

Oracle® Communications

Cloud Native Core, Unified Data Repository

REST Specification Guide



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Acronyms

The following table provides information about the acronyms and the terminologies used in the document:

Table Acronyms and Terminologies

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
ASM	Aspen Service Mesh
AUSF	Authentication Server Function
CNE	Oracle Communications Cloud Native Core, Cloud Native Environment
cnPCRF	Cloud Native Policy and Charging Rules Function
EIC	Equipment Identity Check
EIR	Equipment Identity Register
NEF	Oracle Communications Cloud Native Core, Network Exposure Function
NF	Network Function
NRF	Oracle Communications Cloud Native Core, Network Repository Function
NSI ID	Network Slice Instance Identifier
NSSAI	Network Slice Selection Assistance Information
NSSF	Oracle Communications Cloud Native Core, Network Slice Selection Function
NSSP	Network Slice Selection Policy
PDB	Provisioning Database
PDBA	Provisioning Database Application
PDBI	Provisioning Database Interface
PEI	Permanent Equipment Identifier
PCF	Policy Control Function
PSP	Pod Security Policy
PVC	Persistent Volume Claim
REST	Representational State Transfer
SBA	Service-Based Architecture (SBA)
SBI	Service Based Interface
SEPP	Oracle Communications Cloud Native Core, Security Edge Protection Proxy
SH	Diameter Interface
SLF	Subscriber Location Function
SMF	Session Management Function
SOAP	Simple Object Access Protocol
UDM	Unified Data Management

Table (Cont.) Acronyms and Terminologies

Field	Description
UDR	Oracle Communications Cloud Native Core, Unified Data Repository
UDSF	Unstructured Data Storage Function

What's New in This Guide

This section describes the documentation updates for release 24.1.x

Release 24.1.1 - F94027-03, July 2024

- Updated the GLOBAL request to add suppressNotificationEnabled parameter. For more information, see [Configuration APIs for UDR Microservices](#).

Release 24.1.0 - F94027-02, July 2024

- Added note on custom fields and entities. For more information, see [Provisioning Operations for PCF Data](#) and [4G Policy Data Operations](#).
- Updated the payload to add custom fields for PUT (Subscriber). For more information, see [4G Policy Data Operations](#).
- Updated the payload to add custom fields for PUT-Policy Data with VSA Data. For more information, see [PUT-Policy Data with VSA Data](#).
- Updated the payload to add custom fields for POST - All Entity on 4G Policy Using VSA. For more information, see [POST - All Entity on 4G Policy Using VSA](#).

Release 24.1.0 - F94027-01, April 2024

- Updated the response payload for DR-PROV-SERVICE request. For more information, see [Configuration APIs for UDR Microservices](#).
- Added the response payload for the following request. For more information, see [Configuration APIs for Common Services](#):
 - serverheaderdetails
 - useragentheadervalidation
 - podprotection

1

Introduction

This document describes REST specifications for Cloud Native Core Unified Data Repository.

Note

The performance and capacity of the UDR system may vary based on the call model, feature or interface configuration, and underlying CNE and hardware environment, including but not limited to, the size of the json payload, operation type, and traffic model.

The 5G Unified Data Repository (UDR) is one of the main components of the 5G Service-Based Architecture (SBA). It is implemented as a cloud native function and offers a unified database to store application, subscription, authentication, service authorization, policy data, session binding, and application state information. It provides HTTP2 restful based interface for other NFs and HTTP2/HTTP1.1 restful interface for provisioning clients. But HTTP1.1 is disabled by default.

Oracle's 5G UDR:

- Leverages a common Oracle Communications Cloud Native Framework
- Complies to 3GPP 29.505 Release 15 specification for UDM
- Complies to 3GPP 29.519 Release 16 (backward compatible with Release 15) specification for PCF
- Has tiered architecture providing separation between the connectivity, business logic, and data layers
- Uses Oracle MySQL NDB Cluster CGE edition as backend database in the Data Tier
- Registers with NRF in the 5G network, allowing the other NFs to discover UDR through NRF
- Registers with services like DR-SERVICE and GROUP-ID-MAP

As per 3GPP, UDR supports 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
- Storage and retrieval of SLF information, consumed by NRF
- Application data (including Packet Flow Descriptions (PFDs) for application detection, AF request information for multiple UEs), by the NEF
- Subscription and Notification features

Oracle's 5G UDR solution provides **Unstructured Data Storage Function (UDSF)**. This allows any 5G NF to store and retrieve unstructured data.

Note

3GPP does not define any specifications for UDSF.

Oracle's 5G UDR solution provides **Subscriber Location Function (SLF)**. It:

- Supports Nudr-groupid-map service as per 3GPP
- Registers with NRF for Nudr-groupid-map service
- Complies with 3GPP Release 16 for APIs to be consumed by 5G NRF
- Supports REST/JSON based provisioning APIs for SLF data

5G Equipment Identity Register (EIR) supports:

- REST/JSON based provisioning of 5G EIR profile
- Bulk import of 5G EIR subscriber data via PDBI interface
- N5g-eir_EquipmentIdentityCheck Service API
- 5G EIR as per 3GPP TS 29.511

1.1 References

For more information about Oracle Communications Cloud Native Core, Unified Data Repository, see the following documents:

- *Oracle Communications Cloud Native Core, Unified Data Repository User Guide*
- *Oracle Communications Cloud Native Core, Unified Data Repository Installation, Upgrade, and Fault Recovery Guide*

2

Provisioning API Specifications

This section describes provisioning API specifications for Profile Data, NEF Data, EIR Data, Policy Data, SLF Data, UDM Data, and UDSF Data.

2.1 Provisioning Operations for Profile Data

This section provides provisioning operations for Profile data.

Resource Name: ProfileData

HTTP Method: POST, PUT, DELETE, GET

BASE URI: {apiRoot}/nudr-dr-prov/{version}/profile-data/{ue-id}

Table 2-1 Profile Data

HTTP Method	Sample REST URL	Description	Possible Error Codes
POST	https://localhost:9443/nudr-dr-prov/v2/profile-data/msisdn-1111111113	This is for initial subscriber provisioning (create subscriber). For more information about payload, see POST-ProfileData To add custom fields in the profile data during initial subscriber provisioning (create subscriber). For more information, see Adding Custom Fields under Profile 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"

Table 2-1 (Cont.) Profile Data

HTTP Method	Sample REST URL	Description	Possible Error Codes
PUT	https://localhost:9443/nudr-dr-prov/v2/profile-data/nai-3333333332	For more information about the payload, see PUT-ProfileData To update an existing profile data with custom fields or the custom fields already present in profile data can be updated using following payload: <pre>{ "profile-data": { "MSISDN": ["1111111112", "1111111113"], "Imsi": ["222222221"], "profile-fields": { "customFieldKey": "CustomValue" } } }</pre>	• 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"
DELETE	https://localhost:9443/nudr-dr-prov/v2/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/v2/profile-data/msisdn-1111111113	This operation extracts profile data.	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 400: "Unknown key, the key provided in the request is invalid"

2.2 Provisioning Operations for NEF Data

This section provides provisioning operations for NEF data.

Resource Name: ProfileData

Base URI: {apiRoot}/nudr-dr-prov/v2/profile-data/{ue-id}

Table 2-2 ProfileData

HTTP Method	Description	Possible Error Codes
POST	http://localhost:8080/nudr-dr-prov/v2/profile-data/msisdn-1111111113 Result Code: 201 Created Payload: POST - NEF Data	NA

Resource Name: AccessAndMobilityData, PduSessionManagementData

Base URI: {apiRoot}/nudr-dr/v2/exposure-data/{ueId}

Table 2-3 AccessAndMobilityData, PduSessionManagementData

HTTP Method	Description	Possible Error Codes
PUT	http://localhost:8080/nudr-dr-prov/v2/exposure-data/msisdn-1111111113 Result Code: 200 OK Payload: PUT - PDU Session Management 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"
GET	http://localhost:8080/nudr-dr-prov/v2/exposure-data/msisdn-1111111113 Result Code: 200 OK Payload: GET - PDU Session Management 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"

2.3 Provisioning Operations Supported for EIR Data

This section provides provisioning operations for EIR data.

Resource Name: EIR Data

HTTP Method: PUT, DELETE, GET

BASE URI: {apiRoot}/n5g-eir-prov/v1/equipment-status/{ueId}

Table 2-4 EIR Provisioning APIs

HTTP Method	Description	Sample Request	Sample Response	Possible Error Codes
PUT	Create EIR subscriber profile. Profile data and equipment status data are mandatory to create subscriber profile.	http://localhost:8080/n5g-eir-prov/v1/equipment-status/imei-1111111111 Use the following payload to: • Create EIR profile if the IMEI is not provisioned on EIR. • Update equipment status and add IMSI/MSISDN keys to existing IMEI already provisioned • Update the equipment status of an existing subscriber <pre>{ "profile-data": { "IMEI": ["1111111111"], "IMSI": ["1111111121", "1111111131"], "MSISDN": ["1111111112", "1111111113"] }, "equipment-status" : {</pre>	201 Created	• 400: Invalid content request data supplied • 400: Schema validation failed for this request • 400: Invalid JSON payload • 400: Invalid URI sent from client • 400: Payload should contain key-value pair present in URI • 400: Unknown key, the key imsi123 provided in the request is invalid • 400: Invalid content, equipment status cannot be empty • 400: Invalid content, equipment status cannot have all its content set to false • 400: Invalid content, equipment status missing for EIR profile • 400: Keys other than IMEI in URI not allowed for EIR profile update • 400: Invalid Key Value

Table 2-4 (Cont.) EIR Provisioning APIs

HTTP Method	Description	Sample Request	Sample Response	Possible Error Codes
		<pre>"grey": true, "black": true, "white": true } }</pre> IMEI key cannot be modified once provisioned		

Table 2-4 (Cont.) EIR Provisioning APIs

HTTP Method	Description	Sample Request	Sample Response	Possible Error Codes
PUT	EIR profile provisioning with imeisv	<pre> http://localhost:8080/n5g-eir-prov/v1/equipment-status/imeisv-11111111111111110 The below payload will support to CREATE EIR Profile { "profile-data": { "IMEISV": ["11111111111111110"], "IMSI": ["1111111121", "1111111131"], "MSISDN": ["1111111112", "1111111113"] }, "equipment-status" : { "grey": true, "black": true, "white": true } } </pre>	201 Created	400: Invalid content request data supplied 400: Schema validation failed for this request 400: Invalid JSON payload 400: Invalid URI sent from client 400: Payload should contain key-value pair present in URI 400: Unknown key, the key imsi123 provided in the request is invalid 400: Invalid content, equipment status cannot be empty 400: Invalid content, equipment status cannot have all its content set to false 400: Invalid content, equipment status missing for EIR profile 400: Keys other than IMEI in URI not allowed for EIR profile update 400: Invalid Key Value

Table 2-4 (Cont.) EIR Provisioning APIs

HTTP Method	Description	Sample Request	Sample Response	Possible Error Codes
PUT	Updates the EIR subscriber profile for an existing IMEI and IMEISV. Does patch operation on the existing EIR subscriber and includes provisions keys in payload if not already provisioned Updates the equipment status with profile update. MEI and IMEISV cannot be modified	<pre> http://localhost:8080/n5g-eir-prov/v1/equipment-status/imei-1111111111 { "profile-data": { "IMEI": ["1111111111"], "IMSI": ["1111111121", "1111111131"], "MSISDN": ["1111111112", "1111111113"] } } { "profile-data": { "IMSI": ["1111111121", "1111111131"], "MSISDN": ["1111111112", "1111111113"] } } { "profile- </pre>	201 Created	400: Invalid content request data supplied 400: Schema validation failed for this request 400: Invalid JSON payload 400: Invalid URI sent from client 400: Payload should contain key-value pair present in URI 400: Unknown key, the key imsi123 provided in the request is invalid 400: Invalid content, equipment status cannot be empty 400: Invalid content, equipment status cannot have all its content set to false 400: Invalid content, equipment status missing for EIR profile 400: Keys other than IMEI in URI not allowed for EIR profile update 400: Invalid Key Value

Table 2-4 (Cont.) EIR Provisioning APIs

HTTP Method	Description	Sample Request	Sample Response	Possible Error Codes
		<pre> data": { "IMEI": ["1111111111"], "IMSI": ["1111111121" , "1111111131"], "MSISDN": ["1111111112" , "1111111113"] } "equipment- status"{ "grey": true, "black": true, "white": true } } http:// localhost:808 0/n5g-eir- prov/v1/ equipment- status/ imeisv-111111 1111111111 { "profile- data": { "IMEISV": ["1111111111 1111"], "IMSI": ["1111111121" </pre>		

Table 2-4 (Cont.) EIR Provisioning APIs

HTTP Method	Description	Sample Request	Sample Response	Possible Error Codes
		<pre> , "11111111131"], "MSISDN": ["11111111112" , "11111111113 "] } } { "profile- data": { "IMSI": ["11111111121" , "11111111131"], "MSISDN": ["11111111112" , "11111111113 "] } } { "profile- data": { "IMEISV": ["11111111111 11111"], "IMSI": ["11111111121" , "11111111131"], "MSISDN": ["11111111112" , "11111111113 "] } "equipment- </pre>		

Table 2-4 (Cont.) EIR Provisioning APIs

HTTP Method	Description	Sample Request	Sample Response	Possible Error Codes
		<pre>status"{ "grey": true, "black": true, "white": true }</pre>		

Table 2-4 (Cont.) EIR Provisioning APIs

HTTP Method	Description	Sample Request	Sample Response	Possible Error Codes
PUT	Updates the equipment status for an existing IMEI and IMEISV	<pre> http://localhost:8080/n5g-eir-prov/v1/equipment-status/imei-1111111111 { "equipment-status":{ "grey": true, "black": false, "white": true } { "profile-data": { "IMEI": ["1111111111"] }, "equipment-status":{ "grey": true, "black": false, "white": true } { "profile-data": { </pre>	201 Created	• 400: Invalid content request data supplied • 400: Schema validation failed for this request • 400: Invalid JSON payload • 400: Invalid URI sent from client • 400: Payload should contain key-value pair present in URI • 400: Unknown key, the key imsi123 provided in the request is invalid • 400: Invalid content, equipment status cannot be empty • 400: Invalid content, equipment status cannot have all its content set to false • 400: Invalid content, equipment status missing for EIR Profile • 400: Keys other than IMEI in URI not allowed for EIR profile update • 400: Invalid Key Value

Table 2-4 (Cont.) EIR Provisioning APIs

HTTP Method	Description	Sample Request	Sample Response	Possible Error Codes
		<pre> "IMEI": ["1111111111"], "IMSI": ["1111111121" ,"1111111131"], "MSISDN": ["1111111112" ,"1111111113" "] } "equipment- status"{ "grey": true, "black": true, "white": true } } http:// localhost:808 0/n5g-eir- prov/v1/ equipment- status/ imeisv-111111 1111111111 { "equipment- status":{ "grey": true, "black": false, "white": true </pre>		

Table 2-4 (Cont.) EIR Provisioning APIs

HTTP Method	Description	Sample Request	Sample Response	Possible Error Codes
		<pre> } } { "profile- data": { "IMEISV": ["111111111111 11111"] }, "equipment- status":{ "grey": true, "black": false, "white": true } } { "profile- data": { "IMEISV": ["111111111111 11111"], "IMSI": ["1111111121" ,"1111111131"], "MSISDN": ["1111111112" ,"1111111113 "] } "equipment- status"{ </pre>		

Table 2-4 (Cont.) EIR Provisioning APIs

HTTP Method	Description	Sample Request	Sample Response	Possible Error Codes
		<pre>"grey": true, "black": true, "white": true } }</pre>		
PUT	Updates EIR and IMSI/MSISDN keys to existing IMEI Update and delete subscriber profile. Does patch operation on the existing subscriber Delete keys included in payload, if not present	<pre>http://localhost:8080/n5g-eir-prov/v1/profile-update/imei-1111111111/deletekeys { "profile-data": { "IMSI": ["1111111131" , "1111111141"], "MSISDN": ["1111111113" , "1111111114"] } }</pre>	204 No Content	400: Invalid content request data supplied 400: Schema validation failed for this request 400: Invalid JSON payload 400: Invalid URI sent from client 400: Unknown key, the key imsi123 provided in the request is invalid 400: Keys other than IMEI in URI not allowed for EIR profile update

Table 2-4 (Cont.) EIR Provisioning APIs

HTTP Method	Description	Sample Request	Sample Response	Possible Error Codes
	EIR Update IMSI/MSISDN keys to existing IMEISV	<pre>http://localhost:8080/n5g-eir-prov/v1/profile-update/imeisv-1111111111/deletekeys { "profile-data": { "IMSI": ["1111111131", "1111111141"], "MSISDN": ["1111111113", "1111111114"] } }</pre>	204 No Content	400: Schema validation failed for this request 400: Invalid JSON payload 400: Invalid URI sent from client 400: Unknown key, the key imsi123 provided in the request is invalid 400: Keys other than IMEI in URI not allowed for EIR profile update
DELETE	Delete EIR profile using IMEI	<pre>http://localhost:8080/n5g-eir-prov/v1/equipment-status/imei-1111111111</pre>	204 No Content	404: Subscriber does not exist
DELETE	Delete EIR profile using IMEISV	<pre>http://localhost:8080/n5g-eir-prov/v1/equipment-status/imeisv-11111111111111111111</pre>	204 No Content	404: Subscriber does not exist

Table 2-4 (Cont.) EIR Provisioning APIs

HTTP Method	Description	Sample Request	Sample Response	Possible Error Codes
GET	Retrieve complete EIR profile using IMEI	http://localhost:8080/n5g-eir-prov/v1/equipment-status/imei-1111111111	200 OK Response <pre>{ "profile-data": { "MSISDN": ["1111111112"], "IMSI": ["1111111121"], "IMEI": ["1111111111"] }, "equipment-status": { "white": true, "grey": true, "black": true } }</pre>	400: Invalid URI sent from client 404: Subscriber does not exist

Table 2-4 (Cont.) EIR Provisioning APIs

HTTP Method	Description	Sample Request	Sample Response	Possible Error Codes
GET	Retrieve complete EIR profile using IMEISV	http://localhost:8080/n5g-eir-prov/v1/equipment-status/imeisv-11111111111111111111	200 OK Response <pre>{ "profile-data": { "MSISDN": ["1111111112"], "IMSI": ["1111111121"], "IMEISV": ["1111111111111111"] }, "equipment-status": { "white": true, "grey": true, "black": true } }</pre>	400: Invalid URI sent from client 404: Subscriber does not exist

2.4 Provisioning Operations for PCF Data

This section provides provisioning operations for PCF data.

Note

UDR accepts custom fields and entities by default. To validate schema for the custom fields or entities, additional configuration is required in UDR. For more information, see [Schema Management Specifications](#). If schema definition is not added for custom fields, UDR skips the schema validation and accepts the custom fields as received in the request payload.

Resource Name: AM, SM, UEPolicySet

HTTP Method: PUT, GET, DELETE

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

Table 2-5 AM, SM, UEPolicySet

HTTP Method	Sample REST URL	Description	Possible Error Codes
PUT	http://localhost:8080/nudr-dr-prov/v2/policy-data/msisdn-461772271137732	To add the AM, SM, UEPolicySet information. Note: - In the 4G subscriber profile fields, State must be under sm-data/ VendorSpecific-000111 - The policy data provisioning operation API must have usage and definition information under sm-data/ VendorSpecific-000111 content. The same must be converted to 5G data and placed under sm-data/umData and sm-data/umDataLimits. - Add all the 4G quota and dynamic quota information under sm-data/umData and sm-data/umDataLimits respectively - All 5G policy data like smPolicySnssaiData must be under sm-data Payload: See PUT-AM SM UEPolicyData To add Policy Data Provisioning along with VSA Data. Payload: See PUT-Policy Data with VSA Data	400: Blob syntax error with corresponding error details 400: Invalid URI sent from client
PUT (update or delete PCF data)	NA	To update am-data and delete sm-data information. Payload: See PUT - update am-data and delete sm-data	NA

Table 2-5 (Cont.) AM, SM, UEPolicySet

HTTP Method	Sample REST URL	Description	Possible Error Codes
GET	<code>http://localhost:8080/nudr-dr-prov/v2/policy-data/msisdn-461772271137732</code>	To view the AM, SM, UEPolicySet information.	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	<code>http://localhost:8080/nudr-dr-prov/v2/policy-data/msisdn-461772271137732</code>	To delete the AM, SM, UEPolicySet information.	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

2.5 Subscriber Provisioning APIs for SLF

This section describes the Subscriber Provisioning APIs on SLF.

The Subscriber Provisioning APIs allows PUT, DELETE, and GET operations for imsi, nai, accountID, msisdn, and extid subscribers. The URL template used is `http://localhost:8080/nudr-group-id-map-prov/v1/slf-group/<subscriber_type>-<subscriber_id>`.

Sample URL is as follows:

- `http://localhost:8080/nudr-group-id-map-prov/v1/slf-group/imsi-2222222221`
- `http://localhost:8080/nudr-group-id-map-prov/v1/slf-group/nai-test@xyz.com`
- `http://localhost:8080/nudr-group-id-map-prov/v1/slf-group/accountID-12345678912345678912345678`
- `http://localhost:8080/nudr-group-id-map-prov/v1/slf-group/msisdn-19195225555`
- `http://localhost:8080/nudr-group-id-map-prov/v1/slf-group/extid-user@xyz.com`

Table 2-6 Subscriber Provisioning APIs

Operation Type	Sample Request	Sample Response	Possible Error Codes
PUT	<pre>http://localhost:8080/nudr-group-id- map-prov/v1/slf-group/ accountID-1234567891234567891 2345678 { "profile-data": { "imsi": ["2222222221", "2222222222"], "nai": ["test@xyz.com"], "accountID": ["1234567891234567891234567 8"], "msisdn": ["19195225555", "19195225556"], "extid": ["user@xyz.com"] }, "slfGroupName": "IMSGrp1" } Add custom fields under profile data using the following payload { "profile-data": { "imsi": ["2222222221", "2222222222"], "nai": ["test@xyz.com"], "accountID": ["1234567891234567891234567 8"], "msisdn": ["19195225555", "19195225556"], "extid": ["user@xyz.com"], "profile- fields": { "customFieldKey": "customValue" } }, "slfGroupName": "IMSGrp1" } The CHFGroupID provisioning of custom fields is done above. The sample payload for the same is as follows: { "profile-data": { "imsi": ["2222222221", "2222222222"], "nai": ["test@xyz.com"], "accountID": ["1234567891234567891234567 8"], "msisdn": ["19195225555", "19195225556"], "extid": ["user@xyz.com"], "profile- fields": { "CHFGroupId": "CHFGrp1" } }, "slfGroupName": "IMSGrp1" }</pre>	201 Created	• 404: Group Not Found • 400: Schema validation failed for this request • 400: Invalid JSON Payload • 400: Invalid URI sent from client • 400: Payload should contain key-value pair present in URI • 400: Unknown key, the key imsi123 provided in the request is invalid

Table 2-6 (Cont.) Subscriber Provisioning APIs

Operation Type	Sample Request	Sample Response	Possible Error Codes
DELETE	http://localhost:8080/nudr-group-id-map-prov/v1/slf-group/accountID-12345678912345678912345678	204 No Content	404: Subscriber does not exist
GET	http://localhost:8080/nudr-group-id-map-prov/v1/slf-group/accountID-12345678912345678912345678	200 OK <pre>{ "profile-data": { "imsi": ["2222222221", "2222222222"], "nai": ["test@xyz.com"], "accountID": ["12345678912345678912345678912345678"], "msisdn": ["19195225555", "19195225556"], "extid": ["user@xyz.com"] }, "slfGroupName": "IMSGrp1" }</pre>	404: Subscriber does not exist 400: Invalid URI sent from client

2.6 SLF GroupName Configuration APIs for SLF

This section describes SLF GroupName Configuration APIs. The details are as follows:

Table 2-7 SLF GroupName Configuration APIs

Operation Type	Sample Request	Sample Response	Possible Error Codes
PUT	http://localhost:8080/slf-group-prov/v1/slf-group <pre>{ "slfGroupName": "IMSGrp1", "slfGroupType": "LteHss", "nfGroupIDs": { "NEF": "nef-group-name1", "UDM": "udm-group-name1", "PCF": "pcf-group-name1", "AUSF": "ausf-group-name1" } }</pre>	201 Created	400: Schema validation failed for this request 400: Invalid JSON Payload 400: Invalid URI sent from client
DELETE	http://localhost:8080/slf-group-prov/v1/slf-group?slfGroupName="IMSGrp1"	204 No Content	404: Group Not Found 403: Subscriber linked to the group 400: Invalid URI sent from client

Table 2-7 (Cont.) SLF GroupName Configuration APIs

Operation Type	Sample Request	Sample Response	Possible Error Codes
GET	http://localhost:8080/slf-group-prov/v1/slf-group?slfGroupName="IMSGrp1"	200 OK { "slfGroupName": "IMSGrp1", "slfGroupType": "LteHss", "nfGroupIDs": { "NEF": "nef-group-name1", "UDM": "udm-group-name1", "PCF": "pcf-group-name1", "AUSF": "ausf-group-name1" } }	• 404: Group Not Found • 400: Invalid URI sent from client

2.7 Provisioning Operations for UDM Data

This section provides information about the operations supported for UDM data through provisioning interface.

