

Oracle® Communications

Unified Data Repository REST Cloud Native Specification Document



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1

Introduction

This document provides information about the REST specifications for User Data Repository.

Overview

The 5G User Data Repository is one of the main key component of the 5G Service Based Architecture. User Data Repository is a converged repository which is used by other 5G Network Functions to store the data.

Oracle 5G UDR, implemented as cloud native function, offers a unified database for storing application, subscription, authentication, service authorization, policy data, session binding and Application state information. UDR is one of the main key component of the 5G Service Based Architecture. UDR provides a HTTP2 based RESTful interface for other NFs and provisioning clients to access the data stored. As per the 3GPP, the Unified Data Repository (UDR) supports the following functionality:

- Storage and retrieval of subscription data by the UDM.
- Storage and retrieval of policy data by the PCF.
- Storage and retrieval of structured data for exposure.
- Application data (including Packet Flow Descriptions (PFDs) for application detection, AF request information for multiple UEs), by the NEF.

Oracle's 5G UDR :

- Leverages a common Oracle Communications Cloud Native Framework
- Compliant to 3GPP Release 15 specification
- Has tiered architecture providing separation between the connectivity, business logic and data layers
- Uses MySQL NDB Cluster as the backend database in the Data Tier
- Registers with NRF in the 5G network, so the other NFs in the network can discover UDR through NRF.

Note:

In this release, User Data Repository supports only Policy Control Function data.

UDSF (Unstructured Data Storage Function) is the functionality which supports storage and retrieval of unstructured data by any 5G NF. The specifications of UDSF is not defined by 3GPP. This functionality is part of Oracle's 5G UDR solution.

Acronyms

The following table provides information about the acronyms used in the document.

Table 1-1 Acronyms

Field	Description
5G-AN	5G Access Network
5GC	5G Core Network
5G-GUTI	5G Globally Unique Temporary Identifier
5GS	5G System
AMF	Access and Mobility Management Function
AUSF	Authentication Server Function
NEF	Network Exposure Function
NF	Network Function
NRF	Network Repository Function
NSI ID	Network Slice Instance Identifier
NSSAI	Network Slice Selection Assistance Information
NSSF	Network Slice Selection Function
NSSP	Network Slice Selection Policy
PCF	Policy Control Function
SEPP	Security Edge Protection Proxy
UDM	Unified Data Management
UDR	Unified Data Repository
UDSF	Unstructured Data Storage Function

Locate Product Documentation on the Oracle Help Center Site

Oracle Communications customer documentation is available on the web at the Oracle Help Center (OHC) site, <http://docs.oracle.com>. You do not have to register to access these documents. Viewing these files requires Adobe Acrobat Reader, which can be downloaded at <http://www.adobe.com>.

1. Access the Oracle Help Center site at <http://docs.oracle.com>.
2. Click **Industries**.
3. Under the Oracle Communications subheading, click the **Oracle Communications documentation** link.

The Communications Documentation page appears. Most products covered by these documentation sets will appear under the headings "Network Session Delivery and Control Infrastructure" or "Platforms."

4. Click on your Product and then the Release Number.
A list of the entire documentation set for the selected product and release appears.
5. To download a file to your location, right-click the PDF link, select **Save target as** (or similar command based on your browser), and save to a local folder.

Customer Training

Oracle University offers training for service providers and enterprises. Visit our web site to view, and register for, Oracle Communications training:

<http://education.oracle.com/communication>

To obtain contact phone numbers for countries or regions, visit the Oracle University Education web site:

www.oracle.com/education/contacts

My Oracle Support

My Oracle Support 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:

1. Select 2 for New Service Request
2. Select 3 for Hardware, Networking and Solaris Operating System Support
3. Select one of the following options:
 - For Technical issues such as creating a new Service Request (SR), Select 1
 - For Non-technical issues such as registration or assistance with MOS, Select 2

You will be 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.

Emergency Response

In the event of a critical service situation, emergency response is offered by the Customer Access Support (CAS) main number at 1-800-223-1711 (toll-free in the US), or by calling the Oracle Support hotline for your local country from the list at <http://www.oracle.com/us/support/contact/index.html>. The emergency response provides immediate coverage, automatic escalation, and other features to ensure that the critical situation is resolved as rapidly as possible.

A critical situation is defined as a problem with the installed equipment that severely affects service, traffic, or maintenance capabilities, and requires immediate corrective action. Critical situations affect service and/or system operation resulting in one or several of these situations:

- A total system failure that results in loss of all transaction processing capability
- Significant reduction in system capacity or traffic handling capability
- Loss of the system's ability to perform automatic system reconfiguration
- Inability to restart a processor or the system
- Corruption of system databases that requires service affecting corrective actions

- Loss of access for maintenance or recovery operations
- Loss of the system ability to provide any required critical or major trouble notification

Any other problem severely affecting service, capacity/traffic, billing, and maintenance capabilities may be defined as critical by prior discussion and agreement with Oracle.

2

REST Specifications

This section provides information about REST specifications used in the User Data Repository.

Operations Supported for PCF as Consumer

This section provides information about the operations supported for PCF as consumer.

Resource Name: AccessAndMobilityPolicyData

HTTP Method: GET

Base URI: *{apiRoot}/nudr-dr/v1/policy-data/ues/{ueId}/am-data*

Sample Request URL: <https://10.75.212.116:31873/nudr-dr/v1/policy-data/ues/msisdn-777777779/am-data>

Possible Error Codes:

- **400:** "Invalid URI sent from client"
- **404:** "Subscriber does not exist"
- **404:** "Data field does not exist"
- **400:** "Unknown key, the key provided in the request is invalid"

Resource Name: SessionManagementPolicyData

HTTP Method: GET, PATCH

Base URI: *{apiRoot}/nudr-dr/v1/policy-data/ues/{ueId}/sm-data*

Table 2-1 SessionManagementPolicyData

Operation Type	Sample REST URL	Possible Error Codes
GET	Different samples of GET • Complete SM data GET: https://10.75.212.116:31873/nudr-dr/v1/policy-data/ues/msisdn-777777779/sm-data • Using query parameters – https://10.75.212.116:31873/nudr-dr/v1/policy-data/ues/msisdn-777777779/sm-data?dnn=dnn1&snssai=11-abc123&fields=umData – https://10.75.212.116:31873/nudr-dr/v1/policy-data/ues/msisdn-777777779/sm-data?dnn=dnn1&fields=umData,smPolicySnssaiData – https://10.75.212.116:31873/nudr-dr/v1/policy-data/ues/msisdn-777777779/sm-data?snssai=11-abc123&fields=smPolicySnssaiData	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 400: "Unknown key, the key provided in the request is invalid" • 404: "Requested data not found" • 400: "Invalid query parameters supplied"

Table 2-1 (Cont.) SessionManagementPolicyData

Operation Type	Sample REST URL	Possible Error Codes
PATCH	https://10.75.212.116:31873/nudr-dr/v1/policy-data/ues/msisdn-777777779/sm-data Payload: See PATCH-SessionManagementPolicyData	• 400: "Blob syntax error with corresponding error details" • 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 400: "Unknown key, the key provided in the request is invalid" • 400: Data field does not exist.

