| enableNFServiceOperationReattempt | boolean                    | O                                               | This is a global flag to enable re-attempt for NF service operations.<br><b>Default Value:</b> false |
| nfServiceOperationProfiles        | NFServiceOperationProfiles | O                                               | Configure the list of NF Service Operations along with Reattempts Profile.                           |

Table 2-439 NFServiceOperationProfiles

| Field Name         | Data Type                  | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                              |
|--------------------|----------------------------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| nfServiceOperation | string Enum:[]             | O                                               | Configure the list of NF Service Operations. The possible values are: <ul style="list-style-type: none"> <li>AMFDiscovery</li> <li>N1N2MessageSubscribe</li> <li>N1N2MessageTransfer</li> <li>N1N2TransferFailureNotification</li> </ul> |
| reattemptProfile   | NFServiceOperationProfiles | O                                               | Provide the Reattempts Profiles for the selected service operation.                                                                                                                                                                      |



## Default Header Values

The following table informs about the default values of Binding headers for each of the supported communication models:

**Table 2-440 Default Header Values for Communication Model**

| Flags                                          | Model B | Model C | Model D | Custom |
|------------------------------------------------|---------|---------|---------|--------|
| Send Target Api Root Header in Initial Message | True    | True    | False   | True   |
| Send Discovery Header In Initial Messages      | False   | False   | True    | False  |
| Send Discovery Header In Subsequent Messages   | False   | False   | True    | False  |
| Send Binding Header                            | True    | True    | True    | False  |
| Send Routing Binding Header                    | False   | True    | True    | False  |
| Send Callback Header                           | False   | True    | True    | False  |

**Sample Request body for NF Communication Profile POST and PUT operations:**

```

{
  "nfCommunicationProfileName": "String",
  "policyNfCommunicationModel": "CUSTOM",
  "nfDiscoverySettings": {
    "discoveryParameters": [
      {
        "paramName": "TARGET_NF_SET_ID",
        "paramValue": "string"
      }
    ],
    "sendDiscoveryHeaderInitMsg": false,
    "sendDiscoveryHeaderSubsMsg": false,
    "sendTargetApiRootHeaderInitMsg": false
  },
  "onDemandDiscoveryCaching": {
    "forceDiscovery": 0,
    "retentionPeriod": 10000
  },
  "nfBindingSettings": {
    "bindingLevel": "NF_SET",
    "sendBindingHeader": false,
    "sendRoutingBindingHeader": false,
    "sendCallbackHeader": false,
    "sendServiceName": false
  },
  "nfServerSettings": {
    "sendServerHeader": true,

```

```

        "serverHeaderErrorCodes": [
            0
        ]
    },
    "retryAndAlternateRoutingSettings": {
        "retryProfileInitMsg": "string",
        "retryProfileSubsMsg": "string"
    },
    "nfCorrelationSettings": {
        "sendCorrelationHeader": true,
        "allowedCorrelationInfoIdType": [
            "imsi"
        ]
    },
    "reattemptSettings": {
        "enableNFServiceOperationReattempt": true,
        "nfServiceOperationProfiles": [
            {
                "nfServiceOperation": "AMFDiscovery",
                "reattemptProfile": "string"
            }
        ]
    }
}

```

**Sample Response body structure for NF Communication Profile GET, POST, and PUT operation:**

```

{
    "nfCommunicationProfileName": "string",
    "policyNfCommunicationModel": "CUSTOM",
    "nfDiscoverySettings": {
        "discoveryParameters": [
            {
                "paramName": "TARGET_NF_SET_ID",
                "paramValue": "string"
            }
        ],
        "sendDiscoveryHeaderInitMsg": false,
        "sendDiscoveryHeaderSubsMsg": false,
        "sendTargetApiRootHeaderInitMsg": false
    },
    "onDemandDiscoveryCaching": {
        "forceDiscovery": 0,
        "retentionPeriod": 10000
    },
    "nfBindingSettings": {
        "bindingLevel": "NF_SET",
        "sendBindingHeader": false,
        "sendRoutingBindingHeader": false,
        "sendCallbackHeader": false
    },
    "nfServerSettings": {
        "sendServerHeader": true,
        "serverHeaderErrorCodes": [

```

```

    0
  ]
},
"retryAndAlternateRoutingSettings": {
  "retryProfileInitMsg": "string",
  "retryProfileSubsMsg": "string"
},
"nfCorrelationSettings": {
  "sendCorrelationHeader": true,
  "allowedCorrelationInfoIdType": [
    "imsi"
  ]
}
}
}

```

## Import and Export NF Communication Profile

**Table 2-441 Import/Export NF Communication Profile**

| API Name                         | Request Type | Request Url                                                                  | Possible Result Code          |
|----------------------------------|--------------|------------------------------------------------------------------------------|-------------------------------|
| Export NF Communication Profiles | GET          | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/nfcommprofiles/export | See <a href="#">Table A-1</a> |
| Import NF Communication Profiles | POST         | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/nfcommprofiles/import | See <a href="#">Table A-3</a> |

**Table 2-442 Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                             |
|---------------|-----------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| date          | string    | O                                       | Current timestamp                                                                                                                       |
| error.message | string    | O                                       | The reason of the failure.                                                                                                              |
| error.name    | string    | O                                       | Name of the components that failed to export or import.                                                                                 |
| exportData    | array     | M                                       | Exported list of NF Communication Profile. For more information, see <a href="#">Get, Create, and Update NF Communication Profile</a> . |
| key           | string    | O                                       | Indicates the ID of NF Communication Profile.                                                                                           |
| sourceVersion | string    | O                                       | System version of product from which data is exported                                                                                   |
| topic         | string    | M                                       | Topic of each managed object                                                                                                            |

**Sample Request Body structure for NF Communication Profile Import and Export operations:**

```

{
  "systemVersion": "string",
  "topic": "string",
  "sourceVersion": "string",
  "date": "string",
  "exportData": [
    {
      "nfCommunicationProfileName": "String",
      "policyNfCommunicationModel": "CUSTOM",
      "nfDiscoverySettings": {
        "discoveryParameters": [
          {
            "paramName": "TARGET_NF_SET_ID",
            "paramValue": "string"
          }
        ],
        "sendDiscoveryHeaderInitMsg": false,
        "sendDiscoveryHeaderSubsMsg": false,
        "sendTargetApiRootHeaderInitMsg": false
      },
      "onDemandDiscoveryCaching": {
        "ignoreCacheAndForceDiscovery": 0,
        "forceDiscovery": 0,
        "retentionPeriod": 10000
      },
      "nfBindingSettings": {
        "bindingLevel": "NF_SET",
        "sendBindingHeader": false,
        "sendRoutingBindingHeader": false,
        "sendCallbackHeader": false,
        "sendServiceName": false
      },
      "nfServerSettings": {
        "sendServerHeader": true,
        "serverHeaderErrorCodes": [
          0
        ]
      },
      "retryAndAlternateRoutingSettings": {
        "retryProfileInitMsg": "string",
        "retryProfileSubsMsg": "string"
      },
      "nfCorrelationSettings": {
        "sendCorrelationHeader": true,
        "allowedCorrelationInfoIdType": [
          "imsi"
        ]
      },
      "retrySettings": {
        "enableNFServiceOperationRetry": true,
        "nfServiceOperationProfiles": [
          {

```

```

        "nfServiceOperation": "AMFDiscovery",
        "retryProfile": "string"
    }
  ]
}
},
"errors": [
  {
    "name": "string",
    "message": "string"
  }
]
}

```

## 2.84 PDS Settings

**Table 2-443 Supported REST APIs**

| Description         | HTTP Method or Custom Operation | Resource URI                                                           | Possible Result Code          |
|---------------------|---------------------------------|------------------------------------------------------------------------|-------------------------------|
| Export PDS Settings | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/pds/pdsSettings/export | See <a href="#">Table A-1</a> |
| Import PDS Settings | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/services/pds/pdsSettings/import | See <a href="#">Table A-3</a> |
| Get PDS Settings    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/pds/pdsSettings        | See <a href="#">Table A-1</a> |
| Update PDS Settings | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/pds/pdsSettings        | See <a href="#">Table A-2</a> |

### Get and Update PDS Settings

**Table 2-444 Request/Response Body Parameters**

| Field Name             | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                      |
|------------------------|-----------|-----------------------------------------|--------------------------------------------------------------------------------------------------|
| audit.enable           | boolean   | O                                       | Specifies whether to send registration request to Audit service or not.                          |
| audit.notificationRate | integer   | M                                       | Specifies the number of stale records which Audit service notifies to PDS service in one second. |

Table 2-444 (Cont.) Request/Response Body Parameters

| Field Name                                                                                   | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| audit.pdsProfileMin<br>AuditPassInterval                                                     | integer   | M                                               | Specifies the minimum interval (in minutes) between start times of two consecutive audit passes for the pdssubscriber table.                                                                             |
| audit.pdsProfileAge                                                                          | integer   | M                                               | Specifies the age (in minutes) of PDS profile (GPSI-SUPI-NAI mapping) after which the profile is considered to be stale in Policy and PDS subscriber table is queried for presence of such associations. |
| audit.pdsProfileMax<br>Age                                                                   | integer   | M                                               | Specifies the age (in minutes) of PDS profile (GPSI-SUPI-NAI mapping) after which the profile is purged from the database without sending any queries to PDS subscriber table.                           |
| audit.subscriberMin<br>AuditPassInterval                                                     | integer   | M                                               | Specifies the minimum interval (in minutes) between start times of two consecutive audit passes for the pdssubscriber table.                                                                             |
| audit.subscriberSes<br>sionAge                                                               | integer   | M                                               | Specifies the age (in minutes) of PDS subscriber entry after which a record is considered to be stale on Policy and services (SM, AM, UE, and PCRF Core) are queried for presence of such associations.  |
| audit.subscriberSes<br>sionMaxAge                                                            | integer   | M                                               | Specifies the age (in minutes) of PDS subscriber entry after which a record is purged from the database and no query requests are sent to services for presence of such associations.                    |
| audit.policyDataSu<br>bscriptionExpiry.poli<br>cyDataSubsEnable<br>d                         | Boolean   | O                                               | Determines whether to enable or disable the handling of Policy Data subscription expiry.<br><b>Default value:</b> false                                                                                  |
| audit.policyDataSu<br>bscriptionExpiry.poli<br>cyDataSubsPreExp<br>iryPeriod                 | integer   | O                                               | Specifies the duration (time in minutes) for which the Re-subscription can be triggered for Policy data.<br><b>Default value:</b> 180<br><b>Range:</b> 1 to 20160                                        |
| audit.policyDataSu<br>bscriptionExpiry.poli<br>cyDataSubsExpiry<br>AuditNotificationRat<br>e | integer   | O                                               | Specifies the Policy Data Subscription Expiry notification processing rate.<br>Default value: 50<br>Range: 20-300                                                                                        |

Table 2-444 (Cont.) Request/Response Body Parameters

| Field Name                                                                  | Data Type              | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------------------------------|------------------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| audit.policyDataSubscriptionExpiry.policyDataSubsExpiryMaxAge               | integer                | O                                               | Specifies the Audit window limited to local site. The local site triggers the audit until the maximum Policy association age is reached. Once maximum Policy association age is reached, the replicated site becomes eligible to perform the audit.<br><b>Default value:</b> 50<br><b>Range:</b> 1-100 |
| audit.policyDataSubscriptionExpiry.policyDataSubsExpiryMinAuditPassInterval | integer                | O                                               | Specifies the minimum interval between Policy Data Subscription expiry audits.<br><b>Default value:</b> 10<br><b>Range:</b> 1-1440                                                                                                                                                                     |
| common.enableFetchAndResubscribe                                            | boolean                | O                                               | If the value for this parameter is set to true, PDS refetches the data and revalidates the subscription when the number of sessions exceeds the configured limit at PDS.                                                                                                                               |
| common.enableHttp2                                                          | boolean                | O                                               | If the value for this parameter is set to true, the HTTP2 remains enabled. By default, HTTP2 remains disabled.                                                                                                                                                                                         |
| common.requestTimeout                                                       | string                 | O                                               | If PDS Setting is updated then set the timeout as 3000 for the initial flow to succeed.                                                                                                                                                                                                                |
| common.sessionCountPerDnnList                                               | SessionCountPerDnnList | O                                               | If enableFetchAndResubscribe parameter is set to true, user can configure the number of sessions per DNN using this group of parameters.                                                                                                                                                               |

Table 2-444 (Cont.) Request/Response Body Parameters

| Field Name                                       | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------------------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| common.enableConfigurableTimeout                 | string    | O                                               | <p>If this parameter is enabled the following interface-level timeouts (optional) are displayed:</p> <ul style="list-style-type: none"> <li>• UDR Request Timeout</li> <li>• CHF Request Timeout</li> <li>• LDAP Request Timeout</li> <li>• OCS Request Timeout</li> <li>• Bulwark Request Timeout</li> <li>• PRE Request Timeout</li> <li>• Notification Request Timeout</li> <li>• Audit Request Timeout</li> </ul> <p><b>Note:</b> When the enableConfigurableTimeout parameter is disabled, it defaults to the Global Request Timeout. Similarly, if interface-level timeouts are not set, they will also use the Global Request Timeout as a fallback.</p> |
| common.dataCompressionScheme                     | string    | O                                               | <p>Specifies the data compression scheme used by PDS. Following are the allowed values for this field:</p> <ul style="list-style-type: none"> <li>• Disabled</li> <li>• Application Compressed</li> </ul> <p>By default, this value remains disabled.</p>                                                                                                                                                                                                                                                                                                                                                                                                       |
| remoteSSVRootPath.amPolicyData                   | string    | M                                               | Specifies the root path of subscriber state variables under amPolicyData.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| remoteSSVRootPath.enableEndSessionSSVRemoteToUDR | boolean   | O                                               | Specifies if the dynamic write should happen at the time of policy execution or at the end of the last session for a subscriber.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| remoteSSVRootPath.operatorSpecificData           | string    | M                                               | Specifies the path of subscriber state variables under operatorSpecificData.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| remoteSSVRootPath.smPolicyData                   | string    | M                                               | <p>Specifies the path of subscriber state variables under SMPolicyData.</p> <p>You can provide multiple paths separated by commas.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| remoteSSVRootPath.spendingLimitData              | string    | M                                               | Specifies the path of subscriber state variables under SpendingLimitData.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| remoteSSVRootPath.uePolicySet                    | string    | M                                               | Specifies the path of subscriber state variables under uePolicySet.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |



**Note**

The **Type of Search** (`common.typeOfSearch`) and **Preference Order** (`common.preferenceOrder`) parameters are not imported or updated through PDS Settings, either using the CNC Console or REST API. These configurations must be updated using PDS UE ID Configuration. For more information, see [PDS UE ID Configuration Settings](#).

**Table 2-445 SessionCountPerDnnList**

| Parameter Name   | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                  |
|------------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| dnn              | string    | O                                               | Specifies the Data Network Name. The allowed expression for DNN is <code>^[A-Za-z0-9-]+\$</code> . Spaces and other characters are not allowed. (NA allowed) |
| maxSessionsCount | integer   | O                                               | Specifies the number of sessions after which PDS refetches and revalidates subscriptions. You can enter a number from 1 to 20.                               |
| sd               | string    | O                                               | Specifies the Slice Differentiator Name. The allowed expression for SD is <code>^[A-Fa-f0-9-]+\$</code> . Spaces and other characters are not allowed.       |
| sst              | string    | O                                               | Specifies the Slice or Service Type name in the S-NSSAI. You can enter a number from 0 to 255 or NA.                                                         |

**Sample Request body structure for PUT operations:**

```
{
  "remoteSSVRootPath": {
    "smPolicyData": [
      "string"
    ],
    "amPolicyData": [
      "string"
    ],
    "uePolicySet": [
      "string"
    ],
    "operatorSpecificData": [
      "string"
    ],
    "spendingLimitData": [
      "string"
    ],
    "enableEndSessionSSVRemoteToUDR": true
  },
  "common": {
```

```

    "preferenceOrder": [
      "SUPI"
    ],
    "enableHttp2": true,
    "requestTimeout": "string",
    "enableConfigurableTimeout": true,
    "udrRequestTimeout": "string",
    "chfRequestTimeout": "string",
    "ldapRequestTimeout": "string",
    "ocsRequestTimeout": "string",
    "bulwarkRequestTimeout": "string",
    "preRequestTimeout": "string",
    "auditRequestTimeout": "string",
    "notificationRequestTimeout": "string",
    "enableFetchAndResubscribe": true,
    "sessionCountPerDnnList": [
      {
        "sst": "NA",
        "sd": "C0eFAD5Ba6e68e6a0fECb84ca6D",
        "dnn": "zB4nl795zWX3gxYz9Ilq.YwXrrYhW2Ap16yZruNiw-LUKazqx.H",
        "maxSessionsCount": 1
      }
    ],
    "dataCompressionScheme": "string"
  },
  "audit": {
    "enable": true,
    "notificationRate": 50,
    "subscriberSessionAge": 1500,
    "subscriberSessionMaxAge": 2940,
    "subscriberMinAuditPassInterval": 390,
    "pdsProfileAge": 4500,
    "pdsProfileMaxAge": 8820,
    "pdsProfileMinAuditPassInterval": 1170,
    "policyDataSubscriptionExpiry": {
      "policyDataSubsEnabled": true,
      "policyDataSubsPreExpiryPeriod": 180,
      "policyDataSubsExpiryAuditNotificationRate": 50,
      "policyDataSubsExpiryMaxAge": 50,
      "policyDataSubsExpiryMinAuditPassInterval": 10
    }
  },
  "advancedSettings": [
    {
      "key":
        "8+RW4&$z1G&GnSASgcsmo5pPt2ZRckILVG9lGbgFyvsxMMuRj+UGeoAr&89vCDH.rJsQaymm084dK
        BX+d5mVA@PZIF",
      "value": "string"
    }
  ]
}

```

**Sample Response body structure for GET and PUT operations:**

```

{
  "remoteSSVRootPath": {
    "smPolicyData": [
      "string"
    ],
    "amPolicyData": [
      "string"
    ],
    "uePolicySet": [
      "string"
    ],
    "operatorSpecificData": [
      "string"
    ],
    "spendingLimitData": [
      "string"
    ],
    "enableEndSessionSSVRemoteToUDR": true
  },
  "common": {
    "preferenceOrder": [
      "SUPI"
    ],
    "enableHttp2": true,
    "requestTimeout": "string",
    "enableConfigurableTimeout": true,
    "udrRequestTimeout": "string",
    "chfRequestTimeout": "string",
    "ldapRequestTimeout": "string",
    "ocsRequestTimeout": "string",
    "bulwarkRequestTimeout": "string",
    "preRequestTimeout": "string",
    "auditRequestTimeout": "string",
    "notificationRequestTimeout": "string",
    "enableFetchAndResubscribe": true,
    "sessionCountPerDnnList": [
      {
        "sst": "NA",
        "sd": "NA",
        "dnn":
"85zeTWLz5Bi.Xmke5NSG5dIH3KueRDwne4DASJFKMoXUuzikdHVYMLpGZ2xl3ALop.GfdccSS1RKU
M",
        "maxSessionsCount": 1
      }
    ],
    "dataCompressionScheme": "string"
  },
  "audit": {
    "enable": true,
    "notificationRate": 50,
    "subscriberSessionAge": 1500,
    "subscriberSessionMaxAge": 2940,
    "subscriberMinAuditPassInterval": 390,
    "pdsProfileAge": 4500,

```

```

    "pdsProfileMaxAge": 8820,
    "pdsProfileMinAuditPassInterval": 1170,
    "policyDataSubscriptionExpiry": {
      "policyDataSubsEnabled": true,
      "policyDataSubsPreExpiryPeriod": 180,
      "policyDataSubsExpiryAuditNotificationRate": 50,
      "policyDataSubsExpiryMaxAge": 50,
      "policyDataSubsExpiryMinAuditPassInterval": 10
    }
  },
  "advancedSettings": [
    {
      "key": "zHa1K1uC8LYRE2rPGohel.t@4nkah@Ze0r03pLUqRl.um3e2x9u$fccVg",
      "value": "string"
    }
  ]
}

```

For more information on the Advanced Settings "Keys" and "Values", see **"PDS settings"** section of "Configuring Policy Using CNC Console" in *Oracle Communications Cloud Native Core, Converged Policy User Guide*.

## Export and Import PDS Settings

**Table 2-446 Request and Response Body Parameters**

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                               |
|---------------|-----------|-------------------------------------------------|-----------------------------------------------------------|
| date          | string    |                                                 | Current timestamp                                         |
| exportData    | array     | M                                               | Exported list of PDS settings.                            |
| sourceVersion | string    |                                                 | System version of the product from which data is exported |
| topic         | string    | M                                               | Topic of each managed object                              |

### Sample Request Body structure for Import and Export operations:

```

{
  "topic": "pds.public.settings",
  "sourceVersion": "26.1.200-nb-20260326",
  "date": "2026-03-31T05:30:54Z",
  "exportData": {
    "remoteSSVRootPath": {
      "smPolicyData": [
        "string"
      ],
      "amPolicyData": [
        "string"
      ],
      "uePolicySet": [
        "string"
      ]
    }
  }
}

```

```

    ],
    "operatorSpecificData": [
        "string"
    ],
    "spendingLimitData": [
        "string"
    ],
    "enableEndSessionSSVRemoteToUDR": true
},
"common": {
    "enableHttp2": true,
    "requestTimeout": "string",
    "enableConfigurableTimeout": true,
    "udrRequestTimeout": "string",
    "chfRequestTimeout": "string",
    "ldapRequestTimeout": "string",
    "ocsRequestTimeout": "string",
    "bulwarkRequestTimeout": "string",
    "preRequestTimeout": "string",
    "auditRequestTimeout": "string",
    "notificationRequestTimeout": "string",
    "typeOfSearch": "Multi-UE ID Search",
    "dataCompressionScheme": "string",
    "preferenceOrder": [
        "SUPI"
    ],
    "enableFetchAndResubscribe": true,
    "sessionCountPerDnnList": [
        {
            "sst": "NA",
            "sd": "C0eFAD5Ba6e68e6a0fECb84ca6D",
            "dnn": "zB4nl795zWX3gxYz9Ilq.YwXrrYhw2Apl6yZruNiw-LUKazqx.H",
            "maxSessionsCount": 1
        }
    ]
},
"audit": {
    "enable": true,
    "notificationRate": 50,
    "subscriberSessionAge": 1500,
    "subscriberSessionMaxAge": 2940,
    "subscriberMinAuditPassInterval": 390,
    "pdsProfileAge": 4500,
    "pdsProfileMaxAge": 8820,
    "pdsProfileMinAuditPassInterval": 1170,
    "policyDataSubscriptionExpiry": {
        "policyDataSubsEnabled": true,
        "policyDataSubsPreExpiryPeriod": 180,
        "policyDataSubsExpiryAuditNotificationRate": 50,
        "policyDataSubsExpiryMaxAge": 50,
        "policyDataSubsExpiryMinAuditPassInterval": 10
    }
},
"advancedSettings": [
    {
        "key":

```

```

"8+RW4&$z1G&GnSASgcsmo5pPt2ZRckI lVG9lGbgFyvsvxMMuRj+UGeoAr&89vCDH.rJsQaymm084dK
BX+d5mVA@PZIF",
  "value": "string"
}
]
}
}

```

## 2.85 PDS Workflow

**Table 2-447 Supported REST APIs**

| Description          | HTTP Method or Custom Operation | Resource URI                                                           | Possible Result Code          |
|----------------------|---------------------------------|------------------------------------------------------------------------|-------------------------------|
| Export PDS Workflows | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/pds/pdsWorkflow/export | See <a href="#">Table A-1</a> |
| Import PDS Workflows | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/services/pds/pdsWorkflow/import | See <a href="#">Table A-3</a> |
| Get PDS Workflows    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/pds/pdsWorkflow        | See <a href="#">Table A-1</a> |
| Update PDS Workflows | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/pds/pdsWorkflow        | See <a href="#">Table A-2</a> |
| Delete PDS Workflow  | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/services/pds/pdsWorkflow        | See <a href="#">Table A-4</a> |

### Get and Update PDS Workflows

**Table 2-448 Request/Response Body Parameters**

| Field Name | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                 |
|------------|-----------|-----------------------------------------|-----------------------------|
| workflows  | boolean   |                                         | Specifies the PDS workflow. |

Table 2-448 (Cont.) Request/Response Body Parameters

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| type       | string    |                                                 | Specifies the PDS workflow type. The values can be chosen as: <ul style="list-style-type: none"> <li>• <b>Default</b> - On selecting this option, the default PDS behavior applies.</li> <li>• <b>Charging Profile selection based on User Profile</b> - On selecting this option, you can configure whether to select user profile from LDAP or UDR.</li> <li>• <b>Charging Profile selection based on Notification</b> - On selecting this option, you can configure to select user profile based on Notification from UDR.</li> <li>• <b>Datasource selection based on PRE</b> - On selecting this option, you can configure to select datasource based on PRE.</li> <li>• <b>Custom</b> - For a custom workflow, contact Oracle Policy engineering team and paste the workflow in JSON format provided by the team.</li> </ul> |
| subtype    | string    |                                                 | On selecting the <b>Charging Profile selection based on Notification</b> workflow type, the Profile type can be selected as: <ul style="list-style-type: none"> <li>• LDAP</li> <li>• UDR</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

Sample Request/Response body structure for GET and PUT operations:

```
{
  "workflows": {},
  "type": "string",
  "subtype": "string"
}
```

## Export/Import PDS Workflows

Table 2-449 Request/Response Body Parameters

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                               |
|---------------|-----------|-------------------------------------------------|-----------------------------------------------------------|
| date          | string    |                                                 | Current timestamp                                         |
| exportData    | array     | M                                               | Exported list of PDS Workflows.                           |
| sourceVersion | string    |                                                 | System version of the product from which data is exported |
| topic         | string    | M                                               | Topic of each managed object                              |

Sample Request Body structure for Import/Export operations:

```
{
  "topic": "string",
  "sourceVersion": "string",
  "date": "string",
  "exportData": {
    "workflows": {},
    "type": "string",
    "subtype": "string"
  }
}
```

## 2.86 Policy Engine

Table 2-450 Supported REST APIs

| Description          | HTTP Method or<br>Custom Operation | Resource URI                                                        | Possible Result Code          |
|----------------------|------------------------------------|---------------------------------------------------------------------|-------------------------------|
| Export Policy Engine | GET                                | {apiRoot}/oc-cnpolicy-configuration/v1/services/policyengine/export | See <a href="#">Table A-1</a> |
| Import Policy Engine | POST                               | {apiRoot}/oc-cnpolicy-configuration/v1/services/policyengine/import | See <a href="#">Table A-3</a> |



## Export/Import Policy Engine

Table 2-451 Request/Response Body Parameters

| Field Name                                | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                               |
|-------------------------------------------|-----------|-------------------------------------------------|-----------------------------------------------------------|
| date                                      | string    |                                                 | Current timestamp                                         |
| exportData.loglevel                       | string    |                                                 |                                                           |
| exportData.supportedServices.relativeUrl  | string    |                                                 |                                                           |
| exportData.supportedServices.serviceLabel | string    |                                                 |                                                           |
| exportData.supportedServices.serviceName  | string    |                                                 |                                                           |
| sourceVersion                             | string    |                                                 | System version of the product from which data is exported |
| topic                                     | string    | M                                               | Topic of each managed object                              |

## Sample Request Body structure for Import/Export operations:

```

{
  "date": "string",
  "exportData": {
    "logLevel": "WARN",
    "supportedServices": [
      {
        "relativeUrl": "string",
        "serviceLabel": "string",
        "serviceName": "string"
      }
    ]
  },
  "sourceVersion": "string",
  "topic": "string"
}

```

## 2.87 NWDAF Agent

Table 2-452 Supported REST APIs

| Description                              | HTTP Method or Custom Operation | Resource URI                                               | Possible Result Code          |
|------------------------------------------|---------------------------------|------------------------------------------------------------|-------------------------------|
| Get NWDAF Agent Service configuration    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/nwdafAgent | See <a href="#">Table A-1</a> |
| Update NWDAF Agent Service configuration | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/nwdafAgent | See <a href="#">Table A-2</a> |

Table 2-452 (Cont.) Supported REST APIs

| Description                              | HTTP Method or Custom Operation | Resource URI                                                                             | Possible Result Code          |
|------------------------------------------|---------------------------------|------------------------------------------------------------------------------------------|-------------------------------|
| Export NWDAF Agent Service configuration | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/nwdafAgent/export                        | See <a href="#">Table A-1</a> |
| Import NWDAF Agent Service configuration | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/services/nwdafAgent/import                        | See <a href="#">Table A-3</a> |
| Create Autonomous Subscription           | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/autonomousSubscription/sliceLoadLevel             | See <a href="#">Table A-3</a> |
| Get Autonomous Subscription              | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/autonomousSubscription/sliceLoadLevel/{sliceLoad} | See <a href="#">Table A-1</a> |
| Update Autonomous Subscription           | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/autonomousSubscription/sliceLoadLevel/{sliceLoad} | See <a href="#">Table A-2</a> |
| Delete Autonomous Subscription           | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/autonomousSubscription/sliceLoadLevel/{sliceLoad} | See <a href="#">Table A-4</a> |
| Get All Autonomous Subscription          | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/autonomousSubscription/sliceLoadLevel/export      | See <a href="#">Table A-1</a> |
| Import Autonomous Subscription           | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/autonomousSubscription/sliceLoadLevel/import      | See <a href="#">Table A-3</a> |

**Get and Update NWDAF Agent**

Table 2-453 Request/Response Body Parameters

| Field Name       | Data Type | Mandatory(M)/Optional(O) | Description            |
|------------------|-----------|--------------------------|------------------------|
| advancedSettings | array     | M                        | List of key/value pair |

**Table 2-454 SmAdvancedSettings**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                     |
|------------|-----------|-------------------------------------------------|---------------------------------|
| key        | string    | O                                               | Specifies the key name.         |
| value      | string    | O                                               | Specifies the value of the key. |

**Sample Request body structure for GET and PUT operations:**

```
{
  "advancedSettings": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}
```

### Export/Import Session Management Service

**Table 2-455 Request/Response Body Parameters**

| Field Name                        | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                    |
|-----------------------------------|-----------|-------------------------------------------------|--------------------------------|
| date                              | String    | O                                               | Current timestamp              |
| exportData.advancedSettings       | array     | O                                               | List of key/value pair         |
| exportData.advancedSettings.key   | string    | O                                               | Specifies the key name         |
| exportData.advancedSettings.value | string    | O                                               | Specifies the value of the key |
| sourceVersion                     | String    | O                                               | Version of the source          |
| systemVersion                     | String    | O                                               | Version of the system          |
| topic                             | String    | M                                               |                                |

**Sample Request Body structure for Import/Export operations:**

```
{
  "date": "string",
  "exportData": {
    "advancedSettings": [
      {
        "key": "string",
        "value": "string"
      }
    ]
  },
  "sourceVersion": "string",
  "systemVersion": "string",
}
```

```
"topic": "string"
}
```

### Slice Load Level

**Table 2-456 Get, Put, Post, and Update Slice Load Level**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                        |
|------------|-----------|-------------------------------------------------|--------------------------------------------------------------------|
| immRep     | Boolean   | O                                               | Indication of immediate reporting                                  |
| snssai     | String    | M                                               | Identification of network slice to which the subscription applies. |
| threshold  | Integer   | M                                               | Indication of slice load level in percentage                       |

**Sample Request body structure for GET and PUT operations:**

```
{
  "immRep": true,
  "snssai": "string",
  "threshold": 0
}
```

### Export/Import Slice Load Level

**Table 2-457 Request/Response Body Parameters**

| Field Name           | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                        |
|----------------------|-----------|-------------------------------------------------|--------------------------------------------------------------------|
| Date                 | string    | O                                               | Current timestamp                                                  |
| Errors               | array     | O                                               | List of errors                                                     |
| Errors.Message       | string    | O                                               | Error message                                                      |
| Errors.Name          | string    | O                                               | Name of the error                                                  |
| exportData           | array     | O                                               | Exported list of session rule profiles.                            |
| exportData.immRep    | Boolean   | O                                               | Indication of immediate reporting                                  |
| exportData.snssai    | String    | O                                               | Identification of network slice to which the subscription applies. |
| exportData.threshold | Integer   | O                                               | Indication of slice load level in percentage                       |
| sourceVersion        | string    | O                                               | System version of product from which data is exported              |
| topic                | string    | M                                               | Topic of each managed object                                       |

**Sample Request Body structure for Import/Export operations:**

```
[
  {
    "date": "string",
    "errors": [
      {
        "message": "string",
        "name": "string"
      }
    ],
    "exportData": [
      {
        "immRep": true,
        "snssai": "string",
        "threshold": 0
      }
    ],
    "sourceVersion": "string",
    "topic": "string"
  }
]
```

## 2.88 Notifier Service

This section describes the APIs used to configure Notifier Service.