Resource Name: AuthenticationSubscriptionData

HTTP Method: GET, PUT, DELETE

Sample URI: http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-9110000000028/authentication-data/authentication-subscription

Table 2-8 AuthenticationSubscriptionData

HTTP Method	Sample REST URL	Description	Possible Error Codes
GET	https://10.75.212.116:31873/nudr-dr-prov/v1/subscription-data/msisdn-7777777779/authentication-data/authentication-subscription	<pre>{ "encOpcKey": "ABED", "encTopcKey": "ACED", "algorithmId": "algoID", "sequenceNumber": { "sqn": "123456789ABE", "difSign": "NEGATIVE", "indLength": 5, "sqnScheme": "GENERAL", "lastIndexes": { "ausf": 5 } }, "encPermanentKey": "ABBA", "authenticationMethod": "5G_AKA", "protectionParameterId": "ProtecID", "authenticationManagementField": "ABBE" }</pre>	• 400: "Invalid URI sent from client" • 404: "Data field does not exist" • 404: "Subscriber does not exist" • 400: "Unknown key, the key provided in the request is invalid"
	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/authentication-data/authentication-subscription?fields=encOpcKey,algorithmId	<pre>{ "encOpcKey": "ABED", "algorithmId": "algoID" }</pre>	NA

Table 2-8 (Cont.) AuthenticationSubscriptionData

HTTP Method	Sample REST URL	Description	Possible Error Codes
PUT	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/authentication-data/authentication-subscription	Payload: <pre>{ "authenticationMethod" : "5G_AKA", "encPermanentKey" : "ABBA", "protectionParameterId" : "ProtecID", "sequenceNumber" : { "sqnScheme" : "GENERAL", "sqn" : "123456789ABE", "lastIndexes" : { "ausf" : 5 }, "indLength" : 5, "difSign" : "NEGATIVE" }, "authenticationManagementField" : "ABBE", "algorithmId" : "algoID", "encOpcKey" : "ABED", "encTopcKey" : "ACED" }</pre>	400: " Invalid URI sent from client" 404: "Subscriber does not exist"
DELETE	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/authentication-data/authentication-subscription	NA	NA

Resource Name: AuthenticationStatus**HTTP Method:** PUT, GET, DELETE

Table 2-9 AuthenticationStatus

HTTP Method	Sample REST URL	Description	Possible Error Codes
PUT	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/authentication-data/authentication-status	Payload <pre>{ "nfInstanceId" : "abae35e5-cc45-4016-8dd4-89598e5311b9", "success" : true, "timeStamp" : "2018-01-02T08:17:14.090Z", "authType" : "5G_AKA", "servingNetworkName" : "5G:mnc123.mcc456.3gppnetwork.org" }</pre>	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist"
GET	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/authentication-data/authentication-status	<pre>{ "success": true, "authType": "5G_AKA", "timeStamp": "2018-01-02T08:17:14.090Z", "nfInstanceId": "abae35e5-cc45-4016-8dd4-89598e5311b9", "servingNetworkName": "5G:mnc123.mcc456.3gppnetwork.org" }</pre>	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 404: "Data field does not exist"

Table 2-9 (Cont.) AuthenticationStatus

HTTP Method	Sample REST URL	Description	Possible Error Codes
	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/authentication-data/authentication-status?fields=nfInstanceId	{ "nfInstanceId": "abae35e5-cc45-4016-8dd4-89598e5311b9" }	NA
DELETE	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/authentication-data/authentication-status	NA	400: "Invalid URI sent from client" 404: "Subscriber does not exist" 400: "Unknown key, the key provided in the request is invalid"

Sub-level Name: Context Data

Resource Name: Amf3GppAccessRegistration

HTTP Method: PUT, DELETE, GET

Table 2-10 Amf3GppAccessRegistration

HTTP Method	Sample REST URL	Description	Possible Error Codes
PUT	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/context-data/amf-3gpp-access	Payload: See PUT-Amf3GppAccessRegistration	400: "Invalid URI sent from client" 404: "Subscriber does not exist"
DELETE	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/context-data/amf-3gpp-access	NA	NA

Table 2-10 (Cont.) Amf3GppAccessRegistration

HTTP Method	Sample REST URL	Description	Possible Error Codes
	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/context-data/amf-3gpp-access/all	NA	NA
GET	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/context-data/amf-3gpp-access?fields=pei,guami	Output: <pre>{ "pei": "imei-1000000000000000 1", "guami": { "plmnId": { "mnc": "123", "mcc": "001" }, "amfId": "1234AA" } }</pre>	NA
	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/context-data/amf-3gpp-access/all	Output: GET - Amf3GppAccessRegistration	NA

Resource Name: AmfNon3GppAccessRegistration

HTTP Method: PUT, DELETE, GET

Base URI: *subscription-data/{ueld}/ context-data/amf-non-3gpp-access*

Table 2-11 AmfNon3GppAccessRegistration

HTTP Method	Sample REST URL	Description	Possible Error Codes
PUT	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/context-data/amf-non-3gpp-access	Payload: See PUT-AmfNon3GppAccessRegistration	400: "Invalid URI sent from client" 404: "Subscriber does not exist"

Table 2-11 (Cont.) AmfNon3GppAccessRegistration

HTTP Method	Sample REST URL	Description	Possible Error Codes
DELETE	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/context-data/amf-non-3gpp-access	NA	NA
	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000025/context-data/amf-non-3gpp-access/all	NA	NA
GET	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/context-data/amf-non-3gpp-access	Output: See GET-AmfNon3GppAccessRegistration	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 404: "Data field does not exist "

Table 2-11 (Cont.) AmfNon3GppAccessRegistration

HTTP Method	Sample REST URL	Description	Possible Error Codes
	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/context-data/amf-non-3gpp-access?fields=backupAmfInfo, ratType	Output: <pre> { "ratType": "WLAN", "backupAmfInfo": [{ "AmfName": "amf1.cluster1.net2.a mf.5gc.mnc012.mcc345. 3gppnetwork.org", "guamiList": [{ "plmnId": { "mnc": "456", "mcc": "002" } }, { "plmnId": { "mnc": "789", "mcc": "003" } }, { "amfId": "9876AA" }] }] }</pre>	NA

Table 2-11 (Cont.) AmfNon3GppAccessRegistration

HTTP Method	Sample REST URL	Description	Possible Error Codes
	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000025/context-data/amf-non-3gpp-access/all	NA	NA

Resource Name: SmfRegistrations**HTTP Method:** GET, DELETE**Base URI:** *subscription-data/{ueld}/context-data/smf-registrations*

Table 2-12 SmfRegistrations

HTTP Method	Sample REST URL	Description	Possible Error Codes
GET	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-9110000000028/context-data/smf-registrations	Output: <pre>[{ "supportedFeatures": { "supFeature1": { "dnn": "dnn2", "singleNssai": { "sd": "abcdef", "sst": 32 } }, "smfInstanceId": "abae35e5-cc45-4016-8dd4-89598e5311b9", "emergencyServices": true, "pcscfRestorationCallbackUri": "http://ocnrf-ambassador.default.svc.cluster.local/nnrf-nfm/v1/nf-instances", "plmnId": { "mnc": "011", "mcc": "001" }, "pduSessionId": 123, "pgwFqdn": "abcdefgh" } }]</pre>	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 404: "Data field does not exist"

Table 2-12 (Cont.) SmfRegistrations

HTTP Method	Sample REST URL	Description	Possible Error Codes
DELETE	http:// localhost:8080/ nudr-dr-prov/v1/ subscription- data/ imsi-911000000002 8/context-data/ smf- registrations	NA	NA

Resource Name: IndividualSmfRegistration**HTTP Method:** PUT, DELETE, GET**Base URI:** *subscription-data/{ueld}/context-data /smf-registrations/{pduSessionId}*

Table 2-13 IndividualSmfRegistration

HTTP Method	Sample REST URL	Description	Possible Error Codes
PUT	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/context-data/smf-registrations/123 Payload: <pre>{ "smfInstanceId" : "abae35e5-cc45-4016-8dd4-89598e5311b9", "pduSessionId" : 123, "singleNssai" : { "sst" : 32, "sd" : "abcdef" }, "plmnId" : { "mcc" : "001", "mnc" : "011" }, "supportedFeatures" : "supFeature1", "dnn" : "dnn2", "emergencyServices" : true, "pcscfRestorationCall backUri" : "http://ocnrf-ambassador.default.svc.cluster.local/nnrf-nfm/v1/nf-instances", "pgwFqdn" : "abcdefgh" }</pre>	Output: <pre>{ "smfInstanceId" : "abae35e5-cc45-4016-8dd4-89598e5311b9", "pduSessionId" : 123, "singleNssai" : { "sst" : 32, "sd" : "abcdef" }, "plmnId" : { "mcc" : "001", "mnc" : "011" }, "supportedFeatures" : "supFeature1", "dnn" : "dnn2", "emergencyServices" : true, "pcscfRestorationCall backUri" : "http://ocnrf-ambassador.default.svc.cluster.local/nnrf-nfm/v1/nf-instances", "pgwFqdn" : "abcdefgh" }</pre>	400: "Invalid URI sent from client" 404: "Subscriber does not exist"

Table 2-13 (Cont.) IndividualSmfRegistration

HTTP Method	Sample REST URL	Description	Possible Error Codes
DELETE	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/context-data/smf-registrations/123	NA	400: "Invalid URI sent from client" 404: "Subscriber does not exist" 404: "Data field does not exist "
GET	Sample URI: http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/context-data/smf-registrations/123	Output: <pre>{ "dnn": "dnn2", "plmnId": { "mcc": "001", "mnc": "011" }, "pgwFqdn": "abcdefgh", "singleNssai": { "sd": "abcdef", "sst": 32 }, "pduSessionId": 123, "smfInstanceId": "abae35e5-cc45-4016-8dd4-89598e5311b9", "emergencyServices": true, "supportedFeatures": "supFeature1", "pcscfRestorationCallbackUri": "http://ocnrf-ambassador.default.svc.cluster.local/nnrf-nfm/v1/nf-instances" }</pre>	400: "Invalid URI sent from client" 404: "Subscriber does not exist" 404: "Data field does not exist "

Table 2-13 (Cont.) IndividualSmfRegistration

HTTP Method	Sample REST URL	Description	Possible Error Codes
	<code>http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/context-data/smf-registrations/123?fields=dnn</code>	Output: <pre>{ "dnn": "dnn2", "emergencyServices": true }</pre>	NA

Resource Name: Smsf3GppAccessRegistration**HTTP Method:** PUT, DELETE, GET

Table 2-14 Smsf3GppAccessRegistration

HTTP Method	Sample REST URL	Description	Possible Error Codes
PUT	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/context-data/smsf-3gpp-access	Payload: <pre>{ "smsfInstanceId": "69d3da66-9e25-11e9-a2a3-2a2ae2dbcce4", "supportedFeatures": "BA2b5d3b977eF2458EEC80592E", "plmnId": { "mcc": "452", "mnc": "45" }, "smsfMAPAddress": "977347916", "smsfDiameterAddress" : { "name": "uLmBAnz2b7S60evNkC7tHvcEZidEXppNIp7Le9yXzucgboiXFRkYg6597LBi31n0BxEBV2ZePCfKpUiEB0ULZMxudPsPepud.emteshu rwdldooeh", "realm": "uLmBAnz2b7S60evNkC7tHvcEZidEXppNIp7Le9yXzucgboiXFRkYg6597LBi31n0BxEBV2ZePCfKpUiEB0ULZMxudPsPepud.emteshu rwdldooeh" } }</pre>	400: "Invalid URI sent from client" 404: "Subscriber does not exist"
DELETE	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/context-data/smsf-3gpp-access	NA	NA

Table 2-14 (Cont.) Smsf3GppAccessRegistration

HTTP Method	Sample REST URL	Description	Possible Error Codes
GET	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/context-data/smsf-3gpp-access	Output: <pre>{ "smsfInstanceId": "69d3da66-9e25-11e9- a2a3-2a2ae2dbcce4", "supportedFeatures": "BA2b5d3b977eF2458EEC 80592E", "plmnId": { "mcc": "452", "mnc": "45" }, "smsfMAPAddress": "977347916", "smsfDiameterAddress" : { "name": "uLmBAnz2b7S60evNkC7t HvcEZidEXppNIp7Le9yXz ucgboiXFRkYg6597Lbi31 n0BxEBV2ZePCfKpUiEB0U LzMxudPsPepud.emteshu rwdldooeh", "realm": "uLmBAnz2b7S60evNkC7t HvcEZidEXppNIp7Le9yXz ucgboiXFRkYg6597Lbi31 n0BxEBV2ZePCfKpUiEB0U LzMxudPsPepud.emteshu rwdldooeh" } }</pre>	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 404: "Data field does not exist "

Table 2-14 (Cont.) Smsf3GppAccessRegistration

HTTP Method	Sample REST URL	Description	Possible Error Codes
	<code>http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/context-data/smsf-3gpp-access?fields=plmnId,smsfInstanceId</code>	Output: <pre>{ "smsfInstanceId": "69d3da66-9e25-11e9- a2a3-2a2ae2dbcce4", "plmnId": { "mnc": "45", "mcc": "452" } }</pre>	NA

Resource Name: SmsfNon3GppAccessRegistration**HTTP Method:** PUT, DELETE, GET

Table 2-15

Operation Type	Sample Request REST URL	Sample Response	Possible Error Codes
PUT	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/context-data/smsf-non-3gpp-access	Payload: <pre>{ "smsfInstanceId": "69d3da66-9e25-11e9-a2a3-2a2ae2dbcce4", "supportedFeatures": "BA2b5d3b977eF2458EEC80592E", "plmnId": { "mcc": "452", "mnc": "45" }, "smsfMAPAddress": "977347916", "smsfDiameterAddress": { "name": "uLmBAnz2b7S60evNkC7tHvcEZidEXppNIp7Le9yXzucgboiXFRkYg6597LBi31n0BxEBV2ZePCfKpUiEB0ULZMxudPsPepud.emte shurwldooeh", "realm": "uLmBAnz2b7S60evNkC7tHvcEZidEXppNIp7Le9yXzucgboiXFRkYg6597LBi31n0BxEBV2ZePCfKpUiEB0ULZMxudPsPepud.emte shurwldooeh" } } }</pre>	400: "Invalid URI sent from client" 404: "Subscriber does not exist"

Table 2-15 (Cont.)

Operation Type	Sample Request REST URL	Sample Response	Possible Error Codes
DELETE	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/context-data/smsf-non-3gpp-access	NA	NA

Table 2-15 (Cont.)

Operation Type	Sample Request REST URL	Sample Response	Possible Error Codes
GET	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/context-data/smsf-non-3gpp-access	Output: <pre>{ "smsfInstanceId": "69d3da66-9e25-11e9-a2a3-2a2ae2dbcce4", "supportedFeatures": "BA2b5d3b977eF2458EEC80592E", "plmnId": { "mcc": "452", "mnc": "45" }, "smsfMAPAddress": "977347916", "smsfDiameterAddress": { "name": "uLmBAnz2b7S60evNkC7tHvcEZidEXppNIp7Le9yXzucgboiXFRkYg6597LBi31n0BxEBV2ZePCfKpUiEB0ULZMxudPsPepud.emte shurwldooeh", "realm": "uLmBAnz2b7S60evNkC7tHvcEZidEXppNIp7Le9yXzucgboiXFRkYg6597LBi31n0BxEBV2ZePCfKpUiEB0ULZMxudPsPepud.emte shurwldooeh" } } }</pre>	400: "Invalid URI sent from client" 404: "Subscriber does not exist" 404: "Data field does not exist"

Table 2-15 (Cont.)

Operation Type	Sample Request REST URL	Sample Response	Possible Error Codes
	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/context-data/smsf-non-3gpp-access?fields=plmnId,smsfDiameterAddresses	Output: <pre>{ "plmnId": { "mnc": "45", "mcc": "452" }, "smsfDiameterAddress": { "name": "uLmBAnz2b7S60evNkC7tHvcEZidEXppNIp7Le9yXzucgboiXFRkYg6597LBi31n0BxEBV2ZePCfKpUiEB0ULZMxudPsPepud.emte shurwldooeh", "realm": "uLmBAnz2b7S60evNkC7tHvcEZidEXppNIp7Le9yXzucgboiXFRkYg6597LBi31n0BxEBV2ZePCfKpUiEB0ULZMxudPsPepud.emte shurwldooeh" } }</pre>	NA

Resource Name: AccessAndMobilitySubscriptionData**HTTP Method:** GET, PUT, DELETE

Table 2-16 AccessAndMobilitySubscriptionData

HTTP Method	Sample REST URL	Description	Possible Error Codes
GET	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000089/77889/provisioned-data/am-data	Sample Output: GET-AccessAndMobilitySubscriptionData	400: "Invalid URI sent from client" 404: "Subscriber does not exist" 404: "Data field does not exist in data table"

Table 2-16 (Cont.) AccessAndMobilitySubscriptionData

HTTP Method	Sample REST URL	Description	Possible Error Codes
	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000089/77889/provisioned-data/am-data?fields=gpsis,nssai,sorInfo	NA	400: "Invalid URI sent from client" 404: "Subscriber does not exist" 404: "Data field does not exist in data table"
PUT	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000089/77889/provisioned-data/am-data	Payload: See PUT - AccessAndMobilitySubscriptionData	400: "Invalid URI sent from client" 404: "Subscriber does not exist"
DELETE	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000089/77889/provisioned-data/am-data	NA	NA

Resource Name: SmfSelectionSubscriptionData**HTTP Method:** PUT, DELETE, GET

Table 2-17 SmfSelectionSubscriptionData

HTTP Method	Sample REST URL	Description	Possible Error Codes
PUT	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000089/77889/provisioned-data/smf-selection-subscription-data	Payload: <pre>{ "supportedFeatures": "692F296F2Cb3BCA76Bc1E126FeEC12", "subscribedSnssaiInfos" :{ "snsai1": {"dnnInfos":[{ "dnn":"Dnn1", "defaultDnnIndicator": true, "lboRoamingAllowed":true, "iwkEpsInd": true }, { "dnn":"Dnn2", "defaultDnnIndicator": false, "lboRoamingAllowed":true, "iwkEpsInd": true }]} }, "sharedSnssaiInfosId": "96367-9z}MD*" }</pre>	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist"

Table 2-17 (Cont.) SmfSelectionSubscriptionData

HTTP Method	Sample REST URL	Description	Possible Error Codes
DELETE	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000089/77889/provisioned-data/smf-selection-subscription-data	NA	

Table 2-17 (Cont.) SmfSelectionSubscriptionData

HTTP Method	Sample REST URL	Description	Possible Error Codes
GET	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000089/77889/provisioned-data/smf-selection-subscription-data	Output: <pre>{ "supportedFeatures": "692F296F2Cb3BCA76Bc1E126FeEC12", "sharedSnssaiInfosId" : "96367-9z}MD*", "subscribedSnssaiInfos": { "snsai1": { "dnnInfos": [{ "dnn": "Dnn1", "iwkEpsInd": true, "lboRoamingAllowed": true, "defaultDnnIndicator" : true }], "dnn": "Dnn2", "iwkEpsInd": true, "lboRoamingAllowed": true, "defaultDnnIndicator" : false }] }</pre>	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 404: "Data field does not exist "

Table 2-17 (Cont.) SmfSelectionSubscriptionData

HTTP Method	Sample REST URL	Description	Possible Error Codes
	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000089/77889/provisioned-data/smf-selection-subscription-data?fields=subscribedSnsaiInfos	Output: <pre> { "subscribedSnsaiInfos": { "snsai1": { "dnnInfos": [{ "defaultDnnIndicator": true, "iwkEpsInd": true, "dnn": "Dnn1", "lboRoamingAllowed": true }, { "defaultDnnIndicator": false, "iwkEpsInd": true, "dnn": "Dnn2", "lboRoamingAllowed": true }] } } }</pre>	400: "Invalid URI sent from client" 404: "Subscriber does not exist" 404: "Data field does not exist "

Resource Name: SessionManagementSubscriptionData**HTTP Method:** GET, PUT, DELETE

Table 2-18 SessionManagementSubscriptionData

HTTP Method	Sample REST URL	Description	Possible Error Codes
GET	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000089/77889/provisioned-data/sm-data	Output: GET-SessionManagementSubscriptionData-Provisioning	400: "Invalid URI sent from client" 404: "Subscriber does not exist" 404: "Data field does not exist "
	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000089/77889/provisioned-data/sm-data?fields=internalGroupIds,dnnConfigurations	Output: GET-SessionManagementSubscriptionData-Provisioning	400: "Invalid URI sent from client" 404: "Subscriber does not exist" 404: "Data field does not exist "
PUT	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000089/77889/provisioned-data/sm-data	Payload: PUT-SessionManagementSubscriptionData	400: "Invalid URI sent from client" 404: "Subscriber does not exist"
DELETE	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000089/77889/provisioned-data/sm-data	NA	NA

Resource Name: SMSManagementSubscriptionData**HTTP Method:** GET, PUT, DELETE

Table 2-19 SMSManagementSubscriptionData

HTTP Method	Sample REST URL	Description	Possible Error Codes
GET	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000089/77889/provisioned-data/sms-mng-data	Output: <pre>{ "moSmsBarringAll": true, "moSmsSubscribed": false, "mtSmsBarringAll": true, "mtSmsSubscribed": true, "supportedFeatures": "CAe8de215CFa721BB2AE7Ef9c5f71a2e", "moSmsBarringRoaming": true, "mtSmsBarringRoaming": false, "sharedSmsMngDataIds": ["16994- 'JD", "693599-9~~GX"] }</pre>	400: "Invalid URI sent from client" 404: "Subscriber does not exist" 404: "Data field does not exist "

Table 2-19 (Cont.) SMSManagementSubscriptionData

HTTP Method	Sample REST URL	Description	Possible Error Codes
	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000089/77889/provisioned-data/sms-mng-data?fields=mtSmsSubscribed,sharedSmsMngDataIds	Output: <pre>{ "mtSmsSubscribed": true, "sharedSmsMngDataIds": ["16994- 'JD", "693599-9~~GX"] }</pre>	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 404: "Data field does not exist "
PUT	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000089/77889/provisioned-data/sms-mng-data	Payload: <pre>{ "supportedFeatures": "CAe8de215CFa721BB2AE7Ef9c5f71a2e", "mtSmsSubscribed": true, "mtSmsBarringAll": true, "mtSmsBarringRoaming": false, "moSmsSubscribed": false, "moSmsBarringAll": true, "moSmsBarringRoaming": true, "sharedSmsMngDataIds": ["16994- 'JD", "693599-9~~GX"] }</pre>	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist"

Table 2-19 (Cont.) SMSManagementSubscriptionData

HTTP Method	Sample REST URL	Description	Possible Error Codes
DELETE	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000089/77889/provisioned-data/sms-mng-data	NA	NA

Resource Name: TraceData**HTTP Method:** PUT, GET, DELETE

Table 2-20 TraceData

HTTP Method	Sample REST URL	Description	Possible Error Codes
PUT	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/77889/provisioned-data/trace-data	{ "traceRef": "070207-baE6Dd", "traceDepth": "MINIMUM", "neTypeList": "0f4FBefe95bF8", "eventList": "855B5bf7bec3AFB8c", "collectionEntityIpv4Addr": "26.118.255.253", "collectionEntityIpv6Addr": "2001:db8:85a3::8a2e:370:7334" }	400: "Invalid URI sent from client" 404: "Subscriber does not exist"

Table 2-20 (Cont.) TraceData

HTTP Method	Sample REST URL	Description	Possible Error Codes
GET	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/77889/provisioned-data/trace-data	Output: <pre>{ "traceRef": "070207-baE6Dd", "eventList": "855B5bf7beC3AFB8c", "neTypeList": "0f4FBFEfe95bF8", "traceDepth": "MINIMUM", "collectionEntityIpv4 Addr": "26.118.255.253", "collectionEntityIpv6 Addr": "2001:db8:85a3::8a2e: 370:7334" }</pre>	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 404: "Data field does not exist "
DELETE	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/77889/provisioned-data/trace-data	NA	NA

Resource Name: SMSSubscriptionData**HTTP Method:**PUT, GET, DELETE

Table 2-21 SMSSubscriptionData

HTTP Method	Sample REST URL	Description	Possible Error Codes
PUT	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/77889/provisioned-data/sms-data	Payload: <pre>{ "smsSubscribed":true, "sharedSmsSubsDataId": "63472-BTkzoYkBL1" }</pre>	400: "Invalid URI sent from client" 404: "Subscriber does not exist"
GET	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/77889/provisioned-data/sms-data	Output: <pre>{ "smsSubscribed":true, "sharedSmsSubsDataId": "63472-BTkzoYkBL1" }</pre>	400: "Invalid URI sent from client" 404: "Subscriber does not exist" 404: "Data field does not exist "
DELETE	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/77889/provisioned-data/sms-data	NA	NA

Sub-level Name: OperatorSpecificData**HTTP Method:** GET, PUT, DELETE

Table 2-22 OperatorSpecificData

HTTP Method	Sample REST URL	Description	Possible Error Codes
GET	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/operator-specific-data	Output: <pre>{ "NumberTypeElements": { "1": 1.1 }, "StringTypeElements": { "1": "s" }, "BooleanTypeElements": : { "1": true }, "IntegerTypeElements": : { "1": 1 } }</pre>	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 404: "Data field does not exist "
	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/operator-specific-data?fields=NumberTypeElements	Output: <pre>{ "NumberTypeElements": { "1": 1.1 } }</pre>	NA

Table 2-22 (Cont.) OperatorSpecificData

HTTP Method	Sample REST URL	Description	Possible Error Codes
PUT	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/operator-specific-data	Payload: <pre>{ "StringTypeElements": { "1": "s" }, "IntegerTypeElements": { "1": 1 }, "NumberTypeElements": { "1": 1.1 }, "BooleanTypeElements": { "1": true } }</pre>	400: "Invalid URI sent from client" 404: "Subscriber does not exist"
DELETE	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/operator-specific-data	NA	NA

Sub-level Name: OperatorDeterminedBarringData**HTTP Method: GET, PUT, DELETE**

Table 2-23 OperatorDeterminedBarringData

HTTP Method	Sample REST URL	Description	Possible Error Codes
PUT	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/operator-determined-barring-data	Payload: <pre>{ "roamingOdb": "OUTSIDE_HOME_PLMN" }</pre>	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist"
DELETE	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/operator-determined-barring-data	NA	NA
GET	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/operator-determined-barring-data	Output: <pre>{ "roamingOdb": "OUTSIDE_HOME_PLMN" }</pre>	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 404: "Data field does not exist"

Sub-level Name: ProvisionedParameterData**HTTP Method:** GET, PUT, DELETE

Table 2-24 ProvisionedParameterData

HTTP Method	Sample REST URL	Description	Possible Error Codes
PUT	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/pp-data	Payload: <pre>{ "communicationCharacteristics": { "ppSubsRegTimer": { "subsRegTimer": 12, "afInstanceId": "f9dc5b9c-a460-11e9-a2a3-2a2ae2dbcce4", "referenceId": 1 }, "ppActiveTime": { "activeTime": 23, "afInstanceId": "f9dc5b9c-a460-11e9-a2a3-2a2ae2dbcce4", "referenceId": 2 }, "ppDlPacketCount": 1 }, "supportedFeatures": "751b" }</pre>	400: "Invalid URI sent from client" 404: "Subscriber does not exist"
DELETE	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/pp-data	NA	NA

Table 2-24 (Cont.) ProvisionedParameterData

HTTP Method	Sample REST URL	Description	Possible Error Codes
GET	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/pp-data	Output: <pre>{ "supportedFeatures": "751b", "communicationCharacteristics": { "ppActiveTime": { "activeTime": 23, "referenceId": 2, "afInstanceId": "f9dc5b9c-a460-11e9-a2a3-2a2ae2dbcce4" }, "ppSubsRegTimer": { "referenceId": 1, "afInstanceId": "f9dc5b9c-a460-11e9-a2a3-2a2ae2dbcce4", "subsRegTimer": 12 }, "ppDlPacketCount": 1 } }</pre>	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 404: "Data field does not exist"

Sub-level Name: EeProfileData**HTTP Method: PUT, GET, DELETE**

Table 2-25 EeProfileData

HTTP Method	Sample REST URL	Description	Possible Error Codes
PUT	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/ee-profile-data	Payload: <pre>{ "restrictedEventTypes": ["LOSS_OF_CONNECTIVITY", "CHANGE_OF_SUPI_PEI_ASSOCIATION"], "supportedFeatures": "fcB2fFC084Fc2d5B4Afcfa2Df8614" }</pre>	400: "Invalid URI sent from client" 404: "Subscriber does not exist"
GET	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/ee-profile-data	Output: <pre>{ "supportedFeatures": "fcB2fFC084Fc2d5B4Afcfa2Df8614", "restrictedEventTypes": ["LOSS_OF_CONNECTIVITY", "CHANGE_OF_SUPI_PEI_ASSOCIATION"] }</pre>	400: "Invalid URI sent from client" 404: "Subscriber does not exist" 404: "Data field does not exist"

Table 2-25 (Cont.) EeProfileData

HTTP Method	Sample REST URL	Description	Possible Error Codes
	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/ee-profile-data?fields=restrictedEventTypes	Output: <pre>{ "restrictedEventTypes": ["LOSS_OF_CONNECTIVITY", "CHANGE_OF_SUPI_PEI_ASSOCIATION"] }</pre>	NA
DELETE	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/ee-profile-data	NA	NA

Sub-level Name: IdentityData**HTTP Method:** PUT, GET, DELETE

Table 2-26 IdentityData

HTTP Method	Sample REST URL	Description	Possible Error Codes
PUT	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/identity-data	<pre>{ "supiList": ["imsi-516737872", "imsi-516737873"], "gpsiList": ["msisdn-101176983803402"] }</pre>	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist"

Table 2-26 (Cont.) IdentityData

HTTP Method	Sample REST URL	Description	Possible Error Codes
GET	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/identity-data	Output: <pre>{ "gpsiList": ["msisdn-101176983803402"], "supiList": ["imsi-516737872", "imsi-516737873"] }</pre>	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 404: "Data field does not exist "
DELETE	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/identity-data	NA	NA

Sub-level Name: ue-update-confirmation-data**Resource Name:** Sor-data**HTTP Method:** PUT, GET, DELETE

Table 2-27 Sor-data

HTTP Method	Sample REST URL	Description	Possible Error Codes
PUT	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/ue-update-confirmation-data/sor-data	<pre>{ "provisioningTime": "2012-04-23T18:25:43.511Z", "ueUpdateStatus": "NOT_SENT", "sorXmacIue": "3a84eBBb8C694Cce4ebA2FCC9307af1F", "sorMacIue": "3a84eBBb8C694Cce4ebA2FCC9307af1A" }</pre>	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist"
GET	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/ue-update-confirmation-data/sor-data	Output: <pre>{ "sorMacIue": "3a84eBBb8C694Cce4ebA2FCC9307af1A", "sorXmacIue": "3a84eBBb8C694Cce4ebA2FCC9307af1F", "ueUpdateStatus": "NOT_SENT", "provisioningTime": "2012-04-23T18:25:43.511Z" }</pre>	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 404: "Data field does not exist"
DELETE	http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000028/ue-update-confirmation-data/sor-data	NA	NA

2.8 4G Policy Data Operations

The 4G Policy Data operations support the default entities using **Vendor Specific Attributes (VSA)** entities. The details are as follows:

Note

UDR accepts custom fields and entities by default. To validate schema for the custom fields or entities, additional configuration is required in UDR. For more information, see [Schema Management Specifications](#). If schema definition is not added for custom fields, UDR skips the schema validation and accepts the custom fields as received in the request payload.