Resource Name: UEPolicySet

HTTP Method: PUT, GET, PATCH

Base URI: *{apiRoot}/nudr-dr/v1/policy-data/ues/{ueId}/ue-policy-set*

Table 2-2 UEPolicySet

Operation Type	Sample REST URL	Possible Error Codes
PUT	https://localhost:9443/nudr-dr/v1/policy-data/ues/msisdn-111111111/ue-policy-set Payload: See PUT-UEPolicySet	• 400: "Blob syntax error with corresponding error details" • 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 400: "Unknown key, the key provided in the request is invalid"
GET	https://localhost:9443/nudr-dr/v1/policy-data/ues/msisdn-111111111/ue-policy-set	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 400: "Unknown key, the key provided in the request is invalid"

Table 2-2 (Cont.) UEPolicySet

Operation Type	Sample REST URL	Possible Error Codes
PATCH	https://localhost:9443/nudr-dr/v1/policy-data/ues/msisdn-1111111111/ue-policy-set Payload: See PATCH-UEPolicySet	400 : "Blob syntax error with corresponding error details" 400 : "Invalid URI sent from client" 404 : "Subscriber does not exist" 400 : "Unknown key, the key provided in the request is invalid" 400: Data field does not exist

Resource Name: UsageMonitoringInformation

HTTP Method: PUT, GET, DELETE

Base URI: *{apiRoot}/nudr-dr/v1/policy-data/ues/{ueId}/sm-data/{usageMonId}*

Table 2-3 UsageMonitoringInformation

Operation Type	Sample REST URL	Possible Error Codes
GET	https://localhost:9443/nudr-dr/v1/policy-data/ues/msisdn-1111111111/sm-data/mk1	400 : "Invalid URI sent from client" 404 : "Subscriber does not exist" 404 : "Data field does not exist " 400 : "Unknown key, the key provided in the request is invalid"
PUT	https://localhost:9443/nudr-dr/v1/policy-data/ues/msisdn-1111111111/sm-data/mk1 Payload: See PUT-UsageMonitoringInformation	400 : "Blob syntax error with corresponding error details" 400 : "Invalid URI sent from client" 400 : "Unknown key, the key provided in the request is invalid" 400: Data field does not exist.

Table 2-3 (Cont.) UsageMonitoringInformation

Operation Type	Sample REST URL	Possible Error Codes
DELETE	https://localhost:9443/nudr-dr/v1/policy-data/ues/msisdn-111111111/sm-data/mk1	• 400 : "Invalid URI sent from client" • 404 : "Subscriber does not exist" • 400 : "Unknown key, the key provided in the request is invalid" • 400: Data field does not exist.

Provisioning System as Consumer

This section provides operation for provisioning system as consumer.

Resource Name: ProfileData

HTTP Method: POST, PUT, DELETE, GET

Base URI: *{apiRoot}/nudr-dr-prov/v1/profile-data/{ue-id}*

Table 2-4 ProfileData

Operation Type	Sample REST URL	Possible Error Codes
POST	This is for initial subscriber provisioning(Create subscriber) https://localhost:9443/nudr-dr-prov/v1/profile-data/msisdn-1111111113 Payload : See POST-ProfileData You could also add profile-data and policy-data in single rest request, For sample, see POST-ProfileData and Policy Data	• 400: "Invalid URI sent from client" • 400: "Unknown key, the key provided in the request is invalid" • 400: "Payload should contain key-value pair present in URI" • 400: "Invalid content request data supplied" • 400: "Occurrence constraint violation" • 400: "Duplicate key"
PUT	https://localhost:9443/nudr-dr-prov/v1/profile-data/nai-333333332 Payload: PUT-ProfileData	• 400: "Invalid URI sent from client" • 400: "Unknown key, the key provided in the request is invalid" • 400: " Payload should contain key-value pair present in URI " • 400: "Invalid content request data supplied" • 400: "Occurrence constraint violation"

Table 2-4 (Cont.) ProfileData

Operation Type	Sample REST URL	Possible Error Codes
DELETE	https://localhost:9443/nudr-dr-prov/v1/profile-data/nai-3333333332 This operation deletes all data from all DATA tables(PCF,UDM etc.)	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 400: "Unknown key, the key provided in the request is invalid"
GET	https://localhost:9443/nudr-dr-prov/v1/profile-data/msisdn-1111111113	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 400: "Unknown key, the key provided in the request is invalid"

PCF data's provisioning APIs

Resource Name: AccessAndMobilityPolicyData

HTTP Method: PUT, GET, DELETE

Base URI: *{apiRoot}/nudr-dr-prov/v1/policy-data/{ueId}/am-data*

Table 2-5 AccessAndMobilityPolicyData

Operation Type	Sample REST URL	Possible Error Codes
PUT	https://10.75.212.116:31873/nudr-dr-prov/v1/policy-data/msisdn-7777777779/am-data Payload: See PUT-AccessAndMobilityPolicyData	• 400: "Blob syntax error with corresponding error details" • 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 400: "Unknown key, the key provided in the request is invalid"
GET	https://10.75.212.116:31873/nudr-dr/v1/policy-data/ues/msisdn-7777777779/am-data	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 404: "Data field does not exist" • 400: "Unknown key, the key provided in the request is invalid"

Table 2-5 (Cont.) AccessAndMobilityPolicyData

Operation Type	Sample REST URL	Possible Error Codes
DELETE	https://localhost:9443/nudr-dr-prov/v1/policy-data/msisdn-111111111/am-data	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 400: "Unknown key, the key provided in the request is invalid"

Resource Name: SessionManagementPolicyData**HTTP Method:** PUT, GET, DELETE**Base URI:** *{apiRoot}/nudr-dr-prov/v1/policy-data/{ueId}/sm-data*

Table 2-6 SessionManagementPolicyData

Operation Type	Sample REST URL	Possible Error Codes
PUT	https://10.75.212.116:31873/nudr-dr-prov/v1/policy-data/msisdn-777777779/sm-data Payload: PUT-SessionManagementPolicyData	• 400: "Blob syntax error with corresponding error details" • 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 400: "Unknown key, the key provided in the request is invalid"
GET	https://10.75.212.116:31873/nudr-dr-prov/v1/policy-data/msisdn-777777779/sm-data	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 404: "Data field does not exist" • 400: "Unknown key, the key provided in the request is invalid"
DELETE	https://localhost:9443/nudr-dr-prov/v1/policy-data/msisdn-1111111131/sm-data	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 400: "Unknown key, the key provided in the request is invalid"

Resource Name: UEPolicySet**HTTP Method:** PUT, GET, DELETE**Base URI:** *{apiRoot}/nudr-dr-prov/v1/policy-data/{ueId}/ue-policy-set*

Table 2-7 UEPolicySet

Operation Type	Sample REST URL	Possible Error Codes
PUT	https://localhost:9443/nudr-dr/v1/policy-data/ues/msisdn-1111111111/ue-policy-set Payload: See PUT-UEPolicySet	• 400: "Blob syntax error with corresponding error details" • 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 400: "Unknown key, the key provided in the request is invalid"
GET	https://localhost:9443/nudr-dr/v1/policy-data/ues/msisdn-1111111111/ue-policy-set	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 404: "Data field does not exist" • 400: "Unknown key, the key provided in the request is invalid"
DELETE	https://localhost:9443/nudr-dr/v1/policy-data/ues/msisdn-1111111111/ue-policy-set	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 400: "Unknown key, the key provided in the request is invalid"

Management URI Schema Update

The [Table 2-8](#) table provides information about the operations supported for management URI schema update.

Table 2-8 Management URI for Schema Update

Operation Type	URI	Sample Schema	Possible Error Codes
PUT	https://localhost:9443/nudr-dr-mgm/v1/policy-data/schema/am-data	Adding new field custom for am-data. Payload: See PUT-schemablob . This operation will add one new schema with version tag as "v1" and current will point to "v1" now. To rollback to any other schema version which already exists in database, see https://localhost:9443/nudr-dr-mgm/v1/policy-data/schema/am-data/version/v0 .	• 405: "Operation not allowed" (for nudr-dr) • 400: incase of json syntax error with appropriate error msg sent from SQL db.
GET	• To get currently supported schema: https://localhost:9443/nudr-dr-mgm/v1/policy-data/schema/am-data • To get all schema versions supported by a resource. https://localhost:9443/nudr-dr-mgm/v1/policy-data/schema/am-data?version=all • To get any specific schema version: https://localhost:9443/nudr-dr-mgm/v1/policy-data/schema/am-data?version=v1		405: "Operation not allowed" (for nudr-dr)
DELETE	• Schema which is currently in use could not be deleted. • To delete any other stored schema: https://localhost:9443/nudr-dr-mgm/v1/policy-data/schema/am-data/version/v1		405: "Operation not allowed" (in case of deleting current schema)

UDSF Data Operations

The [Table 2-9](#) table provides information about the UDSF Data Operations.