### 2.88.1 Notifier Configurations

This URI is used to configure the Notifier Service from CNC Console to send SMPP messages to external notification servers.

**Table 2-458 Supported REST APIs that can be configured from CNC Console**

| Description                                      | HTTP Method or Custom Operation | Resource URI                                                                                                                                                      |
|--------------------------------------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| To update Notifier Service configuration         | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/notifier<br>For details on Request/Response Body Parameters for PUT notify, see <a href="#">Table 2-459</a> .     |
| To get individual Notifier Service configuration | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/notifier<br>For details on Request/Response Body Parameters for GET smsGateway, see <a href="#">Table 2-459</a> . |
| To export Notifier Service configuration.        | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/services/notifier / export                                                                                                 |

**Table 2-458 (Cont.) Supported REST APIs that can be configured from CNC Console**

| Description                               | HTTP Method or Custom Operation | Resource URI                                                                                                                                                                |
|-------------------------------------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| To import Notifier Service configuration. | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/services/notifier/import<br><br>For details on Request/Response Body Parameters for POST smsGateway, see <a href="#">Table 2-459</a> |

**Table 2-459 Request/Response Body Parameters for Notifier Configurations**

| Field Name                               | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                        |
|------------------------------------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| smppConfiguration.isEnabled              | string    | M                                               | Enables the Subscriber Notification using SMPP Protocol.<br><b>Default Value:</b> false                                                                                                                                                                                            |
| smppConfiguration.sourceAddress          | string    | O                                               | ESME Source Address.<br>By default this field is empty.                                                                                                                                                                                                                            |
| smppConfiguration.defaultSmsGatewayGroup | String    | M                                               | All the SMS Gateways that are created in SMS GATEWAY CONFIGURATION page.                                                                                                                                                                                                           |
| smppConfiguration.connectTimeoutMillis   | String    | M                                               | Indicates the SMS Gateway Connection Timeout in milliseconds.<br><b>Range:</b> 1-60000<br><b>Default Value:</b> 30000                                                                                                                                                              |
| smppConfiguration.responseTimeoutMillis  | String    | M                                               | Indicates the timeout (in milliseconds) for the response going towards SMS Gateway.<br><b>Range:</b> 1-60000<br><b>Default Value:</b> 10000                                                                                                                                        |
| smppConfiguration.sourceAddressTON       | string    | O                                               | Indicates the ESME Source address type of number: <ul style="list-style-type: none"> <li>UNKNOWN</li> <li>INTERNATIONAL</li> <li>NATIONAL</li> <li>NETWORK_SPECIFIC</li> <li>SUBSCRIBER_NUMBER</li> <li>ALPHANUMERIC</li> <li>ABBREVIATED</li> </ul> <b>Default Value:</b> UNKNOWN |

**Table 2-459 (Cont.) Request/Response Body Parameters for Notifier Configurations**

| Field Name                      | Data Type | Mandatory(M)<br>/ Optional(O)<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                              |
|---------------------------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| smppConfiguration.sourceAddrNpi | String    | O                                               | ESME Source Address Number Plan Indicator: <ul style="list-style-type: none"> <li>UNKNOWN</li> <li>ISDN (E163/E164)</li> <li>DATA (X, 121)</li> <li>TELEX</li> <li>LAND_MOBILE</li> <li>NATIONAL</li> <li>PRIVATE</li> <li>ERMES</li> <li>INTERNET</li> <li>WAP</li> </ul> <b>Default Value:</b> UNKNOWN |
| advancedSettings                |           |                                                 | To configure the Keys and values for advanced settings.                                                                                                                                                                                                                                                  |

**Sample Request/Response body structure for PUT operation:**

```
{
  "smppConfiguration": {
    "isEnabled": true,
    "sourceAddr": "3.3.2.2",
    "defaultSmsGatewayGroup": "gateway1",
    "connectTimeoutMillis": 30000,
    "responseTimeoutMillis": 10000,
    "sourceAddrTon": "UNKNOWN",
    "sourceAddrNpi": "UNKNOWN"
  },
  "advancedSettings": []
}
```

## 2.88.2 SMS Gateway

This URI is used to configure the SMS Gateway.

**Table 2-460 Supported REST APIs to configure SMS Gateway**

| Description                                           | HTTP Method or Custom Operation | Resource URI                                                                                                              |
|-------------------------------------------------------|---------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| To get the configuration of a particular SMS Gateway. | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/smsGateway/{smsGatewayName}<br><br>Where <smsGatewayName> is the SMS Gateway name. |

**Table 2-460 (Cont.) Supported REST APIs to configure SMS Gateway**

| Description                                              | HTTP Method or Custom Operation | Resource URI                                                                                                                                                                                                                 |
|----------------------------------------------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| To delete the configuration of a particular SMS Gateway. | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/smsGateway/{smsGatewayName}<br>Where <smsGatewayName> is the SMS Gateway name.                                                                                                        |
| To update the configuration of a particular SMS Gateway. | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/smsGateway/{smsGatewayName}<br>Where <smsGatewayName> is the SMS Gateway name.<br>For details on Request/Response Body Parameters for PUT smsGateway, see <a href="#">Table 2-461</a> |
| To create a new SMS Gateway.                             | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/smsGateway/<br>For details on Request/Response Body Parameters for POST smsGateway, see <a href="#">Table 2-461</a>                                                                   |
| To export the list of all the SMS Gateways.              | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/smsGateway/{export}                                                                                                                                                                   |
| To import the list of all the SMS Gateways.              | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/smsGateway/{import}<br>For details on Request/Response Body Parameters for POST smsGateway.import, see <a href="#">Table 2-461</a>                                                    |

**Table 2-461 Request/Response Body Parameters for PUT/POST operations on smsGateway**

| Field Name      | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                                                                                                                                                                           |
|-----------------|-----------|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| description     | string    | O                                         | Free-form text that identifies the SMS Gateway server within the network. Enter up to 250 characters. By default, the value is left empty.                                                            |
| name            |           | M                                         | Enter the name of the SMS Gateway server. The name can be lower case alphanumeric characters, '-' or '.', and must start and end with an alphanumeric character. By default, the value is left empty. |
| primarySmscHost |           | M                                         | Enter the Host Name of the primary SMSC Host server. By default, the value is left empty.                                                                                                             |



**Table 2-461 (Cont.) Request/Response Body Parameters for PUT/POST operations on smsGateway**

| Field Name                | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                                                                                                               |
|---------------------------|-----------|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| requestDeliveryReceipt    |           | O                                       | Specify the mode of delivery receipt.<br>This field accepts the following integer values: <ul style="list-style-type: none"> <li>0 to indicate REQUEST_DELIVERY_RECEIPT_NO</li> <li>1 to indicate REQUEST_DELIVERY_RECEIPT_SUCCESS_FAILURE</li> <li>2 to indicate REQUEST_DELIVERY_RECEIPT_FAILURE</li> </ul> <b>Default Value:</b> 0     |
| maxByteLength             |           | O                                       | Maximum number of bytes allowed for the message.<br>The length of the message can range between 1 to 254 bytes.<br><b>Default Value:</b> 140                                                                                                                                                                                              |
| longMsgMaxByteLength      |           | O                                       | Maximum number of bytes allowed in a long message.<br>The length of the message can range between 1 to 999 bytes.<br><b>Default Value:</b> 500                                                                                                                                                                                            |
| longMessageEnabled        |           | M                                       | Enables the long messages.<br><b>Default Value:</b> true                                                                                                                                                                                                                                                                                  |
| longMessageDeliveryMethod |           | M                                       | Specify the long message delivery method. It can take the following integer values: <ul style="list-style-type: none"> <li>0 to indicate SEGMENTATION AND REASSEMBLY (SAR) to deliver the long messages in segments</li> <li>1 to indicate the MESSAGE_PAYLOAD to deliver the long messages in payload</li> </ul> <b>Default Value:</b> 0 |
| truncateLongMessages      |           | M                                       | Indicates whether to truncate messages longer than the specified length.<br><b>Default Value:</b> false                                                                                                                                                                                                                                   |
| failMaxMessageSize        |           | M                                       | Specifies the maximum length of the message after which the message fails.<br><b>Default Value:</b> true                                                                                                                                                                                                                                  |

**Sample Request/Response body structure for PUT smsGateway operation:**

```
{
  "description": "testing",
  "name": "test",
  "primarySmscHost": "host_3",
```

```

    "requestDeliveryReceipt": 2,
    "maxByteLength": 140,
    "longMsgMaxByteLength": 500,
    "longMessageEnabled": true,
    "longMessageDeliveryMethod": 0,
    "truncateLongMessages": false,
    "failMaxMessageSize": true
  }

```

**Sample Request/Response body structure for POST smsGateWay.import operation:**

```

{
  "topic": "common.notifierservice.msggateway",
  "sourceVersion": "1.6.0",
  "date": "2023-03-14T08:01:48Z",
  "exportData": [
    {
      "description": "testing",
      "name": "test",
      "primarySmscHost": "host_3",
      "requestDeliveryReceipt": 2,
      "maxByteLength": 140,
      "longMsgMaxByteLength": 500,
      "longMessageEnabled": true,
      "longMessageDeliveryMethod": 0,
      "truncateLongMessages": false,
      "failMaxMessageSize": true
    }
  ]
}

```

### 2.88.3 SMSC HOST Info

This URI is used to configure the SMSC Host.

**Table 2-462 Supported REST APIs to configure SMS Gateway**

| Description                   | HTTP Method or Custom Operation | Resource URI                                                       |
|-------------------------------|---------------------------------|--------------------------------------------------------------------|
| To get the SMSC Host name.    | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/smscHostInfo/{smscHostName} |
| To delete the SMSC Host name. | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/smscHostInfo/{smscHostName} |

**Table 2-462 (Cont.) Supported REST APIs to configure SMS Gateway**

| Description                                            | HTTP Method or Custom Operation | Resource URI                                                                                                                                                                                  |
|--------------------------------------------------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| To update the configuration of a particular SMSC Host. | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/smscHostInfo/{smscHostName}<br><br>For details on Request/Response Body Parameters for PUT smscHostInfo.smscHostName, see <a href="#">Table 2-463</a>  |
| To create a new SMSC Host.                             | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/smscHostInfo/{smscHostName}<br><br>For details on Request/Response Body Parameters for POST smscHostInfo.smscHostName, see <a href="#">Table 2-463</a> |
| To export the list of all the SMSC Hosts.              | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/smscHostInfo/{export}                                                                                                                                  |
| To import the list of all the SMSC Hosts.              | POST                            | {apiRoot}/oc-cnpolicy-configuration/v1/smscHostInfo/{import}<br><br>For details on Request/Response Body Parameters for POST smsHostInfo.import, see <a href="#">Table 2-463</a>              |

**Table 2-463 Request/Response Body Parameters for PUT/POST smscHostInfo.smscHostName.**

| Field Name | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                                                                                                                                                                               |
|------------|-----------|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name       | string    | M                                         | Enter the name of the SMSC Host server.<br>The name can be lower case alphanumeric characters, '-' or '.', and must start and end with an alphanumeric character.<br>By default, the value is left empty. |
| host       | String    | M                                         | Enter the Host Name of the SMSC server.<br>The host can be Ipv4, Ipv6 or FQDN with optional port value.<br>By default, the value is left empty.                                                           |
| port       | Integer   | M                                         | Enter the Port number of the SMSC server.<br>Range: 0-65535<br>By default, the value is left empty.                                                                                                       |

**Sample Request/Response body structure for PUT/POST operations:**

```
{
  "name": "host_2",
  "host": "1.1.1.9",
  "port": 8002
}
```

**Sample Request/Response body structure for POST operation to import the details:**

```
{
  "topic": "common.notifierservice.smschost",
  "sourceVersion": "1.6.0",
  "date": "2023-03-15T13:21:02Z",
  "exportData": [
    {
      "name": "host_4",
      "host": "1.1.1.7",
      "port": "8000"
    }
  ]
}
```

## 2.89 Usage Monitoring

This section describes the APIs used to configure Usage Monitoring service.

### 2.89.1 Usage Monitoring Service

**Table 2-464 Supported operations**

| HTTP Method or Custom Operation | Description                     | Resource URI                                                                                                                                         |
|---------------------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| GET                             | Get Usage Monitoring Service    | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcfum<br>For details on the Request/Response Body Parameters, see <a href="#">Table 2-465</a>        |
| PUT                             | Update Usage Monitoring Service | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcfum<br>For details on the Request/Response Body Parameters, see <a href="#">Table 2-465</a>        |
| POST                            | Import Usage Monitoring Service | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcfum/import<br>For details on the Request/Response Body Parameters, see <a href="#">Table 2-465</a> |

Table 2-464 (Cont.) Supported operations

| HTTP Method or Custom Operation | Description                     | Resource URI                                                                                                                                         |
|---------------------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| GET                             | Export Usage Monitoring Service | {apiRoot}/oc-cnpolicy-configuration/v1/services/pcfum/export<br>For details on the Request/Response Body Parameters, see <a href="#">Table 2-465</a> |

Table 2-465 Request/Response Body Parameters for GET/PUT/POST operations

| Field Name           | Data Type | Mandatory(M)/Optional (O)/Conditional (C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------|-----------|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enablePRE            | Boolean   | M                                         | Indicates whether to enable or disable interaction with PRE for Policy evaluation as per the match list.                                                                                                                                                                                                                                                                                                                                                       |
| dataRolloverProfile  | String    | O                                         | Indicates the default data rollover profile to use for UDR provided data limits for which rollover is applicable. That is, "Data Rollover" attribute is set to "true" and a separate "Data Rollover Profile" attribute is not provided.                                                                                                                                                                                                                        |
| enableQuotaMigration | String    | O                                         | Indicates whether 4G to 5G UDR Quota Data Migration is in progress. If so, Policy considers the custom attributes from 4G UDR for quota calculation and update.<br><b>Default value:</b> false<br><b>Note:</b> Disabling this flag while 4G to 5G Subscriber Data Migration is incomplete may result in Quota loss. It is recommended to not fallback to 4G PCRF once this flag is disabled as after this, the data provided to 4G PCRF may NOT be up to date. |

**Table 2-465 (Cont.) Request/Response Body Parameters for GET/PUT/POST operations**

| Field Name                             | Data Type | Mandatory(M)/<br>Optional (O)/<br>Conditional (C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------|-----------|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| reversePriority                        | String    | O                                                 | Indicates the priority consideration order.<br>When this flag is enabled: Higher number indicates lower priority<br>When this flag is disabled: Higher number indicates higher priority<br><b>Default value:</b> true                                                                                                                                                                                                                                                              |
| enableProRatedQuota                    | String    | O                                                 | Indicates whether pro-rated data calculation should be applied to the selected plan at a time of activation or not.<br><b>Default value:</b> false                                                                                                                                                                                                                                                                                                                                 |
| enableProRatedQuotaForBillingDayChange | String    | O                                                 | Indicates whether pro-rated data calculation should be applied to the selected plan at a time of billing day change.<br><b>Default value:</b> false                                                                                                                                                                                                                                                                                                                                |
| minimumVolumeGrant                     | Integer   | M                                                 | Enter the minimum grant value (in bytes) that can be approved for volume based usage monitoring. If the grant value published by PRE is less than the value for this field, then Policy considers the minimum grant value out of the two.<br>After deducting the current grant, if the remaining grant value is less than the minimum grant value, then the remaining grant is also added to the current grant.<br><b>Default value:</b> 2048<br><b>Range:</b> 512 - 1048576 (1MB) |

**Table 2-465 (Cont.) Request/Response Body Parameters for GET/PUT/POST operations**

| Field Name         | Data Type | Mandatory(M)/<br>Optional (O)/<br>Conditional (C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------------|-----------|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| maximumVolumeGrant | Integer   | M                                                 | Enter the maximum grant value (in bytes) that can be approved for volume based usage monitoring. If the grant value published by PRE is greater than the value for this field, then Policy considers the maximum grant value out of the two.<br><b>Default value:</b> 2048<br><b>Range:</b> 1024 - 107374182400 (100 GB)                                                                                                                                                         |
| minimumTimeGrant   | Integer   | M                                                 | Enter the minimum grant value (in seconds) that can be approved for time based usage monitoring. If the grant value published by PRE is less than the value for this field, then Policy considers the minimum grant value out of the two.<br>After deducting the current grant, if the remaining grant value is less than the minimum grant value, then the remaining grant is also added to the current grant.<br><b>Default value:</b> 300<br><b>Range:</b> 30 - 3600 (1 hour) |
| maximumTimeGrant   | Integer   | M                                                 | Enter the maximum grant value (in seconds) that can be approved for time based usage monitoring. If the grant value published by PRE is greater than the value for this field, then Policy considers the maximum grant value out of the two.<br><b>Default value:</b> 300<br><b>Range:</b> 60 - 86400 (1 hour)                                                                                                                                                                   |

**Table 2-465 (Cont.) Request/Response Body Parameters for GET/PUT/POST operations**

| Field Name                         | Data Type   | Mandatory(M)/<br>Optional (O)/<br>Conditional (C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------|-------------|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| inactivityTime                     | Integer     | O                                                 | Enter the time interval (in seconds) during which if no packets are received for a given monitoring key, PGW or SMF stops measuring the time.<br><b>Default value:</b> 86400<br><b>Range:</b> 0 - 604800 (7 Days)                                                                                                                                                                                                                                                                       |
| usageAccumulationStart<br>DateTime | Enumeration | O                                                 | Select the start time and date from when the Usage Monitoring service starts counting the usage reset periodicity. The values are: <ul style="list-style-type: none"> <li>Plan Start Date and Time: Counted from the plan start date and time as provisioned on the UDR.</li> <li>Plan Activation Date and Time: Counted from the plan activation date and time as provisioned on the UDR.</li> <li>Period Start Date and Time: Counted from the period start date and time.</li> </ul> |
| applyBillingDay                    | String      | O                                                 | Indicates if the flexible billing cycle option is enabled.<br>The accepted values are: <ul style="list-style-type: none"> <li>Current Billing Cycle</li> <li>Next Billing Cycle</li> </ul> <b>Default value:</b> Next Billing Cycle                                                                                                                                                                                                                                                     |



**Table 2-465 (Cont.) Request/Response Body Parameters for GET/PUT/POST operations**

| Field Name            | Data Type | Mandatory(M)/<br>Optional (O)/<br>Conditional (C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------|-----------|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| dataCompressionScheme | String    | O                                                 | <p>Used to configure the data compression in UmContext table. This flag accepts the following values:</p> <ul style="list-style-type: none"> <li>• <b>Disabled:</b><br/>Indicates that the data will not be compressed and will be stored in the column in uncompressed format. The value of COMPRESSION_SCHEME for that row is set to the default value 0.</li> <li>• <b>MySQL Compressed:</b><br/>Indicates that the data will be compressed using MySQL and will be stored in the column in compressed format. The value of COMPRESSION_SCHEME for that row is set to 1.</li> <li>• <b>Application Compressed:</b><br/>Indicates that the data will be compressed using Zlib and will be stored in the column in compressed format. The value of COMPRESSION_SCHEME for that row is set to 2.</li> </ul> <p><b>Default value:</b> Disabled</p> <p>When accessing the data from UmContext .v, the application determines the compression status based on the value of COMPRESSION_SCHEME and does the decompression accordingly.</p> |

**Table 2-465 (Cont.) Request/Response Body Parameters for GET/PUT/POST operations**

| Field Name                           | Data Type   | Mandatory(M)/<br>Optional (O)/<br>Conditional (C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------|-------------|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                      |             |                                                   | For more details on data compression, see <i>Usage Monitoring on Gx Interface in Oracle Communications Cloud Native Core, Converged Policy User Guide</i> .                                                                                                                                                                                                                                                                  |
| weekStartDay                         | Enumeration | O                                                 | Enter the starting day of the week.<br><b>Default value:</b> Sunday                                                                                                                                                                                                                                                                                                                                                          |
| defaultVolumeGrant.grantVolumeSource | Enumeration | O                                                 | <b>Note:</b> This field becomes active when you select Grant Unit as Percent.<br>Accepts one of the following values: <ul style="list-style-type: none"> <li>Initial Volume: Calculate grant volume from the initial volume.</li> <li>Used Volume: Calculate grant volume from the used volume.</li> <li>Remaining Volume: Calculate grant volume from the remaining volume.</li> </ul> <b>Default value:</b> Initial Volume |
| defaultVolumeGrant.grantVolumeUnit   | Enumeration | O                                                 | Accepts one of the following values: <ul style="list-style-type: none"> <li>Percent: Grant volume is calculated as a percentage.</li> <li>Bytes: Grant volume is calculated as an absolute value.</li> </ul> <b>Default value:</b> Percent                                                                                                                                                                                   |

**Table 2-465 (Cont.) Request/Response Body Parameters for GET/PUT/POST operations**

| Field Name                          | Data Type | Mandatory(M)/<br>Optional (O)/<br>Conditional (C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------------|-----------|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| defaultVolumeGrant.grantVolumeValue | Integer   | M                                                 | <p><b>If Grant Unit is Percent:</b><br/>Enter the default Grant Volume in percentage, which is considered when PRE is not invoked or PRE does not return a decision.</p> <p>This value is applied to the Total Volume and divided equally among the Uplink and Downlink Volumes when available.</p> <p><b>Default value:</b> 10<br/><b>Range:</b> 1-100</p> <p>When the grant value is 0 and Grant is not calculated by PRE, then volume based Usage Monitoring is disabled for the session.</p> <p><b>If Grant Unit is Bytes:</b><br/>Enter the default Grant Volume in Bytes, which is considered when PRE is not invoked or PRE does not return a decision.</p> <p>This value is applied to the Total Volume and divided equally among the Uplink and Downlink Volumes when available.</p> <p><b>Default value:</b> 2048<br/><b>Range:</b> 512 - 1048576 (1 MB)</p> <p>When the grant value is 0 and Grant is not calculated by PRE, then volume based Usage Monitoring is disabled for the session.</p> |

**Table 2-465 (Cont.) Request/Response Body Parameters for GET/PUT/POST operations**

| Field Name                       | Data Type   | Mandatory(M)/<br>Optional (O)/<br>Conditional (C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------------------|-------------|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| defaultTimeGrant.grantTimeSource | Enumeration | O                                                 | <p><b>Note:</b> This field becomes active when you select Grant Unit as Percent. Accepts one of the following values:</p> <ul style="list-style-type: none"> <li>Initial Duration: Calculate grant time from the initial duration.</li> <li>Used Duration: Calculate grant time from the used duration.</li> <li>Remaining Duration: Calculate grant time from the remaining duration.</li> </ul> <p><b>Default value:</b> Initial Volume</p> |
| defaultTimeGrant.grantTimeUnit   | Enumeration | O                                                 | <p>Accepts one of the following values:</p> <ul style="list-style-type: none"> <li>Percent: Grant time is calculated as a percentage.</li> <li>Seconds: Grant time is calculated as an absolute value.</li> </ul> <p><b>Default value:</b> Percent</p>                                                                                                                                                                                        |

**Table 2-465 (Cont.) Request/Response Body Parameters for GET/PUT/POST operations**

| Field Name                            | Data Type | Mandatory(M)/<br>Optional (O)/<br>Conditional (C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------|-----------|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| defaultTimeGrant.grantTimeValue       | Integer   | M                                                 | <p><b>If Grant Unit is Percent:</b><br/>Enter the default Grant time in percentage, which is considered when PRE is not invoked or PRE does not return a decision.<br/><b>Default value:</b> 10<br/><b>Range:</b> 1-100<br/>When the grant value is 0 and grant is not calculated by PRE, then time based Usage Monitoring is disabled for the session.</p> <p><b>If Grant Unit is Seconds:</b><br/>Enter the default Grant time in seconds, which is considered when PRE is not invoked or PRE does not return a decision.<br/><b>Default value:</b> 3600<br/><b>Range:</b> 30 - 86400 (1 day)<br/>When the grant value is 0 and grant is not calculated by PRE, then time based Usage Monitoring is disabled for the session.</p> |
| defaultUsageLevels.minorUsageLevel    | Integer   | M                                                 | Enter threshold value in percentage indicating minor usage.<br><b>Default value:</b> 50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| defaultUsageLevels.majorUsageLevel    | Integer   | M                                                 | Enter threshold value in percentage indicating major usage.<br><b>Default value:</b> 75                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| defaultUsageLevels.criticalUsageLevel | Integer   | M                                                 | Enter threshold value in percentage indicating critical usage.<br><b>Default value:</b> 95                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

**Table 2-465 (Cont.) Request/Response Body Parameters for GET/PUT/POST operations**

| Field Name                              | Data Type | Mandatory(M)/<br>Optional (O)/<br>Conditional (C) | Description                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------|-----------|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| defaultUsageLevels.exhaustedUsageLevel  | Integer   | M                                                 | Enter threshold value in percentage indicating usage level has exhausted allowed limit.<br><b>Default value:</b> 100                                                                                                                                                                                                                                        |
| customAttributeMapping.resetDay         | String    | O                                                 | Enter a string identifying the custom attribute in UDR response that represents the usage reset day.<br>Example: SmPolicyData/umDataLimits/{limitId}/billingDay                                                                                                                                                                                             |
| customAttributeMapping.dataPlanName     | String    | O                                                 | Maps the custom attribute available in the UDR provided data limit to name. A "name" associated with the data limit can be used in a Selection Profile to select the plan to apply when multiple active plans are found. Default value: SmPolicyData/umDataLimits/{limitId}/name                                                                            |
| customAttributeMapping.dataPlanPriority | String    | O                                                 | Maps the custom attribute available in the UDR provided data limit to priority. A "priority" associated with the data limit would help to select the plan to apply when multiple active plans are found.<br>Possible values allowed in this field in UDR Data Limit are: any integer.<br><b>Default value:</b> SmPolicyData/umDataLimits/{limitId}/priority |

**Table 2-465 (Cont.) Request/Response Body Parameters for GET/PUT/POST operations**

| Field Name                              | Data Type | Mandatory(M)/<br>Optional (O)/<br>Conditional (C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------------------|-----------|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| customAttributeMapping<br>.dataPlanType | String    | O                                                 | <p>Maps the custom attribute available in the UDR provided data limit to type. A "type" associated with the data limit would help to order the selection of the plan. Possible values allowed in this field in UDR Data Limit are: "base", "pass", "top-up".</p> <p>A separate configuration would order the selection, for example: Pass &gt; Base Plan &gt; Top-up.</p> <p><b>Default value:</b><br/>SmPolicyData/<br/>umDataLimits/{limitId}/<br/>type</p> <p>Default value to apply if this mapped attribute is absent: base</p> <p>The Plan Type, Priority within that Plan Type and the Selection Order of Plan Types together decide the order of selection of Data Plans.</p> |
| customAttributeMapping<br>.dataRollover | String    | O                                                 | <p>Maps the custom attribute available in the UDR provided data limit to indicate whether rollover is enabled for this data limit. Possible values allowed in this field in UDR Data Limit are: "true" and "false".</p> <p><b>Default value:</b><br/>SmPolicyData/<br/>umDataLimits/{limitId}/<br/>rollover</p> <p>Default value to apply if this mapped attribute is absent: false</p>                                                                                                                                                                                                                                                                                               |

**Table 2-465 (Cont.) Request/Response Body Parameters for GET/PUT/POST operations**

| Field Name                              | Data Type | Mandatory(M)/<br>Optional (O)/<br>Conditional (C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------|-----------|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| conflictResolution.enableEtag           | Boolean   | O                                                 | <p>Indicates if the ETag functionality is enabled or disabled between PDS and UDR. By default, this is disabled. Following scenarios may occur if it is enabled:</p> <ul style="list-style-type: none"> <li>When the Usage Monitoring service sends a GET request for the first time, then PDS will fetch latest ETag details from UDR and update it in THE pdssubscriber table.</li> <li>when the Usage Monitoring service sends PATCH request to PDS, PDS sends the request to UDR using if-match header. UDR matches the ETag of PDS with UDR. If it matches, then UDR replies with the latest ETag that gets updated on PDS.</li> <li>If the If-Match headers fail, it means ETag on PDS does not match with UDR. UDR replies with 412 error response and based on the response code, Usage Monitoring service sends a force request to PDS to get the latest ETag from UDR and update it on PDS database.</li> </ul> |
| conflictResolution.conflictRetryAttempt | Integer   | O                                                 | Specifies the number of retry the Usage Monitoring service will do when if-match will fail on UDR.Default value: 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |



**Table 2-465 (Cont.) Request/Response Body Parameters for GET/PUT/POST operations**

| Field Name             | Data Type | Mandatory(M)/<br>Optional (O)/<br>Conditional (C) | Description                                                                                                                                                                                                                                                                                          |
|------------------------|-----------|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| dataLimitSelection     | Reference | O                                                 | Indicates the data limit selection profile to use while selecting a data limit among more than one active data limits provided by UDR.                                                                                                                                                               |
| audit.enable           | Boolean   | O                                                 | Used to enable or disable the Audit registration for Usage Monitoring service. When this field is enabled, Usage Monitoring sends registration request to Audit service. When this field is disabled, Usage Monitoring sends de-registration request to Audit service.<br><b>Default value:</b> true |
| audit.notificationRate | Integer   | O                                                 | Indicates the number of stale records that Audit service notifies to Usage Monitoring service in one second.                                                                                                                                                                                         |
| audit.ttl              | Integer   | O                                                 | Indicates the age of a Usage Monitoring session, after which the session is considered to be stale and the PCRF Core service is queried for the presence of such associations.<br><b>Note:</b> This value should be higher than the Gx session audit.                                                |
| audit.maxTtl           | Integer   | O                                                 | Indicates the maximum age of a UMPolicyAssociation, after which the session is purged from UMContext database without sending further queries.<br><b>Note:</b> This value should be higher than the Gx session audit.                                                                                |