Table 2-28 Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
POST	All Entity	{apiRoot}/nudr-dr-prov/v2/policy-data/{ueId}/sm-data/vsa	http://5G_UDR_IP:PORT/nudr-dr-prov/v2/policy-data/msisdn-33123654862/sm-data/vsa For more information about the request payload, see POST - All Entity on 4G Policy Using VSA .	• 201: Created • 400: Bad Request • 400: Duplicate Entry
GET	All Entity	{apiRoot}/nudr-dr-prov/v2/policy-data/{ueId}/sm-data/vsa	http://localhost:8080/nudr-dr-prov/v2/policy-data/msisdn-1111111111/sm-data/vsa	• 200: OK • 404: Subscriber does not exists • 404: "data field does not exists"

Table 2-28 (Cont.) Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
GET	Subscriber	{apiRoot}/ nudr-dr- prov/v2/ policy-data/ {ueId}/sm- data/vsa? fields=subscr iber	http:// localhost:8080/nudr- dr-prov/v2/policy- data/ msisdn-1111111111/sm- data/vsa? fields=subscriber http:// 5G_UDR_IP:PORT/nudr- dr-prov/v2/policy- data/ msisdn-33123654862/s m-data/vsa/ subscriber? fields=MSISDN,Tier,E ntitlement,BillingDa y Response Body <pre>{ "MSISDN": ["33123654862"], "Entitlement": ["DayPass", "WeekPass", "Weekend"], "Tier": "Prepaid", "BillingDay": 23 }</pre>	• 200: OK • 404: Subscriber does not exists • 404: "data field does not exists"
DELETE	Subscriber	{apiRoot}/ nudr-dr- prov/v2/ policy-data/ {ueId}/sm- data/vsa	http:// localhost:8080/nudr- dr-prov/v2/policy- data/ msisdn-1111111111/sm- data/vsa This API deletes the entire subscriber and VSA data.	• 204: No Content • 404: Subscriber does not exists

Table 2-28 (Cont.) Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
PUT	Subscriber	{apiRoot}/ nudr-dr- prov/v2/ policy-data/ {ueId}/sm- data/vsa	http:// localhost:8080/nudr- dr-prov/v2/policy- data/ msisdn-1111111111/sm- data/vsa Payload <pre>{ "subscriber": { "SequenceNumber": 3, "MSISDN": ["13121149999"], "BillingDay": 3, "operateTime": "20140513162800", "Tier": 1, "custom2": "abc", "custom3": "abc123" } }</pre>	• 201: Created • 400: "Invalid URI sent from client" • 409 conflict: "sequence no invalid"

Table 2-28 (Cont.) Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
PATCH	subscriber	{apiRoot}/ nudr-dr- prov/v2/ policy-data/ {ueId}/sm- data/vsa/ subscriber	http:// 5G_UDR_IP:PORT/nudr- dr-prov/v2/policy- data/ imsi-305801234567890 /sm-data/vsa/ subscriber Request Body <pre>[{ "op": "add", "filters": null, "patchFields": { "Entitlement": ["DayPass"] } }, { "op": "replace", "filters": null, "patchFields": { "MSISDN": ["14161234567"] } }, { "op": "delete", "filters": null, "patchFields": { "Entitlement": null } }]</pre>	• 201: Created • 204: No Content • 404: Subscriber does not exists • 404: data field does not exist

Table 2-28 (Cont.) Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
PUT	Quota	{apiRoot}/ nudr-dr- prov/v2/ policy-data/ {ueId}/sm- data/vsa	http:// localhost:8080/nudr- dr-prov/v2/policy- data/ msisdn-1111111111/sm- data/vsa Payload <pre>{ "usage": { "SequenceNumber": 1, "quota": [{ "totalVolume": "166000", "grantedTotalVolume": "0", "name": "AggregateQuota1", "grantedinputVolume": "0", "nextResetTime": "2010-05-22T00:00:00- 05:00Z", "time": "3400", "outputVolume": "5010", "inputVolume": "10000", "grantedoutputVolume" : "0", "quotaState": "valid", "serviceSpecific": "22", "cid": "9223372036854775808" }] } }</pre>	• 201: Created • 400 : "Invalid URI sent from client" • 409 conflict : "sequence no invalid"

Table 2-28 (Cont.) Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
			<pre>], "version": 3 } }</pre>	

Table 2-28 (Cont.) Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
PUT	Quota	{apiRoot}/ nudr-dr- prov/v2/ policy-data/ {ueId}/sm- data/vsa/ usage/ quota/row	http:// localhost:8080/nudr- dr-prov/v2/policy- data/ msisdn-1111111111/sm- data/vsa/usage/ quota/row Payload <pre>{ "usage": { "SequenceNumber": 1, "quota": [{ "totalVolume": "166000", "grantedTotalVolume": "0", "name": "AggregateQuota1", "grantedinputVolume": "0", "nextResetTime": "2010-05-22T00:00:00- 05:00Z", "time": "3400", "outputVolume": "5010", "inputVolume": "10000", "grantedoutputVolume" : "0", "quotaState": "valid", "serviceSpecific": "22", "cid": "9223372036854775808"</pre>	• 201: created • 404: Subscriber does not exists • 400: Bad Request

Table 2-28 (Cont.) Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
			<pre> }], "version": 3 }</pre>	

Table 2-28 (Cont.) Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
GET	Quota	{apiRoot}/ nudr-dr- prov/v2/ policy-data/ {ueId}/sm- data/vsa? fields=usage	http:// localhost:8080/nudr- dr-prov/v2/policy- data/ msisdn-1111111111/sm- data/vsa? fields=usage Payload <pre>{ "usage": { "SequenceNumber": 1, "quota": [{ "totalVolume": "166000", "grantedTotalVolume": "0", "name": "AggregateQuota1", "grantedinputVolume": "0", "nextResetTime": "2010-05-22T00:00:00- 05:00Z", "time": "3400", "outputVolume": "5010", "inputVolume": "10000", "grantedoutputVolume" : "0", "quotaState": "valid", "serviceSpecific": "22", "cid": "9223372036854775808"</pre>	• 200: Ok • 404: Subscriber does not exists • 404: data field does not exist

Table 2-28 (Cont.) Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
			<pre> }], "version": 3 }</pre>	

Table 2-28 (Cont.) Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
GET	Quota	{apiRoot}/ nudr-dr- prov/v2/ policy-data/ {ueId}/sm- data/vsa/ usage/quota/ row? name=Q1&cid=1 1223344	http:// 5G_UDR_IP:PORT/nudr- dr-prov/v2/policy- data/ msisdn-33123654862/s m-data/vsa/usage/ quota/row? name=Q1&cid=11223344 Response Body <pre>{ "usage": { "SequenceNumber": 1, "quota": [{ "totalVolume": "166000", "grantedTotalVolume": "0", "name": "Q1", "grantedinputVolume": "0", "nextResetTime": "2010-05-22T00:00:00- 05:00Z", "time": "3400", "outputVolume": "5010", "inputVolume": "10000", "grantedoutputVolume" : "0", "quotaState": "valid", "serviceSpecific": "22", "cid":</pre>	• 200: Ok • 404: Subscriber does not exists • 404: data field does not exist

Table 2-28 (Cont.) Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
			<pre>"11223344" }], "version": 3 } }</pre>	
GET	Quota	<pre>{apiRoot}/ nudr-dr- prov/v2/ policy-data/ {ueId}/sm- data/vsa/ usage/quota/ row? fields=output volume&name=Q 3&cid=1122334 4</pre>	<pre>http:// 5G_UDR_IP:PORT/nudr- dr-prov/v2/policy- data/ msisdn-33123654862/s m-data/vsa/usage/ quota/row? fields=outputvolume& name=Q3&cid=11223344</pre> Response Body <pre>{ "outputVolume": "4000" }</pre>	• 200: Ok • 404: Subscriber does not exists • 404: data field does not exist
DELETE	Quota	<pre>{apiRoot}/ nudr-dr- prov/v2/ policy-data/ {ueId}/sm- data/vsa? fields=usage</pre>	<pre>http:// localhost:8080/nudr- dr-prov/v2/policy- data/ msisdn-1111111111/sm- data/vsa? fields=usage</pre>	• 204: No Content • 404: Subscriber does not exists • 404: data field does not exists
DELETE	Quota	<pre>{apiRoot}/ nudr-dr- prov/v2/ policy-data/ {ueId}/sm- data/vsa/ usage/ quota/row</pre>	<pre>http:// 5G_UDR_IP:PORT/nudr- dr-prov/v2/policy- data/ msisdn-33123654862/s m-data/vsa/usage/ quota/row? name=Q1&cid=11223344</pre>	• 204: No Content • 404: Subscriber does not exists • 404: data field does not exists

Table 2-28 (Cont.) Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
PATCH	Quota	{apiRoot}/ nudr-dr- prov/v2/ policy-data/ {ueId}/sm- data/vsa/ usage/ quota/row	http:// 5G_UDR_IP:PORT/nudr- dr-prov/v2/policy- data/ msisdn-33123654862/s m-data/vsa/usage/ quota/row Request Body <pre>[{ "op": "replace", "filters": { "name": "Q1" }, "patchFields": { "inputVolume": "1000" } }, { "op": "delete", "filters": { "name": "Q1" }, "patchFields": { "OutputVolume": null }, { "op": "reset", "filters": { "name": "Q1" }, "patchFields": null }]</pre>	• 204: No Content • 404: Subscriber does not exists • 404 : data field does not exist

Table 2-28 (Cont.) Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
PUT	State	{apiRoot}/ nudr-dr- prov/v2/ policy-data/ {ueId}/sm- data/vsa	http:// localhost:8080/nudr- dr-prov/v2/policy- data/ msisdn-1111111111/sm- data/vsa Payload <pre>{ "state": { "SequenceNumber":0, "property": [{ "name": "mcc", "value": "315" }, { "name": "expire", "value": "20130801T09:00:00" }, { "name": "approved", "value": "no" }], "version": 1 } }</pre>	• 201: Created • 400 : "Invalid URI sent from client" • 409 conflict : "sequence no invalid"

Table 2-28 (Cont.) Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
GET	State	{apiRoot}/ nudr-dr- prov/v2/ policy-data/ {ueId}/sm- data/vsa? fields=state	http:// localhost:8080/nudr- dr-prov/v2/policy- data/ msisdn-1111111111/sm- data/vsa? fields=state Payload <pre>{ "state": { "SequenceNumber":0, "property": [{ "name": "mcc", "value": "315" }, { "name": "expire", "value": "20130801T09:00:00" }, { "name": "approved", "value": "no" }], "version": 1 } }</pre>	• 200: Ok • 404 : "Subscriber does not exist" • 404: data field does not exists

Table 2-28 (Cont.) Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
GET	State	{apiRoot}/ nudr-dr- prov/v2/ policy-data/ {ueId}/sm- data/vsa/ state/ property/row? fields=mcc,ex pire	http:// 5G_UDR_IP:PORT/nudr- dr-prov/v2/policy- data/ msisdn-33123654862/s m-data/vsa/state/ property/row? fields=mcc,expire Response Body { "property": [{ "name": "mcc", "value": "315" }], { "name": "expire", "value": "20130801T09:00:00" }] }	• 200: Ok • 404: Subscriber does not exists • 404 : data field does not exist
DELETE	State	{apiRoot}/ nudr-dr- prov/v2/ policy-data/ {ueId}/sm- data/vsa? fields=state	http:// localhost:8080/nudr- dr-prov/v2/policy- data/ msisdn-1111111111/sm- data/vsa? fields=state	• 204: No Content • 404: Subscriber does not exists • 404: data field does not exists

Table 2-28 (Cont.) Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
PATCH	State	{apiRoot}/ nudr-dr- prov/v2/ policy-data/ {ueId}/sm- data/vsa/ state/ property/row	http:// 5G_UDR_IP:PORT/nudr- dr-prov/v2/policy- data/ imsi-302370123456789 /sm-data/vsa/state/ property/row Request Body <pre>[{ "op": "replace", "filters": null, "patchFields": { "mcc": "302" } }, { "op": "replace", "filters": null, "patchFields": { "approved": "no" } }, { "op": "delete", "filters": null, "patchFields": { "mcc": null } }]</pre>	• 204: No Content • 404: Subscriber does not exists • 404: data field does not exist

Table 2-28 (Cont.) Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
PUT	DynamicQuota	{apiRoot}/nudr-dr-prov/v2/policy-data/{ueId}/sm-data/vsa	http://localhost:8080/nudr-dr-prov/v2/policy-data/msisdn-1111111111/sm-data/vsa Payload <pre>{ "definition": { "SequenceNumber": 1, "version": 1, "DynamicQuota": [{ "InstanceId": "15678", "Priority": "4", "InitialInputVolume": "15000", "InterimReportingInterval": "1000", "Duration": "100", "InitialOutputVolume": "5000", "Type": "pass", "activationdatetime": "2015-03-09T11:20:32Z", "expirationdatetime": "2015-04-09T11:20:32Z", "InitialTotalVolume": "20000", "name":</pre>	201: Created 400: "Invalid URI sent from client" 409 conflict: "sequence no invalid"

Table 2-28 (Cont.) Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
			<pre>"DynamicAggregateLimit", "InitialServiceSpecific": "9", "InitialTime": "135" }] }</pre>	

Table 2-28 (Cont.) Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
PUT	DynamicQuota	{apiRoot}/ nudr-dr- prov/v2/ policy-data/ {ueId}/sm- data/vsa/ definition/ DynamicQuota/ row	http:// 5G_UDR_IP:PORT/nudr- dr-prov/v2/policy- data/ msisdn-33123654862/s m-data/vsa/ definition/ DynamicQuota/row Request Body <pre>{ "definition": "DynamicQuota": [{ "InstanceId": "15678", "Priority": "4", "InitialInputVolume": "1500", "InterimReportingInte rval": "100", "Duration": "10", "InitialOutputVolume" : "500", "Type": "pass", "activationdatetime": "2015-03-09T11:20:32Z ", "expirationdatetime": "2015-04-09T11:20:32Z ", "InitialTotalVolume": "2000", "name": "AggregateLimit", "InitialServiceSpecif ic": "4", "InitialTime": "135" }] }</pre>	• 201: created • 404: Subscriber does not exists • 400: Bad Request

Table 2-28 (Cont.) Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
			} }	

Table 2-28 (Cont.) Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
GET	DynamicQuota	{apiRoot}/nudr-dr-prov/v2/policy-data/{ueId}/sm-data/vsa?fields=definition	http://localhost:8080/nudr-dr-prov/v2/policy-data/{ueId}/sm-data/vsa?fields=definition Payload <pre>{ "definition": { "SequenceNumber": 1, "version": 1, "DynamicQuota": [{ "InstanceId": "15678", "Priority": "4", "InitialInputVolume": "15000", "InterimReportingInterval": "1000", "Duration": "100", "InitialOutputVolume": "5000", "Type": "pass", "activationdatetime": "2015-03-09T11:20:32Z", "expirationdatetime": "2015-04-09T11:20:32Z", "InitialTotalVolume": "20000", </pre>	200: Ok 404: "Subscriber does not exist" 404: data field does not exist

Table 2-28 (Cont.) Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
			<pre>"name": "DynamicAggregateLimit", "InitialServiceSpecific": "9", "InitialTime": "135" }] }</pre>	

Table 2-28 (Cont.) Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
GET	DynamicQuota	{apiRoot}/ nudr-dr- prov/v2/ policy-data/ {ueId}/sm- data/vsa/ definition/ DynamicQuota/ row? name=Q1&cid=1 1223344	http:// 5G_UDR_IP:PORT/nudr- dr-prov/v2/policy- data/ msisdn-33123654862/s m-data/vsa/ definition/ DynamicQuota/row? name=DQ1&InstanceId= 11223344 Response Body <pre>{ "definition": { "SequenceNumber": 1, "version": 1, "DynamicQuota": [{ "InstanceId": "15678", "Priority": "4", "InitialInputVolume": "15000", "InterimReportingInte rval": "1000", "Duration": "100", "InitialOutputVolume" : "5000", "Type": "pass", "activationdatetime": "2015-03-09T11:20:32Z ", "expirationdatetime": "2015-04-09T11:20:32Z ",</pre>	• 200: Ok • 404: Subscriber does not exists • 404: data field does not exist

Table 2-28 (Cont.) Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
			<pre> "InitialTotalVolume": "20000", "name": "DynamicAggregateLimit", "InitialServiceSpecific": "9", "InitialTime": "135" }] } } </pre>	
GET	DynamicQuota	{apiRoot}/ nudr-dr- prov/v2/ policy-data/ {ueId}/sm- data/vsa/ definition/ DynamicQuota/ row? name=DQ3&InstanceId=15678& fields=InstanceId,InitialTotalVolume,InitialInputVolume	http:// 5G_UDR_IP:PORT/nudr-dr- prov/v2/policy-data/ msisdn-15145551234/s m-data/vsa/ definition/ DynamicQuota/ row? name=DQ3&InstanceId=15678&fields=InstanceId,InitialTotalVolume,InitialInputVolume Response Body <pre> { "InstanceId": "15678" "InitialTotalVolume": "2000" "InitialInputVolume": "1500" } </pre>	• 200: Ok • 404: Subscriber does not exists • 404: data field does not exist

Table 2-28 (Cont.) Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
DELETE	DynamicQuota	{apiRoot}/nudr-dr-prov/v2/policy-data/{ueId}/sm-data/vsa?fields=definition	http://localhost:8080/nudr-dr-prov/v2/policy-data/msisdn-1111111111/sm-data/vsa?fields=definition	• 204: No Content • 404: Subscriber does not exists • 404 : data field does not exist
DELETE	DynamicQuota	{apiRoot}/nudr-dr-prov/v2/policy-data/msisdn-33123654862/sm-data/vsa/definition/DynamicQuota/row?name=DQ1	http://5G_UDR_IP:PORT/nudr-dr-prov/v2/policy-data/msisdn-33123654862/sm-data/vsa/definition/DynamicQuota/row?name=DQ1	• 204: No Content • 404: Subscriber does not exists • 404: data field does not exist

Table 2-28 (Cont.) Default Entities Supported on 4G UDR using VSA

HTTP Method	Resource Name	Sample REST URL	Description	Possible Result Codes
PATCH	DynamicQuota	{apiRoot}/nudr-dr-prov/v2/policy-data/{ueId}/sm-data/vsa/definition/DynamicQuota/row	http://5G_UDR_IP:PORT/nudr-dr-prov/v2/policy-data/{ueId}/sm-data/vsa/definition/DynamicQuota/row Request Body <pre>[{ "op": "replace", "filters": { "name": "DQ1", "InstanceId": "15678" }, "patchFields": { "InitialTotalVolume": "1000" } }, { "op": "delete", "filters": { "name": "DQ1", "InstanceId": "11223344" }, "patchFields": { "InitialInputVolume": null } }]</pre>	• 204: No Content • 404: Subscriber does not exists • 404: data field does not exist
DELETE	All Entities Except Subscriber entity	{ apiRoot}/nudr-dr-prov/v2/policy-data/{ueId}/sm-data/vsa?fields=all	http://5G_UDR_IP:PORT/nudr-dr-prov/v2/policy-data/{ueId}/sm-data/vsa?fields=all This API deletes all VSA data (quota, state, and dynamicQuota) except subscriber entity.	• 204: No Content • 404: Subscriber does not exists • 404: data field does not exist

3

Signaling API Specifications

This section describes signaling API specifications

3.1 Operations Supported for NEF Data

This section provides information about the operations supported for NEF Data.

All APIs are supported as per TS29.519 v16.8.0 on UDR. Sample payloads are as follow:

- [GET - Access and Mobility Data](#)
- [PUT - Access and Mobility Data](#)
- [GET - PDUSessionManagementData](#)
- [PUT - PDU Session Management Data](#)
- [POST - ExposureDataSubscription](#)
- [PUT - ExposureDataSubscription](#)

3.2 Operations Supported for EIR Data

This section provides information about the operations supported for EIR Data.

All APIs are supported as per TS 29.511v16 on UDR. Sample payloads are as follow:

- [GET-equipment-status](#)

3.3 Operations Supported for PCF Data

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

All APIs are supported as per TS29.519 v16.8.0 on UDR. Sample payloads are as follow:

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

3.3.1 Subscription Operations for Policy Data

This section provides information about the subscription operations for policy data.

All APIs are supported as per TS29.519 v16.8.0 on UDR. Sample payloads are as below:

- [POST-Subscription Operations](#)
- [PUT-Subscription Operations](#)
- [PUT-Subscription Operations](#)

3.3.2 Subscription Notification Formats for PCF Data

This section provides information about the subscription notification formats for PCF data

All APIs are supported as per TS29.519 v16.8.0 on UDR. Sample payloads are as below:

- [PUT or PATCH - Subscription Notification](#)
- [DELETE DATA - Subscription Notification](#)
- [DELETE SUBSCRIBER - Subscription Notification](#)

3.4 Operations Supported for SLF Data

This section provides information about operations supported for SLF Data feature.

All APIs are supported as per 3GPP TS 29.504 v16.2.0 on UDR. Sample payloads are as follow:

- [GET-Subscriber ID](#)

3.5 Operations Supported for UDM Data

This section provides information about the operations supported for UDM data

All APIs are supported as per TS29.505 on UDR. Sample payloads are as follow:

- [GET-ContextData](#)
- [GET - Context Data - SMSF](#)
- [PUT - Amf3GppAccessRegistration](#)
- [PATCH - Amf3GppAccessRegistration](#)
- [GET-Amf3GppAccessRegistration](#)
- [GET-Amf3GppAccessRegistration](#)
- [PUT-AmfNon3GppAccessRegistration](#)
- [GET-AmfNon3GppAccessRegistration](#)
- [GET-AmfNon3GppAccessRegistration](#)
- [GET-AuthenticationSubscriptionData](#)
- [PATCH-AuthenticationSubscriptionData](#)
- [PUT-AuthenticationStatus](#)
- [GET-AuthenticationStatus](#)
- [GET - AccessAndMobilitySubscriptionData](#)
- [PUT-AccessAndMobilitySubscriptionData](#)
- [GET-SessionManagementSubscriptionData](#)
- [GET-ProvisionedData](#)

3.5.1 Subscription Operations for UDM Data

This table provides information about the subscription operations for UDM data.

All APIs are supported as per TS29.505 on UDR. Sample payloads are as follow:

- [POST-SDMSubscriptions](#)
- [PUT - SDMSubscriptions](#)
- [GET-SDMSubscriptions](#)
- [Post-Output-SubscriptionDataSubscriptions](#)
- [Post-SubscriptionDataSubscriptions](#)
- [Get-Output-SubscriptionDataSubscriptions](#)

3.6 UDSF Data Operations

The following table provides information about the UDSF Data Operations.

Table 3-1 UDSF Data Operations

HTTP Method	Sample REST URL	Description	Possible Error Codes
PUT	<code>https://localhost:9443/nudsf-dr/v1/udsf/msisdn-1111111111/udsf-data</code>	Sample data blob for UDSF data is: <pre>{ "a": 1, "b": 2 }</pre>	• 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	<code>https://localhost:9443/nudsf-dr/v1/udsf/msisdn-1111111111/udsf-data</code>	NA	• 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	<code>https://localhost:9443/nudsf-dr/v1/udsf/msisdn-1111111111/udsf-data</code>	NA	• 400: "Invalid URI sent from client" • 404: "Subscriber does not exist" • 400: "Unknown key, the key provided in the request is invalid"

4

Schema Management Specifications

This section describe the schema management specification operations for PCF, SLF, EIR, and UDM.

- [Profile Data Schema Management](#)
- [PCF Schema Management](#)
- [SLF Schema Management](#)
- [EIR Schema Management](#)
- [UDM Schema Management](#)

4.1 Profile Data Schema Management

The following table lists the Profile Data Schema Management operations.