Table 2-9 UDSF Data Operations

Operations Type	URI	Notes	Possible Error codes
PUT	https://localhost:9443/nudsf-dr/v1/udsf/msisdn-1111111111/udsf-data	Sample data blob for UDSF data could be: <code>{"a":1, "b":2}</code>	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 400: "Unknown key, the key provided in the request is invalid" • 400: "Blob syntax error with corresponding error details"
GET	https://localhost:9443/nudsf-dr/v1/udsf/msisdn-1111111111/udsf-data	-	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 404: "Data field does not exist" • 400: "Unknown key, the key provided in the request is invalid"
DELETE	https://localhost:9443/nudsf-dr/v1/udsf/msisdn-1111111111/udsf-data	-	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 400: "Unknown key, the key provided in the request is invalid"

Policy Data Subscription Operations

The [Table 2-10](#) table provides information about the Policy Data Subscription Operations.

Table 2-10 Policy Data Subscription Operations

Operations Type	URI	Notes	Possible Error codes
POST	http://localhost:8080/nudr-dr/v1/policy-data/subs-to-notify	{ "notificationUri": " http://mlu-pcf-api-gateway.mlu-pcf.svc/user-service/userservice/notification/msisd-7878787878 ", "monitoredResourceUri": [" http://sims-udr-2-udr-simulator.sims-udr-2:5807/nudr-dr/v1/policy-data/ues/msisd-7878787878/ue-policy-set "], "supportedFeatures": "f" }	• 400: " Schema validation failed for this request"
PUT	http://localhost:8080/nudr-dr/v1/policy-data/subs-to-notify/6	- { "notificationUri": " http://mlu-pcf-api-gateway.mlu-pcf.svc/user-service/userservice/notification/msisd-7878787878 ", "monitoredResourceUri": [" http://sims-udr-2-udr-simulator.sims-udr-2:5807/nudr-dr/v1/policy-data/ues/msisd-7878787878/ue-policy-set "], "supportedFeatures": "f" }	• 400: " Schema validation failed for this request" • 404: "Not found "
GET	http://localhost:8080/nudr-dr-prov/v1/policy-data/subs-to-notify/6		404: " Requested data not found "
DELETE	http://localhost:8080/nudr-dr/v1/policy-data/subs-to-notify/6	-	404: "Not found"

List of Title and Type under Problem Details in Error Response

The [Table 2-11](#) table lists the titles which can be accompanied by any of the types given below.

Table 2-11 Titles and Type under Problem Details in Error Response

Error Codes	Title	Type
400	Bad request	Invalid Data Content Schema Validation Failure Invalid URI Occurrence Constraint Violation Key Not Supported Invalid Payload Invalid Value Invalid JSON Format Invalid Number Format
404	Not Found	Not Found
405	Operation Not Allowed	Operation Not Allowed
500	Internal Server Error	Invalid Result Set Access Data Access Denied Data Access Denied/Resource Failure Temporary Resource Failure Acquire Lock Failure Transaction Rollback
501	Not Implemented	Bad SQL Grammar

A

Payload Reference for PCF

This section provides the details of payloads for the following PCF Operations.

- [PATCH-SessionManagementPolicyData](#)
- [PUT-UEPolicySet](#)
- [PATCH-UEPolicySet](#)
- [PUT-UsageMonitoringInformation](#)

PATCH-SessionManagementPolicyData

```
{
  "mk1": {
    "scopes": {
      "11-abc123": {
        "dnn": [
          "dnn1"
        ],
        "snssai": {
          "sd": "abc123",
          "sst": 11
        }
      },
      "22-abc123": {
        "dnn": [
          "dnn2"
        ],
        "snssai": {
          "sd": "abc123",
          "sst": 22
        }
      }
    }
  },
}
```

```

    "33-abc123": {
      "dnn": [
        "dnn1",
        "dnn2"
      ],
      "snssai": {
        "sd": "abc123",
        "sst": 33
      }
    }
  },
  "limitId": "mk1",
  "umLevel": "SERVICE_LEVEL",
  "resetTime": "2018-01-02T08:17:14.090Z",
  "allowedUsage": {
    "duration": 9006,
    "totalVolume": 8888,
    "uplinkVolume": 6666,
    "downlinkVolume": 7777
  }
}

```

PUT-UEPolicySet

```

{
  "praInfos": {"p1": {
    "praId": "p1",

    "trackingAreaList": [{
      "plmnId": {

```

```
        "mcc": "976",
        "mnc": "32"
    },
    "tac": "5CB6"
},
{
    "plmnId": {
        "mcc": "977",
        "mnc": "33"
    },
    "tac": "5CB7"
}
],
"ecgiList": [{
    "plmnId": {
        "mcc": "976",
        "mnc": "32"
    },
    "eutraCellId": "92FFdBE"
},
{
    "plmnId": {
        "mcc": "977",
        "mnc": "33"
    },
    "eutraCellId": "8F868C4"
}
],
"ncgiList": [{
    "plmnId": {
        "mcc": "976",
```

```
        "mnc": "32"
      },
      "nrCellId": "b2fB6fE9D"
    },
    {
      "plmnId": {
        "mcc": "977",
        "mnc": "33"
      },
      "nrCellId": "5d1B4127b"
    }
  ],
  "globalRanNodeIdList": [{
    "plmnId": {
      "mcc": "965",
      "mnc": "235"
    },
    "n3IwfId": "fFf0f2AFbFa16CEfE7",
    "gNbId": {
      "bitLength": 25,
      "gNbValue": "1A8F1D"
    },
    "ngeNbId": "SMacroNGeNB-f077d"
  },
  {
    "plmnId": {
      "mcc": "967",
      "mnc": "238"
    },
    "n3IwfId": "fFf0f2AFbFa16CEfE7",
```



```
        "gNbId": {
            "bitLength": 25,
            "gNbValue": "1A8F1D"
        },
        "ngeNbId": "SMacroNGeNB-4Ea7C"
    }
]
}},
"subscCats": ["cat1", "cat2"],
"uePolicySections": {
    "111": {
        "upsi": "111",
        "uePolicySectionInfo": null
    },
    "33": {
        "upsi": "33",
        "uePolicySectionInfo": null
    }
},
"upsis": ["111", "33"],
"allowedRouteSelDescs": {
    "965-235": {
        "servingPlmn": {
            "mcc": "965",
            "mnc": "235"
        },
        "snssaiRouteSelDescs": [{
            "snssai": {
                "sd": "abc123",
                "sst": 11
            }
        },
    },
}
```

```

        "dnnRouteSelDescs": [{
            "dnn": "dnn1",
            "sscModes": ["SSC_MODE_1", "SSC_MODE_2"],
            "pduSessTypes": ["IPv4"]
        }]
    }]
}

},

"andspInd": true,

"pei": "imei-355375345274757",

"osIds": ["bceafb30-31bd-4b8d-b3c2-ed79d029531a",
"cc9d9f97-0127-497c-9bca-79e8e9080ea8"]
}

```

PATCH-UEPolicySet

```

{
    "pei": "imei-355375345274799",
    "osIds": [
        "bceafb30-31bd-4b8d-b3c2-ed79d029531a",
        "cc9d9f97-0127-497c-9bca-79e8e9080ea8"
    ],
    "upsis": [
        "1123333333",
        "3326666666666666"
    ],
    "andspInd": true,
    "uePolicySections": {
        "112": {
            "upsi": "1111",
            "uePolicySectionInfo": null
        }
    }
}

```

```

    },
    "332": {
        "upsi": "3322",
        "uePolicySectionInfo": null
    }
}
}

```

PUT-UsageMonitoringInformation

```

{
    "scopes": {
        "11-abc123": {
            "dnn": [
                "dnn1"
            ],
            "snssai": {
                "sd": "abc123",
                "sst": 11
            }
        },
        "22-abc123": {
            "dnn": [
                "dnn2"
            ],
            "snssai": {
                "sd": "abc123",
                "sst": 22
            }
        },
        "33-abc123": {

```

```
      "dnn": [
        "dnn1",
        "dnn2"
      ],
      "snssai": {
        "sd": "abc123",
        "sst": 33
      }
    },
    "limitId": "mk1",
    "umLevel": "SERVICE_LEVEL",
    "resetTime": "2018-01-02T08:17:14.090Z",
    "allowedUsage": {
      "duration": 9000,
      "totalVolume": 8888,
      "uplinkVolume": 6666,
      "downlinkVolume": 7777
    }
  }
}
```

B

Payload Reference for Provisioning System

This section provides the details of payloads for the following Provisioning System Operations.