**Table 2-465 (Cont.) Request/Response Body Parameters for GET/PUT/POST operations**

| Field Name             | Data Type | Mandatory(M)/<br>Optional (O)/<br>Conditional (C) | Description                                                                                                                                                           |
|------------------------|-----------|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| audit.minAuditAttempts | Integer   | O                                                 | Indicates the minimum number of queries to PCRF Core service before deleting a session.                                                                               |
| audit.frequency        | Integer   | O                                                 | Defines the time when next audit for the Usage Monitoring service table is done after delta time if auditing this table has been finished before this specified time. |

**Table 2-466 MessageDefaultPriorityUMService**

| Field Name                | Data Type | Mandatory(M)/<br>Optional (O)/<br>Conditional (C) | Description                                                                                                                                                                                                                                                            |
|---------------------------|-----------|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enter a range from [0-31] | String    | O                                                 | Defines the discard message priority for different Usage Monitoring API end points. <b>Allowed Values:</b> 0-31                                                                                                                                                        |
| umCongestionErrorCode     | String    | O                                                 | Configure the response code of the rejected messages by Usage Monitoring due to congestion state. By default, Usage Monitoring service sends 503 as response code. If configured then it shall be 5xx only.<br><b>Allowed Values:</b> 5xx<br><b>Default Value:</b> 503 |

**Sample Request/Response body structure for GET operation:**

```
{
  "enablePRE": false,
  "enter a range in bytes from [512-1048576]": 2048,
  "enter a range in bytes from [1024-10000000000000]": 2048,
  "enter a range in seconds from [30-3600]": 300,
  "enter a range in seconds from [60-86400]": 300,
  "enter a range in seconds from [0-604800]": 86400,
  "dataRolloverProfile": "string",
```

```

    "enableQuotaMigration": "string",
    "reversePriority": "string",
    "enableProRatedQuota": "string",
    "enableProRatedQuotaForBillingDayChange": "string",
    "UsageAccumulation StartDateTime should be one of PLAN_START,
    PLAN_ACTIVATION, PERIOD_START.": "PLAN_START",
    "Week Start Day should be one of SUNDAY, MONDAY, TUESDAY, WEDNESDAY,
    THURSDAY, FRIDAY or SATURDAY.": "SUNDAY",
    "NEXT_BILLING_CYCLE, CURRENT_BILLING_CYCLE": "NEXT_BILLING_CYCLE",
    "dataCompressionScheme": "0",
    "defaultVolumeGrant": {
        "Grant Volume Source should be one of INITIAL_VOLUME, USED_VOLUME,
        REMAINING VOLUME.": "INITIAL_VOLUME",
        "Grant Volume Source should be one of VOLUME_PERCENT, VOLUME_BYTES.":
        "VOLUME_PERCENT",
        "grantVolumeValue": 0
    },
    "defaultTimeGrant": {
        "Grant Time Source should be one of INITIAL_DURATION, USED_DURATION,
        REMAINING_DURATION.": "INITIAL_DURATION",
        "Grant Time Source should be one of TIME_PERCENT, TIME_BYTES.":
        "TIME_PERCENT",
        "grantTimeValue": 0
    },
    "defaultUsageLevels": {
        "enter a range in Percent from [0-100]": 100
    },
    "customAttributeMapping": {
        "enter a Reset Day, such as 'SmPolicyData/umDataLimits/{limitid}/
        billingDay'.": "string",
        "enter a Data Plan name, such as 'SmPolicyData/umDataLimits/{limitid}/
        name'.": "string",
        "enter a Data Plan Priority, such as 'SmPolicyData/umDataLimits/{limitid}/
        priority'.": "string",
        "enter a Data Plan Type, such as 'SmPolicyData/umDataLimits/{limitid}/
        type'.": "string",
        "enter a Data Rollover, such as 'SmPolicyData/umDataLimits/{limitid}/
        rollover'.": "string",
        "enter a Data Rollover Profile, such as 'SmPolicyData/umDataLimits/
        {limitid}/rolloverProfile'.": "string"
    },
    "conflictResolution": {
        "enableEtag": true,
        "conflictRetryAttempt": 0
    },
    "dataLimitSelection": {
        "selectionRules": [
            {
                "Enter Integer Value": 0,
                "limitIdentifier": "string",
                "conditions": [
                    {
                        "Parameter Name should be SERVING_NODE_LOCATION.":
                        "SERVING_NODE_LOCATION",
                        "Operator should be one of MATCH or EQUAL.": "MATCH",
                        "value": "string"
                    }
                ]
            }
        ]
    }

```

```

        }
    ]
}
],
"sortingRules": [
{
    "Enter Integer Value": 0,
    "Sorting Parameter Name should be one of RESET_PERIOD, START_DATE,
END_DATE.": "RESET_PERIOD",
    "Sorting Order should be one of ASC, DSC.": "ASC"
}
],
"defaultDataLimitSelectionProfile": "string",
"defaultDataLimitProfile": "string",
"defaultDataLimitSortProfile": "string",
"selectionOrder1": "base",
"selectionOrder2": "base",
"selectionOrder3": "base"
},
"audit": {
    "enable": true,
    "enter a range in sec from [20-700]": 50,
    "enter a range in minutes from [1-10080]": 7200,
    "minAuditAttempts": 5,
    "enter a range in minutes from [1-1440]": 330
},
"messageDefaultPriority": {
    "enter a range from [0-31]": "31",
    "umCongestionErrorCode": "503"
},
"advancedSettings": [
{
    "key": "string",
    "value": "string"
}
]
}

```

For more information on the Advanced Settings "Keys" and "Values", see "**Configuring Usage Monitoring**" section of "Configuring Policy Using CNC Console" in *Oracle Communications Cloud Native Core, Converged Policy User Guide*.

## 2.89.2 Attribute Forwarding Profile

**Table 2-467 Supported operations**

| HTTP Method or Custom Operation | Description                         | Resource URI                                                                                                                                                                                         |
|---------------------------------|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GET                             | Get Attribute Forwarding Profile    | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/attributeForwardingProfiles/{attributeForwardingProfileName} where <attributeForwardingProfileName> is the attribute forwarding profile name. |
| PUT                             | Update Attribute Forwarding Profile | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/attributeForwardingProfiles/{attributeForwardingProfileName} where <attributeForwardingProfileName> is the attribute forwarding profile name. |
| DELETE                          | Delete Attribute Forwarding Profile | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/attributeForwardingProfiles/{attributeForwardingProfileName} where <attributeForwardingProfileName> is the attribute forwarding profile name. |
| POST                            | Create Attribute Forwarding Profile | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/attributeForwardingProfiles/ For details on the Request/Response Body Parameters, see <a href="#">Table 2-468</a> .                           |
| POST                            | Import Attribute Forwarding Profile | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/attributeForwardingProfiles/import For details on the Request/Response Body Parameters, see <a href="#">Table 2-468</a> .                     |
| GET                             | Export Attribute Forwarding Profile | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/attributeForwardingProfiles/export For details on the Request/Response Body Parameters, see <a href="#">Table 2-468</a> .                     |

**Table 2-468 Request/Response Body Parameters for GET and POST operations**

| Field Name                                     | Data Type   | Mandatory(M)/<br>Optional (O)/<br>Conditional (C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------|-------------|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| forwardedAttribute.attributeName               | String      | C                                                 | Name of the attribute.                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| forwardedAttribute.attributeSource             | Enumeration | M                                                 | <p>Source of the attribute to be forwarded.</p> <p>Attribute Source provides the following options:</p> <ul style="list-style-type: none"> <li>Request Message: The incoming request message such as Gx CCR message or SM Policy Association Create message.</li> <li>User Data: Data received from different data sources such as UDR and CHF.</li> <li>Session Data: Data saved in the session (association) previously, such as saved APN/DNN value.</li> </ul> |
| forwardedAttribute.attributeSelection          | Enumeration | M                                                 | <p>Attribute Selection can be:</p> <ul style="list-style-type: none"> <li>Predefined</li> <li>Custom</li> </ul>                                                                                                                                                                                                                                                                                                                                                    |
| forwardedAttribute.predefinedAttributeLocation | String      | C                                                 | <p>This parameter can be filled when the Attribute Selection is of Predefined type.</p> <p>It indicates the path/location at which this attribute can be found by the source (forwarder) micro-service.</p>                                                                                                                                                                                                                                                        |
| forwardedAttribute.attributeLocation           | String      | C                                                 | <p>This parameter can be filled when the Attribute Selection is of Custom type.</p> <p>It indicates the path/location at which this attribute can be found by the source (forwarder) micro-service.</p>                                                                                                                                                                                                                                                            |

**Sample Request/Response body structure for GET operation:**

```

{
  "name": "string",
  "forwardedAttribute": [
    {
      "attributeName": "string",
      "attributeSource": "enter any one value from
[\"REQUEST\", \"UDR\", \"SESSION\"] ",
      "attributeSelection": "enter value from [\"PREDEFINED\", \"CUSTOM\"]",
      "predefinedAttributeLocation": "string",
      "attributeLocation": "string"
    }
  ]
}

```

## 2.89.3 UM Data Limit Selection Profile

**Table 2-469 Supported Operations**

| HTTP Method or Custom Operation | Description                                          | Resource URI                                                                                                                                                                                                    |
|---------------------------------|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GET                             | Get Usage Monitoring Data Limit Selection Profile    | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/usagemon/datalimitselectionprofiles/{umDataLimitSelectionProfileName}<br>where<br><umDataLimitSelectionProfileName> is the Data Limit Selection profile name. |
| PUT                             | Update Usage Monitoring Data Limit Selection Profile | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/usagemon/datalimitselectionprofiles/{umDataLimitSelectionProfileName}<br>where<br><umDataLimitSelectionProfileName> is the Data Limit Selection profile name. |
| DELETE                          | Delete Usage Monitoring Data Limit Selection Profile | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/usagemon/datalimitselectionprofiles/{umDataLimitSelectionProfileName}<br>where<br><umDataLimitSelectionProfileName> is the Data Limit Selection profile name. |

**Table 2-469 (Cont.) Supported Operations**

| HTTP Method or Custom Operation | Description                                          | Resource URI                                                                                                                                                                           |
|---------------------------------|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| POST                            | Create Usage Monitoring Data Limit Selection Profile | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/usagemon/datalimitselectionprofiles<br>For details on the Request/Response Body Parameters, see <a href="#">Table 2-470</a> .        |
| POST                            | Import Usage Monitoring Data Limit Selection Profile | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/usagemon/datalimitselectionprofiles/import<br>For details on the Request/Response Body Parameters, see <a href="#">Table 2-470</a> . |
| GET                             | Export Usage Monitoring Data Limit Selection Profile | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/usagemon/datalimitselectionprofiles/export<br>For details on the Request/Response Body Parameters, see <a href="#">Table 2-470</a> . |

**Table 2-470 Request/Response Body Parameters for GET operation**

| Field Name                      | Data Type   | Mandatory(M)/Optional (O)/Conditional (C) | Description                                                                                                                                 |
|---------------------------------|-------------|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| name                            | String      | M                                         | Unique name to identify the Data Limit Selection Profile.                                                                                   |
| selectionRules.type             | Enumeration | O                                         | Indicates the selection rules type.                                                                                                         |
| selectionRules.priority         | Integer     | M                                         | Indicates the selection rule priority.                                                                                                      |
| selectionRules.alwaysMatch      | Boolean     | M                                         | When this is true, no conditions shall be evaluated. This can be used as a CATCH ALL Selection Rule.<br>Default: False                      |
| selectionRules.dataLimitProfile | String      | C                                         | Uniquely identifies the UM Data Limit Profile by a name. This field is for configuration purpose only and not transmitted over the network. |
| selectionRules.limitIdentifier  | String      | C                                         | Specifies the limit identifier. Multiple limit identifiers may have the same priority.                                                      |



**Table 2-470 (Cont.) Request/Response Body Parameters for GET operation**

| Field Name                              | Data Type | Mandatory(M)/<br>Optional (O)/<br>Conditional (C) | Description                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------|-----------|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| selectionRules.conditions               | Object    | M                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                  |
| selectionRules.conditions.parameterType |           |                                                   | Indicates the type of parameter on which the condition will be applied. <ul style="list-style-type: none"> <li>Forwarded Attribute <ul style="list-style-type: none"> <li>An attribute forwarded by the core service, for e.g. Serving Gateway MCCMNC / IP Address, APN etc.</li> </ul> </li> <li>Policy Decision Tag <ul style="list-style-type: none"> <li>A Tag applied by the policy.</li> </ul> </li> </ul> |
| selectionRules.conditions.attributeName | String    | C                                                 | This field is displayed when Parameter Type is "Forwarded Attribute".                                                                                                                                                                                                                                                                                                                                            |
| selectionRules.conditions.operator      |           |                                                   | Accepts the following values: <ul style="list-style-type: none"> <li>Equals</li> <li>Not Equals</li> <li>Less Than</li> <li>Greater Than</li> <li>Matches</li> </ul>                                                                                                                                                                                                                                             |
| selectionRules.conditions.value         | String    |                                                   | Displays the list of configured Match Lists when the Operator is "Matches".                                                                                                                                                                                                                                                                                                                                      |

**Sample Request/Response body structure for GET operation:**

```

{
  "name": "string",
  "selectionRules": [
    {
      "type": "DATA_LIMIT_PROFILE",
      "priority": 0,
      "alwaysMatch": true,
      "dataLimitProfile": "string",
      "limitIdentifier": "string",
      "conditions": [
        {
          "application": "Gx",
          "message": "CCR",
          "preDefinedAVPConditions": [
            {
              "conditionName": "CC-Request-Type",
              "conditionCSIDValue": [

```

"5PuJi0lFdWxZihAhm6NDNp3rY7ikjSQ0zH.x0CSRJcJciVjiGvx7Iom880llacqa4nYh5Hjka8AT6  
GH5PX7lEvMEbk?N3H-7.S.-,3GBkb1pSVVDAPUUpkVc6pdLFV0JmRFVj9gsX?  
19G200oWAuUz,pte7QohKf\*D.ktAh7vnMv, EynrpYPQeH?EUuRKReIKzkf,  
YEUMYAUC9gPPdz4j6Y\*\*j?BLP3Xa7CJsQZRUB5PdSBPsn2tsB6a-  
sqJFU\*dX89.wtQcLY.9AzpdxyzG0FTWxCGvm, 1a?dm?z5w2jrJyKG-  
GZbVLzYufX.t,1oVj3QJbMK4Y\*vLph?KhAsd7ruIAXTueMkvR940BhHAQuvnrjJaIarfiY?  
EsLIISoRL04,Q-AWRGLoHqn\*2QEW3gMnUftB.pK,PvSQenBHhQCXX1LXa06DFScU?k9kZowN.YJj?  
0, 0RDkmNRXEBVSw1M8-8EDltiNZC.McRX?6kFUHb?um0PMokL,09zwYjVPlz79CMcV7y-  
\*o\*mbDcjpwQz,5dCwwVMVL.C07oLXnHHeMmovtGtJg0R1Mtb15E7ChzIq?  
hd6sXVNs0xIPf8W2anEce3daMbokR,PjRd9Gp?yAest8tbPHqTiT?  
6Hby\*k6YoTIZ9c20ckZvoBBN,I780p0n5.olzVYArGFC-oc1G5, lID?  
nm0FRiMgFswFZUruE1QV26oRPbuIQskynUrL.jwi9ZlBfI6lf.5DGKK.dDizZ0,LYG1?  
JmHmlKoOQ.mWN1al.GhPtLkh340aUjcDN?er84neX07yoLFz-TfBL1vd0oR?  
6Ss9fLohSegQotbN\*n7Ry4tk0zaMaMXE, F0dwTd?  
mfoi2KJgq5Soq4CMBJCPJh3\*Bjz.I5iX9zJPnCK5sqA2I70qT9zINN?  
MS7SBfcEU.65oDMKSLi9pxf, 9J.bxbhlzxS\*uL,7zQxMU7-E0.UvSswCvehTx.zSdro?  
iPUfjEiYx8aU0n3RUN58S7E\*k0Bhdv7Pt?3G9l6gTR.lBb2EgyIpQV\*h,XLqE?m\*t1YlgeTb,  
J9124-LKRRW0P,kfpw\*4k?P8wT-cBowa,Dwj\*Esm1m23.J0Gw1Ed-TQF\*SSoVaEav?-  
UqPFXV6nvArIUBnBzJMUqCQwMXDLcM,6vUHhJmyDW?vcnu, euBYyTo5IBxAG0vEya\*WBDjnGiw?  
NEqP\*QIjoAjdoAjSKA,FdbezK3Cjy4tAHG0ra.7JRyuNT5yxP.vou214201aSy\*YeYWhXad?.Vid\*x  
Ows44hAWT7JByXr4Af8sfvj48nLiGN, AKmPvd7EYo-N.mOYShwpTs-  
Vi6UmxtL9u5tli\*Ob5RbyNUS,GpnM, LY\*juuKhM9Sgu?jksAds3IS8.2Qzp,  
C6BRbywARSHJb6ba4ml20DY.7LIVsKPC6G8G.emPqN29sfXnuXAIi3\*SL35CTGQp?q6E-  
jZwe.45LZt4ILLYt68r\*thkd8v32ot,7rQAjNHVB?  
U0.o7YvNmkt0x.ciYr7Gj3xq700249ni1SSGauK-QCxCowcUW9Z.I1jfGzu8wpyeZYxQqvKaRhM?  
17ua42r6A,XvLzXPbuf0ctdRw\*w3s4B2x7Al\*wVJ9Ia?5k4xvdPKTGi,UZVg-  
ru6HaNWMSl816b5xHTjg068kdRGT1TaS1Zt1XZ.G20huosmClCYURb,  
4qGLNr6Ta.95ralc46qHwLHQSwFwTtQnAD13LW.4\*7WDQnk,  
tyIXQuZ610fA\*tNRMQg,iUB0Nvd8LPxmR1M, 5GLY.9.fGiWcl-  
mnubYWUOVKxta,Ut5EY8hyPckHzCUL09c54Bx-Vp3s0I0PTJujddv\*nNAPG?hhXb-  
lB.Ft02LEH4SknKOWT-44rkVkyZF3msz4oskJpwARCCec1, \*nY.qw?WeL,  
j\*S9zMJHwvpsdPoV.46dW044eIwNyYT7YzQXaSt1q-  
f1IRNy0luGC4fPPQg.U0BzVkiqC0IcDI2r8ME09haDGB6EU, XNZAJ.HivrB0tMr3LFvCOKIyN?  
tXayw-CCS\*PEg,  
IwQnNRcICfUnAnIidRhj,ES3eJo2\*3xhNc6lJRv\*51Ho0RhDPCpdVgJ.IUV\*jpgMLVzkVT4oeR?  
5tH0n-F,XtoBTW8j90sZWf36kV6VFxe,qdLVk6SEDSegGunGEZhvuLLf01L8.?  
ADZ0o\*OrfCUIzJefu5j4LMjGheNtnjgh4B5,A2LKDqSkT3DkXVbJu5Q8YQhEESjSKCmR,1F8TLHDG4  
BAVnq5\*anQpC5tK7hHy.I\*Pftn4UZuE0j, a, v4zUGHixr.r\*St16Xncs3QKFIAU.T,nCt-4uF,  
PhRFYU8G4Nc7VHJpvFQExLMA7sQL4ls-nkFtMuBjMX0\*6V.?P6Xg, .yJbwc-2P8T-,-  
FAlpkvcmBATTv88nK.10uJNuQeglkE4xqs,JryE0c-  
SmixRXk3GJfPf,\*cN.Zr6n3IlckTnLlnIaQ.ysiquptvniG0r0ZpSjpBVYK?7u.E-  
JKWAhvH8nMrZC6nhVpGpmnnvsHzz.qfQ0JIdsdthm6YLuSZ, 1i7jHTDyNSj-  
T90.mT3egbaVBr\*n8-eZVeUfhavn.yELKjBEPsuygrH93pZnZsLXlxcI4afvV1jw8po0lt,0f,  
i7YK68T6dqZ6j\*WbK6zgPQ73ARnPP01cN0, XvUUiwH00?9?  
Rz4Hp4UCE9gxHnGy,dWaT7\*5ibyG,Jq6MZk8PQzR0LJl5mWhiAndpb8rhy8cPemL7PF?  
OPyhFDJdI,Dbh1?\*zybcqAmBg9-E4PzG0.oSRraGwv11ND-0Y?dhVgaUj6VJpnHk6N, N?  
p7AXv.-8mA6JfG-yc15tnHhgyPBCpMBc1S0,yFPLmHFhQCTKy4TMwbyD8FvwC6bIYNDZdNLF62?  
5Zy5L,qX..0-  
ommdbaAPmD9kint6SdjIPrblI2,yw1--71B0eSjY6jGNpNR8FNR91rLMch7oZgetxM\*gtK,  
1CyvRijp,9p0LA,ESEfBchgXXx1b0KkIV7A55J4mNlcIDaTwZUXqrpiG-sMMG6cxhk6T-  
otFghPnd4,A-JAshdlc4.yJP\*XuyZHOldrCnf, HhsPiLy?NmixbpEx-6Hf1s6dU7UEpFV?  
CFVv3PupWL\*bllQk4L454d-zm4xWkaVGwQbtQVqfAY3t4mFxtVCQbvPh2uffhfe,  
ZrbXhJTz5IFnm26BTIcpB,FPsCxBP9mNmWT?bySieohK0YR?  
Fp7hXIobGruyPKzTkNvFKVvVamb73V7?sJ7NTLiGSr2L4xIt5saE1p.AKW.P,W1WfcshFbi?  
cT3Khh-  
wiziCS5fz4nZd2uWnd-1FSd1rcJoIB5vnTkcQjqJ9z29y.MH8K0f6Yq,zAWXxKnF5yXSX8iFpqz4jn

```

J1if?*N6LnCxDTs6Z, -TShlFXHVYol786*39e3o9?425Q,
0CzKiUXp5N7FtBLEbn8pxdL1DDJgK, JmzzXR7RfG.qE8bidWw07PayykvzcvHH3kyfPbY6xMUGLwtH
938qQ3t6t0GGvz15ZCWR?kUC?Kcu10j?YXkA3,R3gxDFWiEb4ITqFSEw, E5RBdIP,
dJM9GxsKtsUZLlLub2005*UAN7c-
BIEczWwGKz0a2zfr7tySHmcxbXRM9Tex3gdv6utZwUCkrVji8pj950UwM07vprAU"
    ],
    "conditionCCRTValue": "UPDATE_REQUEST",
    "conditionRxRTValue": [
        "INITIAL_REQUEST"
    ],
    "conditionServiceURNIDValue": [
        "r,Vnj9p.MZlxvBFiLr*YRHT0xCfC*Y*kGmw-kB-8j1JqfnDcgqkfeKHFN1-
GdHS4fvPx*AX5EagP4Xvx0Q2w*dBJrOpT5V, hF847pVFbHqx*yMYr7svKCj2TC?utLpLemQsq?
Ikm0AINKaYbcr0zyZb3AZX?W-i.dnbl7iY80Wvd2.vL1V-5,NBBoxA-
MTK67f9wQ2HDnNsizzFCD8lqH.T,jMurIbEhksKqTZkiaNwodBq8rTw9tBmRVJGeafW?
BjsKNUoM4*F4R-o?, oi-J*D.Bj?JAv0puz0A2ESszsijiU6A-
z2vHqpecCqzKCUsRLToqsNc893aVA.ew3P0fG,H5P*BMKAhUpwTrtYHw0C3.?-
hbGuJ0SwwmDl6hKgc, 2a*x0i56aFNLcDPndiz,
w3QBy95lwZe0c*TJw.2B7lG9L2um0sE59cToEvuu0SUNLMX4rKaPMqT6*.*VrN*XF,
oUQYzJEEpZSPtmCWU-Ykowuh,jMcmrcRw-nRrBlu7Ci-EDqWw*?wjgbL-
W2ODRfUXW*iIcIFKJwhuW0jk4p10lJYf03m*7THq4GsdjhF-
QNHYv,7jaCi70sg.XPXsqne9d,3J1RL*-dfTT4m8?E.D.eYb4h8y*jqmYhblDv08HSF-
T13eXUq0i0KBEvE--rMN,bo?H09Iy--
wXkBktsx9GB0WZFBcvfGFhUHADsi.lOLRKVBuIVaqQMm6i700feaUpMpFtaiVDw11K??0r8I.r?
stWQ4U,cxKXwGZSZhclPy?XlZQGwgXkyhu1bKm9VXDj5nmAACInhZgk, 3ekMCjB..re2u4?
2Dj0yoCNz0J0SJ0eemy9cUPVJx9y7I0N8YTvThy7wPsPKQSZvmZe-Ba9bQ*k,mExi2kiTTTtVbNid-
m9jZkH0e5bcR?I2ICD7qvUwlbMLRg1*6pw.MwB5wwX0K8bnoA6LFXd0JfzS7Rmz-
l3wIbjjAFg53U,?RXQ8lQ6LyNVfCut-
WX9eadTgpW1iQy*a3ZtL5l7JJrVDsK7gB980Wj8Mxs9kuRUV,VQVRh0iRHPf21c2HoL1J7uqNQVpfX
JgL?4lM2KhbIHajKxfvbsV.v5UD8Cl,
vEDZjr9N3PW3DgUgnwlsfpIE8dSv5lrFTYcmfm5xY4HISpgvLcwo0nR*9yj.,Vja26gB7J0A3N,OBM
eELFhseaZ4bvRWizJeUoc3t4YSo., 3zDXsJ3p8uX7WC?LmYfdo6y, GHoE?
2EVniTNRmeaPL7*gnzv3voUCRCJ64xepuMWQDbA5GGyTfQ4ZB?ekWUNsw"
    ],
    "conditionMPSIdValue": [
        "string"
    ],
    "conditionMCPTTIdValue": [
        "string"
    ],
    "conditionMCVideoIdValue": [
        "string"
    ],
    "conditionReservPriorityValue": [
        "string"
    ],
    "conditionSNRTypeValue": [
        "ABORT_SESSION_REQUEST"
    ]
}
}
}
}
},
"sortingRules": [

```

```

    {
      "index": 0,
      "parameterType": "START_DATE",
      "attributeName": "string",
      "order": "string"
    }
  ]
}

```

## 2.89.4 UM Data Limit Profile

**Table 2-471 Supported operations**

| HTTP Method or Custom Operation | Description                                | Resource URI                                                                                                                                                                  |
|---------------------------------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GET                             | Get Usage Monitoring Data Limit Profile    | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/usagemon/datalimitprofiles/{umDataLimitProfileName} where <umDataLimitProfileName> is the Data Limit profile name.          |
| PUT                             | Update Usage Monitoring Data Limit Profile | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/usagemon/datalimitprofiles/{umDataLimitProfileName} where <umDataLimitProfileName> is the Data Limit profile name.          |
| DELETE                          | Delete Usage Monitoring Data Limit Profile | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/usagemon/datalimitprofiles/{umDataLimitProfileName} where <umDataLimitProfileName> is the Data Limit profile name.          |
| POST                            | Create Usage Monitoring Data Limit Profile | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/usagemon/datalimitprofiles<br>For details on the Request/Response Body Parameters, see <a href="#">Table 2-472</a> .        |
| POST                            | Import Usage Monitoring Data Limit Profile | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/usagemon/datalimitprofiles/import<br>For details on the Request/Response Body Parameters, see <a href="#">Table 2-472</a> . |
| GET                             | Export Usage Monitoring Data Limit Profile | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/usagemon/datalimitprofiles/export<br>For details on the Request/Response Body Parameters, see <a href="#">Table 2-472</a> . |

Table 2-472 Request/Response Body Parameters for GET and POST operations

| Field Name      | Data Type   | Mandatory(M)/<br>Optional (O)/<br>Conditional (C) | Description                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------|-------------|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name            | String      | M                                                 | Uniquely identifies the UM Data Limit Profile by a name. This field is for configuration purpose only and not transmitted over the network.                                                                                                                                                                                                                                          |
| limitIdentifier | String      |                                                   | Specifies the limit identifier. Multiple limit identifiers may have the same priority.                                                                                                                                                                                                                                                                                               |
| priority        | Integer     | O                                                 | A Priority to weigh it with other Data Limit Profiles and/or UDR provisioned Data Limits of the same Plan Type. The priority can be used by Policy or Data Limit Selection Profile for choosing among different candidate profiles.<br><br>The Plan Type, Priority within that Plan Type and the Selection Order of Plan Types together decide the order of selection of Data Plans. |
| umLevel         | Enumeration | M                                                 | Indicates the level of the usage monitoring instance (PDU Session level or per Service).<br><b>Default value:</b> Session Level                                                                                                                                                                                                                                                      |
| profileType     | Enumeration | M                                                 | Type of the Data Limit Profile.<br><b>Default value:</b> SUBSCRIBER<br><b>Note:</b> Striked-out entries are for future.                                                                                                                                                                                                                                                              |
| planType        | Enumeration | M                                                 | Type of the Plan such as Base, Top-up, and Pass. This help to determine the priority in selecting the plan over other types. The priority is configurable in service configuration screen.<br><b>Default value:</b> Base                                                                                                                                                             |

Table 2-472 (Cont.) Request/Response Body Parameters for GET and POST operations

| Field Name                  | Data Type   | Mandatory(M)/<br>Optional (O)/<br>Conditional (C) | Description                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------|-------------|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| parentPlan                  | Reference   | O                                                 | Identifies a Data Limit Profile as a parent data plan. Any attribute that is not explicitly configured in this plan shall be taken from the parent plan (if present).                                                                                                                                                                       |
| usageLimit                  | Integer     | O                                                 | Indicates usage limit for this Data Limit Profile.<br><b>Default value:</b> False                                                                                                                                                                                                                                                           |
| resetPeriod                 | Enumeration | O                                                 | Indicates whether the periodicity is "YEARLY", "MONTHLY", "WEEKLY", "DAILY" or "HOURLY".<br><b>Default value:</b> Monthly                                                                                                                                                                                                                   |
| resetDay                    |             |                                                   | Enter a string identifying the custom attribute in UDR response that represents the usage reset day.<br>Example: SmPolicyData/umDataLimits/{limitId}/billingDay                                                                                                                                                                             |
| excessUsageLimit.percentage | Integer     | O                                                 | Indicates the percentage of base volume/time up to which excess usage is allowed.<br><b>Range:</b> 100 - 1500<br><b>Note:</b> If all the Excess Usage Limit fields are left empty, the grant shall continue indefinitely.                                                                                                                   |
| excessUsageLimit.duration   | Integer     | O                                                 | Indicates the length of time in seconds. This is inclusive of the base duration. That is the value in this field indicates the total duration to be consumed including base + excess.<br><b>Range:</b> 3600 - 31536000 (1 Year)<br><b>Note:</b> If all the Excess Usage Limit fields are left empty, the grant shall continue indefinitely. |

Table 2-472 (Cont.) Request/Response Body Parameters for GET and POST operations

| Field Name                      | Data Type | Mandatory(M)/<br>Optional (O)/<br>Conditional (C) | Description                                                                                                                                                                                                                                            |
|---------------------------------|-----------|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| excessUsageLimit.volumeTotal    | Integer   | O                                                 | Total data octets for both downlink and uplink. This is inclusive of the base total volume.<br><b>Range:</b> 512 - 1073741824000 (1000 GB)<br><b>Note:</b> If all the Excess Usage Limit fields are left empty, the grant shall continue indefinitely. |
| excessUsageLimit.volumeUplink   | Integer   | O                                                 | Uplink data octets. This is inclusive of the base uplink volume.<br><b>Range:</b> 512 - 1073741824000 (1000 GB)<br><b>Note:</b> If all the Excess Usage Limit fields are left empty, the grant shall continue indefinitely.                            |
| excessUsageLimit.volumeDownlink | Integer   | O                                                 | Downlink data octets. This is inclusive of the base downlink volume.<br><b>Range:</b> 512 - 1073741824000 (1000 GB)<br><b>Note:</b> If all the Excess Usage Limit fields are left empty, the grant shall continue indefinitely.                        |
| inactivityTime                  | Integer   | O                                                 | Enter the time interval (in seconds) during which if no packets are received for a given monitoring key, PGW or SMF stops measuring the time.<br><b>Default value:</b> 86400<br><b>Range:</b> 0 - 604800 (7 Days)                                      |