OpenAPI for Management URI: OpenAPIMGM.yml

Table 4-1 Profile Data SchemaManagement Operations

HTTP Method	Sample REST URL	Description	Possible Error Codes
PUT	<code>http://localhost:8081/nudr-dr-mgm/v1/profile-data/schema</code>	To add new field "customFieldKey" for profile-data, see PUT Profile Data This operation adds a new schema with version tag as "v1" and current schema points to "v1" now. To rollback to any other schema version, which already exists in database: <code>http://localhost:8081/nudr-dr-mgm/v1/profile-data/schema/version/v0</code>	• 400: In case of JSON syntax error with appropriate error message sent from SQL database. • 400: Invalid URI sent from client • 405: Operation not allowed

Table 4-1 (Cont.) Profile Data SchemaManagement Operations

HTTP Method	Sample REST URL	Description	Possible Error Codes
GET	- To get currently supported schema: http://localhost:8081/nudr-dr-mgm/v1/profile-data/schema - To get all schema versions supported by a resource: http://localhost:8081/nudr-dr-mgm/v1/profile-data/schema?version=all - To get any specific schema version: http://localhost:8081/nudr-dr-mgm/v1/profile-data/schema?version=v1	NA	405: Operation not allowed
DELETE	You cannot delete schema, which is currently in use. To delete any other stored schema: http://localhost:8081/nudr-dr-mgm/v1/profile-data/schema/version/v0	NA	405: Operation not allowed (in case of deleting current schema)

4.1.1 Management APIs for Attribute Mapping

The following table lists attribute mapping APIs on 5G UDR for conversion of 4G to 5G quota and dynamic quota attributes:

Table 4-2 Attribute Mapping

Operation Type	Sample REST URL	Description	Possible error codes
PUT - Quota Attribute (Individual field)	http:// localhost:8080/ nudr-dr-mgm/v1/ attribute- mapping/quota/ {4g-attribute- name} Example: http:// localhost:8080/ nudr-dr-mgm/v1/ attribute- mapping/quota/ custom1	Adding or updating a quota attribute Payload: <pre>{ "fiveg- attribute- placeholder": "umData", "quota- type": "quota", "fiveg- attribute-name": "fivegcustom1", "fiveg- attribute- datatype": "string", "fourg- attribute-name": "custom1" }</pre> Result Code: 201 on creation and 204 on updates	400: Invalid value for fiveg-attribute- placeholde 400: Invalid URI 400: Invalid value for quota-type 400: quota type in url and payload should be same 400: 4G attribute name in url and payload should be same 404: Attribute Mapping not found 405: Operation not allowed

Table 4-2 (Cont.) Attribute Mapping

Operation Type	Sample REST URL	Description	Possible error codes
PUT - Dynamic Quota Attribute (Individual field)	http://localhost:8080/nudr-dr-mgm/v1/attribute-mapping/dynamicquota/{4g-attribute-name} Example: http://localhost:8080/nudr-dr-mgm/v1/attribute-mapping/dynamicquota/custom1	Adding or updating a dynamic quota attribute Payload: <pre>{ "fiveg-attribute-placeholder": "umDataLimits", "quota-type": "dynamicquota", "fiveg-attribute-name": "fivegcustom1", "fiveg-attribute-datatype": "string", "fourg-attribute-name": "custom1" }</pre> Result Code: 201 on creation and 204 on update	400: Invalid value for fiveg-attribute-placeholder 400: Invalid URI 400: Invalid value for quota-type 400: quota type in url and payload should be same 400: 4G attribute name in url and payload should be same 404: Attribute Mapping not found 405: Operation not allowed
GET - Quota Attribute (Individual field)	http://localhost:8080/nudr-dr-mgm/v1/attribute-mapping/quota/{4g-attribute-name} Example: http://localhost:8080/nudr-dr-mgm/v1/attribute-mapping/quota/custom1	Payload: <pre>{ "fiveg-attribute-placeholder": "umData", "quota-type": "quota", "fiveg-attribute-name": "fivegcustom1", "fiveg-attribute-datatype": "string", "fourg-attribute-name": "custom1" }</pre> Result Code: 200 on success	400: Invalid URI 404: Attribute mapping not found 405: Operation not allowed

Table 4-2 (Cont.) Attribute Mapping

Operation Type	Sample REST URL	Description	Possible error codes
GET - Dynamic Quota Attribute (Individual field)	http://localhost:8080/nudr-dr-mgm/v1/attribute-mapping/dynamicquota/{4g-attribute-name} Example: http://localhost:8080/nudr-dr-mgm/v1/attribute-mapping/dynamicquota/custom1	Response payload: <pre>{ "fiveg-attribute-placeholder": "umDataLimits", "quota-type": "dynamicquota", "fiveg-attribute-name": "fivegcustom1", "fiveg-attribute-datatype": "string", "fourg-attribute-name": "custom1" }</pre> Result Code: 200 on success	400: Invalid URI 404: Attribute mapping not found 405: Operation not allowed
DELETE - Quota Attribute (Individual field)	http://localhost:8080/nudr-dr-mgm/v1/attribute-mapping/quota/{4g-attribute-name}/version/v1 Example: http://localhost:8080/nudr-dr-mgm/v1/attribute-mapping/quota/custom1/version/v1	Result Code: 204 on deletion	400: Invalid URI 404: Attribute mapping not found 405: Operation not allowed

Table 4-2 (Cont.) Attribute Mapping

Operation Type	Sample REST URL	Description	Possible error codes
DELETE - Dynamic Quota Attribute (Individual field)	<code>http://localhost:8080/nudr-dr-mgm/v1/attribute-mapping/dynamicquota/{4g-attribute-name}/version/v1</code> Example: <code>http://localhost:8080/nudr-dr-mgm/v1/attribute-mapping/dynamicquota/custom1/version/v1</code>	Result Code: 204 on deletion	400: Invalid URI 404: Attribute mapping not found 405: Operation not allowed

Table 4-2 (Cont.) Attribute Mapping

Operation Type	Sample REST URL	Description	Possible error codes
GET (All Quota Attribute)	http://localhost:8080/nudr-dr-mgm/v1/attribute-mapping/quota	Payload: <pre>[{ "fiveg-attribute-placeholder": "umData", "quota-type": "quota", "fiveg-attribute-name": "fivegcustom1", "fiveg-attribute-datatype": "string", "fourg-attribute-name": "custom1" }, { "fiveg-attribute-placeholder": "umData", "quota-type": "quota", "fiveg-attribute-name": "fivegcustom1", "fiveg-attribute-datatype": "string", "fourg-attribute-name": "custom2" }]</pre> Return 200 on success	400: Invalid URI 404: Attribute mapping not found 405: Operation not allowed

Table 4-2 (Cont.) Attribute Mapping

Operation Type	Sample REST URL	Description	Possible error codes
GET (All Dynamic Quota Attribute)	http://localhost:8080/nudr-dr-mgm/v1/attribute-mapping/dynamicquota	Payload: <pre>[{ "fiveg-attribute-placeholder": "umData", "quota-type": "dynamicquota", "fiveg-attribute-name": "fivegcustom1", "fiveg-attribute-datatype": "string", "fourg-attribute-name": "custom1" }, { "fiveg-attribute-placeholder": "umData", "quota-type": "dynamicquota", "fiveg-attribute-name": "fivegcustom1", "fiveg-attribute-datatype": "string", "fourg-attribute-name": "custom2" }]</pre> Return 200 on success	400: Invalid URI 404: Attribute mapping not found 405: Operation not allowed

Table 4-2 (Cont.) Attribute Mapping

Operation Type	Sample REST URL	Description	Possible error codes
PUT (All Quota Attribute)	http://localhost:8080/nudr-dr-mgm/v1/attribute-mapping/quota	To Add, Update, or Delete quota attributes. Payload: <pre>[{ "fiveg-attribute-placeholder": "umData", "quota-type": "quota", "fiveg-attribute-name": "fivegcustom1", "fiveg-attribute-datatype": "string", "fourg-attribute-name": "custom1" }, { "fiveg-attribute-placeholder": "umData", "quota-type": "quota", "fiveg-attribute-name": "fivegcustom1", "fiveg-attribute-datatype": "string", "fourg-attribute-name": "custom2" }]</pre> Return 201 on creation and 204 on updates	400: Invalid value for fiveg-attribute-placeholder 400: Invalid URI 400: Invalid value for quota-type 400: quota type in url and payload should be same 404: Attribute Mapping not found 405: Operation not allowed

Table 4-2 (Cont.) Attribute Mapping

Operation Type	Sample REST URL	Description	Possible error codes
PUT (All Dynamic Quota Attribute)	<code>http://localhost:8080/nudr-dr-mgm/v1/attribute-mapping/dynamicquota</code>	To Add, Update, or Delete dynamic quota attributes. Payload: <pre>[{ "fiveg-attribute-placeholder": "umData", "quota-type": "dynamicquota", "fiveg-attribute-name": "fivegcustom1", "fiveg-attribute-datatype": "string", "fourg-attribute-name": "custom1" }, { "fiveg-attribute-placeholder": "umData", "quota-type": "dynamicquota", "fiveg-attribute-name": "fivegcustom1", "fiveg-attribute-datatype": "string", "fourg-attribute-name": "custom2" }]</pre> Return 201 on creation and 204 on updates	400: Invalid value for fiveg-attribute-placeholder 400: Invalid URI 400: Invalid value for quota-type 400: quota type in url and payload should be same 404: Attribute Mapping not found 405: Operation not allowed

4.2 PCF Schema Management

The following table lists the PCF Schema Management operations.

OpenAPI for Management URI: OpenAPIMGM.yml

Table 4-3 PCF Schema Management Operations

HTTP Method	Sample REST URL	Description	Possible Error Codes
PUT	https://localhost:9443/nudr-dr-mgm/v1/policy-data/schema/am-data	Adding new field "custom" for am-data. Source: PCF Schema Management - PUT This operation adds one new schema with version tag as "v1" and current points to "v1" now. 2) To rollback to any other schema version which already exist in db: https://localhost:9443/nudr-dr-mgm/v1/policy-data/schema/am-data/version/v0	405: Operation not allowed 400: In case of JSON syntax error with appropriate error message sent from SQL database. 400: Invalid URI sent from client
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	NA	405 : Operation not allowed

Table 4-3 (Cont.) PCF Schema Management Operations

HTTP Method	Sample REST URL	Description	Possible Error Codes
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	NA	405: "Operation not allowed" (in case of deleting current schema)
PUT	https://localhost:9443/nudr-dr-mgm/v1/policy-data/schema/sm-data	Remove mandatory parameter for sm-data, see, PUT - sm-data schema This operation will add one new schema with version tag as "v2" and current will point to "v2" now. To rollback to any other schema version which already exists in db: https://localhost:9443/nudr-dr-mgm/v1/policy-data/schema/sm-data/version/v0	405: Operation not allowed 400: In case of JSON syntax error with appropriate error message sent from SQL database. 400: Invalid URI sent from client
GET	To get currently supported schema: https://localhost:9443/nudr-dr-mgm/v1/policy-data/schema/sm-data To get all schema versions supported by a resource: https://localhost:9443/nudr-dr-mgm/v1/policy-data/schema/sm-data?version=all To get any specific schema version: https://localhost:9443/nudr-dr-mgm/v1/policy-data/schema/sm-data?version=v1		405: Operation not allowed

Table 4-3 (Cont.) PCF Schema Management Operations

HTTP Method	Sample REST URL	Description	Possible Error Codes
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/sm-data/version/v1		405: Operation not allowed
PUT	https://localhost:8081/nudr-dr-mgm/v1/policy-data/schema/ue-policy-set	For ue-policy-set schema, see, PUT-ue-policy-set schema This operation will add one new schema with version tag as "v2" and current will point to "v2" now. To rollback to any other schema version which already exist in db: https://localhost:9443/nudr-dr-mgm/v1/policy-data/schema/ue-policy-set/version/v0	405: "Operation not allowed" 400: In case of JSON syntax error with appropriate error message sent from SQL database. 400: Invalid URI sent from client
GET	To get currently supported schema: https://localhost:9443/nudr-dr-mgm/v1/policy-data/schema/ue-policy-set To get all schema versions supported by a resource. https://localhost:9443/nudr-dr-mgm/v1/policy-data/schema/ue-policy-set?version=all To get any specific schema version: https://localhost:9443/nudr-dr-mgm/v1/policy-data/schema/ue-policy-set?version=v1		405: Operation not allowed

Table 4-3 (Cont.) PCF Schema Management Operations

HTTP Method	Sample REST URL	Description	Possible Error Codes
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/ue-policy-set/version/v1		405: Operation not allowed
PUT (vsa)	https://localhost:9443/nudr-dr-mgm/v1/policy-data/schema/sm-data/vsa	- To add a new field "custom" for VSAVSA Example Schema: PCF Schema Management - PUT (VSA). This operation adds one new schema with version tag as "v1" and current points to "v1" now. - To rollback to any other schema version which already exists in db: https://localhost:9443/nudr-dr-mgm/v1/policy-data/schema/sm-data/vsa/version/v0	400: in case of json syntax error with appropriate error message sent from SQL db. 400: Invalid URI sent from client

Table 4-3 (Cont.) PCF Schema Management Operations

HTTP Method	Sample REST URL	Description	Possible Error Codes
GET(VSA)	- To get currently supported schema: https://localhost:9443/nudr-dr-mgm/v1/policy-data/schema/sm-data/vsa - To get all schema versions supported by a resource. https://localhost:9443/nudr-dr-mgm/v1/policy-data/schema/sm-data/vsa?version=all - To get any specific schema version https://localhost:9443/nudr-dr-mgm/v1/policy-data/schema/sm-data/vsa?version=v1	VSA_GET_CURRENT_SCHEMA PCF Schema Management - GET (VSA) VSA_GET_ALL_SCHEMA PCF Schema Management - VSA GET ALL SCHEMA VSA_GET_V1 PCF Schema Management - VSA GET V1	405 : Operation not allowed
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/sm-data/vsa	NA	405 : "Operation not allowed" (in case of deleting current schema)

4.3 SLF Schema Management

The following table lists the SLF Schema Management operations.

OpenAPI for Management URI: OpenAPIMGM.yml

Table 4-4 SLF Schema Management Operations

HTTP Method	Sample REST URL	Description	Possible Error Codes
PUT	<code>https://localhost:9443/nudr-dr-mgm/v1/slf-group/schema/slf-group-prov</code>	- To add a new field "expiry" for slf-group-prov: SLF_GROUP_PROV_SCHEMA: SLF Schema Management - PUT (SLF) This operation adds one new schema with version tag as "v2" and current points to "v2" now. - To rollback to any other schema version which already exist in db: <code>https://localhost:9443/nudr-dr-mgm/v1/slf-group/schema/slf-group-prov/version/v2</code>	405: Operation not allowed 400: in case of JSON syntax error with appropriate error message sent from SQL database. 400: Invalid URI sent from client
GET	- To get currently supported schema: <code>https://localhost:9443/nudr-dr-mgm/v1/slf-group/schema/slf-group-prov</code> - To get all schema versions supported by a resource: <code>https://localhost:9443/nudr-dr-mgm/v1/slf-group/schema/slf-group-prov?version=all</code> - To get any specific schema version: <code>https://localhost:9443/nudr-dr-mgm/v1/slf-group/schema/slf-group-prov?version=v1</code>	NA	404: Not Found
DELETE	To delete any other stored schema: <code>https://localhost:9443/nudr-dr-mgm/v1/slf-group/schema/slf-group-prov/version/v1</code>	Schema, which is currently in use could not be deleted.	405: "Operation not allowed" (in case of deleting current schema) 404: Not Found

4.4 EIR Schema Management

The following table lists the EIR Schema Management operations.

OpenAPI for Management URI: OpenAPIMGM.yml

Table 4-5 EIR Schema Management Operations

HTTP Method	Sample REST URL	Description	Possible Error Codes
PUT	<code>http://localhost:8080/nudr-dr-mgm/v1/equipment-status/schema/n5g-eir-prov</code>	201 CREATED This schema will support equipment status with multiple combination of grey, black, and white. This serves as the default schema. Body <pre>{ "type": "object", "\$schema": "http://json-schema.org/draft-07/schema#", "properties": { "equipment-status": { "type": "object", "properties": { "grey": { "type": "boolean", "default": false, "examples": [false] }, "black": { "type": "boolean", "default": false, "examples": [true] }, "white": { "type": "boolean", "default": false, "examples": [true] } } } } }</pre>	405: Operation not allowed 400: in case of JSON syntax error with appropriate error message sent from SQL database. 400: Invalid URI sent from client

Table 4-5 (Cont.) EIR Schema Management Operations

HTTP Method	Sample REST URL	Description	Possible Error Codes
		<pre>"additionalProperties": false } }</pre> This schema will allow one of grey, white, and black inside equipment status only when it is set to true. Body <pre>{ "\$schema": "http://json-schema.org/draft-07/schema#", "type": "object", "properties": { "equipment-status": { "type": "object", "oneOf": [{ "required": ["gray"] }, { "required": ["white"] }, { "required": ["black"] }], "properties": { "gray": { "const": true }, "white": { "const": true }, </pre>	

Table 4-5 (Cont.) EIR Schema Management Operations

HTTP Method	Sample REST URL	Description	Possible Error Codes
		<pre> "black": { "const": true } } } } } </pre>	
GET	- To get currently supported schema: http://localhost:8080/nudr-dr-mgm/v1/equipment-status/schema/n5g-eir-prov - To get all schema versions supported by a resource: http://localhost:8080/nudr-dr-mgm/v1/equipment-status/schema/n5g-eir-prov?version=all - To get any specific schema version: http://localhost:8080/nudr-dr-mgm/v1/equipment-status/schema/n5g-eir-prov?version=v1	NA	404: Not Found
DELETE	You cannot delete schema, which is currently in use. To delete any other stored schema: http://localhost:8080/nudr-dr-mgm/v1/equipment-status/schema/n5g-eir-prov/version/v0	NA	405: "Operation not allowed" (in case of deleting current schema) 404: Not Found

4.5 UDM Schema Management

The following table list the UDM Schema Management operations.

OpenAPI for Management URI: OpenAPIMGM.yml

Table 4-6 UDM Schema Management Operations

HTTP Method	Sample REST URL	Description	Possible Error Codes
PUT (provisioned-data/am-data)	<code>http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/am-data</code>	To add a new field "custom" for am-data. Schema for provisioned/am-data: UDM Schema Management - PUT (provisioned-data/am-data) This operation adds one new schema with version tag as "v1" and current points to "v1" now. To rollback to any other schema version, which already exist in db: <code>http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/am-data/version/v0</code>	405: Operation not allowed 400: in case of JSON syntax error with appropriate error message sent from SQL database 400: Invalid URI sent from client
GET	- To get currently supported schema: <code>http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/am-data</code> - To get all schema versions supported by a resource: <code>http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/am-data?version=all</code> - To get any specific schema version: <code>http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/am-data?version=v1</code>	NA	405: Operation not allowed

Table 4-6 (Cont.) UDM Schema Management Operations

HTTP Method	Sample REST URL	Description	Possible Error Codes
DELETE	To delete any other stored schema: <code>http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/am-data/version/v1</code>	Schema currently in use cannot not be deleted.	405: "Operation not allowed" (in case of deleting current schema)
PUT (provisioned/sm-data)	<code>http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/sm-data</code>	- To add a new field "custom" for sm-data Schema for provisioned/sm-data: UDM Schema Management - PUT(provisioned/sm-data) This operation adds one new schema with version tag as "v1" and current points to "v1" now. - To rollback to any other schema version which already exist in db: <code>http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/sm-data/version/v0</code>	400: In case of JSON syntax error with an appropriate error message sent from SQL database. 400: Invalid URI sent from client

Table 4-6 (Cont.) UDM Schema Management Operations

HTTP Method	Sample REST URL	Description	Possible Error Codes
GET	- To get currently supported schema: http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/sm-data - To get all schema versions supported by a resource: http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/sm-data?version=all - To get any specific schema version: http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/sm-data?version=v1	NA	405: Operation not allowed
DELETE	To delete any other stored schema: http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/sm-data/version/v1	Schema currently in use could not be deleted.	405: "Operation not allowed" (in case of deleting current schema)

Table 4-6 (Cont.) UDM Schema Management Operations

HTTP Method	Sample REST URL	Description	Possible Error Codes
PUT (provisioned/ smf-selection- subscription-data)	http:// localhost:8086/nudr- dr-mgm/v1/ subscription-data/ schema/provisioned- data/smf-selection- subscription-data	To add a new field "custom" for smf-selection-subscription-data provisioned/smf-selection-subscription-data: UDM Schema Management - PUT (provisioned/smf-selection-subscription-data) This operation adds one new schema with version tag as "v1" and current points to "v1" now. To rollback to any other schema version which already exist in db: http:// localhost:8086/nudr- dr-mgm/v1/ subscription-data/ schema/provisioned- data/smf-selection- subscription-data/ version/v0	• 405: Operation not allowed • 400: In case of JSON syntax error with an appropriate error message sent from SQL database. • 400: Invalid URI sent from client

Table 4-6 (Cont.) UDM Schema Management Operations

HTTP Method	Sample REST URL	Description	Possible Error Codes
GET	- To get currently supported schema: http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/smf-selection-subscription-data - To get all schema versions supported by a resource: http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/smf-selection-subscription-data?version=all - To get any specific schema version: http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/smf-selection-subscription-data?version=v1	NA	405: Operation not allowed
DELETE	To delete any other stored schema: http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/smf-selection-subscription-data/version/v1	Schema currently in use could not be deleted.	405: "Operation not allowed" (in case of deleting current schema)

Table 4-6 (Cont.) UDM Schema Management Operations

HTTP Method	Sample REST URL	Description	Possible Error Codes
PUT (provisioned/sms-mng-data)	http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/sms-mng-data	To add a new field "custom" for sms-mng-data provisioned/sms-mng-data: UDM Schema Management - PUT(provisioned/sms-mng-data) This operation adds one new schema with version tag as "v1" and current points to "v1" now. To rollback to any other schema version which already exist in db: http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/sms-mng-data/version/v0	405: Operation not allowed 400: In case of JSON syntax error with an appropriate error message sent from SQL database. 400: Invalid URI sent from client
GET	- To get currently supported schema: http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/sms-mng-data - To get all schema versions supported by a resource: http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/sms-mng-data?version=all - To get any specific schema version: http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/sms-mng-data?version=v1	NA	405: Operation not allowed

Table 4-6 (Cont.) UDM Schema Management Operations

HTTP Method	Sample REST URL	Description	Possible Error Codes
DELETE	To delete any other stored schema: <code>http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/sms-mng-data/version/v1</code>	Schema currently in use could not be deleted.	405: "Operation not allowed" (in case of deleting current schema)
PUT (provisioned/trace-data)	<code>http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/trace-data</code>	To add a new field "custom" for trace-data provisioned/trace-data: UDM Schema Management - PUT(provisioned/trace-data). This operation adds one new schema with version tag as "v1" and current point to "v1" now. To rollback to any other schema version, which already exist in db: <code>http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/trace-data/version/v0</code>	405: Operation not allowed 400: In case of JSON syntax error with an appropriate error message sent from SQL database. 400: Invalid URI sent from client

Table 4-6 (Cont.) UDM Schema Management Operations

HTTP Method	Sample REST URL	Description	Possible Error Codes
GET	- To get currently supported schema: http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/trace-data - To get all schema versions supported by a resource: http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/trace-data?version=all - To get any specific schema version: http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/trace-data?version=v1	NA	405: Operation not allowed
DELETE	To delete any other stored schema: http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/trace-data/version/v1	Schema currently in use could not be deleted.	405: "Operation not allowed" (in case of deleting current schema)

Table 4-6 (Cont.) UDM Schema Management Operations

HTTP Method	Sample REST URL	Description	Possible Error Codes
PUT (provisioned/sms-data)	http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/sms-data	To add a new field "custom" for sms-data provisioned/sms-data: UDM Schema Management - PUT(provisioned/sms-data) This operation adds one new schema with version tag as "v1" and current points to "v1" now. To rollback to any other schema version, which already exist in database: http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/sms-data/version/v0	405: Operation not allowed 400: In case of JSON syntax error with an appropriate error message sent from SQL database. 400: Invalid URI sent from client
GET	- To get currently supported schema: http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/sms-data - To get all schema versions supported by a resource: http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/sms-data?version=all - To get any specific schema version: http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/sms-data?version=v1	NA	405: Operation not allowed

Table 4-6 (Cont.) UDM Schema Management Operations

HTTP Method	Sample REST URL	Description	Possible Error Codes
DELETE	To delete any other stored schema: <code>http://localhost:8086/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/sms-data/version/v1</code>	Schema currently in use could not be deleted.	405: "Operation not allowed" (in case of deleting current schema)

5

Configuration API Specifications

Configuration REST APIs are exposed directly on the nudr-config microservice of UDR, and it does not use Ingress Gateway for traffic (OAM traffic). These APIs are consumed by CNC Console GUI. For more information about APIs, see *Oracle Communications Cloud Native Core Unified Data Repository User Guide*.

5.1 Configuration APIs for UDR Microservices

This section describes the configuration APIs for UDR microservices.

Table 5-1 Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
GET	http://ocudr-nudr-config.myudr:5001/nudr-config/v1/udr.nudrservice.cfg/DR-SERVICE	Result Code: 200 OK Payload <pre>{ "hikariPoolSize": 25, "defaultSlfGroupName": "DefaultGrp", "onDemandMigrationEnabled": true, "tracingEnabled": true, "defaultGroupIdEnabled": false, "subscriptionDataSubscriptionsOnly": false, "defaultResponse": "EQUIPMENT_UNKNOWN", "accessLogEnabled": false, "defaultResponseIMEINotFound": "EQUIPMENT_UNKNOWN" }</pre>	NA

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
GET	http://ocudr-nudr-config.myudr:5001/nudr-config/v1/udr.notifyservice.cfg/NOTIFY-SERVICE	Result Code: 200 OK Payload <pre>{ "hikariPoolSize": 10, "retryErrorCodes": "400,429,500,503", "httpRetryCount": 2, "notifRetryCount": 3, "notifRetryInterval": 5 }</pre>	NA

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
GET	http://ocudr-nudr-config.myudr:5001/nudr-config/v1/udr.global.cfg/GLOBAL	Result Code: 200 OK Payload <pre> { "dbServiceName": "mysql-connectivity- service.occne-ndb", "udrServices": "All", "udsfEnabled": false, "ingressHttpPort": "", "ingressHttpsPort": "", "snssai": "2- FFFFFFFF", "dnn": "dnn1", "autoCreate": true, "autoEnrolOnSignalling": true, "etagEnabled": true, "sbiCorrelationInfoEnabled": false, "consumerNF": "PCF,UDM,NEF", "nfInstanceId": "5a7bd676- ceeb-44bb-95e0- f6a55a328b03", "vsaDefaultBillingDay": 1, "subscriberActivityEnabled": false, "addDefaultBillingDay": true, "enableControlledShutdown": true, </pre>	NA

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
		<pre>"suppressNotification Enabled": true, "keyType": "msisdn", "keyRange": "0000000-0000000", "subscriberIdentifiers ": { "msisdn": [], "imsi": [], "nai": [], "extid": [] } }</pre>	

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
GET	http://ocudr-nudr-config.myudr:5001/nudr-config/v1/udr.diamgateway.cfg/DIAMETER-GATEWAY	Result Code: 200 OK Payload <pre>{ "realm": "oracle.com", "identity": "nudr.oracle.com", "reconnectDelay": 3, "responseTimeout": 4, "connectionTimeOut": 3, "watchdogInterval": 6, "reconnectLimit": 50, "onDemandMigrationEnabled": false, "allowedClientNodes": [{ "port": 7867, "identity": "local1.tekelec1.com" }, { "port": 3868, "identity": "sh-server", "host": "10.75.185.161", "responseOnly": true, "realm": "seagull", </pre>	NA

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
		<pre>"type": "server" }] }</pre>	

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
GET	http://ocudr-nudr-config.myudr:5001/nudr-config/v1/udr.biservice.cfg/BULK_IMPORT	Result Code: 200 OK Payload <pre>[{ "importFile": "modify_slf5.csv", "timeQueued": "22-12-2020 10:36:06", "timeStarted": "22-12-2020 10:36:08", "timeCompleted": "22-12-2020 10:36:11", "progress": 100.0, "failedKeys": "[]", "passCount": 100, "failCount": 0, "totalCount": 100, "status": "Completed" }, { "importFile": "modify_slf4.csv", "timeQueued": "22-12-2020 10:37:38", "timeStarted": "22-12-2020 11:13:14", "timeCompleted": "", "progress": 10.1085,</pre>	NA

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
		<pre> "failedKeys": "[]", "passCount": 101066, "failCount": 0, "totalCount": 1000000, "status": "Started" }] </pre>	
GET	http://ocudr-nudr-config.myudr:5001/nudr-config/v1/udr.ondemand.cfg/ON-DEMAND	Result Code: 200 OK Payload <pre> { "sourceUDRDeleteSubscriber": false, "realm": "oracle.com", "identity": "ondemand- migration.nudr.oracle .com", "enabled": false, "sourceUdrConfig": { "restEndpoint": "http://source-udr- rest-endpoint", "realm": "tekelec1275.com", "identity": "local1.tekelec1.com" , "hostIp": "10.0.7.500", "hostPort": 7867 } } </pre>	NA

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
GET	http://localhost:8081/nudr-config/v1/udr.diamgateway.congestion.cfg/DGW-CONGESTION	Result Code: 200 OK Payload <pre>{ "enabled": true, "defaultMessagePriority": 2, "sampleCount": 10, "calculationInterval": 100, "loadSheddingRulesMap": { "CONGESTED": { "state": "CONGESTED", "discardPriority": 10, "ansWithResultCode": "DIAMETER_TOO_BUSY", "resultCode": 3004, "vendorId": 10415 }, "DOC": { "state": "DOC", "discardPriority": 15, "ansWithResultCode": "DIAMETER_TOO_BUSY", "resultCode": 3004, "vendorId": 10415 } }, "priorityRules": [{</pre>	NA

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
		<pre> "ruleName": "SH-UDR_MIGRATION", "messagePriority": 2, "conditions": { "requestType": "UDR_MIGRATION", "application": "Sh", "message": "UDR_MIGRATION" } }, { "ruleName": "SH-UDR", "messagePriority": 5, "conditions": { "requestType": "UDR", "application": "Sh", "message": "UDR" } }, { "ruleName": "SH-PUR", "messagePriority": 3, "conditions": { "requestType": "PUR", "application": "Sh", "message": "PUR" } }, { "ruleName": "SH-SNR", </pre>	