- [POST-ProfileData](#)
- [POST-ProfileData and Policy Data](#)
- [PUT-ProfileData](#)
- [PUT-AccessAndMobilityPolicyData](#)
- [PUT-SessionManagementPolicyData](#)
- [PUT-UEPolicySet](#)

POST-ProfileData

```
{
  "profile-data": {
    "MSISDN": ["1111111112", "1111111113"],
    "IMSI": ["2222222221", "2222222222", "2222222223"],
    "NAI": ["3333333331", "3333333332", "3333333333"]
  }
}
```

POST-ProfileData and Policy Data

```
{
  "profile-data": {
    "MSISDN": ["9111111111", "9211111111", "1111111113"]
  },
  "policy-data": {
    "am-data": {
      "praInfos": {
        "p1": {
          "praId": "p1",
          "trackingAreaList": [{
            "plmnId": {
              "mcc": "976",
              "mnc": "32"
            },
            "tac": "5CB6"
          },
          {
            "plmnId": {
              "mcc": "977",
              "mnc": "33"
            },
            "tac": "5CB7"
          }
        ],
        "ecgiList": [{
```

```

        "plmnId": {
            "mcc": "976",
            "mnc": "32"
        },
        "eutraCellId": "92FFdBE"
    },
    {
        "plmnId": {
            "mcc": "977",
            "mnc": "33"
        },
        "eutraCellId": "8F868C4"
    }
],
"ncgiList": [{
    "plmnId": {
        "mcc": "976",
        "mnc": "32"
    },
    "nrCellId": "b2fB6fE9D"
},
{
    "plmnId": {
        "mcc": "977",
        "mnc": "33"
    },
    "nrCellId": "5d1B4127b"
}
],
"globalRanNodeIdList": [{
    "plmnId": {
        "mcc": "965",
        "mnc": "235"
    },
    "n3IwfId": "fFf0f2AFbFa16CEfE7",
    "gNbId": {
        "bitLength": 25,
        "gNbValue": "1A8F1D"
    },
    "ngeNbId": "SMacroNGeNB-f077d"
},
{
    "plmnId": {
        "mcc": "967",
        "mnc": "238"
    },
    "n3IwfId": "fFf0f2AFbFa16CEfE7",
    "gNbId": {
        "bitLength": 25,
        "gNbValue": "1A8F1D"
    },
    "ngeNbId": "SMacroNGeNB-4Ea7C"
}
]
}
},
"subscCats": ["cat1", "cat2"]
},
"sm-data":
{

```

```

"umData": {
  "mk1": {
    "scopes": {
      "11-abc123": {
        "dnn": [
          "dnn1"
        ],
        "snssai": {
          "sd": "abc123",
          "sst": 11
        }
      },
      "22-abc123": {
        "dnn": [
          "dnn2"
        ],
        "snssai": {
          "sd": "abc123",
          "sst": 22
        }
      },
      "33-abc123": {
        "dnn": [
          "dnn1",
          "dnn2"
        ],
        "snssai": {
          "sd": "abc123",
          "sst": 33
        }
      }
    },
    "limitId": "mk1",
    "umLevel": "SERVICE_LEVEL",
    "resetTime": "2018-01-02T08:17:14.090Z",
    "allowedUsage": {
      "duration": 9000,
      "totalVolume": 8888,
      "uplinkVolume": 6666,
      "downlinkVolume": 7777
    }
  }
},
"umDataLimits": {
  "mk1": {
    "scopes": {
      "11-abc123": {
        "dnn": [
          "dnn1"
        ],
        "snssai": {
          "sd": "abc123",
          "sst": 11
        }
      },
      "22-abc123": {
        "dnn": [
          "dnn2"
        ],
        "snssai": {
          "sd": "abc123",

```

```

        "sst": 22
      }
    },
    "33-abc123": {
      "dnn": [
        "dnn1",
        "dnn2"
      ],
      "snssai": {
        "sd": "abc123",
        "sst": 33
      }
    }
  },
  "endDate": "2018-11-05T08:17:14.090Z",
  "limitId": "mk1",
  "umLevel": "SESSION_LEVEL",
  "startDate": "2018-09-05T08:17:14.090Z",
  "usageLimit": {
    "duration": 6000,
    "totalVolume": 9000,
    "uplinkVolume": 5000,
    "downlinkVolume": 4000
  },
  "resetPeriod": {
    "period": "WEEKLY",
    "maxNumPeriod": 2
  }
}
},
"smPolicySnssaiData": {
  "11-abc123": {
    "snssai": {
      "sd": "abc123",
      "sst": 11
    }
  },
  "smPolicyDnnData": {
    "dnn1": {
      "dnn": "dnn1",
      "gbrDL": "7788 Kbps",
      "gbrUL": "5566 Kbps",
      "online": true,
      "chfInfo": {
        "primaryChfAddress": "1.1.1.1",
        "secondaryChfAddress": "2.2.2.2"
      },
      "offline": true,
      "praInfos": {
        "p1": {
          "praId": "p1",
          "ecgiList": [{
            "plmnId": {
              "mcc": "976",
              "mnc": "32"
            },
            "eutraCellId": "92FFdBE"
          }
        ],
        "p2": {
          "plmnId": {
            "mcc": "977",
            "mnc": "33"
          }
        }
      }
    }
  }
}

```



```

        },
        "eutraCellId": "8F868C4"
    },
    ],
    "ncgiList": [{
        "plmnId": {
            "mcc": "976",
            "mnc": "32"
        },
        "nrCellId": "b2fB6fE9D"
    },
    {
        "plmnId": {
            "mcc": "977",
            "mnc": "33"
        },
        "nrCellId": "5d1B4127b"
    }
    ],
    "trackingAreaList": [{
        "tac": "5CB6",

        "plmnId": {
            "mcc": "976",

            "mnc": "32"
        }
    },
    {
        "tac": "5CB7",

        "plmnId": {
            "mcc": "977",

            "mnc": "33"
        }
    }
    ],
    "globalRanNodeIdList": [{
        "gNbId": {
            "gNbValue": "1A8F1D",

            "bitLength": 25
        },

        "plmnId": {

```

```

        "mcc": "965",
        "mnc": "235"
    },
    "n3IwfId": "FFf0f2AFbFa16CEfE7",
    "ngeNbId": "SMacroNGeNB-f077d"
},
{
    "gNbId": {
        "gNbValue": "1A8F1D",
        "bitLength": 25
    },
    "plmnId": {
        "mcc": "967",
        "mnc": "238"
    },
    "n3IwfId": "FFf0f2AFbFa16CEfE7",
    "ngeNbId": "SMacroNGeNB-4Ea7C"
}
]
}
},
"ipv4Index": 0,
"ipv6Index": 0,
"subscCats": [
    "cat1",
    "cat2"
],
"adcSupport": true,
"mpsPriority": true,
"allowedServices": [
    "ser1",

```

```

        "ser2"
    ],
    "mpsPriorityLevel": 2,
    "imsSignallingPrio": true,
    "refUmDataLimitIds": {
        "mk1": {
            "monkey": [
                "monkey1"
            ],
            "limitId": "mk1"
        }
    },
    "subscSpendingLimits": true
}

},
"22-abc123": {
    "snssai": {
        "sd": "abc123",
        "sst": 22
    },
    "smPolicyDnnData": {
        "dnn": {
            "dnn": "dnn2",
            "gbrDL": "7788 Kbps",
            "gbrUL": "5566 Kbps",
            "online": true,
            "chfInfo": {
                "primaryChfAddress": "1.1.1.1",
                "secondaryChfAddress": "2.2.2.2"
            }
        }
    }
}