Table 2-472 (Cont.) Request/Response Body Parameters for GET and POST operations

| Field Name          | Data Type | Mandatory(M)/<br>Optional (O)/<br>Conditional (C) | Description                                                                                                                                                                                                                                                                                                                                                            |
|---------------------|-----------|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| dataRolloverProfile | Reference | O                                                 | To map the custom attribute available in the UDR provided data limit to a pre-configured rollover profile. See "Data Rollover Profile" for more information. Possible values allowed in this field in UDR Data Limit are: A "Data Rollover Profile" name pre-configured on Policy.<br><b>Default value:</b><br>SmPolicyData/umDataLimits/{limitId}/rolloverProfile     |
| reversePriority     | Boolean   | O                                                 | Indicates the priority consideration order. When this flag is enabled: Higher number indicates lower priority<br>When this flag is disabled: Higher number indicates higher priority<br><b>Default value:</b> true                                                                                                                                                     |
| allowExcessUsage    | Boolean   | O                                                 | Indicates whether or not excess usage is allowed for this Data Limit Profile. When Excess Usage is allowed, Usage Monitoring shall continue to grant and accumulate usage even after consuming 100% of allocated volume/time. The QoS, Charging etc. parameters can be controlled at PCRF Core Policy on account of the consumed usage.<br><b>Default value:</b> False |

**Sample Request/Response body structure for GET operation:**

```
{
  "name": "string",
  "limitIdentifier": "string",
  "monitoringKey": "string",
  "priority": "string",
  "umLevel": "SESSION_LEVEL",
  "profileType": "SUBSCRIBER",
```



```

"planType": "BASE",
"parentPlan": "string",
"usageLimit": {
  "Enter in range [3600-2592000]": 3600,
  "Enter in range [512-107374182400]": 512
},
"resetPeriod": {
  "period": "MONTHLY",
  "Enter a number": 3
},
"resetDay": {
  "type": "FIRST_DAY",
  "day": 0,
  "Enter time in HH:MM:SS format": "00:00:00"
},
"excessUsageLimit": {
  "percentage": 1000,
  "duration": 2592000,
  "volumeTotal": 107374182400,
  "volumeUplink": 107374182400,
  "volumeDownlink": 107374182400
},
"inactivityTime": "string",
"dataRolloverProfile": "string",
"enableQuotaMigration": true,
"reversePriority": true,
"allowExcessUsage": true
}

```

## 2.89.5 Data Limit Sorting Profile

**Table 2-473 Supported operations**

| HTTP Method or Custom Operation | Description                       | Resource URI                                                                                                                                                                                  |
|---------------------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GET                             | Get Data Limit Sorting Profile    | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/usagemon/dataLimitSortingProfiles/{dataLimitSortingProfileName} where <dataLimitSortingProfileName> is the Data Limit Sorting profile name. |
| PUT                             | Update Data Limit Sorting Profile | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/usagemon/dataLimitSortingProfiles/{dataLimitSortingProfileName} where <dataLimitSortingProfileName> is the Data Limit Sorting profile name. |

**Table 2-473 (Cont.) Supported operations**

| HTTP Method or Custom Operation | Description                       | Resource URI                                                                                                                                                                                  |
|---------------------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DELETE                          | Delete Data Limit Sorting Profile | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/usagemon/dataLimitSortingProfiles/{dataLimitSortingProfileName} where <dataLimitSortingProfileName> is the Data Limit Sorting profile name. |
| POST                            | Create Data Limit Sorting Profile | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/usagemon/dataLimitSortingProfiles<br>For details on the Request/Response Body Parameters, see <a href="#">Table 2-474</a> .                 |
| POST                            | Import Data Limit Sorting Profile | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/usagemon/dataLimitSortingProfiles/import<br>For details on the Request/Response Body Parameters, see <a href="#">Table 2-474</a> .          |
| GET                             | Export Data Limit Sorting Profile | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/usagemon/dataLimitSortingProfiles/export<br>For details on the Request/Response Body Parameters, see <a href="#">Table 2-474</a> .          |

**Table 2-474 Request/Response Body Parameters for GET and POST operations**

| Field Name                 | Data Type | Mandatory(M)/Optional (O)/Conditional (C) | Description                                                               |
|----------------------------|-----------|-------------------------------------------|---------------------------------------------------------------------------|
| name                       | String    | M                                         | Name of the Data Limit Sorting Profile                                    |
| sortingRules.index         | Integer   | M                                         | Specifies the index. The sorting rules are applied in the order of index. |
| sortingRules.parameterType |           |                                           | Specifies the type of the parameter.                                      |
| sortingRules.attributeName | String    | C                                         | Specifies the name of the attribute.                                      |
| sortingRules.order         | String    | O                                         | Specifies the order.                                                      |

**Sample Request/Response body structure for GET operation:**

```

{
  "name": "string",
  "sortingRules": [
    {
      "index": 0,
      "parameterType": "START_DATE",
      "attributeName": "string",
      "order": "string"
    }
  ]
}

```

## 2.89.6 Data Rollover Profile

**Table 2-475 Supported operations**

| HTTP Method or Custom Operation | Description                  | Resource URI                                                                                                                                                                       |
|---------------------------------|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GET                             | Get Data Rollover Profile    | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/usagemon/dataRolloverProfiles/{dataRolloverProfileName}<br>where<br><dataRolloverProfileName> is the Data Rollover profile name. |
| PUT                             | Update Data Rollover Profile | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/usagemon/dataRolloverProfiles/{dataRolloverProfileName}<br>where<br><dataRolloverProfileName> is the Data Rollover profile name. |
| DELETE                          | Delete Data Rollover Profile | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/usagemon/dataRolloverProfiles/{dataRolloverProfileName}<br>where<br><dataRolloverProfileName> is the Data Rollover profile name. |
| POST                            | Create Data Rollover Profile | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/usagemon/dataRolloverProfile<br>For details on the Request/Response Body Parameters, see <a href="#">Table 2-476</a> .           |
| POST                            | Import Data Rollover Profile | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/usagemon/dataRolloverProfiles/import<br>For details on the Request/Response Body Parameters, see <a href="#">Table 2-476</a> .   |

Table 2-475 (Cont.) Supported operations

| HTTP Method or Custom Operation | Description                  | Resource URI                                                                                                                                                                     |
|---------------------------------|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GET                             | Export Data Rollover Profile | {apiRoot}/oc-cnpolicy-configuration/v1/policydata/usagemon/dataRolloverProfiles/export<br>For details on the Request/Response Body Parameters, see <a href="#">Table 2-476</a> . |

Table 2-476 Request/Response Body Parameters for GET and POST operations

| Field Name               | Data Type   | Mandatory(M)/Optional (O)/Conditional (C) | Description                                                                                                                                                                                                                                                           |
|--------------------------|-------------|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name                     | String      | M                                         | Uniquely identifies the Data Rollover Profile by a name.                                                                                                                                                                                                              |
| dataRolloverEnabled      | Boolean     | M                                         | Indicates whether to enable or disable the data rollover.                                                                                                                                                                                                             |
| rolloverDataConsumption  | Enumeration | M                                         | Indicates when to consume the rollover data.                                                                                                                                                                                                                          |
| maximumNumberOfRollovers | Integer     | M                                         | Indicates how many cycles the data plan can rollover. A value of 0 means there is not limit to the number of cycles the left over data can rollover.<br><b>Range:</b> 0 to 24<br><b>Default value:</b> 0 (No limit)                                                   |
| dataRolloverPercentage   | Integer     | M                                         | This field indicates the percentage of left over data volume/time to rollover to the next cycle.<br><b>Range:</b> 0 to 100<br><b>Default value:</b> 100.                                                                                                              |
| rolloverCap              | Boolean     | M                                         | Indicates whether to enable or disable a cap (maximum limit) on the total data volume/time to be allotted for the next billing cycle or period. The maximum cap shall be applied on the total of base plan volume/time and total accumulated rolled over volume/time. |

Table 2-476 (Cont.) Request/Response Body Parameters for GET and POST operations

| Field Name                                                    | Data Type | Mandatory(M)/<br>Optional (O)/<br>Conditional (C) | Description                                                                                                                                                                                                                                |
|---------------------------------------------------------------|-----------|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| maximunRolloverThresh<br>old.baseDataPercentage               | Integer   | O                                                 | Indicates the percentage of base plan data volume/time that is allowed as rollover data volume/time.<br><br><b>Range:</b> 0 to 100                                                                                                         |
| maximunRolloverThresh<br>old.maximunDurationThreshold         | Integer   | O                                                 | Indicates the length of time in seconds.<br><br><b>Range:</b> 3600 - 2592000 (30 Days)                                                                                                                                                     |
| maximunRolloverThresh<br>old.maximunVolumeTotal<br>Threshold  | Integer   | O                                                 | Total data octets for both downlink and uplink.<br><br><b>Range:</b> 512 - 107374182400 (100 GB)                                                                                                                                           |
| maximunRolloverThresh<br>old.maximunVolumeUplinkThreshold     | Integer   | O                                                 | Uplink data octets.<br><br><b>Range:</b> 512 - 107374182400 (100 GB)                                                                                                                                                                       |
| maximunRolloverThresh<br>old.maximunVolumeDownlinkThreshold   | Integer   | O                                                 | Downlink data octets.<br><br><b>Range:</b> 512 - 107374182400 (100 GB)                                                                                                                                                                     |
| minimunRolloverThresho<br>ld.minimunDurationThreshold         | Integer   | O                                                 | Indicates the length of time in seconds. The remaining duration if applicable shall be rolled over to the next period if it is greater than the threshold value configured here.<br><br><b>Range:</b> 0 - 2592000 (30 Days)                |
| minimunRolloverThresho<br>ld.minimunVolumeTotalThreshold      | Integer   | O                                                 | Total data octets for both downlink and uplink. The remaining total volume if applicable shall be rolled over to the next period if it is greater than the threshold value configured here.<br><br><b>Range:</b> 0 - 107374182400 (100 GB) |
| minimunRolloverThresho<br>ld.minimunVolumeUplink<br>Threshold | Integer   | O                                                 | Uplink data octets. The remaining uplink volume if applicable shall be rolled over to the next period if it is greater than the threshold value configured here.<br><br><b>Range:</b> 0 - 107374182400 (100 GB)                            |

**Table 2-476 (Cont.) Request/Response Body Parameters for GET and POST operations**

| Field Name                                                      | Data Type | Mandatory(M)/<br>Optional (O)/<br>Conditional (C) | Description                                                                                                                                                                                                                          |
|-----------------------------------------------------------------|-----------|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| minimunRolloverThresho<br>ld.minimunVolumeDownli<br>nkThreshold | Integer   | O                                                 | Downlink data octets.<br>The remaining downlink<br>volume if applicable shall<br>be rolled over to the next<br>period if it is greater than<br>the threshold value<br>configured here.<br><b>Range:</b> 0 -<br>107374182400 (100 GB) |
| rolloverCapSettings.dura<br>tion                                | Integer   | C                                                 | Indicates the length of<br>time in seconds.<br><b>Range:</b> 3600 - 2592000<br>(30 Days)                                                                                                                                             |
| rolloverCapSettings.vol<br>umeTotal                             | Integer   | C                                                 | Total data octets for both<br>downlink and uplink.<br><b>Range:</b> 512 -<br>107374182400 (100 GB)                                                                                                                                   |
| rolloverCapSettings.vol<br>umeUplink                            | Integer   | C                                                 | Uplink data octets.<br><b>Range:</b> 512 -<br>107374182400 (100 GB)                                                                                                                                                                  |
| rolloverCapSettings.vol<br>umeDownlink                          | Integer   | C                                                 | Downlink data octets.<br><b>Range:</b> 512 -<br>107374182400 (100 GB)                                                                                                                                                                |

**Sample Request/Response body structure for GET operation:**

```
{
  "name": "string",
  "dataRolloverEnabled": true,
  "rolloverDataConsumption": "BEFORE_PARENT_PLAN",
  "maximumNumberOfRollovers": 0,
  "dataRolloverPercentage": 0,
  "rolloverCap": true,
  "maximunRolloverThreshold": {
    "baseDataPercentage": 100,
    "maximunDurationThreshold": 2592000,
    "maximunVolumeTotalThreshold": 107374182400,
    "maximunVolumeUplinkThreshold": 107374182400,
    "maximunVolumeDownlinkThreshold": 107374182400
  },
  "minimunRolloverThreshold": {
    "minimunDurationThreshold": 2592000,
    "minimunVolumeTotalThreshold": 107374182400,
    "minimunVolumeUplinkThreshold": 107374182400,
    "minimunVolumeDownlinkThreshold": 107374182400
  },
  "rolloverCapSettings": {
    "duration": 2592000,
```

```

    "volumeTotal": 107374182400,
    "volumeUplink": 107374182400,
    "volumeDownlink": 107374182400
  }
}

```

## 2.90 Acquire lock

**Table 2-477 Supported operations:**

| HTTP Method or Custom Operation | Description                        | Resource URI                                                                                    |
|---------------------------------|------------------------------------|-------------------------------------------------------------------------------------------------|
| POST                            | To acquire locks for multiple keys | {apiRoot}/v1/locks<br>For Bulwark service:<br>http://{BULWARK_HOST}:<br>{BULWARK_PORT}/v1/locks |

Sample cURL command for POST operation:

```

curl --location 'http://localhost:8080/v1/locks' \
--header 'oc-origination-request-timestamp: 1718017076394' \
--header 'Content-Type: application/json' \
--data '{
  "keys": [
    {
      "key": "imsi-4500810000000030"
    },
    {
      "key": "imsi-4500810000000031"
    }
  ],
  "leaseDuration": 2500,
  "lockWaitTimeout": 4000,
  "serviceInfo": {
    "serviceName": "postman",
    "serviceID": "postman",
    "contextInfo": "{\"msgType\":\"MSGTYPE_CREATE\"}"
  }
}'

```

**Table 2-478 Request/Response Body Parameters for POST operation:**

| Field Name | Data Type | Mandatory (M)/<br>Optional (O)/<br>Conditional (C) | Description                                       |
|------------|-----------|----------------------------------------------------|---------------------------------------------------|
| keys       | Array     | M                                                  | Indicates the key for which the lock is requested |

Table 2-478 (Cont.) Request/Response Body Parameters for POST operation:

| Field Name    | Data Type | Mandatory (M)/<br>Optional (O)/<br>Conditional (C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------|-----------|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| leaseDuration | Long      | M                                                  | <p>Duration in milliseconds for which lock is kept once the acquisition is successful. After this duration, the lock will be released automatically. This is used as default global leaseDuration, if key specific leaseDuration is not provided.</p> <p>Either overall leaseDuration OR key-specific leaseDuration must be present in a request.</p> <p>In case of this field is missing, overall leaseDuration will be considered for a given key.</p> <p>Note: It can be `0` for the requests where they do not want to release lock timeout. It means the lock will be there indefinitely until explicitly released.</p> |



Table 2-478 (Cont.) Request/Response Body Parameters for POST operation:

| Field Name      | Data Type | Mandatory (M)/<br>Optional (O)/<br>Conditional (C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------|-----------|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| lockWaitTimeout | Long      | C                                                  | <p>Duration in milliseconds for which consumer service will wait for the response to get a lock. The same duration would be used by Bulwark to poll for the lock if a lock is not available.</p> <p>This parameter is used as default global lockWaitTimeout, if key specific lockWaitTimeout is not provided.</p> <p>Either overall lockWaitTimeout OR key-specific lockWaitTimeout must be present in a request.</p> <p>In case of this field is missing, overall lockWaitTimeout will be considered for a given key.</p> <p>Note: It can be `0` for the requests where they do not want to wait for lock and respond immediately.</p> |
| serviceInfo     | Array     | M                                                  | Contains the details of the service requesting the lock, such as service name, service ID, and context.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

Table 2-479 Parameters for keys description

| Field Name | Data Type | Mandatory (M)/<br>Optional (O)/<br>Conditional | Description                                         |
|------------|-----------|------------------------------------------------|-----------------------------------------------------|
| keys.key   | String    | M                                              | Key for which consumer-service is requesting a lock |

Table 2-479 (Cont.) Parameters for keys description

| Field Name           | Data Type | Mandatory (M)/<br>Optional (O)/<br>Conditional | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------|-----------|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| keys.leaseDuration   | Long      | C                                              | <p>Duration in milliseconds for which lock is kept once the acquisition is successful. After this duration, the lock will be released automatically.</p> <p>Either overall leaseDuration OR key-specific leaseDuration must be present in a request.</p> <p>In case of this field is missing, overall leaseDuration will be considered for a given key.</p> <p>Note: It can be `0` for the requests where they do not want to release lock timeout. It means the lock will be there indefinitely until explicitly released.</p> |
| keys.lockWaitTimeout | Long      | Conditional                                    | <p>Duration in milliseconds for which consumer service will wait for the response to get a lock. The same duration would be used by Bulwark to poll for the lock if a lock is not available.</p> <p>Either overall lockWaitTimeout OR key-specific lockWaitTimeout must be present in a request.</p> <p>In case of this field is missing, overall lockWaitTimeout will be considered for a given key.</p> <p>Note: It can be `0` for the requests where they do not want to wait for lock and respond immediately.</p>          |

Table 2-480 Parameters for service name

| Field name              | Data Type | Mandatory (M)/<br>Optional (O)/<br>Conditional (C) | Description                                                                         |
|-------------------------|-----------|----------------------------------------------------|-------------------------------------------------------------------------------------|
| serviceInfo.serviceName | String    | M                                                  | Service name from which request is sent [SM-Service, AM-Service, UE Policy Service] |
| serviceInfo.serviceId   | String    | M                                                  | POD-ID of service from which request is sent                                        |
| serviceInfo.context     | String    | O                                                  | Client's context information kept with a bulwark.                                   |

Sample request body structure for GET operation:

```
{
  "keys": [
    {
      "key": "key-1",
      "leaseDuration": 5000,
      "lockWaitTimeout": 1000
    },
    {
      "key": "key-2",
      "leaseDuration": 3000,
      "lockWaitTimeout": 2000
    },
    {
      "key": "key-3",
      "leaseDuration": 2000,
      "lockWaitTimeout": 3000
    }
  ],
  "leaseDuration": 6000,
  "lockWaitTimeout": 3000,
  "serviceInfo": {
    "serviceName": "PCF_SM",
    "serviceID": "pcf-sm-pod1"
    "context": "{\"user1\": \"imsi-1\"}"
  }
}
```

## 2.91 Release Lock

**Table 2-481 Supported operations**

| HTTP Method or Custom Operation | Description                              | Resource URI                                             |
|---------------------------------|------------------------------------------|----------------------------------------------------------|
| DELETE                          | To release the lock with key and lockID. | {apiRoot}/v1/locks/{lockID}?reqParam={unlockRequestBody} |

Sample cURL command for DELETE operation:

```
curl --location --request DELETE 'http://localhost:8080/v1/locks/2a7d69f4-4364-4f6d-af72-0702cb769076?reqParam=%7B%22keys%22%3A%5B%22imsi-450081000000030%22%2C%22imsi-450081000000031%22%5D%2C%22serviceInfo%22%3A%7B%22serviceName%22%3A%22nata%22%2C%22serviceID%22%3A%22localhost%22%2C%22contextInfo%22%3A%22%7B%5C%22msgType%5C%22%3A%5C%22MSGTYPE_CREATE%5C%22%7D%22%7D%0A'
```

Sample request body structure for DELETE operation:

```
{
  "keys": ["key-1", "key-2", "key-3"],
  "serviceInfo": {
    "serviceName": "PCF_SM",
    "serviceID": "pcf-sm-pod1"
  }
}
```

## 2.92 Server Retry on already locked keys

**Table 2-482 Supported operations**

| HTTP Method or Custom Operation | Description                                                             | Resource URI                                      |
|---------------------------------|-------------------------------------------------------------------------|---------------------------------------------------|
| PUT                             | Used to enable / disable the server side retry for already locked keys. | {apiRoot}/nf-common-component/v1/bulwark/settings |

**Table 2-483 Request/Response Body Parameters for PUT operation:**

| Field Name | Data Type | Mandatory (M)/Optional (O)/Conditional (C) | Description                                                                              |
|------------|-----------|--------------------------------------------|------------------------------------------------------------------------------------------|
| enabled    | Boolean   | M                                          | Indicates whether to enable server retry on already locked keys.<br>Default value: false |

**Table 2-483 (Cont.) Request/Response Body Parameters for PUT operation:**

| Field Name                   | Data Type | Mandatory (M)/<br>Optional (O)/<br>Conditional (C) | Description                                                                                                  |
|------------------------------|-----------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| maxPendingLockRequestsPerKey | Integer   | M                                                  | Indicates the maximum number of pending lock requests allowed per key.<br>Range: 1 to 10<br>Default value: 5 |

Sample request body structure for PUT operation:

```
{
  "serverRetryOnAlreadyLocked": {
    "enabled": true,
    "maxPendingLockRequestsPerKey": 5
  }
}
```

## 2.93 Rx Reauth Profiles

**Table 2-484 Supported REST APIs - Rx Reauth Profiles**

| Description              | HTTP Method or Custom Operation | Resource URI                                                                                     | Possible Result Code          |
|--------------------------|---------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------|
| Create Rx Reauth Profile | POST                            | /oc-cnppolicy-configuration/v1/services/common/rx-reauth-profiles                                | See <a href="#">Table A-3</a> |
| Get Rx Reauth Profile    | GET                             | {apiRoot}/oc-cnppolicy-configuration/v1/services/common/rx-reauth-profiles/{rxReauthProfileName} | See <a href="#">Table A-1</a> |
| Update Rx Reauth Profile | PUT                             | {apiRoot}/oc-cnppolicy-configuration/v1/services/common/rx-reauth-profiles/{rxReauthProfileName} | See <a href="#">Table A-2</a> |
| Export Rx Reauth Profile | GET                             | /oc-cnppolicy-configuration/v1/services/common/rx-reauth-profiles/export                         | See <a href="#">Table A-1</a> |
| Import Rx Reauth Profile | POST                            | /oc-cnppolicy-configuration/v1/services/common/rx-reauth-profiles/import                         | See <a href="#">Table A-3</a> |

**Table 2-484 (Cont.) Supported REST APIs - Rx Reauth Profiles**

| Description              | HTTP Method or Custom Operation | Resource URI                                                                                    | Possible Result Code          |
|--------------------------|---------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------|
| Delete Rx Reauth Profile | DELETE                          | {apiRoot}/oc-cnpolicy-configuration/v1/services/common/rx-reauth-profiles/{rxReauthProfileName} | See <a href="#">Table A-4</a> |

**Get, Create, and Update Rx Reauth Profile**

This section describes the request and response parameters used in NF communication profile APIs.

**Table 2-485 Request and Response Body Parameters**

| Field Name                                    | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                                                                                                                                                                                                                                             |
|-----------------------------------------------|-----------|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name                                          | string    | M                                         | -                                                                                                                                                                                                                                                                       |
| Settings                                      | -         | O                                         | -                                                                                                                                                                                                                                                                       |
| mediaType                                     | string    | M                                         | Enter the name of the media type.<br>Allowed Values: ALL, AUDIO, DATA, APPLICATION, VIDEO, CONTROL, TEXT, MESSAGE, NOMEDIATYPE, OTHER<br>Default Value: All                                                                                                             |
| precedence (when mediaType is other than ALL) | integer   | M                                         | When the Notify-Update triggered by Rx request towards SMF fails and the request comes with multiple media components then use this precedence value to determine which of these will determine the final Reauth Action.<br>Allowed Values: 1-99<br>Default Value: Null |
| acceptAllErrors                               | boolean   | O                                         | When the Notify-Update triggered by Rx request towards SMF fails with any error code or cause and this field is set as True, then we would say that the ErrorCode and ErrorCause matched successfully.<br>Allowed Values: False<br>Default Value: True, False           |

Table 2-485 (Cont.) Request and Response Body Parameters

| Field Name   | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|-----------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| errors       | boolean   | O                                       | When the Notify-Update triggered by Rx request towards SMF fails with any error code or cause and the <b>Accept All Errors</b> field is set as False, check the <a href="#">Table 2-486</a> example table and match the ErrorCode and ErrorCause of the failure.<br><b>Note:</b> If the ErrorCode is configured and ErrorCause is left empty, PCF will compare only the ErrorCode and allow any ErrorCause for that specific error to match.<br>Default Value: Empty List |
| exceptions   | string    | M                                       | When the Notify-Update triggered by Rx Request towards SMF fails with any exception, then match the exception of the failure.<br>Default Value: Empty List                                                                                                                                                                                                                                                                                                                |
| reauthAction | string    | O                                       | Given that all following conditions for current setting are met:<br><br><ol style="list-style-type: none"> <li>1. MediaType specified matches</li> <li>2. Error matched successfully or Exception matches successfully</li> </ol> Then PCF can take the Reauth Action.<br>Allowed Values: SEND_ASR, SUPPRESS_ASR, SEND_RAR<br>Default Value: SEND_ASR                                                                                                                     |

Table 2-486 ErrorCode and ErrorCause Combination

| Configuration                                                 | ErrorCode | ErrorCause          | Expectation |
|---------------------------------------------------------------|-----------|---------------------|-------------|
| Nothing configured                                            | 5xx/4xx   | NA                  | No match    |
| {"error code": 503, "error cause": ""}                        | 503       | ...                 | Match       |
|                                                               | 503       | SERVICE_UNAVAILABLE | Match       |
|                                                               | 503       | CUSTOM_503          | Match       |
|                                                               | 404       | ...                 | No match    |
| {<br>"error code": 503, "error cause": "SERVICE_UNAVAILABLE", | 503       | ...                 | Match       |
|                                                               | 503       | SERVICE_UNAVAILABLE | Match       |

Table 2-486 (Cont.) ErrorCode and ErrorCause Combination

| Configuration                                                                                                                                                                             | ErrorCode | ErrorCause              | Expectation |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------------------------|-------------|
| "error code":<br>503, "error<br>cause":<br>"NF_CONGESTED",<br>"error code":<br>503, "error<br>cause":<br>"CUSTOM_503",<br>"error code":<br>404, "error<br>cause":<br>"NOT_FOUND",<br>}    | 404       | ...                     | Match       |
| {<br>"error code":<br>503, "error<br>cause":<br>"SERVICE_UNAVAILA<br>BLE",<br>"error code":<br>404, "error<br>cause":<br>"NOT_FOUND",<br>"error code":<br>503, "error<br>cause": "",<br>} | 503       | SERVICE_UNAVAILABL<br>E | Match       |
|                                                                                                                                                                                           | 503       | CUSTOM_503              | Match       |
|                                                                                                                                                                                           | 404       | NOT_FOUND               | Match       |

Sample Request body for Rx Reauth Profile POST and PUT operations:

```
{
  "name": "string",
  "settings": [
    {
      "mediaType": "ALL",
      "precedence": 99,
      "acceptAllErrors": true,
      "errors": [
        {
          "errorCode": 999,
          "errorCause": "string"
        }
      ],
      "exceptions": [
        {
          "exception": "TIMEOUT_EXCEPTION"
        }
      ]
    }
  ]
}
```



```

    }
  ],
  "reauthAction": "SEND_ASR"
}
]
}

```

**Sample Response body structure for Rx Reauth Profile GET, POST, and PUT operation:**

```

{
  "name": "string",
  "settings": [
    {
      "mediaType": "ALL",
      "precedence": 99,
      "acceptAllErrors": true,
      "errors": [
        {
          "errorCode": 999,
          "errorCause": "string"
        }
      ],
      "exceptions": [
        {
          "exception": "TIMEOUT_EXCEPTION"
        }
      ],
      "reauthAction": "SEND_ASR"
    }
  ]
}

```

**Sample Request Body structure for Rx Reauth Profile Import and Export operations:**

```

{
  "name": "string",
  "settings": [
    {
      "mediaType": "ALL",
      "precedence": 99,
      "acceptAllErrors": true,
      "errors": [
        {
          "errorCode": 999,
          "errorCause": "string"
        }
      ],
      "exceptions": [
        {
          "exception": "TIMEOUT_EXCEPTION"
        }
      ],
      "reauthAction": "SEND_ASR"
    }
  ]
}

```

```
}
  ]
}
```

## 2.94 Diameter Connector

The Diameter Connector API allows to configure Diameter Connector.

**Table 2-487 Supported REST APIs**

| HTTP Method or Custom Operation | Description                       | Resource URI                                               |
|---------------------------------|-----------------------------------|------------------------------------------------------------|
| GET                             | Get Diameter Connector service    | oc-cnpolicy-configuration/v1/services/diamConnector        |
| PUT                             | Update Diameter Connector service | oc-cnpolicy-configuration/v1/services/diamConnector        |
| POST                            | Import Diameter Connector service | oc-cnpolicy-configuration/v1/services/diamConnector/import |
| GET                             | Export Diameter Connector service | oc-cnpolicy-configuration/v1/services/diamConnector/export |

**Table 2-488 Request/Response Body Parameters**

| Field Name          | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                                       |
|---------------------|-----------|-------------------------------------------|-------------------------------------------------------------------|
| general             | object    | O                                         | Allows to configure Diameter Connector.                           |
| staleRequestCleanup | object    | O                                         | Allows to configure stale request cleanup for Diameter Connector. |

Table 2-489 General Configuration

| Field Name             | Data Type        | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------|------------------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ratTypeNRRedCapEnabled | boolean          | O                                               | <p>When this parameter is enabled and if the RAT Type in the PDU session is NR_REDCAP, PCF sends the RATType AVP with value NR_REDCAP to P-CSCF in AAA and RAR messages.</p> <p>When this parameter is disabled and Rx session is established for the RedCap devices for which the RAT Type of the PDU session is NR_REDCAP:</p> <ul style="list-style-type: none"> <li>Policy accepts the session and sends AAA and RAR messages to P-CCSCF without RATType AVP.</li> <li>Policy increments diam_avp_dropped metric.</li> </ul> <p><b>Default value:</b> false</p> |
| advancedSettings       | AdvancedSettings | O                                               | To add additional advanced settings keys to the settings.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

Table 2-490 staleRequestCleanup Configuration

| Field Name        | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                            |
|-------------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enableLateArrival | boolean   | O                                               | <p>Indicates whether to validate an incoming request if it is stale during arrival.</p> <p>Enable this field to stop processing the incoming requests to Diameter Connector if it already stale.</p> <p><b>Default value:</b> true</p> |

Table 2-490 (Cont.) staleRequestCleanup Configuration

| Field Name                     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                         |
|--------------------------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enableLateProcessing           | boolean   | O                                               | Indicates whether to validate a request at Diameter Connector if it is stale during processing.<br><br>Enable this field to stop processing the requests at Diameter Connector if it becomes stale during processing.<br><b>Default value:</b> true |
| sbiTimerEnabled                | boolean   | O                                               | Indicates whether to handle HTTP SBI headers that are attached to incoming request.<br><b>Default value:</b> true                                                                                                                                   |
| skipLateProcessingForTerminate | boolean   | O                                               | Indicates whether to skip validating requests of type DELETE if the request becomes stale during arrival and processing.<br><b>Default value:</b> false                                                                                             |

Table 2-491 AdvancedSettings

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                     |
|------------|-----------|-------------------------------------------------|---------------------------------|
| key        | string    | O                                               | Specifies the key name.         |
| value      | string    | O                                               | Specifies the value of the key. |

Sample Request/Response parameters for GET operation:

```
{
  "general": {
    "ratTypeNRRedCapEnabled": false
  },
  "staleRequestCleanup": {
    "enableLateArrival": true,
    "enableLateProcessing": true,
    "skipLateProcessingForTerminate": false,
    "sbiTimerEnabled": true
  },
  "advancedSettings": [
    {
```

```

        "key": "key",
        "value": "value"
    }
  ]
}

```

### cURL Commands

The following is a sample cURL command for GET operation:

```
curl -X 'GET' \ 'http://100.77.63.77:30331/oc-cnpolicy-configuration/v1/
services/diamConnector' \ -H 'accept: application/json'
```

## 2.95 PDS UE ID Configuration Settings

The PDS UE ID Configuration Settings API allows to configure UE ID based query on PolicyDS database.