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
		<pre> "messagePriority": 7, "conditions": { "requestType": "SNR", "application": "Sh", "message": "SNR" }, { "ruleName": "SH-PNR", "messagePriority": 3, "conditions": { "requestType": "PNR", "application": "Sh", "message": "PNR" }], "thresholds": { "CONGESTED": { "memory": 80, "cpu": 80, "queue": 50 }, "DOC": { "memory": 60, "cpu": 60, "queue": 30 } } </pre>	

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
GET	http://ocudr-nudr-config.myudr:5001/nudr-config/v1/udr.nudrprovservice.cfg/DR-PROV-SERVICE	Result Code: 200 OK Payload <pre>{ "hikariPoolSize": 25, "tracingEnabled": false, "onDemandMigrationEnabled": false, "provLogsEnabled": true, "provLogsApiNames": ["nudr-dr-prov"] }</pre>	NA

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
GET	http://ocudr-nudr-config.myudr:5001/nudr-config/v1/udr.bulkimportservice.cfg/BULK_IMPORT_CFG	Result Code: 200 OK Payload <pre>{ "pollingTimeInterval": 5000, "lastModifiedTimeInterval": 30, "pdbiFilePath": "/home/udruser/pdbi", "resultLogFilePath": "/home/udruser/pdbi/logs", "pdbiFileExpiryTime": "1d", "remoteHost": "10.75.229.18", "remoteHostUsername": "cloud-user", "fileExt": ".pdbi", "remoteDirPath": "/home/cloud-user/ocudr/sftppath/", "periodicImportPoll": "2", "periodicExportPoll": "1", "remoteHostPort": "22", "deleteFileFromPVC": false, "sftpEnabled": true }</pre>	NA

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
GET	http://ocudr-nudr-config.myudr:5001/nudr-config/v1/udr.exporttool.cfg/EXPORT_TOOL_CFG	Result Code: 200 OK Payload <pre>{ "fixedDumpFileNameSuffix": "policydata", "remoteUserName": "cloud-user", "exportMode": "EXML_EXPORT", "remotePath": "/" home/cloud-user/ ocudr/", "pollingInterval": "1", "msisdnCount": 5, "pvcPath": "/" home/udruser/export", "fieldDelimiter": ",", "serverPort": 22, "multiValueddelimiter": : " ", "serverHost": "10.75.229.18", "subscriberExportRange": { "keyType": "msisdn", "subscriberRanges": ["33123654860-33123654864", "33123654865-33123654870", "33123654871-33123654874", "33123654875-3123654880",</pre>	NA

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
		<pre> "33123654881-33123654885"] }, "subscriberRangeEnabled": false, "fileExtension": ".txt", "deleteFromPVC": true, "sftpExportEnabled": false, "startTime": "17/11/2022 07:02:04", "imsiCount": 5, "newFilePerRangeEnabled": false, "frequencyOfPeriodicDump": "ONE_TIME", "maxNumberOfDumps": 1 } </pre>	
GET	http://ocudr-nudr-config.myudr:5001/udr/nf-common-component/v1/operationalState	Result Code: 200 OK Payload <pre> { "operationalState": "NORMAL" } </pre>	• 404 Not Found: Operational State Not Found • 400 Bad Request

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
GET	<code>http://ocudr-nudr-config.myudr:5001/udr/nf-common-component/v1/operationalStateHistory</code> If offset is set to any value greater than 0 then it will return an empty array Value of the limit greater than 5 displays only 5 records with query params:<code>http://ocudr-nudr-config.myudr:5001/udr/nf-common-component/v1/operationalStateHistory?limit=3&offset=0</code>	Result Code: 200 OK Payload <pre>[{ "timeStamp": "2023-05-09T05:52:51.573025", "id": "9613dc1a-e6ce-4115-9e40-d1bee80ed8ca", "type": "operationalState", "value": "{\"state\": \"NORMAL\"}", "status": "SUCCESS" }, { "timeStamp": "2023-05-09T05:52:31.259321", "id": "0bf4eb21-d312-424b-93a5-03da6546069f", "type": "operationalState", "value": "{\"state\": \"NORMAL\"}", "status": "SUCCESS" }, { "timeStamp": "2023-05-09T05:49:28.531684", "id": "13c4824e-d8a4-4e98-94f7-0bf4debd4879", "type": "operationalState", "value": "{\"state\": \"COMPLETE_SHUTDOWN\"}", </pre>	404 Not Found: Operational State Not Found 400 Bad Request

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
		<pre> "status": "SUCCESS" }] </pre>	
GET	http://ocudr-nudr-config.myudr:5001/nudr-config/v1/migrationtool.status.cfg/MIGRATION_TOOL_STATU S	<pre> [{ "totalNumberOfSourceUdrSuccess": 0, "totalNumberOfKeyAlreadyExistsTargetUdr": 0, "totalNumberOfSourceUdrFailures": 2001, "timeCompleted": "2023-11-06T08:58:26.786402714Z", "progress": 100, "timeStarted": "2023-11-06T08:57:39.541432287Z", "totalNumberOfSubscribers": 2001, "totalNumberOfTargetUdrSuccess": 0, "totalNumberOfTargetUdrFailures": 0, "totalNumberOfSourceSubscriberNotFound": 0, "status": "COMPLETED" }] </pre>	404 Not Found: Data field does not exist 400 Bad Request

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
GET	http:ocudr-nudr-config.myudr:5001/nudr-config/v1/migration.tool.cfg/MIGRATION_TOOL	<pre>{ "migrationPauseEnabled": false, "keyType": "msisd", "delete4g": false, "migrationRealm": "oracle.com", "migrationIdentity": "migration.oracle.com", "migrationNodePort": 3868, "migrationNodeHost": "ocudr-nudr-migration-service ", "migrationRanges": { "migrationtool-nudr-migration-tool-1": { "startRange": 1111101001, "endRange": 1111102000 }, "migrationtool-nudr-migration-tool-0": { "startRange": 1111100000, "endRange": 1111101000 } } }</pre>	404 Not Found: Data field does not exist 400 Bad Request

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
		Note: The subscriber migration ranges cannot be modified.	

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
GET	http://ocudr-nudr-config.myudr:5001/nudr-config/v1/udr.exporttoolfilestatus.cfg/EXPORT_TOOL_FILE_STATUS	Result Code: 200 OK Payload <pre>{ "exportFileStatusList": [{ "jobId": "export-10-11-2022T15:32:00", "fileName": "2022-11-10-15-32-00-026810444_SLFTestSegment.txt", "startTime": "10/11/2022 15:32:00", "completeTime": "10/11/2022 15:32:14", "filePath": "/home/udruser/export/2022-11-10-15-32-00-026810444_SLFTestSegment.txt", "status": "FILE_EXPORT_COMPLETED" }, { "jobId": "export-09-11-2022T17:21:00", "fileName": "2022-11-09-17-21-00-018290194_SLFTestSegment.txt", "startTime": "09/11/2022 17:21:00",</pre>	400 Bad Request 404 Data field Doesn't exist

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
		<pre> "completeTime": "09/11/2022 17:21:10", "filePath": "/home/ udruser/export/ 2022-11-09-17-21-00-0 18290194_SLFTestSegme nt.txt", "status": "FILE_EXPORT_COMPLETE D" }, { "jobId": "export-10-11-2022T15 :35:00", "fileName": "2022-11-10-15-35-00- 019351328_SLFTestSegm ent.txt", "startTime": "10/11/2022 15:35:00", "completeTime": "10/11/2022 15:35:12", "filePath": "/home/ udruser/export/ 2022-11-10-15-35-00-0 19351328_SLFTestSegme nt.txt", "status": "FILE_EXPORT_COMPLETE D" }, { "jobId": "export-10-11-2022T05 :40:00", "fileName": </pre>	

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
		<pre>"2022-11-10-05-40-00-315885098_SLFTestSegment.txt", "startTime": "10/11/2022 05:40:00", "completeTime": "10/11/2022 05:40:43", "filePath": "/home/ udruser/export/ 2022-11-10-05-40-00-3 15885098_SLFTestSegme nt.txt", "status": "FILE_EXPORT_COMPLETE D" }] }</pre>	

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
GET	http://ocudr-nudr-config.myudr:5001/nudr-config/v1/udr.exporttoolstatus.cfg/EXPORT_TOOL_STATUS	Result Code: 200 OK Payload <pre>[{ "jobId": "export-2023-01-16T14:12:33", "subscriberCount": 1, "exportedSubscriberCount": 1, "jobProgress": 100.0, "exportState": "1/1", "status": "COMPLETED" }, { "jobId": "export-2023-01-16T14:13:53", "subscriberCount": 1, "exportedSubscriberCount": 1, "jobProgress": 100.0, "exportState": "1/1", "status": "COMPLETED" }, { "jobId": "export-2023-01-16T17:32:10", "subscriberCount": 1, "exportedSubscriberCount": 1, "jobProgress": 100.0, "exportState": "1/1",</pre>	• 400 Bad Request • 404 Data field Doesn't exist

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
		<pre>"status": "COMPLETED" }]</pre>	

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
GET	http://ocudr-nudr-config.myudr:5001/nudr-config/v1/udr.exporttoolstatus.cfg/EXPORT_TOOL_STATUS/export-2023-01-16T14:12:33	Result Code: 200 OK Payload <pre> { "exportedSubscriberCount": 1, "jobId": "export-2023-01-16T14:12:33", "jobProgress": 100, "subscriberCount": 1, "exportState": "1/1", "exportFileStatusList": [{ "jobId": "export-2023-01-16T14:12:33", "fileName": "2023-01-16-14-12-33-025218306_SLFTestSegment.txt", "filePath": "/home/udruser/export/2023-01-16-14-12-33-025218306_SLFTestSegment.txt", "completeTime": "16/01/2023 14:12:33", "startTime": "16/01/2023 14:12:33", "status": "FILE_EXPORT_COMPLETED" }], "status": </pre>	• 400 Bad Request • 404 Data field Doesn't exist

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
		"COMPLETED" }	
PUT	http://ocudr-nudr-config.myudr:5001/nudr-config/v1/udr.nudrservice.cfg/DR-SERVICE	Result Code: 200 OK Payload <pre>{ "hikariPoolSize": 25, "tracingEnabled": false, "subscriptionDataSubscriptionsOnly": false, "defaultGroupIdEnabled": false, "defaultSlfGroupName": "DefaultGrp", "onDemandMigrationEnabled": true, "defaultResponse": "EQUIPMENT_UNKNOWN", "accessLogEnabled": false, "defaultResponseIMEINotFound": "EQUIPMENT_UNKNOWN" }</pre>	• 400 Bad Request: Schema validation failed • Payload should at least one valid parameter • Read Only field can not be modified • JSONObject["unknown field name"] not found.

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
PUT	http://ocudr-nudr-config.myudr:5001/nudr-config/v1/udr.bulkimportservice.cfg/BULK_IMPORT_CFG	Result Code: 200 OK Payload <pre>{ "pollingTimeInterval": 5000, "lastModifiedTimeInterval": 30, "pdbiFilePath": "/home/udruser/pdbi", "resultLogFilePath": "/home/udruser/pdbi/logs", "pdbiFileExpiryTime": "1d", "remoteHost": "10.75.229.18", "remoteHostUsername": "cloud-user", "fileExt": ".pdbi", "remoteDirPath": "/home/cloud-user/ocudr/sftppath/", "periodicImportPoll": "2", "periodicExportPoll": "1", "remoteHostPort": "22", "deleteFileFromPVC": false }</pre>	• 400 Bad Request: Schema validation failed • Payload should at least one valid parameter • Read Only field can not be modified • JSONObject["unknown field name"] not found.

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
PUT	http://ocudr-nudr-config.myudr:5001/nudr-config/v1/udr.exporttool.cfg/EXPORT_TOOL_CFG	Result Code: 200 OK Payload <pre>{ "fixedDumpFileNameSuffix": "policydata", "remoteUserName": "cloud-user", "exportMode": "EXML_EXPORT", "remotePath": "/home/cloud-user/ocudr/", "pollingInterval": "1", "msisdnCount": 5, "pvcPath": "/home/udruser/export", "fieldDelimiter": ",", "serverPort": 22, "multiValuedDelimiter": " ", "serverHost": "10.75.229.18", "subscriberExportRange": { "keyType": "msisdn", "subscriberRanges": ["33123654860-33123654864", "33123654865-33123654870", "33123654871-33123654874", "33123654875-33123654880",] } }</pre>	• 400 Bad Request: Schema validation failed • Payload should at least one valid parameter • Read Only field can not be modified • JSONObject["unknown field name"] not found.

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
		<pre> "33123654881-33123654885"], }, "subscriberRangeEnabled": false, "fileExtension": ".txt", "deleteFromPVC": true, "sftpExportEnabled": false, "startTime": "17/11/2022 07:02:04", "imsiCount": 5, "newFilePerRangeEnabled": false, "frequencyOfPeriodicDump": "ONE_TIME", "maxNumberOfDumps": 1 } </pre>	
PUT	http://ocudr-nudr-config.myudr:5001/nudr-config/v1/udr.notifyservice.config/NOTIFY-SERVICE	Result Code: 200 OK Payload <pre> { "hikariPoolSize": 10, "retryErrorCodes": "400,429,500,503", "httpRetryCount": 2, "notifRetryCount": 3, "notifRetryInterval": 5 } </pre>	• 400 Bad Request: Schema validation failed • Payload should at least one valid parameter • Read Only field can not be modified • JSONObject["unknown field name"] not found.

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
PUT	http://ocudr-nudr-config.myudr:5001/nudr-config/v1/udr.diamgateway.cfg/DIAMETER-GATEWAY	Result Code: 200 OK payload <pre>{ "realm": "oracle.com", "identity": "nudr.oracle.com", "reconnectDelay": 3, "responseTimeout": 4, "connectionTimeOut": 3, "watchdogInterval": 6, "reconnectLimit": 50, "onDemandMigrationEnabled": false, "allowedClientNodes": [{ "port": 7867, "identity": "local1.tekelec1.com" }, { "port": 3868, "identity": "sh-server", "host": "10.75.185.161", "responseOnly": true, "realm": "seagull", "type": "4GUDR0ndemandConnect ion" }, { "port": 7867, "identity": "tekelec1275.com", "realm": "10.0.7.500", "host": "10.75.185.161", "responseOnly": true, "type": "4GUDR0ndemandConnect ion" }], "responseOnly": true, "host": "10.0.7.500", "realm": "tekelec1275.com", "type": "4GUDR0ndemandConnect ion" }</pre>	• 400 Bad Request: Schema validation failed • Payload should at least one valid parameter • Read Only field can not be modified • JSONObject["unknown field name"] not found. • Data field update not allowed

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
		<pre>"type": "server" }] }</pre>	

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
PUT	http://localhost:8081/nudr-config/v1/udr.diamgateway.congestion.cfg/DGW-CONGESTION	Result Code: 200 OK payload <pre>{ "enabled": true, "defaultMessagePriority": 2, "sampleCount": 10, "calculationInterval": 100, "loadSheddingRulesMap": { "CONGESTED": { "state": "CONGESTED", "discardPriority": 10, "ansWithResultCode": "DIAMETER_TOO_BUSY", "resultCode": 3004, "vendorId": 10415 }, "DOC": { "state": "DOC", "discardPriority": 15, "ansWithResultCode": "DIAMETER_TOO_BUSY", "resultCode": 3004, "vendorId": 10415 } }, "priorityRules": [{</pre>	• 400 Bad Request: Schema validation failed • Payload should at least one valid parameter • Read Only field can not be modified • JSONObject["unknown field name"] not found. • Data field update not allowed

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
		<pre> "ruleName": "SH- UDR_MIGRATION", "messagePriority": 2, "conditions": { "requestType": "UDR_MIGRATION", "application": "Sh", "message": "UDR_MIGRATION" } }, { "ruleName": "SH-UDR", "messagePriority": 5, "conditions": { "requestType": "UDR", "application": "Sh", "message": "UDR" } }, { "ruleName": "SH-PUR", "messagePriority": 3, "conditions": { "requestType": "PUR", "application": "Sh", "message": "PUR" } }, { "ruleName": "SH-SNR", </pre>	

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
		<pre> "messagePriority": 7, "conditions": { "requestType": "SNR", "application": "Sh", "message": "SNR" }, { "ruleName": "SH-PNR", "messagePriority": 3, "conditions": { "requestType": "PNR", "application": "Sh", "message": "PNR" }], "thresholds": { "CONGESTED": { "memory": 80, "cpu": 80, "queue": 50 }, "DOC": { "memory": 60, "cpu": 60, "queue": 30 } } </pre>	

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
PUT	http://ocudr-nudr-config.myudr:5001/nudr-config/v1/udr.global.cfg/GLOBAL	<pre> 200 OK payload { "dbServiceName": "mysql-connectivity- service.ocne-ndb", "udrServices": "All", "udsfEnabled": false, "ingressHttpPort": "", "ingressHttpsPort": "", "snssai": "2- FFFFFF", "dnn": "dnn1", "autoCreate": true, "autoEnrolOnSignallin g": true, "etagEnabled": true, "sbiCorrelationInfoEn able": false, "consumerNF": "PCF,UDM,NEF", "nfInstanceId": "5a7bd676- ceeb-44bb-95e0- f6a55a328b03", "vsaDefaultBillingDay ": 1, "subscriberActivityEn abled": false, "addDefaultBillingDay ": true, "enableControlledShut down" : true, </pre>	• 400 Bad Request: Schema validation failed • Payload should at least one valid parameter • Read Only field can not be modified • JSONObject[\"unknown field name\"] not found. • Data field update not allowed

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
		<pre> "suppressNotification Enabled": true, "keyType": "imsi", "keyRange": "2013020001-201302000 2", "subscriberIdentifiers ": { "msisdn": [], "imsi": [], "nai": [], "extid": [] } } </pre>	
PUT	http://ocudr-nudr-config.myudr:5001/nudr-config/v1/udr.nudrprovservice.cfg/DR-PROV-SERVICE	<pre> Result Code: 200 OK Payload { "hikariPoolSize": 25, "tracingEnabled": false, "onDemandMigrationEna bled": false, "provLogsEnabled": true, "provLogsApiNames": ["nudr-dr- prov"] } </pre>	• 400 Bad Request: Schema validation failed • Payload should at least one valid parameter • Read Only field can not be modified • JSONObject["unknown field name"] not found. • Data field update not allowed

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
PUT	http://ocudr-nudr-config.myudr:5001/nudr-config/v1/udr.ondemand.cfg/ON-DEMAND	Result Code: 200 OK Payload <pre>{ "sourceUDRDeleteSubscriber": false, "realm": "oracle.com", "identity": "ondemand-migration.nudr.oracle.com", "enabled": false, "sourceUdrConfig": { "restEndpoint": "http://source-udr-rest-endpoint", "realm": "tekelec1275.com", "identity": "local1.tekelec1.com", "hostIp": "10.0.7.500", "hostPort": 7867 } }</pre>	400 Bad Request: Schema validation failed - Payload should at least one valid parameter - Read Only field can not be modified - JSONObject["unknown field name"] not found. - Data field update not allowed
PUT	http://ocudr-nudr-config.myudr:5001/nudr-config/v1/udr.bulkimportservice.cfg/BULK_IMPORT_CFG	Result Code: 200 OK Payload <pre>{ "pollingTimeInterval" : 5000, "lastModifiedTimeInterval": 30 }</pre>	400 Bad Request: Schema validation failed - Payload should at least one valid parameter - Read Only field can not be modified - JSONObject["unknown field name"] not found. - Data field update not allowed

Table 5-1 (Cont.) Configuration APIs for UDR microservices

HTTP Method	Sample REST Request URL	Sample Response	Possible Error Codes
PUT	<code>http://ocudr-nudr-config.myudr:5001/udr/nf-common-component/v1/operationalState</code>	Result Code: 200 OK Payload <pre>{ "operationalState": "NORMAL"}</pre>	400 Bad Request: Controlled shutdown feature disabled 500 Internal Server Error Occurred
PUT	<code>http://ocudr-nudr-config.myudr:5001/nudr-config/v1/migration.tool.cfg/MIGRATION_TOOL</code>	Result Code: 200 OK Payload <pre>{ "migrationPauseEnabled": false, "keyType": "msisdn", "migrationRanges": { "migrationtool-nudr-migration-tool-0": { "startRange": 1111100000, "endRange": 1111100600 } }</pre>	400 Bad Request: Controlled shutdown feature disabled 500 Internal Server Error Occurred
DELETE	<code>http://ocudr-nudr-config.myudr:5001/nudr-config/v1/udr.exporttoolstatus.cfg/EXPORT_TOOL_STATUS/export-2023-01-16T14:12:33</code>	Result Code: 200 OK	400 Bad Request 404 Data field Doesn't exist

5.2 Configuration APIs for Common Services

This section describes the configuration APIs for common services.

Table 5-2 Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
PUT	http://<nudr-config svc IP>:<port>/udr/nf-common-component/v1/igw-sig/oauthvalidatorconfiguration Payload <pre>{ "keyIdList": [{ "keyId": "a14ef8e1bc5d", "certName": "rsa_certificate.crt", "kSecretName": "oauthsecret", "certAlgorithm": "RS256" }], "instanceIdList": [{ "certName": "rsa_certificate.crt", "instanceId": "6faf1bbc-6e4a-4454-a507-a14ef8e1bc5c", "kSecretName": "oauthsecret", "certAlgorithm": "RS256" }], "oauthValidationMode": "KID_PREFERRED" }</pre>	200 OK Response Body <pre>{ "keyIdList": [{ "keyId": "a14ef8e1bc5d", "certName": "rsa_certificate.crt", "kSecretName": "oauthsecret", "certAlgorithm": "RS256" }], "instanceIdList": [{ "certName": "rsa_certificate.crt", "instanceId": "6faf1bbc-6e4a-4454-a507-a14ef8e1bc5c", "kSecretName": "oauthsecret", "certAlgorithm": "RS256" }], "oauthValidationMode": "KID_PREFERRED" }</pre>

Table 5-2 (Cont.) Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
GET	http://<nudr-config svc IP>:<port>/udr/nf-common-component/v1/igw-sig/oauthvalidatorconfiguration	200 OK Response Body <pre>{ "keyIdList": [{ "keyId": "a14ef8e1bc5d", "certName": "rsa_certificate.crt", "kSecretName": "oauthsecret", "certAlgorithm": "RS256" }], "instanceIdList": [{ "certName": "rsa_certificate.crt", "instanceId": "6faf1bbc-6e4a-4454-a507-a14ef8e1bc5c", "kSecretName": "oauthsecret", "certAlgorithm": "RS256" }], "oauthValidationMode": "KID_PREFERRED" }</pre>

Table 5-2 (Cont.) Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
PUT	http://<nudr-config svc IP>:<port>/udr/nf-common-component/v1/igw-prov/oauthvalidatorconfiguration Payload <pre>{ "keyIdList": [{ "keyId": "a14ef8e1bc5d", "certName": "rsa_certificate.crt", "kSecretName": "oauthsecret", "certAlgorithm": "RS256" }], "instanceIdList": [{ "certName": "rsa_certificate.crt", "instanceId": "6faf1bbc-6e4a-4454-a507-a14ef8e1bc5c", "kSecretName": "oauthsecret", "certAlgorithm": "RS256" }], "oauthValidationMode": "KID_PREFERRED" }</pre>	200 OK Response Body <pre>{ "keyIdList": [{ "keyId": "a14ef8e1bc5d", "certName": "rsa_certificate.crt", "kSecretName": "oauthsecret", "certAlgorithm": "RS256" }], "instanceIdList": [{ "certName": "rsa_certificate.crt", "instanceId": "6faf1bbc-6e4a-4454-a507-a14ef8e1bc5c", "kSecretName": "oauthsecret", "certAlgorithm": "RS256" }], "oauthValidationMode": "KID_PREFERRED" }</pre>

Table 5-2 (Cont.) Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
GET	http://<nudr-config svc IP>:<port>/udr/nf-common-component/v1/igw-prov/oauthvalidatorconfiguration	200 OK Response Body <pre> { "keyIdList": [{ "keyId": "a14ef8e1bc5d", "certName": "rsa_certificate.crt", "kSecretName": "oauthsecret", "certAlgorithm": "RS256" }], "instanceIdList": [{ "certName": "rsa_certificate.crt", "instanceId": "6faf1bbc-6e4a-4454-a507- a14ef8e1bc5c", "kSecretName": "oauthsecret", "certAlgorithm": "RS256" }], "oauthValidationMode": "KID_PREFERRED" }</pre>

Table 5-2 (Cont.) Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
PUT	http://<nudr-config svc IP>:<port>/udr/nf-common-component/v1/igw-sig/serverheaderdetails To enable: Payload <pre>{ "enabled": true, "configuration": { "nfType": "UDR", "nfInstanceId": "5a7bd676-ceeb-44bb-95e0-f6a55a328b03", "errorCodeSeries": [{ "errorSet": "4xx", "errorCodes": [-1] }, { "errorSet": "5xx", "errorCodes": [-1] }] } }</pre> To disable: Payload <pre>{ "enabled": false, "configuration": { "nfType": "" } }</pre>	200 OK

Table 5-2 (Cont.) Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
GET	http://<nudr-config svc IP>:<port>/udr/nf-common-component/v1/igw-sig/serverheaderdetails	200 OK Response Body <pre>{ "enabled": false, "configuration": { "nfType": "" } }</pre>
PATCH	http://<nudr-config svc IP>:<port>/udr/nf-common-component/v1/igw-sig/serverheaderdetails Payload <pre>{ "enabled": true, "configuration": { "nfType": "UDR", "nfInstanceId": "5a7bd676-ceed-44bb-95e0- f6a55a328b03", "errorCodeSeries": [{ "errorSet": "4xx", "errorCodes": [-1] }, { "errorSet": "5xx", "errorCodes": [-1] }] } }</pre>	200 OK

Table 5-2 (Cont.) Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
PUT	http://<nudr-config svc IP>:<port>/udr/nf-common-component/v1/igw-prov/serverheaderdetails To enable: Payload <pre>{ "enabled": true, "configuration": { "nfType": "UDR", "nfInstanceId": "5a7bd676-ceeb-44bb-95e0-f6a55a328b03", "errorCodeSeries": [{ "errorSet": "4xx", "errorCodes": [-1] }, { "errorSet": "5xx", "errorCodes": [-1] }] } }</pre> To disable: Payload <pre>{ "enabled": false, "configuration": { "nfType": "" } }</pre>	200 OK

Table 5-2 (Cont.) Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
GET	http://<nudr-config svc IP>:<port>/udr/nf-common-component/v1/igw-prov/serverheaderdetails	200 OK <pre>{ "enabled": false, "configuration": { "nfType": "" } }</pre>
PATCH	http://<nudr-config svc IP>:<port>/udr/nf-common-component/v1/igw-prov/serverheaderdetails <pre>{ "enabled": true, "configuration": { "nfType": "UDR", "nfInstanceId": "5a7bd676-ceed-44bb-95e0-f6a55a328b03", "errorCodeSeries": [{ "errorSet": "4xx", "errorCodes": [-1] }, { "errorSet": "5xx", "errorCodes": [-1] }] } }</pre>	200 OK

Table 5-2 (Cont.) Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
PUT	http://<nudr-config svc IP>:<port>/udr/nf-common-component/v1/igw-sig/useragentheadervalidation To enable: Payload <pre>{ "enabled": true, "validationType": "strict", "consumerNfTypes": ["PCF", "NRF", "UDM"] }</pre> To disable: Payload <pre>{ "enabled": false, "configuration": { "nfType": "" } }</pre>	
GET	http://<nudr-config svc IP>:<port>/udr/nf-common-component/v1/igw-sig/useragentheadervalidation	200 OK <pre>{ "enabled": false, "validationType": "strict" }</pre>

Table 5-2 (Cont.) Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
PATCH	http://<nudr-config svc IP>:<port>/udr/nf-common-component/v1/igw-sig/useragentheadervalidation <pre>{ "enabled": true, "validationType": "strict", "consumerNfTypes": ["PCF", "NRF", "UDM"] }</pre>	200 OK
PUT	http://<nudr-config svc IP>:<port>/udr/nf-common-component/v1/igw-prov/useragentheadervalidation To enable: Payload <pre>{ "enabled": true, "validationType": "strict", "consumerNfTypes": ["PCF", "NRF", "UDM"] }</pre> To disable: Payload <pre>{ "enabled": false, "validationType": "strict" }</pre>	200 OK