```

```

},
"offline": true,
"praInfos": {
  "p1": {
    "praId": "p1",
    "ecgiList": [{
      "plmnId": {
        "mcc": "976",
        "mnc": "32"
      },
      "eutraCellId": "92FFdBE"
    },
    {
      "plmnId": {
        "mcc": "977",
        "mnc": "33"
      },
      "eutraCellId": "8F868C4"
    }
  ],
  "ncgiList": [{
    "plmnId": {
      "mcc": "976",
      "mnc": "32"
    },
    "nrCellId": "b2fB6fE9D"
  },
  {
    "plmnId": {
      "mcc": "977",
      "mnc": "33"
    }
  }
]

```

```

    },
    "nrCellId": "5d1B4127b"
  }
],

"trackingAreaList": [{
  "tac": "5CB6",
  "plmnId": {
    "mcc": "976",
    "mnc": "32"
  }
},
{
  "tac": "5CB7",
  "plmnId": {
    "mcc": "977",
    "mnc": "33"
  }
}
],

"globalRanNodeIdList": [{
  "gNbId": {
    "gNbValue": "1A8F1D",
    "bitLength": 25
  },
  "plmnId": {
    "mcc": "965",
    "mnc": "235"
  },
  "n3IwfId": "fFf0f2AFbFa16CEfE7",

```

```

        "ngcNbId": "SMacroNGeNB-f077d"
    },
    {
        "gNbId": {
            "gNbValue": "1A8F1D",
            "bitLength": 25
        },
        "plmnId": {
            "mcc": "967",
            "mnc": "238"
        },
        "n3IwfId": "fFf0f2AFbFa16CEfE7",
        "ngcNbId": "SMacroNGeNB-4Ea7C"
    }
]
}
},
"ipv4Index": 0,
"ipv6Index": 0,
"subscCats": [
    "cat1",
    "cat2"
],
"adcSupport": true,
"mpsPriority": true,
"allowedServices": [
    "ser1",
    "ser2"
],
"mpsPriorityLevel": 2,
"imsSignallingPrio": true,

```

```

        "refUmDataLimitIds": {
            "mk1": {
                "monkey": [
                    "monkey1"
                ],
                "limitId": "mk1"
            }
        },
        "subscSpendingLimits": true
    }
}

},
"33-abc123": {
    "snssai": {
        "sd": "abc123",
        "sst": 33
    },
    "smPolicyDnnData": {
        "dnn1": {
            "dnn": "dnn1",
            "gbrDL": "7788 Kbps",
            "gbrUL": "5566 Kbps",
            "online": true,
            "chfInfo": {
                "primaryChfAddress": "1.1.1.1",
                "secondaryChfAddress": "2.2.2.2"
            },
            "offline": true,
            "praInfos": {
                "p1": {

```

```
"praId": "p1",
"ecgiList": [{
  "plmnId": {
    "mcc": "976",
    "mnc": "32"
  },
  "eutraCellId": "92FFdBE"
},
{
  "plmnId": {
    "mcc": "977",
    "mnc": "33"
  },
  "eutraCellId": "8F868C4"
}
],
"ncgiList": [{
  "plmnId": {
    "mcc": "976",
    "mnc": "32"
  },
  "nrCellId": "b2fB6fE9D"
},
{
  "plmnId": {
    "mcc": "977",
    "mnc": "33"
  },
  "nrCellId": "5d1B4127b"
}
],
```



```

"trackingAreaList": [{
    "tac": "5CB6",
    "plmnId": {
        "mcc": "976",
        "mnc": "32"
    }
},
{
    "tac": "5CB7",
    "plmnId": {
        "mcc": "977",
        "mnc": "33"
    }
}
],
"globalRanNodeIdList": [{
    "gNbId": {
        "gNbValue": "1A8F1D",
        "bitLength": 25
    },
    "plmnId": {
        "mcc": "965",
        "mnc": "235"
    },
    "n3IwfId": "FFf0f2AFbFa16CEfE7",
    "ngeNbId": "SMacroNGeNB-f077d"
},
{
    "gNbId": {

```

```

        "gNbValue": "1A8F1D",
        "bitLength": 25
    },
    "plmnId": {
        "mcc": "967",
        "mnc": "238"
    },
    "n3IwfId": "fFf0f2AFbFa16CEfE7",
    "ngeNbId": "SMacroNGeNB-4Ea7C"
    }
    ]
    }
    },
    "ipv4Index": 0,
    "ipv6Index": 0,
    "subscCats": [
        "cat1",
        "cat2"
    ],
    "adcSupport": true,
    "mpsPriority": true,
    "allowedServices": [
        "ser1",
        "ser2"
    ],
    "mpsPriorityLevel": 2,
    "imsSignallingPrio": true,
    "refUmDataLimitIds": {
        "mk1": {
            "monkey": [
                "monkey1"
            ]
        }
    }
}

```

```

        ],
        "limitId": "mk1"
    }
},
"subscSpendingLimits": true
},
"dnn2": {
    "dnn": "dnn2",
    "gbrDL": "7788 Kbps",
    "gbrUL": "5566 Kbps",
    "online": true,
    "chfInfo": {
        "primaryChfAddress": "1.1.1.1",
        "secondaryChfAddress": "2.2.2.2"
    },
    "offline": true,
    "praInfos": {
        "p1": {
            "praId": "p1",
            "ecgiList": [{
                "plmnId": {
                    "mcc": "976",
                    "mnc": "32"
                },
                "eutraCellId": "92FFdBE"
            }],
            {
                "plmnId": {
                    "mcc": "977",
                    "mnc": "33"
                }
            }
        }
    }
}

```

```

    },
    "eutraCellId": "8F868C4"
  }
],
"ncgiList": [{
  "plmnId": {
    "mcc": "976",
    "mnc": "32"
  },
  "nrCellId": "b2fB6fE9D"
},
{
  "plmnId": {
    "mcc": "977",
    "mnc": "33"
  },
  "nrCellId": "5d1B4127b"
}
],

"trackingAreaList": [{
  "tac": "5CB6",
  "plmnId": {
    "mcc": "976",
    "mnc": "32"
  }
},
{
  "tac": "5CB7",
  "plmnId": {
    "mcc": "977",

```

```

        "mnc": "33"
      }
    }
  ],
  "globalRanNodeIdList": [{
    "gNbId": {
      "gNbValue": "1A8F1D",
      "bitLength": 25
    },
    "plmnId": {
      "mcc": "965",
      "mnc": "235"
    },
    "n3IwfId": "FFf0f2AFbFa16CEfE7",
    "ngeNbId": "SMacroNGeNB-f077d"
  },
  {
    "gNbId": {
      "gNbValue": "1A8F1D",
      "bitLength": 25
    },
    "plmnId": {
      "mcc": "967",
      "mnc": "238"
    },
    "n3IwfId": "FFf0f2AFbFa16CEfE7",
    "ngeNbId": "SMacroNGeNB-4Ea7C"
  }
]
}

```

```

    },
    "ipv4Index": 0,
    "ipv6Index": 0,
    "subscCats": [
        "cat1",
        "cat2"
    ],
    "adcSupport": true,
    "mpsPriority": true,
    "allowedServices": [
        "ser1",
        "ser2"
    ],
    "mpsPriorityLevel": 2,
    "imsSignallingPrio": true,
    "refUmDataLimitIds": {
        "mk1": {
            "monkey": [
                "monkey1"
            ],
            "limitId": "mk1"
        }
    },
    "subscSpendingLimits": true
}

}

}

},
"ue-policy-set": {
    "praInfos": {

```

```

"p1": {
  "praId": "p1",

  "trackingAreaList": [{
    "plmnId": {
      "mcc": "976",
      "mnc": "32"
    },
    "tac": "5CB6"
  },
  {
    "plmnId": {
      "mcc": "977",
      "mnc": "33"
    },
    "tac": "5CB7"
  }
],
"ecgiList": [{
  "plmnId": {
    "mcc": "976",
    "mnc": "32"
  },
  "eutraCellId": "92FFdBE"
},
{
  "plmnId": {
    "mcc": "977",
    "mnc": "33"
  },