**Table 2-492 Supported REST APIs**

| HTTP Method or Custom Operation | Description                             | Resource URI                                                          |
|---------------------------------|-----------------------------------------|-----------------------------------------------------------------------|
| GET                             | Get PDS UE ID Configuration settings    | oc-cnpolicy-configuration/v1/services/pds/pdsUEIdConfiguration        |
| PUT                             | Update PDS UE ID Configuration settings | oc-cnpolicy-configuration/v1/services/pds/pdsUEIdConfiguration        |
| POST                            | Import PDS UE ID Configuration settings | oc-cnpolicy-configuration/v1/services/pds/pdsUEIdConfiguration/import |
| GET                             | Export PDS UE ID Configuration settings | oc-cnpolicy-configuration/v1/services/pds/pdsUEIdConfiguration/export |

Table 2-493 Request/Response Body Parameters

| Field Name   | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| typeOfSearch | string    | O                                               | <p>Indicates the type of query to be performed on the PolicyDS database. This field provides a dropdown list with the following options:</p> <ul style="list-style-type: none"><li>• Multi_UE_ID_SEARCH: Specifies a key preference for PDS search query used to look up for a Pdsprofile record. When Multi-UE ID Search is selected the search query uses OR criteria and the search time will be higher.</li><li>• PREFERENTIAL_SEARCH: When Preferential Search is selected, Preference Order field is displayed. It allows to query based on preferred primary key.</li><li>• SINGLE_UE_ID_PREFERENTIAL_SEARCH: Specifies a key preference for PDS search query used to look up for a PDSSubscriber record.</li></ul> |

Table 2-493 (Cont.) Request/Response Body Parameters

| Field Name            | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| preferenceOrder       | string    | O                                               | <p>This parameter must be configured when typeOfSearch parameter is configured as PREFERENTIAL_SEARCH.</p> <p>The value of preferenceOrder parameter specifies the preferred order of keys used for querying the database.</p> <ul style="list-style-type: none"> <li>• SUPI: Query based on SUPI value. It is mandatory to provide a valid SUPI value.</li> <li>• GPSI: Query based on GPSI value. It is mandatory to provide a valid GPSI value.</li> <li>• SUPI, GPSI: Query on SUPI first and then on GPSI. It is mandatory to provide at least a valid SUPI or GPSI value.</li> <li>• GPSI, SUPI: Query on GPSI first and then on SUPI. It is mandatory to provide at least a valid SUPI or GPSI value.</li> </ul> |
| primaryKeyCombination | string    | O                                               | <p>Specifies the required primary key combination. The primary key combination can be SUPI,GPSI or SUPI/GPSI.</p> <p>On selecting the required primary key combination, the requests to PDS is expected to mandatorily contain that ID. Otherwise, the request is rejected with 400 HTTP error code.</p>                                                                                                                                                                                                                                                                                                                                                                                                                |

Table 2-493 (Cont.) Request/Response Body Parameters

| Field Name          | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| migrationInProgress | boolean   | O                                               | <p>The <b>Migration In Progress</b> flag is applicable only when switching between MULTI_UE_ID_SEARCH/PREFERENTIAL_SEARCH and SINGLE_UE_ID_PREFERENTIAL_SEARCH.</p> <p>This flag is enabled when the records are being migrated from PDSPProfile to PDSSubscriber.</p> <p>This flag can be disabled once the migration of all the records are complete. The expectation is that all records must be migrated to updated format.</p> <p>While disabling <b>Migration In Progress</b>, Policy console displays the following warning:</p> <p>"Migration should be disabled only when all the records have been migrated. Are you sure you want to disable it?"</p> <p>If <b>Migration In Progress</b> flag is disabled while the migration of records is still in progress, the non-migrated records will go stale and can be cleaned up by Audit.</p> <p><b>Note</b> In case of multi-site deployment:</p> <ul style="list-style-type: none"> <li>• <b>Migration In Progress</b> flag can be disabled for a site only if migration is enabled in all the sites with the updated configuration. Otherwise, migration cannot be disabled.</li> </ul> |



Table 2-493 (Cont.) Request/Response Body Parameters

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                |
|----------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                |           |                                                 | <ul style="list-style-type: none"> <li>• Migration should be disabled in all the sites almost simultaneously to avoid stale subscriptions being left in PDS.</li> <li>• Migration from Single to Single with different Primary Key combinations should be done in all sites almost simultaneously to avoid stale subscription being left in PDS</li> </ul> |
| skipValidation | boolean   | O                                               | This section is used to verify the migration status at each site.                                                                                                                                                                                                                                                                                          |

**Sample Request/Response parameters for PUT operation:**

```
{
  "typeOfSearch": "string",
  "preferenceOrder": [
    "string"
  ],
  "primaryKeyCombination": "string",
  "migrationInProgress": true,
  "skipValidation": true
}
```

### cURL Commands

The following is a sample cURL command for PUT operation:

```
curl -X 'PUT' \
  'http://<host>:<port>/oc-cnpolicy-configuration/v1/services/pds/
  pdsUEIdConfiguration' \
  -H 'accept: application/json' \
  -H 'Content-Type: application/json' \
  -d '{
    "typeOfSearch": "string",
    "preferenceOrder": [
      "string"
    ],
    "primaryKeyCombination": "string",
    "migrationInProgress": true,
```

```
"skipValidation": true
}'
```

## 2.96 Force Cleanup API

When importing a Policy configuration, if the import task remains in the IN\_PROGRESS state for any reason, no new import can be initiated since only one import can run at a time. In such cases, new import cannot be initiated until stale cleanup timeout (30 minutes by default). After this timeout, the import is automatically cleaned up, and a new import can be initiated.

In order to reset the import status immediately (without waiting for the default 30-minute timeout), the Force Cleanup API can be used. This allows the stuck import data to be cleaned up instantly, enabling a new import to start right away.

**Table 2-494 Possible operations for Force Cleanup API**

| HTTP Method or Custom Operation | Description                                                | Resource URI                                                     | Possible Result Code                             |
|---------------------------------|------------------------------------------------------------|------------------------------------------------------------------|--------------------------------------------------|
| DELETE                          | Forcefully cleans up the Policy configuration import task. | {apiRoot}/oc-cnpolicy-query/v1/administration/import/stale/reset | 200<br>Indicates resetImportStatus 200 response. |

```
curl -X 'DELETE' \
  'http://10.148.208.40:32373/oc-cnpolicy-configuration/v1/administration/
import/stale/reset' \
  -H 'accept: */*'
```

This API does not contain any request parameter.

## 2.97 DNN

The DNN API allows to configure DNN Profiles, which can be used to configure Message Profiles.

**Table 2-495 Supported REST APIs**

| HTTP Method or Custom Operation | Description        | Resource URI                                             |
|---------------------------------|--------------------|----------------------------------------------------------|
| GET                             | Get DNN Profile    | oc-cnpolicy-configuration/v1/services/common/dnn/{dnnId} |
| POST                            | Create DNN Profile | oc-cnpolicy-configuration/v1/services/common/dnn         |
| PUT                             | Update DNN Profile | oc-cnpolicy-configuration/v1/services/common/dnn/{dnnId} |
| POST                            | Import DNN Profile | oc-cnpolicy-configuration/v1/services/common/dnn/import  |
| GET                             | Export DNN Profile | oc-cnpolicy-configuration/v1/services/common/dnn/export  |
| DELETE                          | Delete DNN Profile | oc-cnpolicy-configuration/v1/services/common/dnn/{dnnId} |

Table 2-496 Request/Response Body Parameters

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                  |
|------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| dnnId      | Integer   | M                                               | Numeric identifier that uniquely represents a DNN entry.<br>A unique ID must be assigned within the allowed range.<br><b>Range:</b> 1 to 255 |
| dnn        | String    | M                                               | Represents the DNN. This value uniquely identifies each DNN for configuration and reference within the system.                               |

Sample Request/Response parameters for GET and POST operation:

```
{
  "dnnId": 255,
  "dnn": "internet"
}
```

## 2.98 SNSSAI

The SNSSAI API allows to configure S-NSSAI Profiles, which can be used to configure Message Profiles.

Table 2-497 Supported REST APIs

| HTTP Method or Custom Operation | Description            | Resource URI                                                  |
|---------------------------------|------------------------|---------------------------------------------------------------|
| GET                             | Get S-NSSAI Profile    | oc-cnpolicy-configuration/v1/services/common/snssai/{snssaid} |
| POST                            | Create S-NSSAI Profile | oc-cnpolicy-configuration/v1/services/common/snssai           |
| PUT                             | Update S-NSSAI Profile | oc-cnpolicy-configuration/v1/services/common/snssai/{snssaid} |
| POST                            | Import S-NSSAI Profile | oc-cnpolicy-configuration/v1/services/common/snssai/import    |
| GET                             | Export S-NSSAI Profile | oc-cnpolicy-configuration/v1/services/common/snssai/export    |
| DELETE                          | Delete S-NSSAI Profile | oc-cnpolicy-configuration/v1/services/common/snssai/{snssaid} |

**Table 2-498 Request/Response Body Parameters**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                  |
|------------|-----------|-------------------------------------------------|--------------------------------------------------------------|
| snssaiId   | Integer   | M                                               | Unique identifier for the S-NSSAI entry.                     |
| sst        | String    | M                                               | The Slice or Service Type value associated with the S-NSSAI. |
| sd         | String    | M                                               | Slice Differentiator value for the S-NSSAI.                  |

**Sample Request/Response parameters for GET and POST operation:**

```
{
  "snssaiId": 100,
  "sst": "253",
  "sd": "1A2B3C"
}
```

## 2.99 Service URN

The Service URN API allows to configure Service URN, which can be used to configure Message Profiles.

**Table 2-499 Supported REST APIs**

| HTTP Method or Custom Operation | Description        | Resource URI                                                                   |
|---------------------------------|--------------------|--------------------------------------------------------------------------------|
| GET                             | Get Service URN    | oc-cnpolicy-configuration/v1/<br>services/common/serviceUrn/<br>{serviceUrnId} |
| POST                            | Create Service URN | oc-cnpolicy-configuration/v1/<br>services/common/serviceUrn                    |
| PUT                             | Update Service URN | oc-cnpolicy-configuration/v1/<br>services/common/serviceUrn/<br>{serviceUrnId} |
| POST                            | Import Service URN | oc-cnpolicy-configuration/v1/<br>services/common/serviceUrn/<br>import         |
| GET                             | Export Service URN | oc-cnpolicy-configuration/v1/<br>services/common/serviceUrn/<br>export         |
| DELETE                          | Delete Service URN | oc-cnpolicy-configuration/v1/<br>services/common/serviceUrn/<br>{serviceUrnId} |

Table 2-500 Request/Response Body Parameters

| Field Name  | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                     |
|-------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| serviceUrId | Integer   | M                                               | Specifies the identifier for each Service URN.<br><b>Range:</b> 1–255                                                                                           |
| serviceUrn  | String    | M                                               | Specifies the Uniform Resource Name (URN) for the service.<br>A maximum of 255 unique Service URNs can be created.<br>For example:<br>urn:service:sos.ambulance |

Sample Request/Response parameters for GET and POST operation:

```
{
  "serviceUrId": 255,
  "serviceUrn": "ims.mnc012.mcc345.3gppnetwork.org"
}
```

## 2.100 Message Profile

The Message Profile API allows to configure the Message Profiles, which are used to configure Overload control at Policy microservices.

Table 2-501 Supported REST APIs

| HTTP Method or Custom Operation | Description            | Resource URI                                                                      |
|---------------------------------|------------------------|-----------------------------------------------------------------------------------|
| GET                             | Get Message Profile    | oc-cnpolicy-configuration/v1/services/common/messageProfiles/{messageProfileName} |
| POST                            | Create Message Profile | oc-cnpolicy-configuration/v1/services/common/messageProfiles                      |
| PUT                             | Update Message Profile | oc-cnpolicy-configuration/v1/services/common/messageProfiles/{messageProfileName} |
| POST                            | Import Message Profile | oc-cnpolicy-configuration/v1/services/common/messageProfiles/import               |
| GET                             | Export Message Profile | oc-cnpolicy-configuration/v1/services/common/messageProfiles/export               |

Table 2-501 (Cont.) Supported REST APIs

| HTTP Method or Custom Operation | Description            | Resource URI                                                                                  |
|---------------------------------|------------------------|-----------------------------------------------------------------------------------------------|
| DELETE                          | Delete Message Profile | oc-cnpolicy-configuration/v1/<br>services/common/<br>messageProfiles/<br>{messageProfileName} |

Table 2-502 Request/Response Body Parameters

| Field Name               | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                    |
|--------------------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| messageProfileName       | String    | M                                               | Message profile name, which must be mapped with overload configurations.                                                                                       |
| serviceType              | String    | O                                               | Specifies the type of service for which the message profile is created.<br><br><b>Note:</b> Only "PCF Session Management" is supported for this configuration. |
| messageProfileAttributes | Array     | O                                               | Specifies the message profile attribute configurations as explained in <a href="#">Table 2-503</a> .                                                           |

Table 2-503 Request/Response Body Parameters to configure message profile attributes

| Field Name                            | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                     |
|---------------------------------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| messageProfileAttributes.messageID    | String    | M                                               | A unique identifier representing specific message rule parameters, including interface type, message type, and priority.<br>Multiple Message IDs can be configured per profile. |
| messageProfileAttributes.rulePriority | Integer   | M                                               | A numeric value that uniquely identifies a rule when multiple rules have similar configurations.<br>Range: 1–65535                                                              |

**Table 2-503 (Cont.) Request/Response Body Parameters to configure message profile attributes**

| Field Name                                              | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                  |
|---------------------------------------------------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| messageProfileAttributes.interfaceType                  | String    | M                                               | Defines the network interface through which the message is transmitted<br><br>For example, Npcf_SMPolicyControl, and Diameter_Rx.                                                                                                                            |
| messageProfileAttributes.messageType                    | String    | M                                               | Denotes the type of message (such as Create, Update, Delete) for the selected interface.                                                                                                                                                                     |
| messageProfileAttributes.messageProfileFilterConditions | String    | O                                               | Configure the message profile filter conditions to filter out rules that matches these attributes as explained in <a href="#">Table 2-504</a> .<br><b>Note:</b> Message Profile Filter Conditions is not a mandatory attribute for rules.                    |
| messageProfileAttributes.requestPriorityOverride        | String    | M                                               | Determines the behavior for overwriting the incoming message's priority with the priority defined in the profile.<br><br>Possible values: <ul style="list-style-type: none"> <li>• Always</li> <li>• Never</li> <li>• IfNotPresent</li> </ul> Default: Never |
| messageProfileAttributes.requestPriorityValue           | String    | C                                               | Specifies the numeric priority value to apply when Request Priority Override is set to Always or IfNotPresent.<br><br>Range: 0–31                                                                                                                            |

**Table 2-504 Request/Response Body Parameters to configure message profile filter conditions**

| Field Name                                                                     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                 |
|--------------------------------------------------------------------------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| messageProfileAttribute<br>s.messageProfileFilterC<br>onditions.attributeName  | String    | C                                               | Specifies the name of the attribute.<br>Depending upon the value of Interface Type, message attributes list will be displayed.<br>The following is the list of supported attributes names: <ul style="list-style-type: none"> <li>• DNN</li> <li>• S-NSSAI</li> <li>• ServiceURN</li> </ul> |
| messageProfileAttribute<br>s.messageProfileFilterC<br>onditions.attributeValue | String    | C                                               | This field is used to mention the value of the attribute.<br>The Attribute values for the selected attribute field is derived from the respective DNN Profile, S-NSSAI Profile, and ServiceUrn Profile.                                                                                     |

**Sample cURL command to create a Message Profile**

```
curl -X 'POST' \
  'http://10.123.179.120:32033/oc-cnpolicy-configuration/v1/services/common/
messageProfiles' \
  -H 'accept: application/json' \
  -H 'Content-Type: application/json' \
  -d '{
    "messageProfileName": "string",
    "serviceType": "PCF_SM",
    "messageProfileAttributes": [
      {
        "messageID": "msg_1",
        "rulePriority": 45,
        "interfaceType": "Npcf_SMPolicyControl",
        "messageType": "Create",
        "messageProfileFilterConditions": [
          {
            "attributeName": "DNN",
            "attributeValue": [
              1
            ]
          }
        ],
        "requestPriorityOverride": "Never",
        "requestPriorityValue": 0,
        "responsePriorityAssign": "Never",
```



```

        "responsePriorityValue": 0
    }
  ]
}'

```

**Sample Request/Response parameters for GET and POST operation:**

```

{
  "messageProfileName": "string",
  "serviceType": "PCF_SM",
  "messageProfileAttributes": [
    {
      "messageID": "msg_1",
      "rulePriority": 45,
      "interfaceType": "Npcf_SMPolicyControl",
      "messageType": "Create",
      "messageProfileFilterConditions": [
        {
          "attributeName": "DNN",
          "attributeValue": [
            1
          ]
        }
      ],
      "requestPriorityOverride": "Never",
      "requestPriorityValue": 0,
      "responsePriorityAssign": "Never",
    }
  ]
}

```

## 2.101 Overload Configurations

The Overload Configurations API allows to perform overload control configurations.

**Table 2-505 Supported REST APIs**

| HTTP Method or Custom Operation | Description                    | Resource URI                                                                                     |
|---------------------------------|--------------------------------|--------------------------------------------------------------------------------------------------|
| GET                             | Get Overload Configurations    | oc-cnpolicy-configuration/v1/services/common/overloadConfigurations/{overloadConfigurationsName} |
| POST                            | Create Overload Configurations | oc-cnpolicy-configuration/v1/services/common/overloadConfigurations                              |
| PUT                             | Update Overload Configurations | oc-cnpolicy-configuration/v1/services/common/overloadConfigurations/{overloadConfigurationsName} |
| POST                            | Import Overload Configurations | oc-cnpolicy-configuration/v1/services/common/overloadConfigurations/import                       |

Table 2-505 (Cont.) Supported REST APIs

| HTTP Method or Custom Operation | Description                    | Resource URI                                                                                     |
|---------------------------------|--------------------------------|--------------------------------------------------------------------------------------------------|
| GET                             | Export Overload Configurations | oc-cnpolicy-configuration/v1/services/common/overloadConfigurations/export                       |
| DELETE                          | Delete Overload Configurations | oc-cnpolicy-configuration/v1/services/common/overloadConfigurations/{overloadConfigurationsName} |

Table 2-506 Request/Response Body Parameters

| Field Name             | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------|-----------|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name                   | String    | M                                         | Unique name to represent Overload configuration profile created.                                                                                                                                                                                                                                                                                                                                                                                    |
| messageProfile         | String    | M                                         | The associated message profile containing rules for handling different message types and their attributes during overload. Provides a dropdown selection from pre-configured message profiles.                                                                                                                                                                                                                                                      |
| configureOverLoadRules | Array     | O                                         | Overload Rules are created where mapping of system 'Load Level' is done with 'MessageIDs', along with Conditional Message Priority and reject Percentage will be defined for the rule as well.<br><br>Define the overload rules as described in <a href="#">Table 2-507</a> table.<br><b>Note:</b> Before deleting any Message Profile, make sure to verify and remove existing associations of the Message Profile with any of the Overload Rules. |

Table 2-507 Request/Response Body Parameters to configure overload rules

| Field Name                              | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                         |
|-----------------------------------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| configureOverLoadRules.level            | Integer   | O                                               | Specifies the overload severity level at which the mapped rule will be applied. Select any of the following values using the drop-down list: <ul style="list-style-type: none"> <li>• L1</li> <li>• L2</li> <li>• L3</li> </ul>                                                     |
| configureOverLoadRules.messageID        | String    | M                                               | Unique identifier representing a combination of message rule parameters, including request type, message type, attributes, interface type, and priority.<br>Message ID must map to a configured message profile.                                                                    |
| configureOverLoadRules.rulePriority     | Integer   | M                                               | Indicates the evaluation priority among multiple overload rules. Higher priority rules are matched first.                                                                                                                                                                           |
| configureOverLoadRules.messagePriority  | Integer   | O                                               | Priority assigned to the message for overload processing. Message Priority can be configured to override incoming priority ("Always", "Never", "If Not Present"). If overridden, the numerical priority can range from 0 to 31. If not set to override, the field is not displayed. |
| configureOverLoadRules.rejectPercentage | Integer   | O                                               | Specifies the percentage of matching messages to be rejected when the overload level is triggered.<br><b>Default value:</b> 0 (no rejection unless specified in the rule)<br><b>Range:</b> 0 to 100                                                                                 |

**Table 2-507 (Cont.) Request/Response Body Parameters to configure overload rules**

| Field Name                           | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                         |
|--------------------------------------|-----------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| configureOverLoadRule<br>s.errorCode | String    | O                                               | Specifies the error code returned to requests when the reject percentage triggers rejection due to overload. This value is selected from a predefined list of error codes relevant to each message type and protocol being handled. |

**Sample Request/Response parameters for GET and POST operation:**

```
{
  "name": "string",
  "messageProfile": "string",
  "configureOverLoadRules": [
    {
      "level": "1",
      "messageID": "string",
      "rulePriority": 0,
      "messagePriority": 0,
      "rejectPercentage": 0,
      "errorCode": "string"
    }
  ]
}
```

## 2.102 Yaml Schema API

The Yaml Schema API allows you to create, import, and export the Yaml schema.

**Table 2-508 Supported REST APIs**

| HTTP Method or Custom Operation | Description        | Resource URI                                                             | Possible Result Code          |
|---------------------------------|--------------------|--------------------------------------------------------------------------|-------------------------------|
| POST                            | Create Yaml Schema | oc-cnpolicy-configuration/v1/policydata/common/schemas/yamlschema        | See <a href="#">Table A-3</a> |
| GET                             | Export Yaml Schema | oc-cnpolicy-configuration/v1/policydata/common/schemas/yamlschema/export | See <a href="#">Table A-1</a> |

Table 2-508 (Cont.) Supported REST APIs

| HTTP Method or Custom Operation | Description        | Resource URI                                                                             | Possible Result Code          |
|---------------------------------|--------------------|------------------------------------------------------------------------------------------|-------------------------------|
| POST                            | Import Yaml Schema | oc-cnpolicy-configuration/v1/policydata/common/schemas/yamlschema/import?action={action} | See <a href="#">Table A-3</a> |

- Post - Create Yaml Schema:** This method is used to add a schema to the Yaml Schema section in UI. You need to provide the yaml schema you want to upload/create. This will be a similar action to the one the user can perform in the UI by using the Import function in the **Yaml Schema** page. For more information about the Yaml Schema page, see Yaml Schema section in *Oracle Communications Cloud Native Core Converged Policy User Guide*. Please use the below code snippet for reference:

```

openapi: 3.0.0
info:
  description: UDRBlob
  version: 0.0.1
  title: UDRBlob
paths:
  /:
    get:
      operationId: get
      summary: get
      tags:
        - get
      responses:
        "200":
          description: OK
          content:
            application/json:
              schema:
                $ref: "#/components/schemas/UDRBlob"
components:
  schemas:
    UDRBlob:
      type: object
      properties:
        smPolicyAttrs:
          $ref: "#/components/schemas/SmPolicyAttrs"
        dynamicAttrs:
          $ref: "#/components/schemas/dynamicAttrs"
        validIds:
          $ref: "#/components/schemas/ValidIds"
        consumerAttrs:
          $ref: "#/components/schemas/ConsumerAttrs"
        testAttrs:
          $ref: "#/components/schemas/TestAttrs"
        SmPolicyAttrs:
          type: object

```

```
properties:
  vzSmPolicyItemId:
    type: string
  blobValue:
    $ref: "#/components/schemas/SmPolicyBlobValue"
SmPolicyBlobValue:
  type: object
  properties:
    PlanType:
      type: string
    DataThr2:
      type: string
    DataThr2UWB:
      type: string
    VidOpt:
      type: string
    VidOptUWB:
      type: string
    Timestamp:
      type: string
dynamicAttrs:
  type: object
  properties:
    vzSmPolicyItemId:
      type: string
    blobValue:
      $ref: "#/components/schemas/DynamicPolicyBlobValue"
DynamicPolicyBlobValue:
  type: object
  properties:
    DATAH:
      type: string
    UWB-DATAH:
      type: string
    TETRH:
      type: string
    UWB-TETRH:
      type: string
    Timestamp:
      type: string
ValidIds:
  type: object
  properties:
    vzSmPolicyItemId:
      type: string
    blobValue:
      $ref: "#/components/schemas/ValIdBlobValue"
ValIdBlobValue:
  type: object
  properties:
    SUPI:
      type: string
    GPSI:
      type: string
ConsumerAttrs:
  type: object
```

```

properties:
  vzSmPolicyItemId:
    type: string
  blobValue:
    $ref: "#/components/schemas/ConsAttrBlobValue"
ConsAttrBlobValue:
  type: object
  properties:
    PlanType:
      type: string
TestAttrs:
  type: object
  properties:
    vzSmPolicyItemId:
      type: string
    blobValue:
      $ref: "#/components/schemas/TestBlobValue"
TestBlobValue:
  type: object
  properties:
    PlanType:
      type: string
    DataThr2:
      type: string
    DataThr2UWB:
      type: string
    VidOpt:
      type: string
    VidOptUWB:
      type: string
    Timestamp:
      type: string

```

- **Get - Export Yaml Schema:** This method is used for retrieving all the schemas uploaded to the Yaml Schema section in UI, no parameter is needed. It will be a similar action to the Bulk Export selecting only the Yaml Schema section under the Administration -> Export & Import. For more information, see Export & Import section in *Oracle Communications Cloud Native Core Converged Policy User's Guide*.
- **Post - Import Yaml Schema:** This method is similar to the *Create Yaml Schema*, this is used with bulk data.

#### Supported Actions for Importing Yaml Schema

Following are the actions supported by Policy when the user imports Yaml Schema:

- **ignore:** On selecting the ignore option, no changes are made to the existing Yaml schema. The Yaml schema in the imported file is ignored or skipped. No changes are made to the Yaml schema with this option.
- **replace:** On selecting the replace option, the existing Yaml schema is completely replaced with the Yaml schema in the imported file.