Table 5-2 (Cont.) Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
GET	<code>http://<nudr-config svc IP>:<port>/udr/nf-common-component/v1/igw-prov/useragentheadervalidation</code>	200 OK <pre>{ "enabled": false, "validationType": "strict" }</pre>
PATCH	<code>http://<nudr-config svc IP>:<port>/udr/nf-common-component/v1/igw-prov/useragentheadervalidation</code> <pre>{ "enabled": true, "validationType": "strict", "consumerNfTypes": ["PCF", "NRF", "UDM"] }</pre>	200 OK

Table 5-2 (Cont.) Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
PUT	<pre> http:// localhost:8081/udr/nf- common-component/v1/nrf- client-nfmanagement/ nfProfileList Request [{ "fqdn": "ocudr- ingressgateway.myudr.svc.cl uster.local", "load": 0, "nfType": "UDR", "udrInfo": { "groupId": "udr-1", "gpsiRanges": [{ "end": "200000000000", "start": "100000000000" }], "supiRanges": [{ "end": "200000000000", "start": "100000000000" }], "supportedDataSets": ["POLICY", "SUBSCRIPTION"], "externalGroupIdentifiersRa nges": [{ "end": "200000000000", "start": "100000000000" }] } }, </pre>	200 OK

Table 5-2 (Cont.) Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
	<pre> "capacity": 500, "locality": "bangalore", "nfStatus": "REGISTERED", "plmnList": [{ "mcc": "310", "mnc": "14" }], "priority": 10, "nfServices": [{ "fqdn": "ocudr- ingressgateway.myudr.svc.cl uster.local", "load": 0, "scheme": "http", "capacity": 500, "priority": 10, "versions": [{ "apiFullVersion": "2.1.0.alpha-3", "apiVersionInUri": "v1" }], "ipEndpoints": [{ "port": "80", "transport": "TCP", "ipv4Address": "10.0.0.0" }], "serviceName": "nudr-dr", </pre>	

Table 5-2 (Cont.) Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
	<pre>"allowedNfTypes": ["PCF", "UDM"], "nfServiceStatus": "REGISTERED", "serviceInstanceId": "ae870316-384d-458a- bd45-025c9e748976" }, { "fqdn": "ocudr- ingressgateway.myudr.svc.cl uster.local", "load": 0, "scheme": "http", "capacity": 500, "priority": 10, "versions": [{ "apiFullVersion": "2.1.0.alpha-3", "apiVersionInUri": "v1" }], "ipEndpoints": [{ "port": "80", "transport": "TCP", "ipv4Address": "10.0.0.0" }], "serviceName": "nudr-group- id-map",</pre>	

Table 5-2 (Cont.) Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
	<pre>"allowedNfTypes": ["NRF"], "nfServiceStatus": "REGISTERED", "serviceInstanceId": "547d42af-628a-4d5d- a8bd-38c4ba672682" }], "nfSetIdList": ["setxyz.udrset.5gc.mnc012.m cc345"], "nfInstanceId": "5a7bd676-ceeb-44bb-95e0- f6a55a328b13", "allowedNfTypes": ["PCF", "UDM", "NRF"], "heartBeatTimer": 90, "nfServicePersistence": false, "nfProfileChangesSupportInd ": false }]</pre>	

Table 5-2 (Cont.) Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
GET	http://localhost:8081/udr/nf-common-component/v1/nrf-client-nfmanagement/nfProfileList	<pre> 200 OK [{ "fqdn": "ocudr- ingressgateway.myudr.svc.cl uster.local", "load": 0, "nfType": "UDR", "udrInfo": { "groupId": "udr-1", "gpsiRanges": [{ "end": "200000000000", "start": "100000000000" }], "supiRanges": [{ "end": "200000000000", "start": "100000000000" }], "supportedDataSets": ["POLICY", "SUBSCRIPTION"], "externalGroupIdentifiersRa nges": [{ "end": "200000000000", "start": "100000000000" }], "capacity": 500, "locality": "bangalore", "nfStatus": "REGISTERED", </pre>

Table 5-2 (Cont.) Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
		<pre> "plmnList": [{ "mcc": "310", "mnc": "14" }], "priority": 10, "nfServices": [{ "fqdn": "ocudr- ingressgateway.myudr.svc.cl uster.local", "load": 0, "scheme": "http", "capacity": 500, "priority": 10, "versions": [{ "apiFullVersion": "2.1.0.alpha-3", "apiVersionInUri": "v1" }], "ipEndpoints": [{ "port": "80", "transport": "TCP", "ipv4Address": "10.0.0.0" }], "serviceName": "nudr-dr", "allowedNfTypes": ["PCF", "UDM"], </pre>

Table 5-2 (Cont.) Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
		<pre> "nfServiceStatus": "REGISTERED", "serviceInstanceId": "ae870316-384d-458a- bd45-025c9e748976" }, { "fqdn": "ocudr- ingressgateway.myudr.svc.cl uster.local", "load": 0, "scheme": "http", "capacity": 500, "priority": 10, "versions": [{ "apiFullVersion": "2.1.0.alpha-3", "apiVersionInUri": "v1" }], "ipEndpoints": [{ "port": "80", "transport": "TCP", "ipv4Address": "10.0.0.0" }], "serviceName": "nudr-group- id-map", "allowedNfTypes": ["NRF"], </pre>

Table 5-2 (Cont.) Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
		<pre>"nfServiceStatus": "REGISTERED", "serviceInstanceId": "547d42af-628a-4d5d- a8bd-38c4ba672682" }], "nfSetIdList": ["setxyz.udrset.5gc.mnc012.m cc345"], "nfInstanceId": "5a7bd676-ceeb-44bb-95e0- f6a55a328b13", "allowedNfTypes": ["PCF", "UDM", "NRF"], "heartBeatTimer": 90, "nfServicePersistence": false, "nfProfileChangesSupportInd ": false }]</pre>

Table 5-2 (Cont.) Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
PUT	<pre> http://<nudr-config svc IP>:<port>/udr/nf-common- component/v1/igw-prov/ podprotection or http:// <nudr-config svc IP>:<port>/udr/nf-common- component/v1/igw-sig/ podprotection { "enabled": true, "congestionControl": { "states": [{ "name": "Normal", "weight": 0, "entryAction": [{ "action": "MaxConcurrentStreamsUpdate ", "arguments": { "incrementBy": 30, "maxConcurrentStreamsPerCon ": 100, "incrementByActionSamplingP eriod": 3 } }, { "action": "AcceptIncomingConnections" , "arguments": { "accept": true } }] }] } } </pre>	200 OK

Table 5-2 (Cont.) Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
	<pre>] }, { "name": "Doc", "weight": 1, "entryAction": [{ "action": "AcceptIncomingConnections" , "arguments": { "accept": false } }, { "action": "MaxConcurrentStreamsUpdate ", "arguments": { "decrementBy": 30, "incrementBy": 30, "maxConcurrentStreamsPerCon ": 50, "decrementByActionSamplingP eriod": 1, "incrementByActionSamplingP eriod": 3 } }], "resourceThreshold": { "cpu":</pre>	

Table 5-2 (Cont.) Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
	<pre> 60, "pendingMessage": 5000 } }, { "name": "Congested", "weight": 2, "entryAction": [{ "action": "AcceptIncomingConnections" , "arguments": { "accept": false } }, { "action": "MaxConcurrentStreamsUpdate ", "arguments": { "decrementBy": 30, "maxConcurrentStreamsPerCon ": 10, "decrementByActionSamplingP eriod": 1 } }], "resourceThreshold": { "cpu": 75, "pendingMessage": 7000 </pre>	

Table 5-2 (Cont.) Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
	<pre> } },], "enabled": true, "actionSamplingPeriod": 3, "stateChangeSampleCount": 10 }, "monitoringInterval": 100 }</pre> Note: You can use the URI for both signaling and provisioning by changing the igw in the URI address to igw-sig or igw-prov respectively.	

Table 5-2 (Cont.) Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
GET	http://<nudr-config svc IP>:<port>/udr/nf-common-component/v1/igw-prov/podprotection or http://<nudr-config svc IP>:<port>/udr/nf-common-component/v1/igw-sig/podprotection Note: You can use the URI for both signaling and provisioning by changing the igw in the URI address to igw-sig or igw-prov respectively.	200 OK <pre>{ "enabled": true, "congestionControl": { "states": [{ "name": "Normal", "weight": 0, "entryAction": [{ "action": "MaxConcurrentStreamsUpdate ", "arguments": { "incrementBy": 30, "maxConcurrentStreamsPerCon ": 100, "incrementByActionSamplingP eriod": 3 } }, { "action": "AcceptIncomingConnections" , "arguments": { "accept": true } }], "name": "DoC", "weight": 1,</pre>

Table 5-2 (Cont.) Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
		<pre>"entryAction": [{ "action": "AcceptIncomingConnections" , "arguments": { "accept": false } }, { "action": "MaxConcurrentStreamsUpdate ", "arguments": { "decrementBy": 30, "incrementBy": 30, "maxConcurrentStreamsPerCon ": 50, "decrementByActionSamplingP eriod": 1, "incrementByActionSamplingP eriod": 3 } }], "resourceThreshold": { "cpu": 60, "pendingMessage": 5000 } }, { "name":</pre>

Table 5-2 (Cont.) Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
		<pre> "Congested", "weight": 2, "entryAction": [{ "action": "AcceptIncomingConnections" , "arguments": { "accept": false } }, { "action": "MaxConcurrentStreamsUpdate ", "arguments": { "decrementBy": 30, "maxConcurrentStreamsPerCon ": 10, "decrementByActionSamplingP eriod": 1 } },], "resourceThreshold": { "cpu": 75, "pendingMessage": 7000 } }, "enabled": true, "actionSamplingPeriod": 3, </pre>

Table 5-2 (Cont.) Common Services Configuration APIs

HTTP Method	Sample Request REST URL	Sample Response
		<pre>"stateChangeSampleCount": 10 }, "monitoringInterval": 100 }</pre>

5.3 Configuration APIs for Import and Export

This section describes the configuration APIs for import and export.

Table 5-3 Configuration APIs for Import and Export

HTTP Method	Sample Request REST URL	Sample Response	Notes
POST	- To export all services: http://<nudr-config svc IP>:<port>/nudr-config/v1/export - To export selective services: http://<nudr-config svc IP>:<port>/nudr-config/v1/export/?managedObjects=Access%20Token%20Validation%20Provisioning,Access%20Token%20Validation%20Signaling,Global%20Configurations,Logging%20Level,Data%20Repository%20Service,Notify%20Service	Result Code: 201 Created Payload Export resource id: 3e470fab-e131-4dbe-be67-ba7391729254	This is the first step to initiate export.
GET	To export all services : http://10.75.229.157:31725/nudr-config/v1/export	Result Code: 200 OK Payload 3e470fab-e131-4dbe-be67-ba7391729254	This API is to get the existing export id. Possible error codes 404 Not Found 500 Internal Server Error

Table 5-3 (Cont.) Configuration APIs for Import and Export

HTTP Method	Sample Request REST URL	Sample Response	Notes
GET	URI: http:// 10.75.229.157:31725/ nudr-config/v1/ export/3e470fab- e131-4dbe-be67- ba7391729254/status Export resource id: 3e470fab- e131-4dbe-be67- ba7391729254	Result Code: 200 OK Payload <pre>{ "status": "DONE", "exportResourceId": "2337e6d8- f17e-46f9-9992-4ab4b0 903b3d", "createTimeStamp": "2021-07-16T14:13:44Z", "percentage": "100", "result": "PARTIAL_SUCCESS" }</pre>	This is the second step. Keep calling this API until "percentage": "100".

Table 5-3 (Cont.) Configuration APIs for Import and Export

HTTP Method	Sample Request REST URL	Sample Response	Notes
GET	URI: http:// 10.75.229.157:31725/ nudr-config/v1/ export/3e470fab- e131-4dbe-be67- ba7391729254/report Export resource id: 3e470fab- e131-4dbe-be67- ba7391729254	Result Code: 200 OK Payload <pre> { "report": [{ "name": "Access Token Validation", "status": "1 records exported successfully" }, { "name": "Global Configurations", "status": "1 records exported successfully" }, { "name": "Data Repository Service", "status": "1 records exported successfully" }, { "name": "Notify Service", "status": "1 records exported successfully" }, { "name": "NRF Client service", "status": "NOT_FOUND" }, { "name": "Diameter service", "status": "1 records exported successfully" }] } </pre>	This is the third step. This API gives complete export report.

Table 5-3 (Cont.) Configuration APIs for Import and Export

HTTP Method	Sample Request REST URL	Sample Response	Notes
		<pre> }, { "name": "DR Service Logging", "status": "1 records exported successfully" }, { "name": "Notify Logging", "status": "1 records exported successfully" }, { "name": "Diameter Service Logging", "status": "1 records exported successfully" }, { "name": "Ondemand Logging", "status": "NOT_FOUND" }, { "name": "NRF Client Logging", "status": "NOT_FOUND" }, { "name": "Ingressgatewa y Logging", "status": "1 records exported successfully" }, { "name": "Egressgateway Logging", </pre>	

Table 5-3 (Cont.) Configuration APIs for Import and Export

HTTP Method	Sample Request REST URL	Sample Response	Notes
		<pre> "status": "1 records exported successfully" }, { "name": "Alternate Route Logging", "status": "1 records exported successfully" }] } </pre>	
GET	URL: http:// 10.75.229.157:31725/ nudr-config/v1/ export/3e470fab- e131-4dbe-be67- ba7391729254/ download Export resource id: 3e470fab- e131-4dbe-be67- ba7391729254	Result Code: 200 OK exportedFiles_ 1.12.0_20210706080247.zip	This is the fourth step. This API is used to download exported zip file.
POST	URL: http:// 10.75.229.157:31725/ nudr-config/v1/ import	Result Code: 201 Created Payload Import resource id: 552a4328-21ec-43aa- a460-58ce1df407ae	This is the first step to initiate import.
GET	URL : http:// 10.75.229.157:31725/ nudr-config/v1/ import	Result Code: 200 OK Payload 552a4328-21ec-43aa- a460-58ce1df407ae	This API is to get the existing import id. 404 Not Found 500 Internal Server Error

Table 5-3 (Cont.) Configuration APIs for Import and Export

HTTP Method	Sample Request REST URL	Sample Response	Notes
GET	URL: http:// 10.75.229.157:31725/ nudr-config/v1/ import/ 552a4328-21ec-43aa- a460-58ce1df407ae/ status Import resource id: 552a4328-21ec-43aa- a460-58ce1df407ae	Result Code: 200 OK Payload <pre>{ "status": "DONE", "importResourceId": "c0ec965a-5d9f-4799- b47f-768a23561ae2", "createTimeStamp": "2021-07-16T09:06:17Z", "percentage": "100", "progress": "12 / 12 M0(s) completed", "result": "PARTIAL_SUCCESS" }</pre>	This is the second step. Keep calling this API until "percentage": "100"

Table 5-3 (Cont.) Configuration APIs for Import and Export

HTTP Method	Sample Request REST URL	Sample Response	Notes
GET	URL: http:// 10.75.229.157:31725/ nudr-config/v1/ import/ 552a4328-21ec-43aa- a460-58ce1df407ae/ report Import resource id: 552a4328-21ec-43aa- a460-58ce1df407ae	Result Code: 200 OK Payload <pre> { "report":[{ "name":"Alternate Route Logging", "status":"1 / 1 records imported successfully." }, { "name":"Diameter service", "status":"1 / 1 records imported successfully." }, { "name":"Notify Logging", "status":"1 / 1 records imported successfully." }, { "name":"Egressgateway Logging", "status":"1 / 1 records imported successfully." }, { "name":"Notify Service", "status":"1 / 1 records imported successfully." }, { "name":"Notify Service", "status":"1 / 1 records imported successfully." }] } </pre>	This is the third step. This API gives complete import report.

Table 5-3 (Cont.) Configuration APIs for Import and Export

HTTP Method	Sample Request REST URL	Sample Response	Notes
		<pre> { "name":"Ingressgateway Logging", "status":"1 / 1 records imported successfully." }, { "name":"Data Repository Service", "status":"INTERNAL_SERVER_ERROR" }, { "name":"Global Configurations", "status":"METHOD_NOT_ALLOWED" }, { "name":"Access Token Validation", "status":"1 / 1 records imported successfully." }, { "name":"Diameter Service Logging", "status":"1 / 1 records imported successfully." }, { "name":"DR Service Logging", "status":"1 / 1 records imported </pre>	

Table 5-3 (Cont.) Configuration APIs for Import and Export

HTTP Method	Sample Request REST URL	Sample Response	Notes
		successfully." }] }	

For more information about the Import and Export configurable parameters, see *Oracle Communications Cloud Native Core Unified Data Repository Installation and Upgrade Guide*.

5.4 Configuration APIs for Loglevel

This section describes the configuration APIs for loglevel.

Table 5-4 Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
GET	URI: http:// 10.75.229.168:32310/ nudr-config/v1/nudr- drservice/logging	Result Code: 200 OK Payload <pre> { "appLogLevel": "WARN", "packageLogLevel": [{ "packageName": "jetty", "logLevelForPackage": "WARN" }, { "packageName": "springframework", "logLevelForPackage": "WARN" }, { "packageName": "root", "logLevelForPackage": "WARN" }] }</pre>	NA

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
GET	http:// 10.75.229.168:32310/ nudr-config/v1/nudr- notify-service/ logging	Result Code: 200 OK Payload <pre> { "appLogLevel": "WARN", "packageLogLevel": [{ "packageName": "jetty", "logLevelForPackage": "WARN" }, { "packageName": "springframework", "logLevelForPackage": "WARN" }, { "packageName": "root", "logLevelForPackage": "WARN" }] } </pre>	NA

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
GET	http:// 10.75.229.168:32310/ nudr-config/v1/nudr- diameterproxy/ logging	Result Code: 200 OK Payload <pre>{ "appLogLevel": "WARN", "packageLogLevel": [{ "packageName": "jetty", "logLevelForPackage": "WARN" }, { "packageName": "springframework", "logLevelForPackage": "WARN" }, { "packageName": "root", "logLevelForPackage": "WARN" }] }</pre>	NA

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
GET	http:// 10.75.229.168:32310/ nudr-config/v1/diam- gateway/logging	Result Code: 200 OK Payload <pre> { "appLogLevel": "WARN", "packageLogLevel": [{ "packageName": "jetty", "logLevelForPackage": "WARN" }, { "packageName": "springframework", "logLevelForPackage": "WARN" }, { "packageName": "root", "logLevelForPackage": "WARN" }] }</pre>	NA

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
GET	http:// 10.75.229.168:32310/ nudr-config/v1/nudr- ondemand-migration/ logging	Result Code: 200 OK Payload <pre> { "appLogLevel": "WARN", "packageLogLevel": [{ "packageName": "jetty", "logLevelForPackage": "WARN" }, { "packageName": "springframework", "logLevelForPackage": "WARN" }, { "packageName": "root", "logLevelForPackage": "WARN" }] }</pre>	NA

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
GET	http:// 10.75.229.168:32527/ udr/nf-common- component/v1/igw- sig/logging	Result Code: 200 OK Payload { "appLogLevel": "DEBUG", "packageLogLevel": [{ "packageName": "root", "logLevelForPackage": "DEBUG" }, { "packageName": "oauth", "logLevelForPackage": "DEBUG" }] }	NA

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
GET	http:// 10.75.229.168:32527/ udr/nf-common- component/v1/igw- prov/logging	Result Code: 200 OK Payload <pre> { "appLogLevel": "DEBUG", "packageLogLevel": [{ "packageName": "root", "logLevelForPackage": "DEBUG" }, { "packageName": "oauth", "logLevelForPackage": "DEBUG" }] }</pre>	NA

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
GET	http:// 10.75.229.168:32527/ udr/nf-common- component/v1/egw/ logging	Result Code: 200 OK Payload <pre>{ "appLogLevel": "DEBUG", "packageLogLevel": [{ "packageName": "root", "logLevelForPackage": "DEBUG" }, { "packageName": "oauth", "logLevelForPackage": "DEBUG" }] }</pre>	NA
GET	http:// 10.75.229.168:32527/ udr/nf-common- component/v1/alt- route/logging	Result Code: 200 OK Payload <pre>{ "appLogLevel": "DEBUG", "packageLogLevel": [{ "packageName": "root", "logLevelForPackage": "DEBUG" }] }</pre>	NA

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
GET	http://10.75.229.168:32527/udr/nf-common-component/v1/nrf-client-nfmanagement/logging	200 OK Response <pre>{ "appLogLevel": "INFO", "packageLogLevel": [{ "logLevelForPackage": "INFO", "packageName": "root" }] }</pre>	• 404 NOT Found • 400 BAD REQUEST

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
GET	http:// 10.75.229.168:31867/ nudr-config/v1/all/ logging	Result Code: 200 OK Payload <pre>[{ "egress- gateway": {"\appLogLevel\":"I NFO\","packageLogLev el\": [{\packageName\":"r oot\","logLevelForPa ckage\":"WARN\"}, {\packageName\":"oa uth\","logLevelForPa ckage\":"INFO\"}]}", "nudr- diameterproxy": {"\packageLogLevel\": : [{\packageName\":"j etty\","logLevelForP ackage\":"WARN\"}, {\packageName\":"sp ringframework\","log LevelForPackage\":"W ARN\"}, {\packageName\":"ro ot\","logLevelForPac kage\":"WARN\"}],\a ppLogLevel\":"DEBUG\ "}", "diam- gateway": {"\packageLogLevel\": : [{\packageName\":"j etty\","logLevelForP ackage\":"WARN\"}, {\packageName\":"sp ringframework\","log LevelForPackage\":"W ARN\"}, {\packageName\":"ro ot\","logLevelForPac kage\":"WARN\"}],\a ppLogLevel\":"DEBUG\ "}", "alternate- route":</pre>	NA

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
		<pre> {"appLogLevel":"WARN", "packageLogLevel": [{"packageName":"root", "logLevelForPackage":"WARN"}]}, "nudr-drservice": {"packageLogLevel": : [{"packageName":"jetty", "logLevelForPackage":"WARN"}, {"packageName":"springframework", "logLevelForPackage":"WARN"}, {"packageName":"root", "logLevelForPackage":"WARN"}]}, "appLogLevel":"DEBUG"}", "nudr-ondemand-migration": {"packageLogLevel": : [{"packageName":"jetty", "logLevelForPackage":"WARN"}, {"packageName":"springframework", "logLevelForPackage":"WARN"}, {"packageName":"root", "logLevelForPackage":"WARN"}]}, "appLogLevel":"DEBUG"}", "nudr-notify-service": {"packageLogLevel": : [{"packageName":"jetty", "logLevelForPackage":"WARN"}, {"packageName":"springframework", "logLevelForPackage":"WARN"}, </pre>	

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
		<pre>{ "packageName": "root", "logLevelForPackage": "WARN", "appLogLevel": "DEBUG" }, "ingress-gateway": { "appLogLevel": "INFO", "packageLogLevel": { "packageName": "root", "logLevelForPackage": "WARN", "packageName": "oauth", "logLevelForPackage": "INFO" } }, "perf-info": { "appLogLevel": "WARN" }, "app-info": { "appLogLevel": "WARN" }, "nudr-dr-provservice": { "packageLogLevel": { "packageName": "jetty", "logLevelForPackage": "WARN", "packageName": "springframework", "logLevelForPackage": "WARN" }, "packageName": "root", "logLevelForPackage": "WARN", "appLogLevel": "DEBUG" }, "nrf-client-nfmanagement": { "appLogLevel": "INFO", "packageLogLevel": { "packageName": "root", "logLevelForPackage": "WARN" } } }</pre>	

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
GET	http:// 10.75.229.168:32310/ nudr-config/v1/nudr- dr-provservice/ logging	Result Code: 200 OK { "appLogLevel": "WARN", "packageLogLevel": [{ "packageName": "jetty", "logLevelForPackage": "WARN" }, { "packageName": "springframework", "logLevelForPackage": "WARN" }, { "packageName": "root", "logLevelForPackage": "WARN" }] }	NA

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
GET	http://10.75.229.168:32310/nudr-config/v1/nudr-bulk-import/logging	Result Code: 200 OK <pre>{ "appLogLevel": "DEBUG", "packageLogLevel": [{ "packageName": "springframework", "logLevelForPackage": "WARN" }, { "packageName": "root", "logLevelForPackage": "WARN" }] }</pre>	NA

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
GET	http:// 10.75.229.168:32310/ nudr-config/v1/nudr- export-tool/logging	200 Created Payload <pre>{ "appLogLevel": "WARN", "packageLogLevel": [{ "packageName": "jetty", "logLevelForPackage": "WARN" }, { "packageName": "springframework", "logLevelForPackage": "WARN" }, { "packageName": "root", "logLevelForPackage": "WARN" }] }</pre>	NA

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
GET	http://10.75.180.253:30601/nudr-config/v1/nudr-config/logging	200 Created Payload <pre>{ "packageLogLevel": [{ "packageName": "jetty", "logLevelForPackage": "WARN" }, { "packageName": "springframework", "logLevelForPackage": "WARN" }, { "packageName": "root", "logLevelForPackage": "DEBUG" }], "appLogLevel": "WARN" }</pre>	NA

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
PUT	URI: http:// 10.75.229.168:32310/ nudr-config/v1/nudr- drservice/logging	201 Created Payload <pre> { "appLogLevel": "WARN", "packageLogLevel": [{ "packageName": "jetty", "logLevelForPackage": "WARN" }, { "packageName": "springframework", "logLevelForPackage": "WARN" }, { "packageName": "root", "logLevelForPackage": "WARN" }] }</pre>	400 Bad Request: Schema validation failed

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
PUT	http:// 10.75.229.168:32310/ nudr-config/v1/nudr- notify-service/ logging	201 Created Payload <pre> { "appLogLevel": "WARN", "packageLogLevel": [{ "packageName": "jetty", "logLevelForPackage": "WARN" }, { "packageName": "springframework", "logLevelForPackage": "WARN" }, { "packageName": "root", "logLevelForPackage": "WARN" }] }</pre>	400 Bad Request: Schema validation failed

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
PUT	http:// 10.75.229.168:32310/ nudr-config/v1/nudr- diameterproxy/ logging	201 Created Payload <pre> { "appLogLevel": "WARN", "packageLogLevel": [{ "packageName": "jetty", "logLevelForPackage": "WARN" }, { "packageName": "springframework", "logLevelForPackage": "WARN" }, { "packageName": "root", "logLevelForPackage": "WARN" }] }</pre>	400 Bad Request: Schema validation failed

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
PUT	http://10.75.229.168:32310/nudr-config/v1/diam-gateway/logging	<pre> 201 Created Payload { "appLogLevel": "WARN", "packageLogLevel": [{ "packageName": "jetty", "logLevelForPackage": "WARN" }, { "packageName": "springframework", "logLevelForPackage": "WARN" }, { "packageName": "root", "logLevelForPackage": "WARN" }] } </pre>	400 Bad Request: Schema validation failed

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
PUT	http:// 10.75.229.168:32310/ nudr-config/v1/nudr- ondemand-migration/ logging	201 Created Payload <pre> { "appLogLevel": "WARN", "packageLogLevel": [{ "packageName": "jetty", "logLevelForPackage": "WARN" }, { "packageName": "springframework", "logLevelForPackage": "WARN" }, { "packageName": "root", "logLevelForPackage": "WARN" }] }</pre>	400 Bad Request: Schema validation failed

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
PUT	http:// 10.75.229.168:32527/ udr/nf-common- component/v1/igw- sig/logging	200 OK Payload { "appLogLevel": "DEBUG", "packageLogLevel": [{ "packageName": "root", "logLevelForPackage": "DEBUG" }, { "packageName": "oauth", "logLevelForPackage": "DEBUG" }] }	404 Not Found

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
PUT	http:// 10.75.229.168:32527/ udr/nf-common- component/v1/igw- prov/logging	200 OK Payload { "appLogLevel": "DEBUG", "packageLogLevel": [{ "packageName": "root", "logLevelForPackage": "DEBUG" }, { "packageName": "oauth", "logLevelForPackage": "DEBUG" }] }	404 Not Found

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
PUT	http:// 10.75.229.168:32527/ udr/nf-common- component/v1/egw/ logging	200 OK Payload <pre>{ "appLogLevel": "DEBUG", "packageLogLevel": [{ "packageName": "root", "logLevelForPackage": "DEBUG" }, { "packageName": "oauth", "logLevelForPackage": "DEBUG" }] }</pre>	404 Not Found
PUT	http:// 10.75.229.168:32527/ udr/nf-common- component/v1/alt- route/logging	200 OK Payload <pre>{ "appLogLevel": "DEBUG", "packageLogLevel": [{ "packageName": "root", "logLevelForPackage": "DEBUG" }] }</pre>	404 Not Found

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
PUT	http://10.75.229.168:32527/udr/nf-common-component/v1/nrf-client-nfmanagement/logging	200 OK Response <pre>{ "appLogLevel": "INFO", "packageLogLevel": [{ "logLevelForPackage": "INFO", "packageName": "root" }] }</pre>	• 404 NOT FOUND • 400 BAD REQUEST

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
PUT	http://10.75.229.168:32310/nudr-config/v1/nudr-dr-provservice/logging	201 created Payload <pre> { "appLogLevel": "WARN", "packageLogLevel": [{ "packageName": "jetty", "logLevelForPackage": "WARN" }, { "packageName": "springframework", "logLevelForPackage": "WARN" }, { "packageName": "root", "logLevelForPackage": "WARN" }] } </pre>	• 404 NOT FOUND • 400 BAD REQUEST

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
PUT	http:// 10.75.229.168:32310/ nudr-config/v1/nudr- bulk-import/logging	201 created Payload <pre>{ "appLogLevel": "WARN", "packageLogLevel": [{ "packageName": "jetty", "logLevelForPackage": "WARN" }, { "packageName": "springframework", "logLevelForPackage": "WARN" }, { "packageName": "root", "logLevelForPackage": "WARN" }] }</pre>	• 404 NOT FOUND • 400 BAD REQUEST

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
PUT	http://10.75.229.168:32310/nudr-config/v1/nudr-export-tool/logging	201 created Payload <pre>{ "appLogLevel": "DEBUG", "packageLogLevel": [{ "packageName": "springframework", "logLevelForPackage": "WARN" }, { "packageName": "root", "logLevelForPackage": "WARN" }] }</pre>	• 404 NOT FOUND • 400 BAD REQUEST

Table 5-4 (Cont.) Configuration APIs for Loglevel

HTTP Method	Sample Request REST URL	Sample Response	Notes
PUT	http:// 10.75.180.253:30601/ nudr-config/v1/nudr- config/logging	201 created Payload <pre>{ "appLogLevel": "DEBUG", "packageLogLevel": [{ "packageName": "jetty", "logLevelForPackage": "WARN" }, { "packageName": "springframework", "logLevelForPackage": "WARN" }, { "packageName": "root", "logLevelForPackage": "DEBUG" }] }</pre>	• 404 NOT FOUND • 400 BAD REQUEST

5.5 Configuration APIs for Overload Handling

This section describes the configuration APIs on Ingress Gateway and perf-info microservices for overload handling.