```

```

        "eutraCellId": "8F868C4"
    }
],
"ncgiList": [{
    "plmnId": {
        "mcc": "976",
        "mnc": "32"
    },
    "nrCellId": "b2fB6fE9D"
},
{
    "plmnId": {
        "mcc": "977",
        "mnc": "33"
    },
    "nrCellId": "5d1B4127b"
}
],
"globalRanNodeIdList": [{
    "plmnId": {
        "mcc": "965",
        "mnc": "235"
    },
    "n3IwfId": "fFf0f2AFbFa16CEfE7",
    "gNbId": {
        "bitLength": 25,
        "gNbValue": "1A8F1D"
    },
    "ngeNbId": "SMacroNGeNB-f077d"
},
{

```



```

        "plmnId": {
            "mcc": "967",
            "mnc": "238"
        },
        "n3IwfId": "fFf0f2AFbFa16CEfE7",
        "gNbId": {
            "bitLength": 25,
            "gNbValue": "1A8F1D"
        },
        "ngeNbId": "SMacroNGeNB-4Ea7C"
    }
]
}
},
"subscCats": ["cat1", "cat2"],
"uePolicySections": {
    "111": {
        "upsi": "111",
        "uePolicySectionInfo": null
    },
    "33": {
        "upsi": "33",
        "uePolicySectionInfo": null
    }
},
"upsis": ["111", "33"],
"allowedRouteSelDescs": {
    "965-235": {
        "servingPlmn": {
            "mcc": "965",

```

```

        "mnc": "235"
      },
      "snssaiRouteSelDescs": [{
        "snssai": {
          "sd": "abc123",
          "sst": 11
        },
        "dnnRouteSelDescs": [{
          "dnn": "dnn1",
          "sscModes": ["SSC_MODE_1", "SSC_MODE_2"],
          "pduSessTypes": ["IPV4"]
        }]
      }]
    },
    "andspInd": true,
    "pei": "imei-355375345274757",
    "osIds": ["bceafb30-31bd-4b8d-b3c2-ed79d029531a",
      "cc9d9f97-0127-497c-9bca-79e8e9080ea8"]
  }
}

```

PUT-ProfileData

```

{
  "profile-data": {
    "MSISDN": ["1111111112", "1111111113", "1111111114", "1111111115",
      "1111111116"],
    "IMSI": ["2222222221", "2222222222", "2222222223"],
    "NAI": ["3333333331", "3333333332", "3333333333"]
  }
}

```

PUT-AccessAndMobilityPolicyData

```

{
  "praInfos":{

```

```

"p1": {
  "praId": "p1",
  "trackingAreaList": [{
    "plmnId": {
      "mcc": "976",
      "mnc": "32"
    },
    "tac": "5CB6"
  },
  {
    "plmnId": {
      "mcc": "977",
      "mnc": "33"
    },
    "tac": "5CB7"
  }
],
"ecgiList": [{
  "plmnId": {
    "mcc": "976",
    "mnc": "32"
  },
  "eutraCellId": "92FFdBE"
},
{
  "plmnId": {
    "mcc": "977",
    "mnc": "33"
  },
  "eutraCellId": "8F868C4"
}

```

```

    }
  ],
  "ncgiList": [{
    "plmnId": {
      "mcc": "976",
      "mnc": "32"
    },
    "nrCellId": "b2fB6fE9D"
  },
  {
    "plmnId": {
      "mcc": "977",
      "mnc": "33"
    },
    "nrCellId": "5d1B4127b"
  }
  ],
  "globalRanNodeIdList": [{
    "plmnId": {
      "mcc": "965",
      "mnc": "235"
    },
    "n3IwfId": "fFf0f2AFbFa16CEfE7",
    "gNbId": {
      "bitLength": 25,
      "gNbValue": "1A8F1D"
    },
    "ngeNbId": "SMacroNGeNB-f077d"
  },
  {
    "plmnId": {

```

```

        "mcc": "967",
        "mnc": "238"
    },
    "n3IwfId": "fFf0f2AFbFa16CEfE7",
    "gNbId": {
        "bitLength": 25,
        "gNbValue": "1A8F1D"
    },
    "ngeNbId": "SMacroNGeNB-4Ea7C"
}
]
}},
"subscCats": ["cat1", "cat2"]
}

```

PUT-SessionManagementPolicyData

```

{
    "umData": {
        "mk1": {
            "scopes": {
                "11-abc123": {
                    "dnn": [
                        "dnn1"
                    ],
                    "snssai": {
                        "sd": "abc123",
                        "sst": 11
                    }
                }
            },
            "22-abc123": {

```

```

        "dnn": [
            "dnn2"
        ],
        "snssai": {
            "sd": "abc123",
            "sst": 22
        }
    },
    "33-abc123": {
        "dnn": [
            "dnn1",
            "dnn2"
        ],
        "snssai": {
            "sd": "abc123",
            "sst": 33
        }
    }
},
"limitId": "mk1",
"umLevel": "SERVICE_LEVEL",
"resetTime": "2018-01-02T08:17:14.090Z",
"allowedUsage": {
    "duration": 9000,
    "totalVolume": 8888,
    "uplinkVolume": 6666,
    "downlinkVolume": 7777
}
}
},
"umDataLimits": {

```

```
"mk1": {
  "scopes": {
    "11-abc123": {
      "dnn": [
        "dnn1"
      ],
      "snssai": {
        "sd": "abc123",
        "sst": 11
      }
    },
    "22-abc123": {
      "dnn": [
        "dnn2"
      ],
      "snssai": {
        "sd": "abc123",
        "sst": 22
      }
    },
    "33-abc123": {
      "dnn": [
        "dnn1",
        "dnn2"
      ],
      "snssai": {
        "sd": "abc123",
        "sst": 33
      }
    }
  }
}
```

```

    },
    "endDate": "2018-11-05T08:17:14.090Z",
    "limitId": "mk1",
    "umLevel": "SESSION_LEVEL",
    "startDate": "2018-09-05T08:17:14.090Z",
    "usageLimit": {
        "duration": 6000,
        "totalVolume": 9000,
        "uplinkVolume": 5000,
        "downlinkVolume": 4000
    },
    "resetPeriod": {
        "period": "WEEKLY",
        "maxNumPeriod": 2
    }
}
},
"smPolicySnssaiData": {
    "11-abc123": {
        "snssai": {
            "sd": "abc123",
            "sst": 11
        },
        "smPolicyDnnData": {
            "dnn": {
                "dnn": "dnn1",
                "gbrDL": "7788 Kbps",
                "gbrUL": "5566 Kbps",
                "online": true,
                "chfInfo": {
                    "primaryChfAddress": "1.1.1.1",

```



```
"secondaryChfAddress": "2.2.2.2"
},
"offline": true,
"praInfos": {
  "p1": {
    "praId": "p1",
    "ecgiList": [
      {
        "plmnId": {
          "mcc": "976",
          "mnc": "32"
        },
        "eutraCellId": "92FFdBE"
      },
      {
        "plmnId": {
          "mcc": "977",
          "mnc": "33"
        },
        "eutraCellId": "8F868C4"
      }
    ],
    "ncgiList": [
      {
        "plmnId": {
          "mcc": "976",
          "mnc": "32"
        },
        "nrCellId": "b2fB6fE9D"
      },