#### Sample Request Body structure for Import method::

```

{
  "topic": "public.yaml.schema",
  "sourceVersion": "26.1.200-ocngf-pre-dev-titans",
  "date": "2026-01-28T23:12:05Z",

```

```

"exportData": [
  {
    "key": "UDRObj",
    "tag": [],
    "yaml": {
      "openapi": "3.0.0",
      "info": {
        "description": "UDRObj",
        "version": "0.0.1",
        "title": "UDRObj"
      },
      "paths": {
        "/": {
          "get": {
            "operationId": "get",
            "summary": "get",
            "tags": [
              "get"
            ],
            "responses": {
              "200": {
                "description": "OK",
                "content": {
                  "application/json": {
                    "schema": {
                      "$ref": "#/components/schemas/
UDRObj"
                    }
                  }
                }
              }
            }
          }
        }
      },
      "components": {
        "schemas": {
          "UDRObj": {
            "type": "object",
            "properties": {
              "smPolicyAttrs": {
                "$ref": "#/components/schemas/
SmPolicyAttrs"
              },
              "testAttrs": {
                "$ref": "#/components/schemas/TestAttrs"
              },
              "dynamicAttrs": {
                "$ref": "#/components/schemas/
DynamicAttrs"
              },
              "validIds": {
                "$ref": "#/components/schemas/ValidIds"
              }
            }
          }
        }
      }
    }
  },

```



```

    "SmPolicyAttrs": {
      "type": "object",
      "properties": {
        "vzSmPolicyItemId": {
          "type": "string"
        },
        "blobValue": {
          "type": "string"
        }
      }
    },
    "DynamicAttrs": {
      "type": "object",
      "properties": {
        "vzSmPolicyItemId": {
          "type": "string"
        },
        "blobValue": {
          "type": "string"
        }
      }
    },
    "TestAttrs": {
      "type": "object",
      "properties": {
        "vzSmPolicyItemId": {
          "type": "string"
        },
        "blobValue": {
          "type": "string"
        }
      }
    },
    "ValidIds": {
      "type": "object",
      "properties": {
        "vzSmPolicyItemId": {
          "type": "string"
        },
        "blobValue": {
          "$ref": "#/components/schemas/
ValidBlobValue"
        }
      }
    },
    "ValidBlobValue": {
      "type": "object",
      "properties": {
        "SUPI": {
          "type": "string"
        },
        "GPSI": {
          "type": "string"
        }
      }
    }
  }

```

```

    }
  }
},
{
  "key": "UDRBlob",
  "tag": [],
  "yaml": {
    "openapi": "3.0.0",
    "info": {
      "description": "UDRBlob",
      "version": "0.0.1",
      "title": "UDRBlob"
    },
    "paths": {
      "/": {
        "get": {
          "operationId": "get",
          "summary": "get",
          "tags": [
            "get"
          ],
          "responses": {
            "200": {
              "description": "OK",
              "content": {
                "application/json": {
                  "schema": {
                    "$ref": "#/components/schemas/
UDRBlob"
                  }
                }
              }
            }
          }
        }
      }
    }
  },
  "components": {
    "schemas": {
      "UDRBlob": {
        "type": "object",
        "properties": {
          "smPolicyAttrs": {
            "$ref": "#/components/schemas/
SmPolicyAttrs"
          },
          "dynamicAttrs": {
            "$ref": "#/components/schemas/
dynamicAttrs"
          },
          "validIds": {
            "$ref": "#/components/schemas/ValidIds"
          },
          "consumerAttrs": {
            "$ref": "#/components/schemas/

```

ConsumerAttrs"

SmPolicyBlobValue"

DynamicPolicyBlobValue"

```

    },
    "testAttrs": {
      "$ref": "#/components/schemas/TestAttrs"
    }
  },
  "SmPolicyAttrs": {
    "type": "object",
    "properties": {
      "vzSmPolicyItemId": {
        "type": "string"
      },
      "blobValue": {
        "$ref": "#/components/schemas/
SmPolicyBlobValue"
      }
    }
  },
  "SmPolicyBlobValue": {
    "type": "object",
    "properties": {
      "PlanType": {
        "type": "string"
      },
      "DataThr2": {
        "type": "string"
      },
      "DataThr2UWB": {
        "type": "string"
      },
      "VidOpt": {
        "type": "string"
      },
      "VidOptUWB": {
        "type": "string"
      },
      "Timestamp": {
        "type": "string"
      }
    }
  },
  "dynamicAttrs": {
    "type": "object",
    "properties": {
      "vzSmPolicyItemId": {
        "type": "string"
      },
      "blobValue": {
        "$ref": "#/components/schemas/
DynamicPolicyBlobValue"
      }
    }
  },
  "DynamicPolicyBlobValue": {
    "type": "object",

```

```

        "properties": {
          "DATAH": {
            "type": "string"
          },
          "UWB-DATAH": {
            "type": "string"
          },
          "TETRH": {
            "type": "string"
          },
          "UWB-TETRH": {
            "type": "string"
          },
          "Timestamp": {
            "type": "string"
          }
        }
      },
      "ValidIds": {
        "type": "object",
        "properties": {
          "vzSmPolicyItemId": {
            "type": "string"
          },
          "blobValue": {
            "$ref": "#/components/schemas/
ValidIdBlobValue"
          }
        }
      },
      "ValidBlobValue": {
        "type": "object",
        "properties": {
          "SUPI": {
            "type": "string"
          },
          "GPSI": {
            "type": "string"
          }
        }
      },
      "ConsumerAttrs": {
        "type": "object",
        "properties": {
          "vzSmPolicyItemId": {
            "type": "string"
          },
          "blobValue": {
            "$ref": "#/components/schemas/
ConsAttrBlobValue"
          }
        }
      },
      "ConsAttrBlobValue": {
        "type": "object",
        "properties": {

```

```

        "PlanType": {
          "type": "string"
        }
      },
    },
    "TestAttrs": {
      "type": "object",
      "properties": {
        "vzSmPolicyItemId": {
          "type": "string"
        },
        "blobValue": {
          "$ref": "#/components/schemas/
TestBlobValue"
        }
      }
    },
    "TestBlobValue": {
      "type": "object",
      "properties": {
        "PlanType": {
          "type": "string"
        },
        "DataThr2": {
          "type": "string"
        },
        "DataThr2UWB": {
          "type": "string"
        },
        "VidOpt": {
          "type": "string"
        },
        "VidOptUWB": {
          "type": "string"
        },
        "Timestamp": {
          "type": "string"
        }
      }
    }
  }
},
{
  "key": "UDRObjUE",
  "tag": [],
  "yaml": {
    "openapi": "3.0.0",
    "info": {
      "description": "UDRObjUE",
      "version": "0.0.1",
      "title": "UDRObjUE"
    },
    "paths": {
      "/": {

```

```

      "get": {
        "operationId": "get",
        "summary": "get",
        "tags": [
          "get"
        ],
        "responses": {
          "200": {
            "description": "OK",
            "content": {
              "application/json": {
                "schema": {
                  "$ref": "#/components/schemas/
UDRObjUE"
                }
              }
            }
          }
        }
      },
      "components": {
        "schemas": {
          "UDRObjUE": {
            "type": "object",
            "properties": {
              "uePolicyAttrs": {
                "$ref": "#/components/schemas/
UePolicyAttrs"
              },
              "testAttrs": {
                "$ref": "#/components/schemas/TestAttrs"
              },
              "dynamicAttrs": {
                "$ref": "#/components/schemas/
DynamicAttrs"
              },
              "validIds": {
                "$ref": "#/components/schemas/ValidIds"
              }
            }
          },
          "UePolicyAttrs": {
            "type": "object",
            "properties": {
              "vzSmPolicyItemId": {
                "type": "string"
              },
              "blobValue": {
                "type": "string"
              }
            }
          },
          "DynamicAttrs": {
            "type": "object",

```

```

        "properties": {
          "vzSmPolicyItemId": {
            "type": "string"
          },
          "blobValue": {
            "type": "string"
          }
        }
      },
      "TestAttrs": {
        "type": "object",
        "properties": {
          "vzSmPolicyItemId": {
            "type": "string"
          },
          "blobValue": {
            "type": "string"
          }
        }
      },
      "ValidIds": {
        "type": "object",
        "properties": {
          "vzSmPolicyItemId": {
            "type": "string"
          },
          "blobValue": {
            "$ref": "#/components/schemas/
ValidIdBlobValue"
          }
        }
      },
      "ValidBlobValue": {
        "type": "object",
        "properties": {
          "SUPI": {
            "type": "string"
          },
          "GPSI": {
            "type": "string"
          }
        }
      }
    }
  },
  {
    "key": "custom_amPolicyData",
    "tag": [
      "User"
    ],
    "yaml": {
      "openapi": "3.0.0",
      "info": {
        "version": "-",

```

```

        "title": "Unified Data Repository Service API file for AM
policy data",
        "description": "The API version is defined in 3GPP TS
29.504© 2020, 3GPP Organizational Partners (ARIB, ATIS, CCSA, ETSI, TSDSI,
TTA, TTC).All rights reserved."
    },
    "components": {
        "schemas": {
            "custom_amPolicyData": {
                "description": "Contains the AM policy data for a
given subscriber.",
                "type": "object",
                "properties": {
                    "vendorSpecific": {
                        "type": "array",
                        "items": {
                            "$ref": "#/components/schemas/
VendorSpecific"
                        },
                        "minItems": "1"
                    }
                }
            },
            "VendorSpecific": {
                "type": "object",
                "properties": {
                    "abPolicyItemId": {
                        "type": "string"
                    },
                    "blobValue": {
                        "$ref": "#/components/schemas/blobValue"
                    }
                }
            },
            "blobValue": {
                "type": "object",
                "properties": {
                    "snssai": {
                        "type": "string"
                    },
                    "olddnn": {
                        "type": "string"
                    },
                    "newdnn": {
                        "type": "string"
                    }
                }
            },
            "01PolicyItem": {
                "type": "object",
                "description": "Contains a Vendor-specific AM
policy data item",
                "properties": {
                    "01PolicyItemId": {
                        "type": "string"
                    }
                }
            },

```



```
    "blobValue": {
      "type": "object",
      "additionalProperties": {
        "$ref": "#/components/schemas/
blobValue"
      },
      "minItems": "1"
    }
  },
  "required": [
    "01PolicyItemId",
    "blobValue"
  ]
}
}
}
}
}
```

## 2.103 HTTP Server API

The HTTP Server API allows you to add and manage HTTP Server.

### Table 2-509 Supported REST APIs

| HTTP Method or Custom Operation | Description          | Resource URI                                                    | Possible Result Code          |
|---------------------------------|----------------------|-----------------------------------------------------------------|-------------------------------|
| POST                            | Create HTTP Server   | /oc-cnpolicy-configuration/v1/httpServer                        | See <a href="#">Table A-3</a> |
| GET                             | Get All HTTP Server  | /oc-cnpolicy-configuration/v1/httpServer/export                 | See <a href="#">Table A-1</a> |
| POST                            | Import HTTP Server s | /oc-cnpolicy-configuration/v1/httpServer/import?action={action} | See <a href="#">Table A-3</a> |
| GET                             | Get HTTP Server      | /oc-cnpolicy-configuration/v1/httpServer                        | See <a href="#">Table A-1</a> |
| PUT                             | Update HTTP Server   | /oc-cnpolicy-configuration/v1/httpServer                        | See <a href="#">Table A-2</a> |
| DELETE                          | Delete HTTP Server   | /oc-cnpolicy-configuration/v1/httpServer                        | See <a href="#">Table A-4</a> |

**Sample Request Body structure for Create or Update operations:**

```
{
  "name": "notif_server_01",
```

```

    "description": "Primary notifier endpoint",
    "host": "api.example.com:443",
    "altHost": "backup.example.com:443",
    "uriPath": "/notify/v1/events",
    "scheme": "HTTPS",
    "version": "1.1",
    "header": [

        {
            "key": "Authorization",
            "value": "Bearer <token>"
        },

        {
            "key": "Content-Type",
            "value": "application/json"
        }
    ]
}

```

### Sample Request Body Structure for import operation:

```

{
    "topic": "common.notifierservice.httpserver",
    "version": "<system-version>",
    "exportData": [
        {
            "name": "notif_server_01",
            "description": "Primary notifier endpoint",
            "host": "api.example.com:443",
            "altHost": "backup.example.com:443",
            "uriPath": "/notify/v1/events",
            "scheme": "HTTPS",
            "version": "1.1",
            "header": [

                {
                    "key": "Authorization",
                    "value": "Bearer
<token>"
                },

                {
                    "key": "Content-Type",
                    "value": "application/
json"
                }
            ]
        }
    ]
}

```

# 3

## Common Services REST Specifications

This chapter provides information about the REST specifications for Common Services used in Oracle Communications Cloud Native Core Converged Policy. You can use the following APIs to update configurations related to the Overload Control feature.

### 3.1 OAuth Validator REST API Configuration

This REST API configuration is required for enabling access token validation using NRF Instance ID and key-ID (K-ID).

Before this configuration, perform the prerequisite steps and helm configuration explained in "Configuring Secrets to Enable Access Token " section in *Oracle Communications Cloud Native Core, Converged Policy Installation, Upgrade and Fault Recovery Guide*.

After the Helm configuration, send the REST requests to Ingress Gateway to use configured public key certificates. Using REST-based configuration, you can distinguish between the certificates configured on different NRFs and can use these certificates to validate the token received from a specific NRF.

This REST API configuration is required for enabling access token validation using NRF Instance ID and key-ID (K-ID). This URI can be used to update oauth configuration that is used for validating token sent in request to Ingress Gateway. By default, the `instanceIdlist` and `keyIdList` are null and validation mode is `INSTANCEID_ONLY`.

Table 3-1 OAuth Validator Configuration

| Description                                                                                                                                                                                                                                                                                             | HT<br>TP<br>Me<br>tho<br>d<br>or<br>Cu<br>sto<br>m<br>Op<br>era<br>tio<br>n | Resource URI                                                                                                                                                                       | Content<br>Type      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| Update or Add oauth configuration that will be used for validating token sent in request to Ingress Gateway.<br><b>Note:</b> By default, instanceIdList, keyIdList are null and validation mode is INSTANCEID_ONLY. This configuration is only applicable when oauth feature is enabled via Helm chart. | P<br>U<br>T                                                                 | /{nfType}/nf-common-component/v1/{serviceName}/oauthvalidatorconfiguration<br>Example:<br><br>http://10.75.152.236:8000/pcf/nf-common-component/v1/igw/oauthValidatorConfiguration | applicati<br>on/json |

Sample JSON:

```
"oauthValidatorConfiguration": {
  "type": "object",
  "description": "Validator configurations for OAuth",
  "properties": {
    "keyIdList": {
      "type": ["array", "null"],
      "uniqueItems": true,
      "maxItems": 150,
      "description": "Array containing KID based configuration",
      "items": {
        "anyOf": [
```

```

        {
            "type": "object",
            "properties": {
                "keyId": {"type": "string", "minLength": 1, "maxLength":
36, "pattern": "[a-zA-Z0-9]"},
                "kSecretName": {"type": "string"},
                "certName": {"type": "string"},
                "certAlgorithm": {"type": "string"}
            },
            "required": [
                "keyId",
                "kSecretName",
                "certName",
                "certAlgorithm"
            ]
        }
    ]
}
},
"instanceIdList": {
    "type": ["array", "null"],
    "uniqueItems": true,
    "maxItems": 150,
    "description": "Array containing Instance Id based configuration",
    "items": {
        "anyOf": [
            {
                "type": "object",
                "properties": {
                    "instanceId": {"type": "string"},
                    "kSecretName": {"type": "string"},
                    "certName": {"type": "string"},
                    "certAlgorithm": {"type": "string"}
                },
                "required": [
                    "instanceId",
                    "kSecretName",
                    "certName",
                    "certAlgorithm"
                ]
            }
        ]
    }
},
"oauthValidationMode": {
    "type": "string",
    "enum": [
        "KID_ONLY",
        "INSTANCEID_ONLY",
        "KID_PREFERRED"
    ],
    "description": "Mode of validation"
}
}
}

```

## 3.2 CCA Header Validation

**Table 3-2 CCA Header Validation APIs**

| API Description                     | HTTP Method or Custom Operation | Resource URI                                                                                                            | Description                                           | Possible Result Code          |
|-------------------------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------|
| GET CCA header information.         | GET                             | {apiRoot}/<br>{nfType}/nf-<br>common-<br>component/v1/igw/<br>ccaheader<br><br><b>Content Type:</b><br>application/json | Gets the details stored in DB for property ccaheader. | See <a href="#">Table A-1</a> |
| Update the CCA details using PUT.   | PUT                             | {apiRoot}/<br>{nfType}/nf-<br>common-<br>component/v1/igw/<br>ccaheader<br><br><b>Content Type:</b><br>application/json | Replaces the existing values with the new value sent. | See <a href="#">Table A-2</a> |
| Update the CCA details using PATCH. | PATCH                           | {apiRoot}/<br>{nfType}/nf-<br>common-<br>component/v1/igw/<br>ccaheader<br><br><b>Content Type:</b><br>application/json | Updates the value of the parameters modified.         | See <a href="#">Table A-2</a> |

### Get and Update Operations

**Table 3-3 Request/Response Body Parameters**

| Attribute Name | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                |
|----------------|-----------|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enabled        | boolean   | M                                       | Indicates if the CCA validation feature flag is enabled or disabled.<br><b>Note:</b> This is a read-only parameter.<br>If you want to enable this feature, use <code>metadata.ccaHeaderValidation.enabled</code> parameter in <code>routesConfig</code> for <code>accesstoken_mapping</code> id in Helm.<br><b>Constraints:</b> true, false<br><b>Default Value:</b> false |
| minExpiryTime  | integer   | NA                                      | Indicates the minimum time of expiry for the CA Root certificate.<br><b>Default Value:</b> 0                                                                                                                                                                                                                                                                               |
| maxTokenAge    | integer   | M                                       | Indicates the maximum token age allowed.<br><b>Note:</b> It skips the check if the value is 0.<br><b>Constraints:</b> 0 - 86400 seconds<br><b>Default Value:</b> 0                                                                                                                                                                                                         |

Table 3-3 (Cont.) Request/Response Body Parameters

| Attribute Name | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                         |
|----------------|-----------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| role           | string    | M                                       | Indicates the CCA token validator role to match the audience claim in the header.<br><b>Note:</b> This is a read-only parameter.<br><b>Default Value:</b> NRF                                                                                                                                                                                       |
| subKey         | string    | M                                       | Indicates if the certificate extension name to be read in the public key certificate received in CCA request.<br><b>Note:</b> This is a read-only parameter.<br><b>Default Value:</b> subjectAltName                                                                                                                                                |
| validationRule | string    | M                                       | Indicates the CCA validation rule.<br><ul style="list-style-type: none"> <li>strict: NRF validation rules are applied.</li> <li>relaxed: "Issued At" validation is not mandatory. Validation rules are applied to Producer NF.</li> </ul> <b>Constraints:</b> strict, relaxed<br><b>Default Value:</b> strict                                       |
| k8SecretName   | string    | M                                       | Indicates the name of the Kubernetes secret in which the CA bundle is present.<br><b>Note:</b> After fresh installation, these attributes must be configured with appropriate values as per the system requirement using the Rest API as these values are sample ones.<br>Example k8SecretName: ocnrfacesstoken-secret                              |
| k8NameSpace    | string    | M                                       | Indicates the Kubernetes namespace in which CA bundle is present.<br><b>Note:</b> After fresh installation, these attributes must be configured with appropriate values as per the system requirement using the Rest API as these values are sample ones.<br>Example k8NameSpace: b2-gate-zeta-13775736-pcf1                                        |
| fileName       | string    | M                                       | Indicates the name of the CA bundle file used for CCA. This is the file generated by certificate and key generation steps.<br><b>Note:</b> After fresh installation, these attributes must be configured with appropriate values as per the system requirement using the Rest API as these values are sample ones.<br>Example: fileName: caroot.cer |

Sample Body Request:

```

"role": "NRF",
"subKey": "subjectAltName",
"enabled": true,
"fileName": "caroot.cer",
"k8NameSpace": "b2-gate-zeta-13775736-pcf1",

```

```
"maxTokenAge":10,
"k8SecretName":"ocnrfacesstoken-secret",
"minExpiryTime":1000,
"validationRule":"strict"
```

## 3.3 XFCC Header Validation

**Table 3-4 XFCC Header Validation APIs**

| API Description            | HTTP Method or Custom Operation | Resource URI                                                      | Description                                                         | Possible Result Code          |
|----------------------------|---------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------------|-------------------------------|
| GET XFCC Header Validation | GET                             | /nfType/nf-common-component/v1/{serviceName}/xfccheadervalidation | Fetches the details stored in db for property xfccheadervalidation. | See <a href="#">Table A-1</a> |
| PUT XFCC Header Validation | PUT                             | {apiRoot}/nfType/nf-common-component/v1/igw/ccaheader             | Replaces the existing parameter values with the new values.         | See <a href="#">Table A-2</a> |

### Get and Put Operations

**Table 3-5 Request/Response Body Parameters**

| Attribute Name        | Data Type | Mandatory(M)/Optional(O)/Conditional(C)  | Description                                                                                                |
|-----------------------|-----------|------------------------------------------|------------------------------------------------------------------------------------------------------------|
| extract               | boolean   | M                                        | For more information, see <a href="#">Table 3-6</a>                                                        |
| validation            |           |                                          | For more information, see <a href="#">Table 3-7</a>                                                        |
| matchcerts            |           | M ( If xfccheader validation is enabled) | The number of certificates that need to be validated starting from the right most entry in the XFCC header |
| matchfield            |           | M ( If xfccheader validation is enabled) | Field in a XFCC header against which the configured nfList FQDN validation needs to be performed           |
| dnsresolutioninterval |           | M                                        | This will be used for triggering dns resolution scheduler as per time interval configured.                 |

**Table 3-6 Extract**

| Attribute Name  | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description |
|-----------------|-----------|-----------------------------------------|-------------|
| extract.enabled | boolean   | M                                       |             |



Table 3-6 (Cont.) Extract

| Attribute Name           | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description |
|--------------------------|-----------|-----------------------------------------|-------------|
| extract.extractfield     |           | M                                       |             |
| extract.certextractfield | integer   | M                                       |             |

Table 3-7 validation

| Attribute Name      | Data Type | Mandatory(M)/Optional(O)/Conditional(C)  | Description                                                                                                                                                                                                             |
|---------------------|-----------|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| validation.enabled  |           | O                                        | Determines if incoming xfcc header needs to be validated                                                                                                                                                                |
| validation.peerlist |           | M ( If xfccheader validation is enabled) | List of configured NF FQDN's against which the matchField entry configured, present in XFCC Header will be validated. For example, name, enabled, scheme, and type. For more information, see <a href="#">Table 3-8</a> |

Table 3-8 peerlist

| Attribute Name | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description |
|----------------|-----------|-----------------------------------------|-------------|
| name           | string    | O                                       |             |
| enabled        | boolean   | O                                       |             |
| scheme         | string    | O                                       |             |
| type           | string    | O                                       |             |

Sample Body Request:

```
{
  "extract": {
    "enabled": false,
    "extractfield": "DNS",
    "extractindex": 0,
    "certextractindex": 0
  },
  "validation": {
    "enabled": true,
    "peerList": [
      {
        "name": "xyz.test.com",
        "enabled": true,
        "scheme": "http",
        "type": "virtual"
      },
      {
        "name": "abc.test.com",
        "enabled": true,

```

```

        "scheme": "https",
        "type": "virtual"
    },
    {
        "name": "scp1.com",
        "enabled": true
    },
    {
        "name": "scp2.com",
    },
    {
        "name": "scp3.com",
        "enabled": false
    }
  ],
  "matchcerts": -1,
  "matchfield": "DNS",
  "dnsresolutioninterval": 300000
}
}

```

## 3.4 Egress Gateway for SCP Health

### Peer Configuration

**Table 3-9 Peer Configuration supported REST APIs details:**

| Description                    | HTTP Method or Custom Operation | Resource URI                                                                | Content Type     | Possible Result Codes         |
|--------------------------------|---------------------------------|-----------------------------------------------------------------------------|------------------|-------------------------------|
| Get Peer Configuration         | GET                             | /nfType/nf-common-component/v1/{serviceName}/peerconfiguration              | application/json | See <a href="#">Table A-1</a> |
| Update Peer Configuration      | PUT                             | /nfType/nf-common-component/v1/{serviceName}/peerconfiguration              | application/json | See <a href="#">Table A-2</a> |
| Get All Peer Configuration     | GET                             | /nfType/nf-common-component/v1/{serviceName}/{instanceId}/peerconfiguration | application/json | See <a href="#">Table A-1</a> |
| Update All Peer Configurations | PUT                             | /nfType/nf-common-component/v1/{serviceName}/{instanceId}/peerconfiguration | application/json | See <a href="#">Table A-2</a> |

**Table 3-10 Request/Response Body Parameters**

| Field Name    | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                |
|---------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| id            | string    | O                                               | Peer identifier<br><b>Note:</b> Unique value in peerconfiguration                                                                                                                                          |
| host          | string    | O                                               | Host details of a peer.It can be IPv4, IPv6 and FQDN details.                                                                                                                                              |
| virtualHost   | string    | O                                               | Host details of a remote peer. For SLF feature, the virtualHost is SCP peer details. It must be a valid FQDN.This FQDN is sent to Alternate Route Service for DNS SRV resolution.                          |
| port          | string    | O                                               | Port details of a peer.                                                                                                                                                                                    |
| apiPrefix     | string    | O                                               | API prefix details of a peer.<br><b>Note:</b> Keep the value as '/' only                                                                                                                                   |
| healthApiPath | string    | O                                               | Path of health API / scp-api-root/v1/status. This attribute is added to maintain the health status of the API.<br><br>This attribute is added as part of monitoring the availability of SCP health status. |

**Peer Monitoring Configuration****Table 3-11 Peer Monitoring Configuration supported REST APIs details:**

| Description                          | HTTP Method or Custom Operation | Resource URI                                                             | Content Type     | Possible Result Codes         |
|--------------------------------------|---------------------------------|--------------------------------------------------------------------------|------------------|-------------------------------|
| Get Peer Monitoring Configuration    | GET                             | /nfType/nf-common-component/v1/{serviceName}/peermonitoringconfiguration | application/json | See <a href="#">Table A-1</a> |
| Update Peer Monitoring Configuration | PUT                             | /nfType/nf-common-component/v1/{serviceName}/peermonitoringconfiguration | application/json | See <a href="#">Table A-2</a> |

**Table 3-11 (Cont.) Peer Monitoring Configuration supported REST APIs details:**

| Description                                  | HTTP Method or Custom Operation | Resource URI                                                                          | Content Type     | Possible Result Codes         |
|----------------------------------------------|---------------------------------|---------------------------------------------------------------------------------------|------------------|-------------------------------|
| Get All of Peer Monitoring Configuration     | GET                             | /nfType/nf-common-component/v1/{serviceName}/{instanceId}/peermonitoringconfiguration | application/json | See <a href="#">Table A-1</a> |
| Update All of Peer Monitoring Configurations | PUT                             | /nfType/nf-common-component/v1/{serviceName}/{instanceId}/peermonitoringconfiguration | application/json | See <a href="#">Table A-2</a> |

**Table 3-12 Request/Response Body Parameters**

| Field Name | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                                                                                                                                                                                                                                             |
|------------|-----------|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enabled    | Boolean   | O                                         | Attribute to enable or disable monitoring at a global level.<br><b>Default value:</b> false                                                                                                                                                             |
| timeout    | Long      | O                                         | Flag to configure the duration after which calls to the SCP health API is timed out. This is provided in milliseconds. The allowed value ranges from 300 milliseconds to 10000 milliseconds.<br><b>Default value:</b> 1000                              |
| frequency  | Long      | O                                         | Indicates the frequency or interval at which Egress Gateway microservice initiates health check calls toward SCP. This is provided in milliseconds. The allowed value ranges from 300 milliseconds to 10000 milliseconds.<br><b>Default value:</b> 2000 |

**Table 3-12 (Cont.) Request/Response Body Parameters**

| Field Name       | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                |
|------------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| failureThreshold | Integer   | O                                               | Indicates the number of consecutive failure responses after which a healthy SCP can be marked as unhealthy. The allowed value ranges 1 to 10.<br><br>The maximum number of attempts to mark SCP unhealthy is 10.<br><b>Default value: 3</b>                                                                |
| successThreshold | Integer   | O                                               | Indicates the number of successful responses after which an unhealthy SCP can be marked as healthy.<br><br>Health API call to given SCP shall succeed consecutively to these many attempts before it is marked as Available from UNAVAILABLE. The allowed value ranges 1 to 10.<br><b>Default value: 3</b> |

Sample body:

```
{
  "enabled":true,
  "timeout":1000,
  "frequency":2000,
  "failureThreshold":3,
  "successThreshold":3
}
```

### Peer Set Configuration

**Table 3-13 Peerset Configuration supported REST APIs details:**

| Description                   | HTTP Method or Custom Operation | Resource URI                                   | Content Type     | Possible Result Codes         |
|-------------------------------|---------------------------------|------------------------------------------------|------------------|-------------------------------|
| Get Peerset Configuration     | GET                             | {apiRoot}/egw/healthStatus/peerSet/{peerSetId} | application/json | See <a href="#">Table A-1</a> |
| List of Peerset Configuration | GET                             | {apiRoot}/egw/healthStatus/peerSet             | application/json | See <a href="#">Table A-1</a> |

**Table 3-13 (Cont.) Peerset Configuration supported REST APIs details:**

| Description                                                                                                   | HTTP Method or Custom Operation | Resource URI                                                          | Content Type     | Possible Result Codes         |
|---------------------------------------------------------------------------------------------------------------|---------------------------------|-----------------------------------------------------------------------|------------------|-------------------------------|
| Get the list of peer sets wherein each peer set consists of ID and list of http or https instances.           | GET                             | /{{nfType}}/nf-common-component/v1/{serviceName}/peerSetconfiguration | application/json | See <a href="#">Table A-1</a> |
| Add or update the list of peer sets wherein each peer set consists of ID and list of http or https instances. | PUT, PATCH,                     | /{{nfType}}/nf-common-component/v1/{serviceName}/peerSetconfiguration | application/json | see <a href="#">Table A-2</a> |

**Table 3-14 Request/Response Body Parameters**

| Field Name         | Data Type                          | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                           |
|--------------------|------------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------------------------|
| id                 | string                             | O                                       | Identifier for Peer Set                                                                               |
| httpConfiguration  | array(PeerIdentifierConfiguration) | O                                       | Configuration for HTTP based Peers. This value will be selected, if 3GPPAPIRootScheme value is http   |
| httpsConfiguration | array(PeerIdentifierConfiguration) | O                                       | Configuration for HTTPS based Peers. This value will be selected, if 3GPPAPIRootScheme value is https |

**Table 3-15 PeerIdentifierConfiguration**

| Field Name     | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                              |
|----------------|-----------|-----------------------------------------|--------------------------------------------------------------------------|
| priority       | integer   | O                                       | Priority of peer to be used in a peer set                                |
| peerIdentifier | string    | O                                       | Peer identifier is the value of peer configured during PeerConfiguration |

Sample body:

```
peerSetConfiguration[
  {
    "id": "set0",
    "httpConfiguration": [
      {
```

```

    "priority": 1,
      "peerIdentifier": "peer1"
    }},
    "httpsConfiguration":[
    {
    "priority": 1,
      "peerIdentifier": "peer1"
    }
  ]

```

## 3.5 OC Policy Mapping

This URI can be used to update service names and corresponding policy name for the service which is mapped to "ocDiscardPolicies" based on "policyName" and also to enable/disable the Overload Control feature and the sampling period in overload control. By default, the Overload Control feature is disabled and the sampling period is the 60s. To enable the feature, REST API needs to be invoked and update the enabled flag to true.

**Table 3-16 Supported REST APIs**

| Description                 | HTTP Method or Custom Operation | Resource URI                                                          |
|-----------------------------|---------------------------------|-----------------------------------------------------------------------|
| Get OC Policy Mapping       | GET                             | PCF/nf-common-component/v1/{serviceName}/ocpolicymapping              |
| Update OC Policy Mapping    | PUT                             | PCF/nf-common-component/v1/{serviceName}/{instanceId}/ocpolicymapping |
| Partially OC Policy Mapping | PATCH                           | PCF/nf-common-component/v1/{serviceName}/{instanceId}/ocpolicymapping |

### Get, Update, and Patch OCPolicyMapping

**Table 3-17 Request/Response Body Parameters**

| Field Name          | Data Type | Mandatory(M)/Optional(O)/Conditional(C)aints | Description                                                                                                                                                   |
|---------------------|-----------|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enabled             | boolean   | M                                            | To enable or disable Overload Control feature.<br>Set values to: <ul style="list-style-type: none"> <li>true: To enable</li> <li>false: To disable</li> </ul> |
| mappings.svcName    | string    | M                                            | The SVC entry to determine a mapping between service and discard policy name per service.                                                                     |
| mappings.policyName | string    | M                                            | The discard policy entry to determine a mapping between service and discard policy name per service.                                                          |

**Table 3-17 (Cont.) Request/Response Body Parameters**

| Field Name     | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C)aints | Description                                                                              |
|----------------|-----------|------------------------------------------------------|------------------------------------------------------------------------------------------|
| samplingPeriod | integer   | M                                                    | Time frame for each cycle of Overload Control per service. Its value is in milliseconds. |

**Sample Request/Response body structure for GET, PUT, and PATCH operations:**

```
{
  "enabled": true,
  "mappings": [
    {
      "svcName": "sm.pcf.com",
      "policyName": "OCDP1"
    },
    {
      "svcName": "cm.pcf.com",
      "policyName": "OCDP2"
    },
    {
      "svcName": "localhost",
      "policyName": "OCDP3"
    }
  ],
  "samplingPeriod": 200
}
```

## 3.6 Error Code Profiles

This URI can be used to update the errorCodeProfiles that are used in Overload Control feature for populating details in error responses when a request is discarded.

By default, the errorCodeProfiles remains null.