Table 5-5 Configuration APIs on Ingress Gateway for Overload Handling

HTTP Method	Sample Request REST URL	Sample Response
PUT	igw-sig URL: /udr/nf-common-component/v1/igw-sig/ocpolicymapping oc policy mapping <pre>{ "enabled":true, "mappings": [{ "svcName": "ocudr-nudr-drservice", "policyName":"OCDP1" }], "samplingPeriod":6000 }</pre> igw-prov URL: /udr/nf-common-component/v1/igw-prov/ocpolicymapping oc policy mapping <pre>{ "enabled":true, "mappings": [{ "svcName": "ocudr-nudr-drprovservice", "policyName":"OCDP1" }], "samplingPeriod":6000 }</pre>	Response is same as Request payload.
PUT	igw-sig URL: /udr/nf-common-component/v1/igw-sig/ocdiscardpolicies igw-prov URL: /udr/nf-common-component/v1/igw-prov/ocdiscardpolicies For payload, see PUT - OC Discard Policy.	Response is same as Request payload.

Table 5-5 (Cont.) Configuration APIs on Ingress Gateway for Overload Handling

HTTP Method	Sample Request REST URL	Sample Response
PUT	igw-sig URL: /udr/nf-common-component/v1/igw-sig/errorcodeprofiles igw-prov URL: /udr/nf-common-component/v1/igw-prov/errorcodeprofiles For payload, see PUT - Error Code Profiles .	Response is same as Request payload.
PUT	igw-sig URL: /udr/nf-common-component/v1/igw-sig/routesconfiguration igw-prov URL: /udr/nf-common-component/v1/igw-prov/routesconfiguration For payload, see PUT - Routes Configuration .	Response is same as Request payload.

Table 5-5 (Cont.) Configuration APIs on Ingress Gateway for Overload Handling

HTTP Method	Sample Request REST URL	Sample Response
PUT	igw-sig URL: /udr/nf-common-component/v1/igw-sig/errorcodeserieslist igw-prov URL: /udr/nf-common-component/v1/igw-prov/errorcodeserieslist error code series <pre>[{ "id": "P1", "exceptionList": ["RequestTimeout", "ConnectionTimeout", "UnknownHostException", "NotFoundException"], "errorCodeSeries": [{ "errorSet": "5xx", "errorCodes": [503] }] }]</pre>	Response is same as Request payload.

Table 5-6 Configuration APIs on perf-info for Overload Handling

HTTP Method	Sample Request REST URL	Sample Response
PUT	URL: /udr/nf-common-component/v1/perf-info/overloadLevelThreshold For payload, see PUT - Overload Threshold Configuration	Response is same as Request payload.

For more information about the Overload Handling configurable parameters, see *Oracle Communications Cloud Native Core Unified Data Repository Installation and Upgrade Guide*.

5.6 Configuration APIs for Rate Limit

This section describes the configuration APIs on Ingress Gateway for rate limiting feature.

Table 5-7 Configuration APIs on Ingress Gateway for Rate Limiting

HTTP Method	Sample Request REST URL	Sample Response	Notes
PUT	URL: http:// 10.75.229.75:31187/u dr/nf-common- component/v1/igw/ routesconfiguration routesconfiguration <pre> [{ "id": "traffic_mapping_http ", "rateLimiting": { "methods": [{ "name": "PATCH", "rate": 200, "rateLimitPolicy": "R1" }, { "name": "GET", "rate": 200, "rateLimitPolicy": "R1" }, { "name": "PUT", "rate": 300, "rateLimitPolicy": "R1" }, { "name": "DELETE", "rate": 200, "rateLimitPolicy": "R1" }, { "name": "POST", "rate": 200, "rateLimitPolicy": "R1" }] } }] </pre>	routesconfiguration <pre> [{ "id": "traffic_mapping_http ", "rateLimiting": { "methods": [{ "name": "PATCH", "rate": 200, "rateLimitPolicy": "R1" }, { "name": "GET", "rate": 200, "rateLimitPolicy": "R1" }, { "name": "PUT", "rate": 300, "rateLimitPolicy": "R1" }, { "name": "DELETE", "rate": 200, "rateLimitPolicy": "R1" }, { "name": "POST", "rate": 200, "rateLimitPolicy": "R1" }] } }] </pre>	Response is same as request

Table 5-7 (Cont.) Configuration APIs on Ingress Gateway for Rate Limiting

HTTP Method	Sample Request REST URL	Sample Response	Notes
	<pre> "rate": 200, "rateLimitPolicy": "R1" }] }, "failureReqCountError CodeSeriesId": "P1" }, { "id": "traffic_mapping_http _prov", "rateLimiting": { "methods": [{ "name": "PATCH", "rate": 200, "rateLimitPolicy": "R1" }, { "name": "GET", "rate": 200, "rateLimitPolicy": "R1" }, { "name": "PUT", "rate": 300, "rateLimitPolicy": "R1" }, { "name": "DELETE", "rate": 200, "rateLimitPolicy": "R1" }, { "name": "POST", "rate": 200, </pre>	<pre> }, "failureReqCountError CodeSeriesId": "P1" }, { "id": "traffic_mapping_http _prov", "rateLimiting": { "methods": [{ "name": "PATCH", "rate": 200, "rateLimitPolicy": "R1" }, { "name": "GET", "rate": 200, "rateLimitPolicy": "R1" }, { "name": "PUT", "rate": 300, "rateLimitPolicy": "R1" }, { "name": "DELETE", "rate": 200, "rateLimitPolicy": "R1" }, { "name": "POST", "rate": 200, </pre>	

Table 5-7 (Cont.) Configuration APIs on Ingress Gateway for Rate Limiting

HTTP Method	Sample Request REST URL	Sample Response	Notes
	<pre> { "name": "POST", "rate": 200, "rateLimitPolicy": "R1" } }, "failureReqCountError CodeSeriesId": "P1" }, { "id": "traffic_mapping_http _group", "rateLimiting": { "methods": [{ "name": "GET", "rate": 1500, "rateLimitPolicy": "R1" }], "failureReqCountError CodeSeriesId": "P1" }, { "id": "traffic_mapping_http _group_prov", "rateLimiting": { "methods": [{ "name": "GET", "rate": 800, "rateLimitPolicy": "R1" }], "rateLimitPolicy": "R1" }, { </pre>	<pre> "rateLimitPolicy": "R1" } }, "failureReqCountError CodeSeriesId": "P1" }, { "id": "traffic_mapping_http _group", "rateLimiting": { "methods": [{ "name": "GET", "rate": 1500, "rateLimitPolicy": "R1" }], "failureReqCountError CodeSeriesId": "P1" }, { "id": "traffic_mapping_http _group_prov", "rateLimiting": { "methods": [{ "name": "GET", "rate": 800, "rateLimitPolicy": "R1" }], "rateLimitPolicy": "R1" }, { </pre>	

Table 5-7 (Cont.) Configuration APIs on Ingress Gateway for Rate Limiting

HTTP Method	Sample Request REST URL	Sample Response	Notes
	<pre> "name": "PUT", "rate": 200, "rateLimitPolicy": "R1" }, { "name": "DELETE", "rate": 200, "rateLimitPolicy": "R1" }], "failureReqCountError CodeSeriesId": "P1" }, { "id": "traffic_mapping_http _slf_group_prov", "rateLimiting": { "methods": [{ "name": "GET", "rate": 800, "rateLimitPolicy": "R1" }, { "name": "PUT", "rate": 200, "rateLimitPolicy": "R1" }, { "name": "DELETE", "rate": 200, "rateLimitPolicy": </pre>	<pre> "R1" }, { "name": "DELETE", "rate": 200, "rateLimitPolicy": "R1" }]} "failureReqCountError CodeSeriesId": "P1" }, { "id": "traffic_mapping_http _slf_group_prov", "rateLimiting": { "methods": [{ "name": "GET", "rate": 800, "rateLimitPolicy": "R1" }, { "name": "PUT", "rate": 200, "rateLimitPolicy": "R1" }, { "name": "DELETE", "rate": 200, "rateLimitPolicy": </pre>	

Table 5-7 (Cont.) Configuration APIs on Ingress Gateway for Rate Limiting

HTTP Method	Sample Request REST URL	Sample Response	Notes
	<pre> "R1" }] }, "failureReqCountError CodeSeriesId": "P1" }] </pre>	<pre> CodeSeriesId": "P1" }] </pre>	
PUT	URL: http://10.75.229.75:31187/udr/nf-common-component/v1/igw/routelevelratelimiting routelevelratelimiting <pre> { "enabled": true, "samplingPeriod": 1000, "rateLimitPolicies": [{ "name": "R1", "value": 24, "action": "RejectWithErrorCode" }, { "name": "R1", "value": 24, "action": "RejectWithErrorCode" }, { "name": "R1", "value": 24, "action": "RejectWithErrorCode" }] } </pre>	routelevelratelimiting <pre> { "enabled": true, "samplingPeriod": 1000, "rateLimitPolicies": [{ "name": "R1", "value": 24, "action": "RejectWithErrorCode" }, { "name": "R1", "value": 24, "action": "RejectWithErrorCode" }, { "name": "R1", "value": 24, "action": "RejectWithErrorCode" }] } </pre>	Response is same as request

Table 5-7 (Cont.) Configuration APIs on Ingress Gateway for Rate Limiting

HTTP Method	Sample Request REST URL	Sample Response	Notes
PUT	URL: http://10.75.229.75:31187/udr/nf-common-component/v1/igw/errorcodeprofiles errorcodeprofiles <pre>[{ "name": "error429", "errorCode": 429, "errorCause": "Too many reequests", "errorTitle": "Too many reequests", "redirectURL": "", "retry- after": "", "errorDescription": "Too many reequests" }]</pre>	errorcodeprofiles <pre>[{ "name": "error429", "errorCode": 429, "errorCause": "Too many reequests", "errorTitle": "Too many reequests", "redirectURL": "", "retry- after": "", "errorDescription": "Too many reequests" }]</pre>	Response is same as request

5.6.1 Default Configuration Details for Rate Limit

The default configuration details for rate limit are:

! Important

The default deployment setup includes two Ingress Gateways and two DR pods. The following default rates are derived based on this deployment setup. If you want to scale up the pods, then adjust or configure the route rates accordingly. The route rates are available under routesconfiguration of <http://10.75.229.75:31187/udr/nf-common-component/v1/igw/routesconfiguration>.

- RouteId-Path - traffic_mapping_http - nudr-dr

Table 5-8 Method wise Rate Details

Method	Rate
GET	200
PUT	300
POST	200
PATCH	200
DELETE	200

- RouteId-Path - traffic_mapping_http_prov - nudr-dr-prov

Table 5-9 Method wise Rate Details

Method	Rate
GET	200
PUT	300
POST	200
PATCH	200
DELETE	200

- RouteId-Path - traffic_mapping_http_group - nudr-group-id-map

Table 5-10 Method wise Rate Details

Method	Rate
GET	1350

- RouteId-Path - traffic_mapping_http_group_prov - nudr-group-id-map-prov

Table 5-11 Method wise Rate Details

Method	Rate
GET	800
PUT	200
DELETE	200

- RouteId-Path - traffic_mapping_http_slf_group_prov - slf-group-prov

Table 5-12 Method wise Rate Details

Method	Rate
GET	800
PUT	200
DELETE	200

5.7 List of Errors and their Details

The list of errors and their details are as follows:

Table 5-13 Error Details

Error Codes	Error Text	Error Detail
400	Bad request	Schema Validation Failure Invalid URI Key Not Supported Invalid JSON Format JSONObject[\"unknow field name\"] not found. /nudr-config/v1/export: • "No MO name passed OR Passed MO name is not correct" • "No MO name passed for Export." /nudr-config/v1/import: • Only zip file format is supported. Upload a zip file to perform the bulk import. • Passed MO name is not correct • Unable to extract contents of file... skipping • Error reading zip stream
404	Not Found	Configuration does not exist Destination Not Found Key Not Found Data field does not exist /nudr-config/v1/export/<id>/status: • Export request id not found /nudr-config/v1/export/<id>/report: • Export report with the provided ID does not exist • Export report with the provided ID not found /nudr-config/v1/export/<id>/download: • Exported Files with the provided ID does not exist /nudr-config/v1/import/<id>/status: • Import request id not found /nudr-config/v1/import/<id>/report • Import report with the provided ID does not exists • Import report with the provided ID not found
405	Operation Not Allowed	Method Not Allowed

Table 5-13 (Cont.) Error Details

Error Codes	Error Text	Error Detail
429	Too Many Requests	/nudr-config/v1/import: Another import or export request is in progress. Please wait for previous requests to complete before performing bulk import operation
500	Internal Server Error	Internal error /nudr-config/v1/export/<id>/report: - Export is in progress. Please try after some time - Could not create export report /nudr-config/v1/export/<id>/download: - Report not yet ready. Please try again after some time - Could not create exported json files /nudr-config/v1/import/<id>/report: - Import is in progress. Please try after some time - Could not create import report
503	Service Unavailable	Service unavailable

6

Payload References

This appendix describes Payload Reference details.

6.1 Payload Reference for PCF

This section provides payload details for the following PCF Operations.

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

6.1.1 PATCH-SessionManagementPolicyData

sm-patch

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

```

        "smPolicyDnnData": {
            "dnn1": {
                "dnn": "dnn1",
                "bdtRefIds": {
                    "abc": "bdtRefIds",
                    "xyz": "PCF"
                }
            }
        }
    }
}

```

VSA patch payload

```

{
    "umData": {
        "mk1": {
            "scopes": {
                "11-abc123": {
                    "dnn": [
                        "dnn1"
                    ],
                    "snssai": {
                        "sd": "abc123",
                        "sst": 11
                    }
                }
            }
        },
        "limitId": "mk1",
        "name": "customQuota",
        "umLevel": "SERVICE_LEVEL",
        "resetTime": "2018-01-02T08:17:14.090Z",
        "allowedUsage": {
            "duration": 9000,
            "totalVolume": 8888,
            "uplinkVolume": 6666,
            "downlinkVolume": 7777
        },
        "customAllowedUsage": {
            "duration": 9000,
            "totalVolume": 8888,
            "downlinkVolume": 6666,
            "uplinkVolume": 7777
        },
        "serviceSpecific": 7777,
        "type": "",
        "grantedUsage": {
            "totalVolume": 8888,
            "downlinkVolume": 6666,
            "uplinkVolume": 7777,
            "duration": 3000
        },
        "grantedServiceSpecific": "",
    }
}

```

```

        "quotaState": "",
        "refInstanceId": ""
    },
    },
    "smPolicySnssaiData": {
        "21-abc123": {
            "snssai": {
                "sd": "abc123",
                "sst": 11
            },
            "smPolicyDnnData": {
                "dnn1": {
                    "dnn": "dnn1",
                    "bdtRefIds": {
                        "abc": "bdtRefIds",
                        "xyz": "PCF"
                    }
                }
            }
        }
    },
    },
    "VendorSpecific-000111": {
        "subscriber": {
            "IMSI": ["302370123456789"],
            "ACCOUNTID": ["178322212122"],
            "MSISDN": ["15145551234", "15141234567"],
            "BillingDay": 6,
            "Entitlement": ["DayPass", "DayPassPlus", "DayPassPro"]
        },
        "state": {
            "property": [{
                "name": "mcc",
                "value": "123"
            }, {
                "name": "expire",
                "value": "201402-09T11:20:32"
            }],
            "version": 1
        }
    },
    },
}

```

6.1.2 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"
  },
  {
    "plmnId": {
      "mcc": "967",
      "mnc": "238"
    },
    "gNbId": {
      "bitLength": 25,
      "gNbValue": "1A8F1D"
    }
  }
  ],

```

```

    }
  }
}
},
"subscCats": ["cat1", "cat2"],
"uePolicySections": {
  "111": {
    "upsi": "111",
    "uePolicySectionInfo": "MQ=="
  },
  "33": {
    "upsi": "33",
    "uePolicySectionInfo": "Mg0K"
  }
},
"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"]
}

```

6.1.3 PATCH-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"
},
{
  "plmnId": {
    "mcc": "967",
    "mnc": "238"
  },
  "gNbId": {
    "bitLength": 25,
    "gNbValue": "1A8F1D"
  }
}
```

```

    }
  ]
}
},
"subscCats": ["cat1", "cat2"],
"uePolicySections": {
  "111": {
    "upsi": "111",
    "uePolicySectionInfo": "MQ=="
  },
  "33": {
    "upsi": "33",
    "uePolicySectionInfo": "Mg0K"
  }
},
"upsis": ["111", "33"],
"allowedRouteSelDescs": {
  "965-235": {
    "servingPlmn": {
      "mcc": "965",
      "mnc": "235"
    },
    "snssaiRouteSelDescs": [{
      "snssai": {
        "sd": "abc123",
        "sst": 11
      }
    }]
  }
}
},
"andspInd": true,
"pei": "imei-355375345274757",
"osIds": ["bceafb30-31bd-4b8d-b3c2-ed79d029531a",
"cc9d9f97-0127-497c-9bca-79e8e9080ea8"]
}

```

6.1.4 PUT-UsageMonitoringInformation

```

{
  "scopes": {
    "11-abc123": {
      "dnn": [
        "dnn1"
      ],
      "snssai": {
        "sd": "abc123",
        "sst": 11
      }
    }
  },
  "limitId": "mk1",
  "umLevel": "SERVICE_LEVEL",
  "resetTime": "2018-01-02T08:17:14.090Z",
  "allowedUsage": {
    "duration": 9000,
  }
}

```

```

        "totalVolume": 8888,
        "uplinkVolume": 6666,
        "downlinkVolume": 7777
    }
}

```

6.1.5 PUT-AM SM UEPolicyData

To add the AM, SM, UEPolicySet information.

```

{
  "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"
  },
  {
    "plmnId": {
      "mcc": "967",
      "mnc": "238"
    },
    "gNbId": {
      "bitLength": 25,
      "gNbValue": "1A8F1D"
    }
  }
]
},
"subscCats": [
  "cat1",
  "cat2"
]
},
"sm-data": {
  "umData": {
    "mk1": {
      "scopes": {
        "11-abc123": {
          "dnn": [
            "dnn1"
          ],
          "snssai": {
            "sd": "abc123",
            "sst": 11
          }
        }
      }
    },
    "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
      }
    }
  },
  "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": "YEARLY"
  }
},
"smPolicySnssaiData": {
  "11-abc123": {
    "snssai": {
      "sd": "abc123",
      "sst": 11
    },
    "smPolicyDnnData": {
      "dnn1": {
        "dnn": "dnn1",
        "bdtRefIds": {
          "xyz": "bdtRefIds",
          "abc": "xyz"
        }
      },
      "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",
          "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"
},
{
    "plmnId": {
        "mcc": "967",
        "mnc": "238"
    },
    "gNbId": {

```

```

        "bitLength": 25,
        "gNbValue": "1A8F1D"
      }
    }
  ]
}
},
"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"
  },
  {
    "plmnId": {
      "mcc": "967",
      "mnc": "238"
    },
    "gNbId": {
      "bitLength": 25,
      "gNbValue": "1A8F1D"
    }
  }
]
},
"subscCats": [
  "cat1",
  "cat2"
],
"uePolicySections": {
  "33": {
    "upsi": "33",
    "uePolicySectionInfo": "MQ=="
  }
}

```



```

    },
    "111": {
      "upsi": "111",
      "uePolicySectionInfo": "Mg0K"
    }
  },
  "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"
]
}
}

```

6.1.6 PUT-Policy Data with VSA 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"
  },
  {
    "plmnId": {
      "mcc": "967",
      "mnc": "238"
    },
    "gNbId": {
      "bitLength": 25,
      "gNbValue": "1A8F1D"
    }
  }
]

```

```

    }
  ]
}
},
"subscCats": [
  "cat1",
  "cat2"
]
},
"sm-data": {
  "umData": {
    "mk1": {
      "scopes": {
        "11-abc123": {
          "dnn": [
            "dnn1"
          ],
          "snssai": {
            "sd": "abc123",
            "sst": 11
          }
        }
      }
    },
    "limitId": "mk1",
    "name": "Weekend",
    "umLevel": "SERVICE_LEVEL",
    "resetTime": "2018-01-02T08:17:14.090Z",
    "allowedUsage": {
      "duration": 9000,
      "totalVolume": 8888,
      "uplinkVolume": 6666,
      "downlinkVolume": 7777
    },
    "customAllowedUsage": {
      "duration": 9000,
      "totalVolume": 8888,
      "downlinkVolume": 6666,
      "uplinkVolume": 7777
    },
    "serviceSpecific": 7777,
    "type": "",
    "grantedUsage": {
      "totalVolume": 8888,
      "downlinkVolume": 6666,
      "uplinkVolume": 7777,
      "duration": 3000
    },
    "grantedServiceSpecific": "",
    "quotaState": "",
    "refInstanceId": ""
  }
},
"umDataLimits": {
  "mk1": {
    "scopes": {
      "11-abc123": {

```

```

        "dnn": [
            "dnn1"
        ],
        "snssai": {
            "sd": "abc123",
            "sst": 11
        }
    },
    "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": "YEARLY"
    },
    "Type": "",
    "name": "DynamicAggregateLimit",
    "priority": "",
    "initialServiceSpecific": 4000,
    "activationdatetime": "2021-09-05T08:17:14.090Z",
    "validityDuration": 300,
    "InterimReportingInterval": ""
    },
    "smPolicySnssaiData": {
        "11-abc123": {
            "snssai": {
                "sd": "abc123",
                "sst": 11
            },
            "smPolicyDnnData": {
                "dnn1": {
                    "dnn": "dnn1",
                    "bdtRefIds": {
                        "xyz": "bdtRefIds",
                        "abc": "xyz"
                    },
                    "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",
                            "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"
},
{
    "plmnId": {
        "mcc": "967",
        "mnc": "238"
    },

```

```

        "gNbId": {
            "bitLength": 25,
            "gNbValue": "1A8F1D"
        }
    },
    ],
    },
    "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
    },
    },
    },
    },
    "VendorSpecific-000111": {
        "subscriber": {
            "IMSI": ["302370123456789"],
            "ACCOUNTID": ["178322212122"],
            "MSISDN": ["15145551234", "15141234567"],
            "BillingDay": 6,
            "Entitlement": ["DayPass", "DayPassPlus"],
            "custom2": "abc",
            "custom3": "abc123"
        },
        "state": {
            "property": [{
                "name": "mcc",
                "value": "123"
            }, {
                "name": "expire",
                "value": "201402-09T11:20:32"
            }],
            "version": 1
        }
    }
}

```

```

},
"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"
  }
]

```

```

    },
    {
      "plmnId": {
        "mcc": "967",
        "mnc": "238"
      },
      "gNbId": {
        "bitLength": 25,
        "gNbValue": "1A8F1D"
      }
    }
  ]
},
"subscCats": [
  "cat1",
  "cat2"
],
"uePolicySections": {
  "33": {
    "upsi": "33",
    "uePolicySectionInfo": "MQ=="
  },
  "111": {
    "upsi": "111",
    "uePolicySectionInfo": "Mg0K"
  }
},
"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"
        ]
    }
}

```

6.1.7 PUT - update am-data and delete sm-data

```

{
    "am-data": {
        "praInfos": {
            "p1": {
                "praId": "p1",
                "trackingAreaList": [{
                    "plmnId": {
                        "mcc": "976",
                        "mnc": "31"
                    },
                    "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"
  },
  {
    "plmnId": {
      "mcc": "967",
      "mnc": "238"
    },
    "gNbId": {
      "bitLength": 25,
      "gNbValue": "1A8F1D"
    }
  }
]
},
"subscCats": [
  "cat1",
  "cat2"
]
},
"sm-data": null
}

```

Delete all PCF data

```

{
  "sm-data": null,
  "am-data": null,
  "ue-policy-set": null
}

```

6.1.8 POST-Subscription Operations

```

"notificationUri": "http://mlu-pcf-api-gateway.mlu-pcf.svc/user-service/
userservice/notification/msisdn-1871587819", "monitoredResourceUris":
[ "https://localhost:9443/nudr-dr-prov/v1/policy-data/msisdn-111111111/sm-
data" ], "supportedFeatures": "f", "expires": "2022-04-23T18:25:43.511Z"
}

```

6.1.9 PUT-Subscription Operations