```

```
{
  "plmnId": {
    "mcc": "977",
    "mnc": "33"
  },
  "nrCellId": "5d1B4127b"
}
],
```

```
"trackingAreaList": [
  {
    "tac": "5CB6",
    "plmnId": {
      "mcc": "976",
      "mnc": "32"
    }
  },
  {
    "tac": "5CB7",
    "plmnId": {
      "mcc": "977",
      "mnc": "33"
    }
  }
],
```

```
"globalRanNodeIdList": [
  {
    "gNbId": {
      "gNbValue": "1A8F1D",
      "bitLength": 25
    }
  },
```

```
        "plmnId": {
            "mcc": "965",
            "mnc": "235"
        },
        "n3IwfId": "fFf0f2AFbFa16CEfE7",
        "ngeNbId": "SMacroNGeNB-f077d"
    },
    {
        "gNbId": {
            "gNbValue": "1A8F1D",
            "bitLength": 25
        },
        "plmnId": {
            "mcc": "967",
            "mnc": "238"
        },
        "n3IwfId": "fFf0f2AFbFa16CEfE7",
        "ngeNbId": "SMacroNGeNB-4Ea7C"
    }
]
}
},
"ipv4Index": 0,
"ipv6Index": 0,
"subscCats": [
    "cat1",
    "cat2"
],
"adcSupport": true,
"mpsPriority": true,
```

```

        "allowedServices": [
            "ser1",
            "ser2"
        ],
        "mpsPriorityLevel": 2,
        "imsSignallingPrio": true,
        "refUmDataLimitIds": {
            "mk1": {
                "monkey": [
                    "monkey1"
                ],
                "limitId": "mk1"
            }
        },
        "subscSpendingLimits": true
    }
},
"22-abc123": {
    "snssai": {
        "sd": "abc123",
        "sst": 22
    },
    "smPolicyDnnData": {
        "dnn2": {
            "dnn": "dnn2",
            "gbrDL": "7788 Kbps",
            "gbrUL": "5566 Kbps",
            "online": true,
            "chfInfo": {
                "primaryChfAddress": "1.1.1.1",

```

```

        "secondaryChfAddress": "2.2.2.2"
    },
    "offline": true,
    "praInfos": {
        "p1": {
            "praId": "p1",
            "ecgiList": [
                {
                    "plmnId": {
                        "mcc": "976",
                        "mnc": "32"
                    },
                    "eutraCellId": "92FFdBE"
                },
                {
                    "plmnId": {
                        "mcc": "977",
                        "mnc": "33"
                    },
                    "eutraCellId": "8F868C4"
                }
            ],
            "ncgiList": [
                {
                    "plmnId": {
                        "mcc": "976",
                        "mnc": "32"
                    },
                    "nrCellId": "b2fB6fE9D"
                },
            ],

```

```
{
  "plmnId": {
    "mcc": "977",
    "mnc": "33"
  },
  "nrCellId": "5d1B4127b"
}
],
```

```
"trackingAreaList": [
  {
    "tac": "5CB6",
    "plmnId": {
      "mcc": "976",
      "mnc": "32"
    }
  },
  {
    "tac": "5CB7",
    "plmnId": {
      "mcc": "977",
      "mnc": "33"
    }
  }
],
```

```
"globalRanNodeIdList": [
  {
    "gNbId": {
      "gNbValue": "1A8F1D",
      "bitLength": 25
    }
  },
```

```

        "plmnId": {
            "mcc": "965",
            "mnc": "235"
        },
        "n3IwfId": "fFf0f2AFbFa16CEfE7",
        "ngeNbId": "SMacroNGeNB-f077d"
    },
    {
        "gNbId": {
            "gNbValue": "1A8F1D",
            "bitLength": 25
        },
        "plmnId": {
            "mcc": "967",
            "mnc": "238"
        },
        "n3IwfId": "fFf0f2AFbFa16CEfE7",
        "ngeNbId": "SMacroNGeNB-4Ea7C"
    }
]
}
},
"ipv4Index": 0,
"ipv6Index": 0,
"subscCats": [
    "cat1",
    "cat2"
],
"adcSupport": true,
"mpsPriority": true,

```

```

        "allowedServices": [
            "ser1",
            "ser2"
        ],
        "mpsPriorityLevel": 2,
        "imsSignallingPrio": true,
        "refUmDataLimitIds": {
            "mk1": {
                "monkey": [
                    "monkey1"
                ],
                "limitId": "mk1"
            }
        },
        "subscSpendingLimits": true
    }
},
"33-abc123": {
    "snssai": {
        "sd": "abc123",
        "sst": 33
    },
    "smPolicyDnnData": {
        "dnn1": {
            "dnn": "dnn1",
            "gbrDL": "7788 Kbps",
            "gbrUL": "5566 Kbps",
            "online": true,
            "chfInfo": {
                "primaryChfAddress": "1.1.1.1",

```



```

        "secondaryChfAddress": "2.2.2.2"
    },
    "offline": true,
    "praInfos": {
        "p1": {
            "praId": "p1",
            "ecgiList": [
                {
                    "plmnId": {
                        "mcc": "976",
                        "mnc": "32"
                    },
                    "eutraCellId": "92FFdBE"
                },
                {
                    "plmnId": {
                        "mcc": "977",
                        "mnc": "33"
                    },
                    "eutraCellId": "8F868C4"
                }
            ],
            "ncgiList": [
                {
                    "plmnId": {
                        "mcc": "976",
                        "mnc": "32"
                    },
                    "nrCellId": "b2fB6fE9D"
                },
            ],

```

```
{
  "plmnId": {
    "mcc": "977",
    "mnc": "33"
  },
  "nrCellId": "5d1B4127b"
}
],
```

```
"trackingAreaList": [
  {
    "tac": "5CB6",
    "plmnId": {
      "mcc": "976",
      "mnc": "32"
    }
  },
  {
    "tac": "5CB7",
    "plmnId": {
      "mcc": "977",
      "mnc": "33"
    }
  }
],
```

```
"globalRanNodeIdList": [
  {
    "gNbId": {
      "gNbValue": "1A8F1D",
      "bitLength": 25
    }
  },
```

```

        "plmnId": {
            "mcc": "965",
            "mnc": "235"
        },
        "n3IwfId": "fFf0f2AFbFa16CEfE7",
        "ngeNbId": "SMacroNGeNB-f077d"
    },
    {
        "gNbId": {
            "gNbValue": "1A8F1D",
            "bitLength": 25
        },
        "plmnId": {
            "mcc": "967",
            "mnc": "238"
        },
        "n3IwfId": "fFf0f2AFbFa16CEfE7",
        "ngeNbId": "SMacroNGeNB-4Ea7C"
    }
]
}

},
"ipv4Index": 0,
"ipv6Index": 0,
"subscCats": [
    "cat1",
    "cat2"
],
"adcSupport": true,
"mpsPriority": true,

```

```

    "allowedServices": [
        "ser1",
        "ser2"
    ],
    "mpsPriorityLevel": 2,
    "imsSignallingPrio": true,
    "refUmDataLimitIds": {
        "mk1": {
            "monkey": [
                "monkey1"
            ],
            "limitId": "mk1"
        }
    },
    "subscSpendingLimits": true
},
"dnn2": {
    "dnn": "dnn2",
    "gbrDl": "7788 Kbps",
    "gbrUl": "5566 Kbps",
    "online": true,
    "chfInfo": {
        "primaryChfAddress": "1.1.1.1",
        "secondaryChfAddress": "2.2.2.2"
    },
    "offline": true,
    "praInfos": {
        "p1": {
            "praId": "p1",
            "ecgiList": [
                {

```

```

        "plmnId": {
            "mcc": "976",
            "mnc": "32"
        },
        "eutraCellId": "92FFdBE"
    },
    {
        "plmnId": {
            "mcc": "977",
            "mnc": "33"
        },
        "eutraCellId": "8F868C4"
    }
],
"ncgiList": [
    {
        "plmnId": {
            "mcc": "976",
            "mnc": "32"
        },
        "nrCellId": "b2fB6fE9D"
    },
    {
        "plmnId": {
            "mcc": "977",
            "mnc": "33"
        },
        "nrCellId": "5d1B4127b"
    }
],

```

```

"trackingAreaList": [
  {
    "tac": "5CB6",
    "plmnId": {
      "mcc": "976",
      "mnc": "32"
    }
  },
  {
    "tac": "5CB7",
    "plmnId": {
      "mcc": "977",
      "mnc": "33"
    }
  }
],
"globalRanNodeIdList": [
  {
    "gNbId": {
      "gNbValue": "1A8F1D",
      "bitLength": 25
    },
    "plmnId": {
      "mcc": "965",
      "mnc": "235"
    },
    "n3IwfId": "fFf0f2AFbFa16CEfE7",
    "ngeNbId": "SMacroNGeNB-f077d"
  },
  {