**Table 3-18 Supported REST APIs**

| Description                              | HTTP Method or Custom Operation | Resource URI                                                            |
|------------------------------------------|---------------------------------|-------------------------------------------------------------------------|
| Get error code profiles                  | GET                             | PCF/nf-common-component/v1/{serviceName}/errorcodeprofiles              |
| Update error code profiles               | PUT                             | PCF/nf-common-component/v1/{serviceName}/{instanceId}/errorcodeprofiles |
| Partially update the error code profiles | PATCH                           | PCF/nf-common-component/v1/{serviceName}/{instanceId}/errorcodeprofiles |



## Get, Update, and Patch errorCodeProfile

Table 3-19 Request/Response Body Parameters

| Field Name       | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------|-----------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name             | string    | M                                       | Error name.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| errorCode        | integer   | M                                       | errorCode field in an errorScenario determines the HttpStatusCode that needs to be populated in <b>ProblemDetails (HttpStatus field)</b> response from IGW when the exception occurred at IGW matches the configured errorScenario's exceptionType field.                                                                                                                                                                                                                                                                                   |
| errorCause       | string    | O                                       | errorCause field in an errorScenario determines the error cause that needs to be populated in <b>ProblemDetails (Cause field)</b> response from IGW when the exception occurred at IGW matches the configured errorScenario's exceptionType parameter.                                                                                                                                                                                                                                                                                      |
| errorTitle       | string    | O                                       | errorTitle field in an errorScenario determines the title that needs to be populated in <b>ProblemDetails (Title field)</b> response from IGW when the exception occurred at IGW matches the configured errorScenario's exceptionType parameter.                                                                                                                                                                                                                                                                                            |
| redirectURL      | string    | O                                       | redirectUrl field in an errorScenario determines the redirection URL, this value is populated in <b>LOCATION</b> header while sending response from IGW. The header is populated only when the exception occurred at IGW matches the configured errorScenario's exceptionType parameter, the errorCode configured for the particular errorScenario lies in 3xx error series and the redirectUrl field for the particular errorScenario is configured appropriately.                                                                         |
| retry-after      | string    | O                                       | retryAfter field in an errorScenario determines the value in seconds/ particular date after which the service should be retried, this value is populated in <b>Retry-After</b> header while sending response from IGW. The header is populated only when the exception occurred at IGW matches the configured errorScenario's exceptionType parameter, the errorCode configured for the particular errorScenario lies in 3xx error series and the retryAfter field for the particular errorScenario is configured appropriately in seconds. |
| errorDescription | string    | O                                       | errorDescription field in an errorScenario determines the description that needs to be populated in <b>ProblemDetails (Detail field)</b> response from IGW when the exception occurred at IGW matches the configured errorScenario's exceptionType field.                                                                                                                                                                                                                                                                                   |

## Sample Request/Response body structure for GET, PUT, and PATCH operations:

```
[
{
```

```

    "name": "error300",
    "errorCode": 300,
    "errorCause": "",
    "errorTitle": "",
    "redirectURL": "",
    "retry-after": "",
    "errorDescription": ""
  },
  {
    "name": "error500",
    "errorCode": 500,
    "errorCause": "",
    "errorTitle": "",
    "redirectURL": "",
    "retry-after": "",
    "errorDescription": ""
  },
  {
    "name": "error429",
    "errorCode": 429,
    "errorCause": "",
    "errorTitle": "",
    "redirectURL": "",
    "retry-after": "",
    "errorDescription": ""
  }
]

```

## 3.7 OC Discard Policies

This URI can be used to update discard policies that will be used in overload control to select the appropriate policy from the configured list based on the load level of a particular service. By default, ocDiscardPolicies will be null.

**Table 3-20 Supported REST APIs**

| Description                         | HTTP Method or Custom Operation | Resource URI                                                            |
|-------------------------------------|---------------------------------|-------------------------------------------------------------------------|
| Get Discard Policies                | GET                             | PCF/nf-common-component/v1/{serviceName}/ocdiscardpolicies              |
| Update Discard Policy               | PUT                             | PCF/nf-common-component/v1/{serviceName}/{instanceId}/ocdiscardpolicies |
| Partially update the Discard Policy | PATCH                           | PCF/nf-common-component/v1/{serviceName}/{instanceId}/ocdiscardpolicies |

## Get, Update, and Patch OCDiscardData

Table 3-21 Request/Response Body Parameters

| Field Name                | Data Type                                                                                                            | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                     |
|---------------------------|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name                      | string                                                                                                               | M                                       | Name of the discarded policy.                                                                                                                                                                                   |
| scheme                    | string<br>The value can be: <ul style="list-style-type: none"> <li>PriorityBased</li> <li>PercentageBased</li> </ul> | M                                       | Discarded policy scheme.                                                                                                                                                                                        |
| policies.value            | integer                                                                                                              | M                                       | Value of priority above which requests are considered as potential candidates for drop. Percentage of requests to drop in the current sampling period over the calculated rate in the previous sampling period. |
| policies.action           | string<br>The value can be:<br>RejectWithErrorCode                                                                   | O                                       | Defines the action to be taken on selected requests rejection based on error code.                                                                                                                              |
| policies.level            | string                                                                                                               | O                                       | Defines the overload level.                                                                                                                                                                                     |
| policies.errorCodeProfile | string                                                                                                               | O                                       | The error code profiles.                                                                                                                                                                                        |

## Sample Request/Response body structure for GET, PUT, and PATCH operations:

```
[
{
  "name": "OCDP2",
  "scheme": "PercentageBased",
  "policies": [
    {
      "value": 20,
      "action": "RejectWithErrorCode",
      "level": "L1",
      "errorCodeProfile": "error411"
    },
    {
      "value": 40,
      "action": "RejectWithErrorCode",
      "level": "L2",
      "errorCodeProfile": "error412"
    },
    {
      "value": 60,
      "action": "RejectWithErrorCode",
      "level": "L3",
```

```

        "errorCodeProfile": "error413"
    },
    {
        "value": 80,
        "action": "RejectWithErrorCode",
        "level": "L4",
        "errorCodeProfile": "error414"
    },
    {
        "value": 95,
        "action": "RejectWithErrorCode",
        "level": "L5",
        "errorCodeProfile": "error415"
    }
  ]
},
{
  "name": "OCDP1",
  "scheme": "PriorityBased",
  "policies": [
    {
      "value": 30,
      "action": "RejectWithErrorCode",
      "level": "Minor",
      "errorCodeProfile": "error300"
    },
    {
      "value": 20,
      "action": "RejectWithErrorCode",
      "level": "Critical",
      "errorCodeProfile": "error500"
    }
  ]
}
]

```

## 3.8 Overload Level Threshold

This URI can be used to configure the Overload Threshold Level. The data is saved in a line with service\_name perf-info and used by the overload manager.

**Table 3-22 Supported REST APIs**

| Description                                                                | HTTP Method or Custom Operation | Resource URI                                                 |
|----------------------------------------------------------------------------|---------------------------------|--------------------------------------------------------------|
| Get Overload Threshold Value of the required SVC (Backend service).        | GET                             | /PCF/nf-common-component/v1/perf-info/overloadLevelThreshold |
| Update the Overload Threshold Value of the required SVC (Backend service). | PUT                             | /PCF/nf-common-component/v1/perf-info/overloadLevelThreshold |
| Delete the Overload Threshold Value of the required SVC (Backend service). | DELETE                          | /PCF/nf-common-component/v1/perf-info/overloadLevelThreshold |

## Update overloadLevelThreshold

Table 3-23 Request/Response Body Parameters

| Field Name                                    | Data Type | Mandatory(M)<br>/ Optional(O)<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------------------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| svcName                                       | string    | M                                               | <p>Name of the backend service (svcName).<br/>You can configure the threshold values for the following services:</p> <ul style="list-style-type: none"> <li>• PCRF Core</li> <li>• Diameter Connector</li> <li>• PCF Session Management</li> <li>• PCF Access and Mobility</li> <li>• PCF UE Policy</li> <li>• CHF Connector</li> <li>• UDR Connector</li> </ul> <div> <p><b>Note</b></p> <p>For PCRF-CORE deployment mode, configuring overload level threshold for SM Service, AM Service, and UE Policy Service is not required.</p> <p>For PCF deployment mode, configuring the overload level threshold for PCRF Core is not required.</p> </div> |
| metricsThresholdList                          | array     | M                                               | List of criteria used to calculate the load level.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| metricsThresholdList.metricsName              | string    | M                                               | <p>Name of criteria:</p> <ul style="list-style-type: none"> <li>• cpu</li> <li>• svc_pending_count</li> <li>• svc_failure_count</li> <li>• memory</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| metricsThresholdList.levelThresholdList       | array     | M                                               | List of threshold values                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| metricsThresholdList.levelThresholdList.level | string    | M                                               | Specifies the name of the level: L1/L2/L3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

Table 3-23 (Cont.) Request/Response Body Parameters

| Field Name                                             | Data Type | Mandatory(M)<br>/ Optional(O)<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| metricsThresholdList.levelThresholdList.abatementValue | integer   | M                                               | <p>If the metric level goes below this value, load level goes to a lower value.</p> <p>The abatement values for each of the metrics are as follows:</p> <ul style="list-style-type: none"> <li>cpu (Calculated in percentage (%)) and ranges between 1-100</li> <li>svc_pending_count (Accepts an integer value) and ranges between 1 to 1000000</li> <li>svc_failure_count (Accepts an integer value) and ranges between 1 to 1000000</li> <li>memory (Calculated in percentage (%)) and ranges between 1-100</li> </ul>                                                                                                                    |
| metricsThresholdList.levelThresholdList.onsetValue     | integer   | M                                               | <p>If the metric level goes above this value, load level is set.</p> <p>The onset value of L1 is less than the abatement value of L2 and the onset value of L2 is less than the abatement value of L3.</p> <p>The onset values for each of the metrics are as follows:</p> <ul style="list-style-type: none"> <li>cpu (Calculated in percentage (%)) and ranges between 1-100</li> <li>svc_pending_count (Accepts an integer value) and ranges between 1 to 1000000</li> <li>svc_failure_count (Accepts an integer value) and ranges between 1 to 1000000</li> <li>memory (Calculated in percentage (%)) and ranges between 1-100</li> </ul> |

**Sample Request/Response body structure for GET/PUT operation:**

```
[
  {
    "svcName": "ztt-overload-ocnp-pcf-sm",
    "metricsThresholdList": [
      {
        "metricsName": "svc_pending_count",
        "levelThresholdList": [
          {
            "level": "L1",
            "onsetValue": 50,
            "abatementValue": 40
          },
          {
            "level": "L2",
            "onsetValue": 200,
            "abatementValue": 180
          },
          {
            "level": "L3",
```

```

        "onsetValue": 400,
        "abatementValue": 360
    },
    {
        "level": "L4",
        "onsetValue": 600,
        "abatementValue": 540
    },
    {
        "level": "L5",
        "onsetValue": 800,
        "abatementValue": 720
    }
]
}
]

```

### 3.8.1 Overload Level Threshold Profiles

This URI can be used to configure the Overload Threshold Level Profiles. The data is saved in a line with service\_name perf-info and used by the overload manager.

**Table 3-24 Supported REST APIs**

| Description                                                                              | HTTP Method or Custom Operation | Resource URI                                                                                                                                                                    |
|------------------------------------------------------------------------------------------|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Get the Overload Threshold Profile of the required SVC (Backend service).                | GET                             | /oc-cnpolicy-configuration/v1/overloadlevelThreshold/activeProfile<br>For details on Request/Response Body Parameters for GET activeProfile, see <a href="#">Table 3-25</a>     |
| Activate the Overload Threshold Profile                                                  | PUT                             | /oc-cnpolicy-configuration/v1/overloadlevelThreshold/activeProfile<br>For details on Request/Response Body Parameters for PUT activeProfile, see <a href="#">Table 3-25</a>     |
| Get all the overload threshold profiles names which includes default and custom profiles | GET                             | /oc-cnpolicy-configuration/v1/overloadlevelThreshold/profiles<br>For details on Request/Response Body Parameters for GET profiles, see <a href="#">Table 3-26</a>               |
| Get Overload Threshold Value for particular profile.                                     | GET                             | /oc-cnpolicy-configuration/v1/overloadlevelThreshold/profiles/{name}<br>For details on Request/Response Body Parameters for GET profiles/{name}, see <a href="#">Table 3-27</a> |

**Table 3-24 (Cont.) Supported REST APIs**

| Description                                                                                                                                                                                                                                     | HTTP Method or Custom Operation | Resource URI                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Adds a new Overload Threshold Profile                                                                                                                                                                                                           | POST                            | /oc-cnpolicy-configuration/v1/overloadlevelThreshold/profiles/{name}<br>For details on Request/Response Body Parameters for POST profiles/{name}, see <a href="#">Table 3-27</a> |
| Update the profile.                                                                                                                                                                                                                             | PUT                             | /oc-cnpolicy-configuration/v1/overloadlevelThreshold/profiles/{name}<br>For details on Request/Response Body Parameters for PUT profiles/{name}, see <a href="#">Table 3-27</a>  |
| Delete the Overload Threshold Profile of the required SVC (Backend service).                                                                                                                                                                    | DELETE                          | /oc-cnpolicy-configuration/v1/overloadlevelThreshold/profiles/{name}                                                                                                             |
| Migrate the data from standalone to profile i.e if any overloadlevelThreshold data is already configured then it will migrate that data to profile<br>name - Name of the profile<br>activate - if after migration , profile should be activated | POST                            | /oc-cnpolicy-configuration/v1/overloadlevelThreshold/migrate<br>For details on Request/Response Body Parameters for POST migrate, see <a href="#">Table 3-28</a>                 |
| Exports the Overload Threshold Profile.                                                                                                                                                                                                         | GET                             | /oc-cnpolicy-configuration/v1/overloadlevelThreshold/export                                                                                                                      |
| Imports the Overload Threshold Profile.                                                                                                                                                                                                         | POST                            | /oc-cnpolicy-configuration/v1/overloadlevelThreshold/import<br>For details on Request/Response Body Parameters for POST (import), see <a href="#">Table 3-29</a> .               |

**Table 3-25 Request/Response Body Parameters for GET/PUT activeProfile**

| Field Name | Data Type | Mandatory(M)/ Optional(O)/ Conditional(C) | Description                 |
|------------|-----------|-------------------------------------------|-----------------------------|
| name       | string    | M                                         | Name of the active profile. |

**Sample Request/Response for GET/PUT activeProfile**

```
{
  "name": "custom"
}
```



**Table 3-26 Request/Response Body Parameters for GET profiles**

| Field Name      | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                       |
|-----------------|-----------|-------------------------------------------------|---------------------------------------------------|
| name            | string    | M                                               | Name of the profile.                              |
| isCustomProfile | string    | M                                               | To specify the type of profile: default or custom |

**Sample Request/Response for GET profiles**

```
[  
  {  
    "name": "default",  
    "isCustomProfile": false  
  }, {  
    "name": "custom",  
    "isCustomProfile": true  
  }  
]
```

**Table 3-27 Request/Response Body Parameters for GET/PUT/POST profiles/{name}**

| Field Name | Data Type | Mandatory(M)<br>/Optional(O)<br>Conditional(C) | Description          |
|------------|-----------|------------------------------------------------|----------------------|
| name       | string    | M                                              | Name of the profile. |

**Table 3-27 (Cont.) Request/Response Body Parameters for GET/PUT/POST profiles/  
{name}**

| Field Name                                          | Data Type | Mandatory(M)<br>)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------------------|-----------|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| value.svcName                                       | string    | M                                                    | <p>Name of the backend service (svcName).<br/>You can configure the threshold values for the following services:</p> <ul style="list-style-type: none"> <li>• PCRF Core</li> <li>• Diameter Connector</li> <li>• PCF Session Management</li> <li>• PCF Access and Mobility</li> <li>• PCF UE Policy</li> <li>• CHF Connector</li> <li>• UDR Connector</li> </ul> |
| value.metricsThresholdList                          | array     | M                                                    | List of criteria used to calculate the load level.                                                                                                                                                                                                                                                                                                               |
| value.metricsThresholdList.metricsName              | string    | M                                                    | <p>Name of criteria:</p> <ul style="list-style-type: none"> <li>• cpu</li> <li>• svc_pending_count</li> <li>• svc_failure_count</li> <li>• memory</li> </ul>                                                                                                                                                                                                     |
| value.metricsThresholdList.levelThresholdList       | array     | M                                                    | List of threshold values                                                                                                                                                                                                                                                                                                                                         |
| value.metricsThresholdList.levelThresholdList.level | string    | M                                                    | Specifies the name of the level: L1/L2/L3.                                                                                                                                                                                                                                                                                                                       |

**Note**

For PCRF-CORE deployment mode, configuring overload level threshold for SM Service, AM Service, and UE Policy Service is not required.

For PCF deployment mode, configuring the overload level threshold for PCRF Core is not required.

**Table 3-27 (Cont.) Request/Response Body Parameters for GET/PUT/POST profiles/{name}**

| Field Name                                | Data Type | Mandatory(M)<br>Optional(O)<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------|-----------|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| value.metricsThresholdList.abatementValue | integer   | M                                             | <p>If the metric level goes below this value, load level goes to a lower value.</p> <p>The abatement values for each of the metrics are as follows:</p> <ul style="list-style-type: none"> <li>cpu (Calculated in percentage (%)) and ranges between 1-100</li> <li>svc_pending_count (Accepts an integer value) and ranges between 1 to 1000000</li> <li>svc_failure_count (Accepts an integer value) and ranges between 1 to 1000000</li> <li>memory (Calculated in percentage (%)) and ranges between 1-100</li> </ul>                                                                                                                    |
| value.metricsThresholdList.onsetValue     | integer   | M                                             | <p>If the metric level goes above this value, load level is set.</p> <p>The onset value of L1 is less than the abatement value of L2 and the onset value of L2 is less than the abatement value of L3.</p> <p>The onset values for each of the metrics are as follows:</p> <ul style="list-style-type: none"> <li>cpu (Calculated in percentage (%)) and ranges between 1-100</li> <li>svc_pending_count (Accepts an integer value) and ranges between 1 to 1000000</li> <li>svc_failure_count (Accepts an integer value) and ranges between 1 to 1000000</li> <li>memory (Calculated in percentage (%)) and ranges between 1-100</li> </ul> |

**Sample Request/Response for GET/PUT/POST profiles/{name}**

```
{
  "name": "custom",
  "value": [
    {
      "svcName": "service-name-pcrf-core",
      "metricsThresholdList": [
        {
          "metricsName": "cpu",
          "levelThresholdList": [
            {
              "level": "L1",
              "onsetValue": 49,
              "abatementValue": 41
            },
            {
              "level": "L2",
              "onsetValue": 48,
              "abatementValue": 47
            }
          ]
        }
      ]
    }
  ]
}
```

```

{
  "level": "L3",
  "onsetValue": 52,
  "abatementValue": 50
}
]
}
]
}
]
}
]
}

```

**Table 3-28 Request/Response Body Parameters for POST migrate**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                       |
|------------|-----------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| name       | string    | M                                               | Name of the profile to migrate.                                                                                                                   |
| activate   | string    | M                                               | To activate the profile.<br>Set value to: <ul style="list-style-type: none"> <li>• true: To activate</li> <li>• false: Not to activate</li> </ul> |

**Sample request/response for GET profiles list**

```

{
  "name": "migrate_profile",
  "activate": true/false
}

```

**Table 3-29 Request/Response Body Parameters for POST (import)**

| Field Name      | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description          |
|-----------------|-----------|-------------------------------------------------|----------------------|
| exportData.name | string    | M                                               | Name of the profile. |

Table 3-29 (Cont.) Request/Response Body Parameters for POST (import)

| Field Name                                                     | Data Type | Mandatory(M)<br>/ Optional(O)<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| exportData.value.svcName                                       | string    | M                                               | <p>Name of the backend service (svcName).<br/>You can configure the threshold values for the following services:</p> <ul style="list-style-type: none"> <li>• PCRF Core</li> <li>• Diameter Connector</li> <li>• PCF Session Management</li> <li>• PCF Access and Mobility</li> <li>• PCF UE Policy</li> <li>• CHF Connector</li> <li>• UDR Connector</li> </ul> <div> <p><b>Note</b></p> <p>For PCRF-CORE deployment mode, configuring overload level threshold for SM Service, AM Service, and UE Policy Service is not required.<br/>For PCF deployment mode, configuring the overload level threshold for PCRF Core is not required.</p> </div> |
| exportData.value.metricsThresholdList                          | array     | M                                               | List of criteria used to calculate the load level.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| exportData.value.metricsThresholdList.metricsName              | string    | M                                               | <p>Name of criteria:</p> <ul style="list-style-type: none"> <li>• cpu</li> <li>• svc_pending_count</li> <li>• svc_failure_count</li> <li>• memory</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| exportData.value.metricsThresholdList.levelThresholdList       | array     | M                                               | List of threshold values                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| exportData.value.metricsThresholdList.levelThresholdList.level | string    | M                                               | Specifies the name of the level: L1/L2/L3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

**Table 3-29 (Cont.) Request/Response Body Parameters for POST (import)**

| Field Name                                                              | Data Type | Mandatory(M)<br>/ Optional(O)<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| exportData.value.metricsThresholdList.levelThresholdList.abatementValue | integer   | M                                               | <p>If the metric level goes below this value, load level goes to a lower value.</p> <p>The abatement values for each of the metrics are as follows:</p> <ul style="list-style-type: none"> <li>cpu (Calculated in percentage (%)) and ranges between 1-100</li> <li>svc_pending_count (Accepts an integer value) and ranges between 1 to 1000000</li> <li>svc_failure_count (Accepts an integer value) and ranges between 1 to 1000000</li> <li>memory (Calculated in percentage (%)) and ranges between 1-100</li> </ul>                                                                                                                    |
| exportData.value.metricsThresholdList.levelThresholdList.onsetValue     | integer   | M                                               | <p>If the metric level goes above this value, load level is set.</p> <p>The onset value of L1 is less than the abatement value of L2 and the onset value of L2 is less than the abatement value of L3.</p> <p>The onset values for each of the metrics are as follows:</p> <ul style="list-style-type: none"> <li>cpu (Calculated in percentage (%)) and ranges between 1-100</li> <li>svc_pending_count (Accepts an integer value) and ranges between 1 to 1000000</li> <li>svc_failure_count (Accepts an integer value) and ranges between 1 to 1000000</li> <li>memory (Calculated in percentage (%)) and ranges between 1-100</li> </ul> |

**Sample Request/Response Body Parameters for POST (import)**

```

"exportData": [
  {
    "name": "TestProfile",
    "value": [
      {
        "svcName": "pcrf-core",
        "metricsThresholdList": [
          {
            "metricsName": "cpu",
            "levelThresholdList": [
              {
                "level": "L1",
                "abatementValue": 41,
                "onsetValue": 44
              },
              {
                "level": "L2",
                "abatementValue": 47,
                "onsetValue": 49
              }
            ]
          }
        ]
      }
    ]
  }
]

```

```

    },
    {
      "level": "L3",
      "abatementValue": 50,
      "onsetValue": 52
    }
  ]
},
}

```

## 3.9 NF profile registration with NRF

These URIs can be used to update or retrieve PCF NF profile to be registered with Network Repository Function (NRF).

**Table 3-30 Supported REST APIs**

| Description          | HTTP Method or Custom Operation | Resource URI                                                     |
|----------------------|---------------------------------|------------------------------------------------------------------|
| Get PCF NfProfile    | GET                             | PCF/nf-common-component/v1/nrf-client-nfmanagement/nfProfileList |
| Update PCF NfProfile | PUT                             | PCF/nf-common-component/v1/nrf-client-nfmanagement/nfProfileList |

The sample request body structure for GET and PUT operation is as follows:

```

[
  {
    "nfInstanceId": "fe7d992b-0541-4c7d-ab84-c6d70b1b0123",
    "nfType": "PCF",
    "nfStatus": "REGISTERED",
    "plmnList": null,
    "nsiList": null,
    "fqdn": "occp-ocpm-ingress-gateway.ocpcf.svc",
    "interPlmnFqdn": null,
    "ipv4Addresses": null,
    "ipv6Addresses": null,
    "priority": null,
    "capacity": null,
    "load": 80,
    "locality": null,
    "pcfInfo": {
      "dnnList": [
        "internet",
        "volte"
      ],
      "supiRanges": [
        {
          "start": "12123444444",
          "end": "232332323323232",
          "pattern": null
        }
      ]
    }
  }
]

```

```

    ]
  },
  "customInfo":null,
  "recoveryTime":null,
  "nfServices":[
    {
      "serviceInstanceId":"03063893-cf9e-4f7a-9827-067f6fa9dd01",
      "serviceName":"npcf-am-policy-control",
      "versions":[
        {
          "apiVersionInUri":"v1",
          "apiFullVersion":"1.0.0",
          "expiry":null
        }
      ],
      "scheme":"http",
      "nfServiceStatus":"REGISTERED",
      "fqdn":"ocnp-ocpm-ingress-gateway.ocpcf.svc",
      "interPlmnFqdn":null,
      "ipEndpoints":null,
      "apiPrefix":null,
      "defaultNotificationSubscriptions":null,
      "allowedPlmns":null,
      "allowedNfTypes":[
        "AMF",
        "NEF"
      ],
      "allowedNfDomains":null,
      "allowedNssais":null,
      "priority":null,
      "capacity":null,
      "load":null,
      "recoveryTime":null,
      "supportedFeatures":null
    },
    {
      "serviceInstanceId":"03063893-cf9e-4f7a-9827-067f6fa9dd02",
      "serviceName":"npcf-smpolicycontrol",
      "versions":[
        {
          "apiVersionInUri":"v1",
          "apiFullVersion":"1.0.0",
          "expiry":null
        }
      ],
      "scheme":"http",
      "nfServiceStatus":"REGISTERED",
      "fqdn":"ocnp-ocpm-ingress-gateway.ocpcf.svc",
      "interPlmnFqdn":null,
      "ipEndpoints":null,
      "apiPrefix":null,
      "defaultNotificationSubscriptions":null,
      "allowedPlmns":null,
      "allowedNfTypes":[
        "SMF",
        "NEF",

```



```

        "AF"
    ],
    "allowedNfDomains":null,
    "allowedNssais":null,
    "priority":null,
    "capacity":null,
    "load":null,
    "recoveryTime":null,
    "supportedFeatures":null
  },
  {
    "serviceInstanceId":"03063893-cf9e-4f7a-9827-067f6fa9dd03",
    "serviceName":"npcf-ue-policy-control",
    "versions":[
      {
        "apiVersionInUri":"v1",
        "apiFullVersion":"1.0.0",
        "expiry":null
      }
    ],
    "scheme":"http",
    "nfServiceStatus":"REGISTERED",
    "fqdn":"occpn-ocpm-ingress-gateway.ocpcf.svc",
    "interPlmnFqdn":null,
    "ipEndpoints":null,
    "apiPrefix":null,
    "defaultNotificationSubscriptions":null,
    "allowedPlmns":null,
    "allowedNfTypes":[
      "AMF"
    ],
    "allowedNfDomains":null,
    "allowedNssais":null,
    "priority":null,
    "capacity":null,
    "load":null,
    "recoveryTime":null,
    "supportedFeatures":null
  }
]

```

## 3.10 Server Header at Ingress Gateway

This section describes the Common Config Server URIs that you can use to enable and configure server header at Ingress Gateway. The server header is included in the error responses sent by Ingress Gateway for the errors generated at Ingress Gateway as well as backend microservices.

**Note**

You can configure server header at both global and route level. However, if you define server header configuration at both global and route level, the route level configuration (irrespective of being enabled or disabled) takes precedence over the global level configuration.

**Error Code Series List**

The following table describes the URIs available to define and retrieve error code series list:

**Table 3-31 Supported REST APIs for Error Code Series List**

| Description                   | HTTP Method or Custom Operation                                                  | Resource URI                                                 |
|-------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------|
| Get Error Code Series List    | GET                                                                              | {apiRoot}/PCF/nf-common-component/v1/igw/errorcodeserieslist |
| Define Error Code Series List | PUT                                                                              | {apiRoot}/PCF/nf-common-component/v1/igw/errorcodeserieslist |
| Delete Error Code Series List | PUT<br>To delete the configurations, put an empty json in the request.<br><br>[] | {apiRoot}/PCF/nf-common-component/v1/igw/errorcodeserieslist |

The sample request body structure for PUT operation is as follows:

```
[
  {
    "id": "E1",
    "errorCodeSeries":
    [
      {
        "errorSet": "4xx",
        "errorCodes": [400, 408]
      },
      {
        "errorSet": "5xx",
        "errorCodes": [500, 503]
      }
    ]
  },
  {
    "id": "E2",
    "errorCodeSeries":
    [
      {
        "errorSet": "4xx",
        "errorCodes": [-1]
      }
    ]
  }
]
```

```

    }
  ]
]

```

**Table 3-32 Request/Response Body Parameters**

| Field Name                 | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                    |
|----------------------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| id                         | string    | M                                               | Specifies the unique ID that is used in the errorCodeSeriesId while configuring server header at global or route level.        |
| errorCodeSeries.errorSet   | string    | M                                               | Specifies an errorSet (4XX, 5XX) in errorCodeSeries for matching server response.                                              |
| errorCodeSeries.errorCodes | array     | M                                               | Specifies the error codes in a specific error set against which the server response is validated for populating server header. |

**Configuring Server header (global level)**

The following table describes the URIs available to enable and configure server header at global level:

**Table 3-33 Supported REST APIs**

| Description          | HTTP Method or Custom Operation | Resource URI                                        |
|----------------------|---------------------------------|-----------------------------------------------------|
| Get Server Header    | GET                             | /PCF/nf-common-component/v1/igw/serverheaderdetails |
| Define Server Header | PUT                             | /PCF/nf-common-component/v1/igw/serverheaderdetails |

The sample request body structure for PUT operation is as follows:

```

{
    "enabled": false,          # Set to false if we want Server Header
    to be generated at Route Level
    "errorCodeSeriesId": "E1", # See "errorcodeserieslist" resource
    above for more details.
    "configuration": {
        "nfType": "PCF",
        "nfInstanceId": "123456" # NF Instance Id of the PCF
    }
}

```

**Table 3-34 Request/Response Body Parameters**

| Field Name                 | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                          |
|----------------------------|-----------|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enabled                    | boolean   | M                                       | When the value for this parameter is set to true, server headers are generated at a global level. To generate server headers at route level, set the value to false. |
| errorCodeSeriesId          | string    | M                                       | Specifies the error list IDs. For more information, see <a href="#">Table 3-31</a> .                                                                                 |
| configuration.nftype       | string    | M                                       | Specifies the type of network function.<br><b>Default value:</b> PCF                                                                                                 |
| configuration.nfInstanceId | string    | M                                       | Specifies the NF Instance ID of the PCF.                                                                                                                             |

**Configuring Server header (route level)**

The following table describes the URIs available to enable and configure server header at route level:

**Table 3-35 Supported REST APIs**

| Description                         | HTTP Method or Custom Operation | Resource URI                                        |
|-------------------------------------|---------------------------------|-----------------------------------------------------|
| Get Route Level Configuration       | GET                             | /PCF/nf-common-component/v1/igw/routesconfiguration |
| Define Server Header at Route Level | PUT                             | /PCF/nf-common-component/v1/igw/routesconfiguration |

The sample request body structure for PUT operation is as follows:

```
[{
  "id": "sm_create_session_route",
  "serverHeaderDetails": {
    "enabled": true,
    "errorCodeSeriesId": "E1"
  }
}]
```

The sample request body structure to clear route using PUT operation is as follows:

```
[]
```

Table 3-36 Request/Response Body Parameters

| Field Name                       | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------|-----------|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| id                               | string    | M                                       | Specifies the route IDs for which you need to define server header.<br>You can define the server header at route level for any of the following supported route IDs: <ul style="list-style-type: none"> <li>sm_create_session_route</li> <li>sm_delete_session_route</li> <li>sm_update_session_route</li> <li>udr_notify_route</li> <li>chf_terminate_route</li> <li>chf_notify_route</li> <li>pa_create_session_route</li> <li>pa_delete_session_route</li> <li>pa_update_session_route</li> <li>pa_events_subscription_route</li> <li>reverse_ue_service</li> <li>reverse_user_udr_notify_service</li> <li>reverse_user_chf_notify_service</li> <li>reverse_nrf_discovery_service</li> <li>reverse_nrf_management_service</li> <li>reverse_nrf_notify_service</li> <li>reverse_soapconnector_service</li> <li>reverse_ue_service_notify</li> <li>am_create_session_route</li> <li>am_delete_session_route</li> <li>am_update_session_route</li> </ul> |
| serverHeaderDetails.enabled      | boolean   | M                                       | Set the value for this parameter to true if you want to define server header at the route level.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| serverHeaderDetails.errorCodesId | string    | M                                       | Specifies the error list IDs. For more information, see <a href="#">Table 3-31</a> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

The sample request body structure for GET operation is as follows:

```
[{
  "id":"sm_create_session_route"
}]
```

## 3.11 Rate Limiting

### 3.11.1 Rate Limiting at Ingress Gateway

This section describes the URIs that you can use to configure route level rate limiting in persistent configuration at Ingress Gateway.