```

```
        "gNbId": {
            "gNbValue": "1A8F1D",
            "bitLength": 25
        },
        "plmnId": {
            "mcc": "967",
            "mnc": "238"
        },
        "n3IwfId": "fFf0f2AFbFa16CEfE7",
        "ngeNbId": "SMacroNGeNB-4Ea7C"
    }
]
}
},
"ipv4Index": 0,
"ipv6Index": 0,
"subscCats": [
    "cat1",
    "cat2"
],
"adcSupport": true,
"mpsPriority": true,
"allowedServices": [
    "ser1",
    "ser2"
],
"mpsPriorityLevel": 2,
"imsSignallingPrio": true,
"refUmDataLimitIds": {
    "mk1": {
```

```
        "monkey": [
            "monkey1"
        ],
        "limitId": "mk1"
    }
},
"subscSpendingLimits": true
}
}
}
```

PUT-UEPolicySet

```
{
  "praInfos": {"p1": {
    "praId": "p1",
    "trackingAreaList": [{
      "plmnId": {
        "mcc": "976",
        "mnc": "32"
      },
      "tac": "5CB6"
    },
    {
      "plmnId": {
        "mcc": "977",
        "mnc": "33"
      },
      "tac": "5CB7"
    }
  ]
}
```



```
],
"ecgiList": [{
    "plmnId": {
        "mcc": "976",
        "mnc": "32"
    },
    "eutraCellId": "92FFdBE"
},
{
    "plmnId": {
        "mcc": "977",
        "mnc": "33"
    },
    "eutraCellId": "8F868C4"
}
],
"ncgiList": [{
    "plmnId": {
        "mcc": "976",
        "mnc": "32"
    },
    "nrCellId": "b2fB6fE9D"
},
{
    "plmnId": {
        "mcc": "977",
        "mnc": "33"
    },
    "nrCellId": "5d1B4127b"
}
]
```

```
],
  "globalRanNodeIdList": [{
    "plmnId": {
      "mcc": "965",
      "mnc": "235"
    },
    "n3IwfId": "fFf0f2AFbFa16CEfE7",
    "gNbId": {
      "bitLength": 25,
      "gNbValue": "1A8F1D"
    },
    "ngeNbId": "SMacroNGeNB-f077d"
  },
  {
    "plmnId": {
      "mcc": "967",
      "mnc": "238"
    },
    "n3IwfId": "fFf0f2AFbFa16CEfE7",
    "gNbId": {
      "bitLength": 25,
      "gNbValue": "1A8F1D"
    },
    "ngeNbId": "SMacroNGeNB-4Ea7C"
  }
]
}},
"subscCats": ["cat1", "cat2"],
"uePolicySections": {
  "111": {
    "upsi": "111",
```

```
        "uePolicySectionInfo": null
    },
    "33": {
        "upsi": "33",
        "uePolicySectionInfo": null
    }
},
"upsis": ["111", "33"],
"allowedRouteSelDescs": {
    "965-235": {
        "servingPlmn": {
            "mcc": "965",
            "mnc": "235"
        },
        "snssaiRouteSelDescs": [{
            "snssai": {
                "sd": "abc123",
                "sst": 11
            },
            "dnnRouteSelDescs": [{
                "dnn": "dnn1",
                "sscModes": ["SSC_MODE_1", "SSC_MODE_2"],
                "pduSessTypes": ["IPv4"]
            }]
        }]
    }
},
"andspInd": true,
"pei": "imei-355375345274757",
"osIds": ["bceafb30-31bd-4b8d-b3c2-ed79d029531a",
"cc9d9f97-0127-497c-9bca-79e8e9080ea8"]
```

}

C

Payloads for Management URI Schema Update

This section provides the details of payloads for the following Management URI Schema Update.

- [PUT-schemablob](#)

PUT-schemablob

```
{
  "$schema": "http://json-schema.org/draft-07/schema#",
  "additionalProperties": false,
  "type": "object",
  "properties": {
    "subscCats": {
      "minItems": 1,
      "type": "array",
      "items": {
        "type": "string"
      }
    },
    "custom": {
      "type": "string"
    },
    "praInfos": {
      "patternProperties": {
        "^(.*)$": {
          "additionalProperties": false,
          "type": "object",
          "properties": {
            "ecgiList": {
              "minItems": 1,
```

```
"type": "array",
"items": {
  "additionalProperties": false,
  "type": "object",
  "required": [
    "plmnId",
    "eutraCellId"
  ],
  "properties": {
    "eutraCellId": {
      "pattern": "^[A-Fa-f0-9]{7}$",
      "type": "string"
    },
    "plmnId": {
      "additionalProperties": false,
      "type": "object",
      "required": [
        "mcc",
        "mnc"
      ],
      "properties": {
        "mnc": {
          "pattern": "^\\d{2,3}$",
          "type": "string"
        },
        "mcc": {
          "pattern": "^\\d{3}$",
          "type": "string"
        }
      }
    }
  }
}
```

```
    }
  }
}
},
"globalRanNodeIdList": {
  "minItems": 1,
  "type": "array",
  "items": {
    "additionalProperties": false,
    "type": "object",
    "required": [
      "plmnId"
    ],
    "properties": {
      "gNbId": {
        "additionalProperties": false,
        "type": "object",
        "required": [
          "bitLength",
          "gNbValue"
        ],
        "properties": {
          "bitLength": {
            "type": "integer"
          },
          "gNbValue": {
            "pattern": "^[A-Fa-f0-9]{6,8}$",
            "type": "string"
          }
        }
      }
    }
  },
},
```

```
"plmnId": {
  "additionalProperties": false,
  "type": "object",
  "required": [
    "mcc",
    "mnc"
  ],
  "properties": {
    "mnc": {
      "pattern": "^\\d{2,3}$",
      "type": "string"
    },
    "mcc": {
      "pattern": "^\\d{3}$",
      "type": "string"
    }
  }
},
"n3IwfId": {
  "pattern": "^[A-Fa-f0-9]+$",
  "type": "string"
},
"ngeNbId": {
  "pattern": "^(MacroNGeNB-[A-Fa-f0-9]{5}|
LMacroNGeNB-[A-Fa-f0-9]{6}|SMacroNGeNB-[A-Fa-f0-9]{5})$",
  "type": "string"
}
}
}
},
"praId": {
```



```
        "type": "string"
    },
    "ncgiList": {
        "minItems": 1,
        "type": "array",
        "items": {
            "additionalProperties": false,
            "type": "object",
            "required": [
                "plmnId",
                "nrCellId"
            ],
            "properties": {
                "plmnId": {
                    "additionalProperties": false,
                    "type": "object",
                    "required": [
                        "mcc",
                        "mnc"
                    ],
                    "properties": {
                        "mnc": {
                            "pattern": "^\\d{2,3}$",
                            "type": "string"
                        },
                        "mcc": {
                            "pattern": "^\\d{3}$",
                            "type": "string"
                        }
                    }
                }
            }
        }
    }
}
```

```
    },
    "nrCellId": {
      "pattern": "^[A-Fa-f0-9]{9}$",
      "type": "string"
    }
  }
}
},
"trackingAreaList": {
  "minItems": 1,
  "type": "array",
  "items": {
    "additionalProperties": false,
    "type": "object",
    "required": [
      "plmnId",
      "tac"
    ],
    "properties": {
      "tac": {
        "default": "",
        "pattern": "^(^[A-Fa-f0-9]{4}$)|(^([A-Fa-f0-9]{6}$)",
        "type": "string"
      },
      "plmnId": {
        "additionalProperties": false,
        "type": "object",
        "required": [
          "mcc",
          "mnc"
```

```

    ],
    "properties": {
      "mnc": {
        "pattern": "^\\d{2,3}$",
        "type": "string"
      },
      "mcc": {
        "pattern": "^\\d{3}$",
        "type": "string"
      }
    }
  }
}
}
}
}
}
}
},
"additionalProperties": false
}
}
}
.

```