## Error Code Profiles

The following table describes the URIs available to define and retrieve error code profiles in persistent configuration:

**Table 3-37 Supported REST APIs for Error Code Profiles**

| Description                | HTTP Method or Custom Operation | Resource URI                                               |
|----------------------------|---------------------------------|------------------------------------------------------------|
| Get Error Code Profiles    | GET                             | {apiRoot}/PCF/nf-common-component/v1/igw/errorcodeprofiles |
| Define Error Code Profiles | PUT                             | {apiRoot}/PCF/nf-common-component/v1/igw/errorcodeprofiles |

The sample request body structure for PUT operation is as follows:

```
[{
  "name": "error429",
  "errorCode": 429,
  "errorCause": "Too Many Request",
  "errorTitle": "",
  "redirectURL": "",
  "retry-after": "",
  "errorDescription": ""
}]
```

**Table 3-38 Request/Response Body Parameters**

| Field Name | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                               |
|------------|-----------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name       | string    | M                                       | Specifies the unique name for the error profile.                                                                                                                                                                                                          |
| errorCode  | string    | M                                       | errorCode field in an errorScenario determines the HttpStatusCode that needs to be populated in <b>ProblemDetails (HttpStatus field)</b> response from IGW when the exception occurred at IGW matches the configured errorScenario's exceptionType field. |
| errorCause | string    | M                                       | errorCause field in an errorScenario determines the error cause that needs to be populated in <b>ProblemDetails (Cause field)</b> response from IGW when the exception occurred at IGW matches the configured errorScenario's exceptionType parameter.    |
| errorTitle | string    | O                                       | errorTitle field in an errorScenario determines the title that needs to be populated in <b>ProblemDetails (Title field)</b> response from IGW when the exception occurred at IGW matches the configured errorScenario's exceptionType parameter.          |

Table 3-38 (Cont.) Request/Response Body Parameters

| Field Name       | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------|-----------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| redirectURL      | string    | O                                       | redirectUrl field in an errorScenario determines the redirection URL, this value is populated in <b>LOCATION</b> header while sending response from IGW. The header is populated only when the exception occurred at IGW matches the configured errorScenario's exceptionType parameter, the errorCode configured for the particular errorScenario lies in 3xx error series and the redirectUrl field for the particular errorScenario is configured appropriately.                                                                         |
| retry-after      | string    | O                                       | retryAfter field in an errorScenario determines the value in seconds/ particular date after which the service should be retried, this value is populated in <b>Retry-After</b> header while sending response from IGW. The header is populated only when the exception occurred at IGW matches the configured errorScenario's exceptionType parameter, the errorCode configured for the particular errorScenario lies in 3xx error series and the retryAfter field for the particular errorScenario is configured appropriately in seconds. |
| errorDescription | string    | O                                       | errorDescription field in an errorScenario determines the description that needs to be populated in <b>ProblemDetails (Detail field)</b> response from IGW when the exception occurred at IGW matches the configured errorScenario's exceptionType field.                                                                                                                                                                                                                                                                                   |

### Configuring Rate Limit for Policy

The following table describes the URIs available to enable and configure ratelimit:

Table 3-39 Supported REST APIs

| Description       | HTTP Method or Custom Operation | Resource URI                                                    |
|-------------------|---------------------------------|-----------------------------------------------------------------|
| Get Rate Limit    | GET                             | {apiRoot}/PCF/nf-common-component/v1/igw/routelevelratelimiting |
| Define Rate Limit | PUT                             | {apiRoot}/PCF/nf-common-component/v1/igw/routelevelratelimiting |

The sample request body structure for PUT operation is as follows:

```
{
  "enabled": true,
  "samplingPeriod": 2000,
  "rateLimitPolicies": [
```

```

{
  "name": "R1",
  "value": 5,
  "action": "RejectWithErrorCode",
  "scheme": "PriorityBased",
  "errorCodeProfile": "error429"
}
]
}

```

**Table 3-40 Request/Response Body Parameters**

| Field Name                         | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                   |
|------------------------------------|-----------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| enabled                            | boolean   | M                                               | Specifies whether to enable or disable rate limiting feature.                                                                                 |
| samplingPeriod                     |           | M                                               | Specifies the duration for each cycle of route rate limit. The value of sampling period is defined in milliseconds.                           |
| rateLimitPolicies.name             | string    | M                                               | Specifies the unique name of the discard policy.                                                                                              |
| rateLimitPolicies.value            | integer   | M                                               | Specifies the value of priority above which requests are considered as potential candidates for drop.                                         |
| rateLimitPolicies.action           | string    | M                                               | Specifies the action such as silent drop or rejection for the selected requests.                                                              |
| rateLimitPolicies.scheme           | string    | M                                               | Specifies the scheme on the basis of which requests are selected to be dropped. The only supported value for this parameter is PriorityBased. |
| rateLimitPolicies.errorCodeProfile | string    | M                                               | Specifies the error code profile. For more information, see <a href="#">Table 3-37</a> .                                                      |

**Configuring Rate Limit for Policy at route level**

For details on configuring rate limit for policy at route level, see [Route Level Configuration](#).

## 3.12 Failure Count at Ingress Gateway

This section describes the URIs that you can use to configure failure count at Ingress Gateway.

**Configuring Failure Count Overload****Error Code Series List**

The following table describes the URIs available to define and retrieve error code series list:



**Table 3-41 Supported REST APIs for Error Code Series**

| Description                   | HTTP Method or Custom Operation                                              | Resource URI                                                 |
|-------------------------------|------------------------------------------------------------------------------|--------------------------------------------------------------|
| Get Error Code Series List    | GET                                                                          | {apiRoot}/PCF/nf-common-component/v1/igw/errorcodeserieslist |
| Define Error Code Series List | PUT                                                                          | {apiRoot}/PCF/nf-common-component/v1/igw/errorcodeserieslist |
| Delete Error Code Series List | PUT<br>To delete the configurations, put an empty json in the request.<br>[] | {apiRoot}/PCF/nf-common-component/v1/igw/errorcodeserieslist |

The sample request body structure for PUT operation is as follows:

```
[
  {
    "id": "E1",
    "errorCodeSeries": [
      {
        "errorSet": "4xx",
        "errorCodes": [
          400,
          408
        ]
      },
      {
        "errorCodes": [
          500,
          503
        ]
      }
    ]
  },
  {
    "id": "E2",
    "errorCodeSeries": [
      {
        "errorSet": "5xx",
        "errorCodes": [
          -1
        ]
      }
    ]
  }
]
```

**Table 3-42 Request/Response Body Parameters**

| Field Name                 | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                    |
|----------------------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| id                         | string    | M                                               | Specifies the unique ID that is used in the errorCodeSeriesId while configuring server header at global or route level.        |
| errorCodeSeries.errorSet   | string    | M                                               | Specifies an errorSet (4XX, 5XX) in errorCodeSeries for matching server response.                                              |
| errorCodeSeries.errorCodes | array     | M                                               | Specifies the error codes in a specific error set against which the server response is validated for populating server header. |

**Failure Count for Policy at Route Level**

The following table describes the URIs available to define and retrieve failure count at route level:

**Table 3-43 Supported REST APIs for Failure Count at Route Level**

| Description                                       | HTTP Method or Custom Operation | Resource URI                                                 |
|---------------------------------------------------|---------------------------------|--------------------------------------------------------------|
| Get failure count at route level Configuration    | GET                             | {apiRoot}/PCF/nf-common-component/v1/igw/routesconfiguration |
| Define failure count at route level Configuration | PUT                             | {apiRoot}/PCF/nf-common-component/v1/igw/routesconfiguration |

For details on configuring the failure count for Policy at route level, see [Route Level Configuration](#).

**Configuring both Failure Count and Rate Limiting Overload****Error Code Series List for Failure Count**

For details on configuring error code series list for failure count, see *Error Code Series List* under *Configuring Failure Count Overload* section.

**Error Code Profile for Rate Limiting**

For details on configuring error code profile for failure count, see *Error Code Profiles* in [Rate Limiting at Ingress Gateway](#).

**Rate Limit for Policy**

For details on configuring rate limit for Policy, see *Configuring Rate Limit for Policy* in [Rate Limiting at Ingress Gateway](#).

**Route Level for Failure Count and Rate Limiting**

For details on configuring the route level for failure count and rate limiting, see [Route Level Configuration](#).

## 3.13 Route Level Configuration

The following table describes the URIs available to enable and configure rate-limit at route level:

**Table 3-44 Supported REST APIs**

| Description                                    | HTTP Method or Custom Operation | Resource URI                                                 |
|------------------------------------------------|---------------------------------|--------------------------------------------------------------|
| Get Rate Limit at route level Configuration    | GET                             | {apiRoot}/PCF/nf-common-component/v1/igw/routesconfiguration |
| Define Rate Limit at route level Configuration | PUT                             | {apiRoot}/PCF/nf-common-component/v1/igw/routesconfiguration |

The sample request body structure for PUT operation is as follows:

```
[
  {
    "id": "sm_create_session_route",
    "rateLimiting": {
      "methods": [
        {
          "name": "POST",
          "rate": 3,
          "rateLimitPolicy": "R1"
        }
      ]
    },
    "failureReqCountErrorCodeSeriesId": "E1"
  },
  {
    "id": "sm_update_session_route",
    "rateLimiting": {
      "methods": [
        {
          "name": "POST",
          "rate": 6,
          "rateLimitPolicy": "R1"
        }
      ]
    },
    "failureReqCountErrorCodeSeriesId": "E1"
  },
  {
    "id": "sm_delete_session_route",
    "rateLimiting": {
      "methods": [
        {
          "name": "POST",
          "rate": 3,
          "rateLimitPolicy": "R1"
        }
      ]
    }
  }
]
```

```

    }
  ],
  "failureReqCountErrorCodeSeriesId": "E1"
}
]

```

**Table 3-45 Request/Response Body Parameters**

| Field Name                           | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                      |
|--------------------------------------|-----------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| id                                   | string    | M                                               | Specifies the route IDs for which you need to define the rate limit.<br>You can define the rate limit at route level for any of the following supported route IDs.<br>For the list of supported route IDs for each service, see <i>Overload Control</i> section in <i>Oracle Communications Cloud Native Core, Converged Policy User Guide</i> . |
| rateLimiting.methods.name            | string    | O                                               | Specifies the name of the HTTP method such as GET, DELETE, or POST. The rate limit is calculated by considering the method along with the route ID.                                                                                                                                                                                              |
| rateLimiting.methods.rate            | integer   | O                                               | Specifies the rate for route level rate limit. Any requests with sbi-priority header with a value greater than the configured number are discarded.                                                                                                                                                                                              |
| rateLimiting.methods.rateLimitPolicy | string    | O                                               | Specifies the unique rate limit policy name. For more information, see <a href="#">Table 3-39</a> .                                                                                                                                                                                                                                              |
| failureReqCountErrorCodeSeriesId     | string    | O                                               | Specifies the mapping between error series and failure count.                                                                                                                                                                                                                                                                                    |

## 3.14 Controlled Shutdown at Ingress and Diameter Gateway

This section describes the URIs that you can use to enable and configure Controlled Shutdown at Ingress and Diameter Gateway.

### Operational State

The following table describes the URIs available to define and retrieve operational state:

**Table 3-46 Supported REST APIs for Operational State**

| Description           | HTTP Method or Custom Operation | Resource URI                                  |
|-----------------------|---------------------------------|-----------------------------------------------|
| GET Operational State | GET                             | {apiRoot}/controlledShutdown/operationalState |
| PUT Operational State | PUT                             | {apiRoot}/controlledShutdown/operationalState |

The sample request body structure for PUT operation is as follows:

```
{
  "operationalState": "NORMAL"
}
```

**Table 3-47 Request/Response Body Parameters**

| Field Name        | Data Type                                                                                                          | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                     |
|-------------------|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------|
| Operational State | Enum <ul style="list-style-type: none"> <li>NORMAL</li> <li>PARTIAL_SHUTDOWN</li> <li>COMPLETE_SHUTDOWN</li> </ul> | M                                               | Specifies the operational state |

### Operational State History

The following table describes the URIs available to retrieve operational state history:

**Table 3-48 Supported REST APIs for Operational State History**

| Description                   | HTTP Method or Custom Operation | Resource URI                                                                      |
|-------------------------------|---------------------------------|-----------------------------------------------------------------------------------|
| GET Operational State History | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/controlledShutdown/operationalStateHistory |

The sample request body structure for GET operation is as follows:

```
[
  {
    "id": "ea01053b-5a3b-4de2-850b-7210bf2a04d5",
    "type": "operationalState",
    "value": "{\"state\":\"NORMAL\"}",
    "timeStamp": "2022-08-30T08:12:45.88519",
    "status": "SUCCESS"
  }
]
```

**Table 3-49 Request/Response Body Parameters**

| Field Name | Data Type | Description             |
|------------|-----------|-------------------------|
| id         | UUID      | Auto-generated ID       |
| type       | String    | Type of historical data |

**Table 3-49 (Cont.) Request/Response Body Parameters**

| Field Name | Data Type | Description                                                                                                                                                      |
|------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| value      | String    | Operational state value                                                                                                                                          |
| timeStamp  | Date      | Logs the timestamp when the operational state event took place                                                                                                   |
| status     | String    | <ul style="list-style-type: none"> <li>Success: Successful in switching of operational state</li> <li>Failure: Fail in switching of operational state</li> </ul> |

**Table 3-50 Request Parameters**

| Field Name | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                                                                  |
|------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------|
| Offset     | Integer   | O                                               | Offset is a position in the set of records.                                  |
| Limit      | Integer   | O                                               | Limit as an option allows to limit the number of rows returned from a query. |
| Page       | Integer   | O                                               | Page shows the number of records.                                            |

**Note**

If offset and Limit are not provided in the API, then the query fetches all the records from the database.

**Controlled Shutdown Error Mapping**

The following table describes the URIs available to define and retrieve Controlled Shutdown Error Mapping:

**Table 3-51 Supported REST APIs for Controlled Shutdown Error Mapping**

| Description                           | HTTP Method or Custom Operation | Resource URI                                                           |
|---------------------------------------|---------------------------------|------------------------------------------------------------------------|
| GET Controlled Shutdown Error Mapping | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/controlledShutdown/errorMapping |
| PUT Controlled Shutdown Error Mapping | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/controlledShutdown/errorMapping |

The sample request body structure for PUT operation is as follows:

```
{
  "routeErrorProfileList": [
    {
```

```

        "errorProfileName": "ERR_400",
        "routeIds": [
            "sm_update_session_route"
        ]
    },
    {
        "errorProfileName": "ERR_100",
        "routeIds": [
            "sm_create_session_route"
        ]
    },
    {
        "routeIds": [
            "sm_delete_session_route",
            "udr_notify_route"
        ],
        "errorProfileName": "ERR_1200"
    }
]
}

```

**Table 3-52 Request/Response Body Parameters**

| Field Name                | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description                             |
|---------------------------|-----------|-------------------------------------------------|-----------------------------------------|
| routeErrorProfile<br>List | Array     | M                                               | Specifies the route error profile list. |

**Table 3-52 (Cont.) Request/Response Body Parameters**

| Field Name                             | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------|-----------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| routeErrorProfileList.routeIDs         | Array     | M                                       | Specifies the route ID.<br>You can define the server header at route level for any of the following supported route IDs: <ul style="list-style-type: none"> <li>sm_create_session_route</li> <li>sm_delete_session_route</li> <li>sm_update_session_route</li> <li>udr_notify_route</li> <li>chf_terminate_route</li> <li>chf_notify_route</li> <li>pa_create_session_route</li> <li>pa_delete_session_route</li> <li>pa_update_session_route</li> <li>pa_events_subscription_route</li> <li>pa_events_unsubscription_route</li> <li>am_create_session_route</li> <li>am_delete_session_route</li> <li>am_update_session_route</li> <li>ue_create_session_route</li> <li>ue_update_session_route</li> <li>ue_delete_session_route</li> <li>n1_message_notify</li> <li>reverse_soapconnector_service</li> <li>reverse_nrf_notify_service</li> <li>binding_audit_notify_route</li> <li>udr_um_notify_route</li> </ul> |
| routeErrorProfileList.errorProfileName | String    | M                                       | Specifies the error code profile.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

**Message Type**

The following table describes the URIs available to define and retrieve Message Type:

**Table 3-53 Supported REST APIs for Message Type**

| Description      | HTTP Method or Custom Operation | Resource URI                                                                                    |
|------------------|---------------------------------|-------------------------------------------------------------------------------------------------|
| GET Message Type | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/controlledshutdown/error mappings/{messageType} |
| PUT Message Type | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/controlledshutdown/error mappings/{messageType} |



The sample request body structure for PUT operation is as follows:

```
{
  "messageType": "CER",
  "ansWithResultCode": "CUSTOM_RESULT_CODE",
  "resultCode": "7899",
  "useExperimentalResultCode": true,
  "vendorId": "2"
}
```

**Table 3-54 Request/Response Body Parameters**

| Field Name                | Data Type                                                                                                                                                                                                        | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                                                              |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| messageType               | String                                                                                                                                                                                                           | M                                       | Type of the request                                                                                                                                                                                                                                                                      |
| ansWithResultCode         | Enum<br>The supported values are: <ul style="list-style-type: none"> <li>• DIAMETER_TOO_BUSY</li> <li>• DIAMETER_UNABLE_TO_COMPLY</li> <li>• DIAMETER_UNABLE_TO_DELIVER</li> <li>• CUSTOM_RESULT_CODE</li> </ul> | M                                       | Specifies the result code, returned in the answer response.                                                                                                                                                                                                                              |
| resultCode                | Integer                                                                                                                                                                                                          | M                                       | Specify a value for this parameter when you choose CUSTOM_RESULT_CODE value for the ansWithResultCode parameter.<br>Specifies the custom result code, which is returned in the answer response.                                                                                          |
| useExperimentalResultCode | Boolean                                                                                                                                                                                                          | O                                       | Specify a value for this parameter when you choose CUSTOM_RESULT_CODE value for the ansWithResultCode parameter.<br>Specifies the value of result code by user according to their requirement.<br>Result code associates with the vendor ID, when the useExperimentalResultCode is true. |
| vendorId                  | Integer                                                                                                                                                                                                          | O                                       | Specify a value for this parameter when you choose CUSTOM_RESULT_CODE value for the ansWithResultCode parameter and useExperimentalResultCode is true.                                                                                                                                   |

**Export/Import**

The following table describes the URIs available to define and retrieve Export/Import:

**Table 3-55 Supported REST APIs for Export/Import**

| Description | HTTP Method or Custom Operation | Resource URI                                                                             |
|-------------|---------------------------------|------------------------------------------------------------------------------------------|
| GET Export  | GET                             | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/controlledshutdown/error mappings/export |
| Put Import  | PUT                             | {apiRoot}/oc-cnpolicy-configuration/v1/diameter/controlledshutdown/error mappings/import |

The sample response body structure for PUT operation is as follows:

```
"exportData": [
  {
    "messageType": "Rx_AAR_I",
    "ansWithResultCode": "CUSTOM_RESULT_CODE",
    "useExperimentalResultCode": false,
    "resultCode": "1300"
  },
  {
    "messageType": "Rx_AAR_U",
    "ansWithResultCode": "DIAMETER_TOO_BUSY",
    "useExperimentalResultCode": false
  },
  {
    "messageType": "STR",
    "ansWithResultCode": "CUSTOM_RESULT_CODE",
    "useExperimentalResultCode": true,
    "resultCode": "2109",
    "vendorId": "1"
  }
]
```

**Table 3-56 Request/Response Body Parameters**

| Field Name  | Data Type | Mandatory(M)/<br>Optional(O)/<br>Conditional(C) | Description         |
|-------------|-----------|-------------------------------------------------|---------------------|
| messageType | String    | M                                               | Type of the request |

Table 3-56 (Cont.) Request/Response Body Parameters

| Field Name                | Data Type                                                                                                                                                                                                        | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                                                              |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ansWithResultCode         | Enum<br>The supported values are: <ul style="list-style-type: none"> <li>• DIAMETER_TOO_BUSY</li> <li>• DIAMETER_UNABLE_TO_COMPLY</li> <li>• DIAMETER_UNABLE_TO_DELIVER</li> <li>• CUSTOM_RESULT_CODE</li> </ul> | M                                       | Specifies the result code, returned in the answer response.                                                                                                                                                                                                                              |
| resultCode                | Integer                                                                                                                                                                                                          | M                                       | Specify a value for this parameter when you choose CUSTOM_RESULT_CODE value for the ansWithResultCode parameter.<br>Specifies the custom result code, which is returned in the answer response.                                                                                          |
| useExperimentalResultCode | Boolean                                                                                                                                                                                                          | O                                       | Specify a value for this parameter when you choose CUSTOM_RESULT_CODE value for the ansWithResultCode parameter.<br>Specifies the value of result code by user according to their requirement.<br>Result code associates with the vendor ID, when the useExperimentalResultCode is true. |
| vendorId                  | Integer                                                                                                                                                                                                          | O                                       | Specify a value for this parameter when you choose CUSTOM_RESULT_CODE value for the ansWithResultCode parameter and useExperimentalResultCode is true.                                                                                                                                   |

## 3.15 NF Scoring for a Site

The following table describes the URI available to define NF Scoring:

Table 3-57 REST API for NF Scoring

| Description      | HTTP Method or Custom Operation | Resource API                          |
|------------------|---------------------------------|---------------------------------------|
| GET for NF Score | GET                             | /oc-cnpolicy-configuration/v1/nfscore |

Table 3-58 Fields

| Field Name      | Mandatory (M)/<br>Optional(O)/<br>Conditional(C) | Datatype | Description                                                                                                                                                         |
|-----------------|--------------------------------------------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NF Score        | M                                                | Float    | The score of a site based on NF-specific factors (metrics, alerts, and so on).                                                                                      |
| detailedReport  | M                                                | NA       | Detailed report of NFScore calculation.                                                                                                                             |
| scoringFactors  | M                                                | NA       | Comprises the factors that contributed to the NFScore                                                                                                               |
| criteria        | C                                                | NA       | Factors involved in NFScore calculation<br>Criteria are present for a specific factor If it is enabled for NF-Scoring.                                              |
| maxScore        | C                                                | Integer  | Max score of that factor<br>maxScore is present for a specific factor If it is enabled for NF-Scoring.                                                              |
| calculatedScore | C                                                | Float    | calculated score of that factor<br>calculatedScore are present for a specific factor If it is enabled for NF-Scoring.                                               |
| additionalInfo  | O                                                | NA       | additional info related to factor's score calculation.                                                                                                              |
| configuredValue | C                                                | Integer  | An expected value configured for a factor<br>configuredValue is present for a specific factor If it is enabled for NF-Scoring.                                      |
| actualValue     | C                                                | Float    | An actual value for a particular factor after doing factor-specific configuration.<br>actualValue is present for a specific factor If it is enabled for NF-Scoring. |
| totalSvcs       | C                                                | Integer  | Total configured services.<br>totalSvcs is present when the factor SVC-Health is enabled                                                                            |

Table 3-58 (Cont.) Fields

| Field Name     | Mandatory (M)/<br>Optional(O)/<br>Conditional(C) | Datatype | Description                                                                                                                                                              |
|----------------|--------------------------------------------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| upSvcs         | C                                                | Integer  | Total running services.<br>upSvcs is present when<br>the factor SVC-Health is<br>enabled                                                                                 |
| totalSites     | C                                                | Integer  | Total configured sites<br>totalSites is present<br>when the factor<br>replicationHealth is<br>enabled.                                                                   |
| availableLinks | C                                                | Integer  | Total healthy sites<br>availableLinks is present<br>when the factor<br>replicationHealth is<br>enabled.                                                                  |
| critical       | C                                                | Integer  | Critical alert's<br>contribution to alert's<br>calculated score<br>This attribute is present<br>when ActiveAlerts are<br>enabled as NF-Scoring<br>factor                 |
| major          | C                                                | Float    | Major alert's contribution<br>to alert's calculated<br>score<br>This attribute is present<br>when ActiveAlerts are<br>enabled as NF-Scoring<br>factor                    |
| minor          | C                                                | Float    | Minor alert's contribution<br>to alert's calculated<br>score<br>This attribute is present<br>when ActiveAlerts are<br>enabled as NF-Scoring<br>factor                    |
| failedFactors  | C                                                | Float    | Enabled factors that<br>failed to contribute to<br>NFScore<br>This attribute is present<br>when an application fails<br>to calculate the score for<br>1 or more factors. |
| detail         | C                                                | NA       | Factor's failure reason<br>This attribute is present<br>when there are 1 or<br>more failed factors.                                                                      |

**Note:** When the Enable flag is true for any criteria, then its related fields will be shown.

Sample Response Body for GET NF Score:

```
{
  "NFScore": 129,
  "detailedReport": {
    "scoringFactors": [
      {
        "criteria": "tps",
        "maxScore": 100,
        "calculatedScore": 75,
        "additionalInfo": {
          "configuredValue": 4000,
          "actualValue": 3000
        }
      },
      {
        "criteria": "serviceHealth",
        "maxScore": 100,
        "calculatedScore": 70,
        "additionalInfo": {
          "totalSvcs": 10,
          "upSvcs": 7
        }
      },
      {
        "criteria": "signallingConnections",
        "maxScore": 100,
        "calculatedScore": 50,
        "additionalInfo": {
          "configuredValue": 50,
          "actualValue": 25
        }
      },
      {
        "criteria": "replicationHealth",
        "maxScore": 100,
        "calculatedScore": 50,
        "additionalInfo": {
          "totalSites": 3,
          "availableLinks": 1
        }
      },
      {
        "criteria": "localityPreference",
        "maxScore": 100, #remove
        "calculatedScore": 100
      },
      {
        "criteria": "activeAlert",
        "score": -30, #rename to "calculatedScore"
        "additionalInfo": {
          "critical": -10,
          "major": -20,
          "minor": 0
        }
      }
    ]
  }
}
```

```

    ]
  },
  "failedFactors": [
    {
      "criteria": "replicationHealth",
      "detail": "failed to calculate replicationHealth score"
    }
  ]
}

```

## 3.16 Configuration for User-Agent Header Generation at Egress Gateway

### Configuring User-Agent Header in Egress Gateway

This section describes the URIs that you can configure for user-agent header generation at Egress Gateway.

The configuration to enable and disable the generation of the user-agent header can be done using REST API exposed by the config-service when sending the following JSON body.

**Table 3-59 Supported REST APIs for User-Agent Generation**

| Description               | HTTP Method or Custom Operation | Resource URI                                                                                    |
|---------------------------|---------------------------------|-------------------------------------------------------------------------------------------------|
| PUT User-Agent Generation | PUT                             | http://<config-service IP>:<config-service PORT>/pcf/nf-common-component/v1/egw/useragentheader |

CURL command for PUT Operation: `curl -X PUT http://10.75.232.35:8000/pcf/nf-common-component/v1/egw/useragentheader -H "Content-Type: application/json" -d`

The sample request body structure for PUT operation is as follows:

```

{
  "enabled": true,
  "nfType": "PCF",
  "nfInstanceId": "fe7d992b-0541-4c7d-ab84-c6d70b1b0555",
  "nfFqdn": "pcf.oracle.org",
  "addFqdnToHeader": true,
  "overwriteHeader": true
}

```

**Table 3-60 Request Body Parameters**

| Field Name                                     | Data Type | Mandatory(M)/Optional(O)/Conditional(C) | Description                                                                                                                                                                                                                                                                                                                      |
|------------------------------------------------|-----------|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| egress-gateway.userAgentHeader.enabled         | Boolean   | M                                       | Specifies whether the feature is enabled or disabled. By default, the value is set to false.                                                                                                                                                                                                                                     |
| egress-gateway.userAgentHeader.nfType          | String    | M                                       | This parameter holds the nfType that will be used to generate the user agent header.                                                                                                                                                                                                                                             |
| egress-gateway.userAgentHeader.nfInstanceId    | String    | O                                       | This parameter represents the UUID of the CNPCF deployment that will be used to generate the user agent header.                                                                                                                                                                                                                  |
| egress-gateway.userAgentHeader.addFqdnToHeader | Boolean   | M                                       | This parameter specifies if the user agent will use the FQDN information under the module to append it when generating the user agent header. The default value is set to 'false' meaning that the FQDN information will not be encoded into the user agent header during its generation. By default, the value is set to false. |
| egress-gateway.userAgentHeader.nfFqdn          | String    | O                                       | This is an optional parameter and can be present or not, if operators want to include the FQDN string configured under this section then the parameter userAgentHeader.addFqdnToHeader needs to be enabled.                                                                                                                      |
| egress-gateway.userAgentHeader.overwriteHeader | Boolean   | M                                       | This parameter is used to govern if we want to include the User-Agent header generated at CNPCF Egress Gateway or forward the User-Agent received from service request. By default it will be set to true as CNPCF always generates its own service requests.                                                                    |



# A

## Result Codes

This section provides detailed information about result codes.

### GET HTTP Method

The following table describes the possible result codes for GET method:

**Table A-1 Result Codes for GET**

| Code | Description           |
|------|-----------------------|
| 200  | OK                    |
| 204  | Successful            |
| 400  | Bad Request           |
| 401  | Unauthorized          |
| 403  | Forbidden             |
| 404  | Not Found             |
| 429  | Too Many Requests     |
| 500  | Internal Server Error |
| 503  | Service Unavailable   |

### PUT HTTP Method

The following table describes the possible result codes for PUT method:

**Table A-2 Result Codes for PUT**

| Code | Description           |
|------|-----------------------|
| 200  | Updated               |
| 201  | Created               |
| 204  | Successfully updated  |
| 400  | Bad Request           |
| 401  | Unauthorized          |
| 403  | Forbidden             |
| 404  | Not Found             |
| 405  | Method Not Allowed    |
| 406  | Not Acceptable        |
| 408  | Request Timeout       |
| 409  | Conflict              |
| 412  | Precondition Failed   |
| 500  | Internal Server Error |
| 503  | Service Unavailable   |
| 504  | Gateway Timeout       |

## POST HTTP Method

The following table describes the possible result codes for POST method:

**Table A-3 Result Codes for POST**

| Code | Description           |
|------|-----------------------|
| 200  | OK                    |
| 201  | Imported/Created      |
| 204  | Successfully created  |
| 400  | Bad Request           |
| 401  | Unauthorized          |
| 403  | Forbidden             |
| 404  | Not Found             |
| 405  | Method Not Allowed    |
| 406  | Not Acceptable        |
| 408  | Request Timeout       |
| 409  | Conflict              |
| 412  | Precondition Failed   |
| 500  | Internal Server Error |
| 503  | Service Unavailable   |
| 504  | Gateway Timeout       |

## DELETE HTTP Method

The following table describes the possible result codes for DELETE method:

**Table A-4 Result Codes for DELETE**

| Code | Description           |
|------|-----------------------|
| 200  | OK                    |
| 204  | Successfully Deleted  |
| 400  | Bad Request           |
| 401  | Unauthorized          |
| 403  | Forbidden             |
| 404  | Not Found             |
| 429  | Too Many Requests     |
| 500  | Internal Server Error |
| 503  | Service Unavailable   |