```
{ "notificationUri":"http://mlu-pcf-api-gateway.mlu-pcf.svc/user-service/
userservice/notification/msisdn-1871587819", "monitoredResourceUri":
[ "https://localhost:9443/nudr-dr-prov/v1/policy-data/msisdn-1111111111/sm-
data" ], "supportedFeatures":"f", "expires": "2022-04-23T18:25:43.511Z" }
```

6.1.10 GET-Subscription Operations

```
{ "subscribedResources": [ "policy-data/msisdn-819191945001/am-data" ],
"expires": "2022-04-23T18:25:43.511Z", "supportedFeatures": "f",
"notificationUri": "http://http2-service.default.svc.cluster.local/policy-
data/uri1/" }
```

6.1.11 PUT or PATCH - Subscription Notification

```
[{'ue-id': 'msisdn-7777777779', 'smPolicyData': {'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': {'period': 'YEARLY'}, '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': '2018-01-02T08:17:14.090Z'}}, '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'}, {'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': [{'plmnId': {'mcc': '965', 'mnc':
'235'}, 'n3IwfId': 'fFf0f2AFbFa16CEfE7'}, {'gNbId': {'gNbValue': '1A8F1D',
'bitLength': 25}, 'plmnId': {'mcc': '967', 'mnc': '238'}}]}}, 'bdtRefIds':
{'abc': 'xyz', 'xyz': 'bdtRefIds'}, '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': [{'plmnId': {'mcc': '965', 'mnc': '235'},
'n3IwfId': 'fFf0f2AFbFa16CEfE7'}, {'gNbId': {'gNBValue': '1A8F1D',
'bitLength': 25}, 'plmnId': {'mcc': '967', 'mnc': '238'}}]}],
'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': [{'plmnId':
{'mcc': '965', 'mnc': '235'}, 'n3IwfId': 'fFf0f2AFbFa16CEfE7'}, {'gNbId':
{'gNBValue': '1A8F1D', 'bitLength': 25}, 'plmnId': {'mcc': '967',
'mnc': '238'}}]}], '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': [{'plmnId':
{'mcc': '965', 'mnc': '235'}, 'n3IwfId': 'fFf0f2AFbFa16CEfE7'},
{'gNbId': {'gNBValue': '1A8F1D', 'bitLength': 25}, 'plmnId': {'mcc': '967',
'mnc': '238'}}]}], '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}}}}}}]

```

6.1.12 DELETE DATA - Subscription Notification

```
[{'ueId': 'msisdn-7777777779', 'smPolicyData': None}]
```

6.1.13 DELETE SUBSCRIBER - Subscription Notification

```
[{'ueId': 'msisdn-7777777779', 'uePolicySet': None,  
'amPolicyData': None, 'smPolicyData': None, 'usageMonData':  
: None}]
```

6.2 Payload Reference for Provisioning System

This section provides payload details for the following Provisioning System Operations.

- [POST - NEF Data](#)
- [POST-ProfileData](#)
- [Adding Custom Fields under Profile Data](#)
- [#unique_122](#)
- [#unique_123](#)
- [PUT-ProfileData](#)

6.2.1 POST-ProfileData

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

6.2.2 Adding Custom Fields under Profile Data

To add custom fields under profile data during initial subscriber provisioning (create subscriber):

```
{
  "profile-data": {
    "MSISDN": [
      "1111111112",
      "1111111113"
    ],
    "Imsi": [
      "2222222221"
    ],
    "profile-fields": {
```

```

        "customFieldKey": "CustomValue"
      }
    }
  }

```

6.2.3 PUT-ProfileData

```

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

```

6.2.4 POST - NEF Data

```

{
  "profile-data": {
    "MSISDN": [
      "9111111111",
      "9211111111",
      "1111111113"
    ],
    "profile-fields": {
      "customFieldKey": "CustomValue"
    }
  },
  "exposure-data": {
    "am-data": {},
    "pdu-sm-data": {}
  }
}

```

6.3 Payload Reference for UDM APIs

This section provides payload details for the following UDM APIs Operations.

- [PATCH-Amf3GppAccessRegistration](#)
- [PUT-Amf3GppAccessRegistration](#)
- [PUT-AmfNon3GppAccessRegistration](#)
- [PUT-SessionManagementSubscriptionData](#)
- [POST-SDMSubscriptions](#)
- [Post-SubscriptionDataSubscriptions](#)
- [PUT - SDMSubscriptions](#)

6.3.1 PATCH-Amf3GppAccessRegistration

```

case 1: REPLACE
[
  {
    "op" : "replace",
    "path" : "/mnc-mcc-amfId/backupAmfInfo/0/guamiList/0/plmnId/mcc",
    "value" : "998"
  }
]

case2: ADD
[
  {
    "op" : "add",
    "path" : "/mnc-mcc-amfId/backupAmfInfo/0/guamiList/1",
    "value" : {
      "amfId": "5678AA",
      "plmnId": {
        "mcc": "666",
        "mnc": "456"
      }
    }
  }
]

case3: REMOVE
[
  {
    "op" : "remove",
    "path" : "/mnc-mcc-amfId/backupAmfInfo/0/guamiList/2"
  }
]

```

6.3.2 PUT-Amf3GppAccessRegistration

```

{
  "amfInstanceId": "abae35e5-cc45-4016-8dd4-89598e5311b9",
  "supportedFeatures": "AF",
  "purgeFlag": true,
  "pei": "imei-1000000000000001",
  "imsVoPs": "HOMOGENEOUS_SUPPORT",
  "deregCallbackUri": "http://ocnrf-ambassador.default.svc.cluster.local/nnrf-nfm/v1/nf-instances",
  "amfServiceNameDereg": "nudm-sdm",
  "pcscfRestorationCallbackUri": "http://ocnrf-ambassador.default.svc.cluster.local/nnrf-nfm/v1/nf-instances",
  "amfServiceNamePcscfRest": "nausf-auth",
  "initialRegistrationInd": true,
  "guami": {
    "plmnId": {
      "mcc": "001",
      "mnc": "123"
    },
    "amfId": "1234AA"
  },
  "backupAmfInfo": [

```

```

    {
      "backupAmf":
      "amf1.cluster1.net2.amf.5gc.mnc012.mcc345.3gppnetwork.org",
      "guamiList": [
        {
          "plmnId": {
            "mcc": "002",
            "mnc": "456"
          },
          "amfId": "5678AA"
        },
        {
          "plmnId": {
            "mcc": "003",
            "mnc": "789"
          },
          "amfId": "9876AA"
        }
      ]
    },
    "drFlag": true,
    "ratType": "WLAN",
    "urrrIndicator": true,
    "amfEeSubscriptionId": "subscriptionId",
    "epsInterworkingInfo": {
      "dnn1": {
        "pgwFqdn": "hijklm",
        "smfInstanceId": "abae35e5-cc45-4016-8dd4-89598e5311b9"
      },
      "dnn2": {
        "pgwFqdn": "abcdefgh",
        "smfInstanceId": "abae35e5-cc45-4016-8dd4-89598e5311b7"
      }
    }
  }
}

```

6.3.3 PUT-AmfNon3GppAccessRegistration

```

{
  "amfInstanceId" : "abae35e5-cc45-4016-8dd4-89598e5311b9",
  "supportedFeatures" : "AF",
  "purgeFlag" : true,
  "pei" : "imei-1000000000000001",
  "imsVoPs" : "HOMOGENEOUS_SUPPORT",
  "deregCallbackUri" : "http://ocnrf-ambassador.default.svc.cluster.local/nnrf-nfm/v1/nf-instances",
  "amfServiceNameDereg" : "nudm-sdm",
  "pcscfRestorationCallbackUri" : "http://ocnrf-ambassador.default.svc.cluster.local/nnrf-nfm/v1/nf-instances",
  "amfServiceNamePcscfRest" : "nausf-auth",
  "guami" : {
    "plmnId" : {
      "mcc" : "001",
      "mnc" : "123"
    }
  }
}

```



```

    },
    "amfId" : "1234AA"
  },
  "backupAmfInfo" : [
    {
      "backupAmf" : "amf1.cluster1.net2.amf.5gc.mnc012.mcc345.3gppnetwork.org",
      "guamiList" : [
        {
          "plmnId" : {
            "mcc" : "002",
            "mnc" : "456"
          },
          "amfId" : "5678AA"
        },
        {
          "plmnId" : {
            "mcc" : "003",
            "mnc" : "789"
          },
          "amfId" : "9876AA"
        }
      ]
    }
  ],
  "ratType" : "WLAN",
  "amfEeSubscriptionId" : "subscriptionId",
  "urrrIndicator" : true
}

```

6.3.4 PUT-SessionManagementSubscriptionData

```

{
  "singleNssai": {
    "sd": "ABC654",
    "sst": 1
  },
  "internalGroupIds": [
    "9ABAB803-203-299-95A9",
    "9ABAB803-203-299-95A2",
    "79e0c480-719-085-f2A55e6DDc91Df802438"
  ],
  "dnnConfigurations": {
    "dnn1": {
      "sscModes": {
        "defaultSscMode": "SSC_MODE_1",
        "allowedSscModes": [
          "SSC_MODE_2",
          "SSC_MODE_3"
        ]
      },
      "iwkEpsInd": true,
      "upSecurity": {
        "upConfid": "REQUIRED",
        "upIntegr": "REQUIRED"
      },
      "sessionAmbr": {
        "uplink": "125 Mbps",
        "downlink": "25 Mbps"
      },
      "5gQosProfile": {
        "5qi": 123,
        "arp": {
          "preemptCap": "MAY_PREEMPT",
          "preemptVuln": "PREEMPTABLE",
          "priorityLevel": 1
        },
        "priorityLevel": 79
      },
      "pduSessionTypes": {
        "defaultSessionType": "IPv4",
        "allowedSessionTypes": [

```

```

        "IPV6",
        "IPV4V6",
        "UNSTRUCTURED",
        "ETHERNET"
    ],
    },
    "staticIpAddress": [
        {
            "ipv4Addr": "11.11.11.1"
        },
        {
            "ipv4Addr": "11.11.11.2"
        }
    ],
    "3gppChargingCharacteristics": "123A"
},
"sharedDnnConfigurationsId": "85868-mZE$cy",
"odbPacketServices": "ALL_PACKET_SERVICES"
}

```

6.3.5 POST-SDMSubscriptions

```

{
  "nfInstanceId": "cb59c48c-a2fa-11e9-a2a3-2a2ae2dbcce4",
  "expires": "2012-04-23T18:25:43.511Z",
  "implicitUnsubscribe": true,
  "dnn": "sasa",
  "singleNssai": {
    "sd": "651Bf9",
    "sst": 23
  },
  "callbackReference": "udr",
  "amfServiceName": "nnrf-nfm",
  "monitoredResourceUris": [
    "http://sims-udr-2-udr-simulator.sims-udr-2:5807/nudr-dr/v2/subscription-data/nai-990991@nai/context-data/amf-3gpp-access"
  ],
  "plmnId": {
    "mnc": "124",
    "mcc": "123"
  },
  "subscriptionId": "sa"
}

```

6.3.6 Post-SubscriptionDataSubscriptions

```

{
  "callbackReference": "http://10.75.212.167:8787",
  "originalCallbackReference": "http://10.75.212.167:8787",
  "ueId": "nai-990991@nai",
  "subscriptionId": "7",
  "monitoredResourceUris": [

```

```

        "http://sims-udr-2-udr-simulator.sims-udr-2:5807/nudr-dr/v2/
subscription-data/nai-990991@nai/context-data/amf-3gpp-access"
    ],
    "expiry": "2020-01-02T08:17:14.090Z",
    "supportedFeatures": "f",
    "sdmSubscription": {
        "nfInstanceId": "cb59c48c-a2fa-11e9-a2a3-2a2ae2dbcce4",
        "expires": "2012-04-23T18:25:43.511Z",
        "implicitUnsubscribe": true,
        "dnn": "sasb",
        "singleNssai": {
            "sd": "651Bf9",
            "sst": 23
        }
    },
    "callbackReference": "udr",
    "amfServiceName": "nnrf-nfm",
    "monitoredResourceUris": [
        "http://sims-udr-2-udr-simulator.sims-udr-2:5807/nudr-dr/v2/
subscription-data/nai-919090909010@nai/context-data/amf-3gpp-access"
    ],
    "plmnId": {
        "mnc": "124",
        "mcc": "123"
    },
    "subscriptionId": "sa"
}
}

```

6.3.7 PUT - SDMSubscriptions

```

{
    "nfInstanceId": "cb59c48c-a2fa-11e9-a2a3-2a2ae2dbcce4",
    "expires": "2012-04-23T18:25:43.511Z",
    "implicitUnsubscribe": true,
    "dnn": "sasa",
    "singleNssai": {
        "sd": "651Bf9",
        "sst": 23
    },
    "callbackReference": "udr",
    "amfServiceName": "nnrf-nfm",
    "monitoredResourceUris": [
        "http://sims-udr-2-udr-simulator.sims-udr-2:5807/nudr-dr/v2/subscription-
data/nai-990991@nai/context-data/amf-3gpp-access"
    ],
    "plmnId": {
        "mnc": "124",
        "mcc": "123"
    },
    "subscriptionId": "sb"
}

```

6.4 Response Reference for UDM APIs

This section provides output details for the following UDM APIs.

6.4.1 GET-ContextData

Following is the Result Code when the Sample URL is: `http://localhost:8080/nudr-dr/v2/subscription-data/imsi-911000000028/context-data`

```
{
  "amfNon3Gpp": {
    "imsVoPs": "HOMOGENEOUS_SUPPORT",
    "deregCallbackUri": "http://ocnrf-ambassador.default.svc.cluster.local/nnrf-nfm/v1/nf-instances",
    "purgeFlag": true,
    "supportedFeatures": "AF",
    "ratType": "WLAN",
    "urrrIndicator": true,
    "amfServiceNameDereg": "nudm-sdm",
    "amfServiceNamePcscfRest": "nausf-auth",
    "guami": {
      "plmnId": {
        "mnc": "123",
        "mcc": "001"
      },
      "amfId": "1234AA"
    },
    "pei": "imei-1000000000000001",
    "amfEeSubscriptionId": "subscriptionId",
    "amfInstanceId": "abae35e5-cc45-4016-8dd4-89598e5311b9",
    "pcscfRestorationCallbackUri": "http://ocnrf-ambassador.default.svc.cluster.local/nnrf-nfm/v1/nf-instances",
    "backupAmfInfo": [
      {
        "backupAmf": "amf1.cluster1.net2.amf.5gc.mnc012.mcc345.3gppnetwork.org",
        "guamiList": [
          {
            "plmnId": {
              "mnc": "456",
              "mcc": "002"
            },
            "amfId": "5678AA"
          },
          {
            "plmnId": {
              "mnc": "789",
              "mcc": "003"
            },
            "amfId": "9876AA"
          }
        ]
      }
    ]
  }
}
```

```

    },
    "smsf3GppAccess": {
      "smsfInstanceId": "69d3da66-9e25-11e9-a2a3-2a2ae2dbcce4",
      "supportedFeatures": "BA2b5d3b977eF2458EEC80592E",
      "smsfMAPAddress": "977347916",
      "plmnId": {
        "mnc": "45",
        "mcc": "452"
      },
    },
    "smsfDiameterAddress": {
      "name":
        "uLmBAnz2b7S60evNkC7tHvcEZidEXppNIp7Le9yXzucgboiXFRkYg6597Lbi31n0BxEBV2ZePCfKp
        UiEB0ULZMxudPsPepud.emteshurwldooeh",
      "realm":
        "uLmBAnz2b7S60evNkC7tHvcEZidEXppNIp7Le9yXzucgboiXFRkYg6597Lbi31n0BxEBV2ZePCfKp
        UiEB0ULZMxudPsPepud.emteshurwldooeh"
    },
  },
  "amf3Gpp": {
    "imsVoPs": "HOMOGENEOUS_SUPPORT",
    "deregCallbackUri": "http://ocnrf-
    ambassador.default.svc.cluster.local/nnrf-nfm/v1/nf-instances",
    "purgeFlag": true,
    "supportedFeatures": "AF",
    "ratType": "WLAN",
    "urrrpIndicator": true,
    "amfServiceNameDereg": "nudm-sdm",
    "amfServiceNamePcscfRest": "nausf-auth",
    "guami": {
      "plmnId": {
        "mnc": "123",
        "mcc": "001"
      },
    },
    "amfId": "1234AA"
  },
  "pei": "imei-100000000000000001",
  "amfEeSubscriptionId": "subscriptionId",
  "drFlag": true,
  "amfInstanceId": "abae35e5-cc45-4016-8dd4-89598e5311b9",
  "pcscfRestorationCallbackUri": "http://ocnrf-
  ambassador.default.svc.cluster.local/nnrf-nfm/v1/nf-instances",
  "backupAmfInfo": [
    {
      "backupAmf":
        "amf1.cluster1.net2.amf.5gc.mnc012.mcc345.3gppnetwork.org",
      "guamiList": [
        {
          "plmnId": {
            "mnc": "456",
            "mcc": "002"
          },
        },
        "amfId": "5678AA"
      ],
    },
    {
      "plmnId": {
        "mnc": "789",

```

```

        "mcc": "003"
      },
      "amfId": "9876AA"
    }
  ]
},
"epsInterworkingInfo": {
  "dnn2": {
    "smfInstanceId": "abae35e5-cc45-4016-8dd4-89598e5311b7",
    "pgwFqdn": "abcdefgh"
  },
  "dnn1": {
    "smfInstanceId": "abae35e5-cc45-4016-8dd4-89598e5311b9",
    "pgwFqdn": "hijklm"
  }
},
"initialRegistrationInd": true
},
"smsfNon3GppAccess": {
  "smsfInstanceId": "69d3da66-9e25-11e9-a2a3-2a2ae2dbcce4",
  "supportedFeatures": "BA2b5d3b977eF2458EEC80592E",
  "smsfMAPAddress": "977347916",
  "plmnId": {
    "mnc": "45",
    "mcc": "452"
  },
  "smsfDiameterAddress": {
    "name":
      "uLmBAnz2b7S60evNkC7tHvcEZidEXppNIp7Le9yXzucgboiXFRkYg6597LBi31n0BxEBV2ZePCfKp
      UiEB0ULZMxudPsPepud.emteshurwldooeh",
    "realm":
      "uLmBAnz2b7S60evNkC7tHvcEZidEXppNIp7Le9yXzucgboiXFRkYg6597LBi31n0BxEBV2ZePCfKp
      UiEB0ULZMxudPsPepud.emteshurwldooeh"
  }
}
}

```

6.4.2 GET - Context Data - SMSF

```

{
  "smsf3GppAccess": {
    "smsfInstanceId": "69d3da66-9e25-11e9-a2a3-2a2ae2dbcce4",
    "supportedFeatures": "BA2b5d3b977eF2458EEC80592E",
    "smsfMAPAddress": "977347916",
    "plmnId": {
      "mnc": "45",
      "mcc": "452"
    },
    "smsfDiameterAddress": {
      "name":
        "uLmBAnz2b7S60evNkC7tHvcEZidEXppNIp7Le9yXzucgboiXFRkYg6597LBi31n0BxEBV2ZePCfKp
        UiEB0ULZMxudPsPepud.emteshurwldooeh",
      "realm":
        "uLmBAnz2b7S60evNkC7tHvcEZidEXppNIp7Le9yXzucgboiXFRkYg6597LBi31n0BxEBV2ZePCfKp

```

```

    "UiEB0ULZMxudPsPepud.emteshurwdldooeh"
  }
}

```

6.4.3 GET-ProvisionedData

Below is the output when the Sample URL is: <http://localhost:8080/nudr-dr/v2/subscription-data/imsi-911000000089/77889/provisioned-data>.

```

{
  "amData": {
    "upuInfo": {
      "upuAckInd": true,
      "upuRegInd": true,
      "upuDataList": [
        {
          "secPacket": "aGVsbG8="
        }
      ],
      "provisioningTime": "2012-04-23T18:25:43.511Z",
      "upuMacIausf": "E0b0cCF4EcCC5CA55DBFeA3B2Ad3aE80",
      "counterUpu": "3Ab5"
    },
    "supportedFeatures": "692F296F2Cb3BCA76Bc1E126FeEC12",
    "mcsPriority": true,
    "activeTime": 3,
    "subscribedDnnList": [
      "hello",
      "ocudr"
    ],
    "subscribedUeAmbr": {
      "uplink": "123 Gbps",
      "downlink": "12 Gbps"
    },
    "sharedAmDataIds": [
      "62626-esp}W3A?hIgZ{47Qiuuj@GR:Ped>@k`Px,76390-Cd[s[TECI"
    ],
    "coreNetworkTypeRestrictions": [
      "5GC",
      "EPC"
    ],
    "nssai": {
      "supportedFeatures": "692F296F2Cb3BCA76Bc1E126FeEC12",
      "defaultSingleNssais": [
        {
          "sd": "abc123",
          "sst": 1
        },
        {
          "sd": "abc124",
          "sst": 2
        }
      ]
    },
    "singleNssais": [

```

```

        {
            "sd": "abc789",
            "sst": 3
        },
        {
            "sd": "abc799",
            "sst": 5
        }
    ]
},
"dlPacketCount": -1,
"gpsis": [
    "msisdn-1585632",
    "msisdn-2969851"
],
"rfspIndex": 123,
"mpsPriority": true,
"forbiddenAreas": [
    {
        "tacs": [
            "d11fdA",
            "EcccaD"
        ]
    }
],
"serviceAreaRestriction": {
    "restrictionType": "ALLOWED_AREAS",
    "maxNumOfTAs": 23,
    "areas": [
        {
            "tacs": [
                "d11fdA",
                "EcccaD"
            ]
        }
    ]
},
"odbPacketServices": "ALL_PACKET_SERVICES",
"sorInfo": {
    "sorMacIausf": "Bf85A791dCCDa7D6d9754264F02EDcBc",
    "steeringContainer": [
        {
            "plmnId": {
                "mnc": "456",
                "mcc": "123"
            },
            "accessTechList": [
                "NR"
            ]
        }
    ],
    "provisioningTime": "2012-04-23T18:25:43.511Z",
    "countersor": "8ebc",
    "ackInd": true
},
"ratRestrictions": [

```



```

        "NR",
        "WLAN",
        "EUTRA",
        "VIRTUAL"
    ],
    "subsRegTimer": 2,
    "ueUsageType": 9,
    "internalGroupIds": [
        "E1465DF5-483-159-Fc23DE491edb354dABAA",
        "51e851ea-577-297-Ef4d7Cf28CaC0D"
    ],
    "micoAllowed": true
},
"smfSelData": {
    "supportedFeatures": "692F296F2Cb3BCA76Bc1E126FeEC12",
    "subscribedSnssaiInfos": {
        "snsai1": {
            "dnnInfos": [
                {
                    "defaultDnnIndicator": true,
                    "iwkEpsInd": true,
                    "dnn": "Dnn1",
                    "lboRoamingAllowed": true
                },
                {
                    "defaultDnnIndicator": false,
                    "iwkEpsInd": true,
                    "dnn": "Dnn2",
                    "lboRoamingAllowed": true
                }
            ]
        }
    }
},
"sharedSnssaiInfosId": "96367-9z}MD*"
},
"smData": {
    "2": {
        "dnnConfigurations": {
            "dnn1": {
                "iwkEpsInd": true,
                "sessionAmbr": {
                    "uplink": "125 Mbps",
                    "downlink": "25 Mbps"
                },
                "5gQosProfile": {
                    "priorityLevel": 79,
                    "5qi": 123,
                    "arp": {
                        "preemptCap": "MAY_PREEMPT",
                        "priorityLevel": 1,
                        "preemptVuln": "PREEMPTABLE"
                    }
                }
            },
            "upSecurity": {
                "upIntegr": "REQUIRED",
                "upConfid": "REQUIRED"
            }
        }
    }
}

```

```

    },
    "sscModes": {
      "allowedSscModes": [
        "SSC_MODE_2",
        "SSC_MODE_3"
      ],
      "defaultSscMode": "SSC_MODE_1"
    },
    "3gppChargingCharacteristics": "123A",
    "pduSessionTypes": {
      "defaultSessionType": "IPv4",
      "allowedSessionTypes": [
        "IPv6",
        "IPv4V6",
        "UNSTRUCTURED",
        "ETHERNET"
      ]
    },
    "staticIpAddress": [
      {
        "ipv4Addr": "11.11.11.1"
      },
      {
        "ipv4Addr": "11.11.11.2"
      }
    ]
  },
  "singleNssai": {
    "sst": 2
  },
  "odbPacketServices": "ALL_PACKET_SERVICES",
  "internalGroupIds": [
    "9ABAB803-203-299-95A9",
    "9ABAB803-203-299-95A2",
    "79e0c480-719-085-f2A55e6DDc91Df802438"
  ],
  "sharedDnnConfigurationsId": "85868-mZE$cy"
},
"3": {
  "dnnConfigurations": {
    "dnn1": {
      "iwkEpsInd": true,
      "sessionAmbr": {
        "uplink": "125 Mbps",
        "downlink": "25 Mbps"
      },
      "5gQosProfile": {
        "priorityLevel": 79,
        "5qi": 123,
        "arp": {
          "preemptCap": "MAY_PREEMPT",
          "priorityLevel": 1,
          "preemptVuln": "PREEMPTABLE"
        }
      }
    }
  }
},

```

```

        "upSecurity": {
            "upIntegr": "REQUIRED",
            "upConfid": "REQUIRED"
        },
        "sscModes": {
            "allowedSscModes": [
                "SSC_MODE_2",
                "SSC_MODE_3"
            ],
            "defaultSscMode": "SSC_MODE_1"
        },
        "3gppChargingCharacteristics": "123A",
        "pduSessionTypes": {
            "defaultSessionType": "IPv4",
            "allowedSessionTypes": [
                "IPv6",
                "IPv4V6",
                "UNSTRUCTURED",
                "ETHERNET"
            ]
        },
        "staticIpAddress": [
            {
                "ipv4Addr": "11.11.11.1"
            },
            {
                "ipv4Addr": "11.11.11.2"
            }
        ]
    },
    "singleNssai": {
        "sst": 3
    },
    "OdbPacketServices": "ALL_PACKET_SERVICES",
    "internalGroupIds": [
        "9ABAB803-203-299-95A9",
        "9ABAB803-203-299-95A2",
        "79e0c480-719-085-f2A55e6DDc91Df802438"
    ],
    "sharedDnnConfigurationsId": "85868-mZE$cy"
},
"traceData": {
    "eventList": "855B5bf7beC3AFB8c",
    "collectionEntityIpv6Addr": "2001:db8:85a3::8a2e:370:7334",
    "collectionEntityIpv4Addr": "26.118.255.253",
    "traceRef": "070207-baE6Dd",
    "neTypeList": "0f4FBefe95bF8",
    "traceDepth": "MINIMUM"
},
"smsMngData": {
    "moSmsBarringAll": true,
    "supportedFeatures": "CAe8de215CFa721BB2AE7Ef9c5f71a2e",
    "mtSmsBarringRoaming": false,
    "mtSmsSubscribed": true,

```

```

        "moSmsBarringRoaming": true,
        "mtSmsBarringAll": true,
        "moSmsSubscribed": false,
        "sharedSmsMngDataIds": [
            "16994-'JD",
            "693599-9~~GX"
        ]
    },
    "smsSubsData": {
        "sharedSmsSubsDataId": [
            "372063-P",
            "372063-0"
        ],
        "smsSubscribed": true
    }
}

```

Below is the output when the Sample URL is `http://localhost:8080/nudr-dr/v2/subscription-data/imsi-911000000089/77889/provisioned-data?dataset-names=AM,SM`

```

{
  "amData": {
    "upuInfo": {
      "upuAckInd": true,
      "upuRegInd": true,
      "upuDataList": [
        {
          "secPacket": "aGVsbG8="
        }
      ],
      "provisioningTime": "2012-04-23T18:25:43.511Z",
      "upuMacIausf": "E0b0cCF4EcCC5CA55DBfeA3B2Ad3aE80",
      "counterUpu": "3Ab5"
    },
    "supportedFeatures": "692F296F2Cb3BCA76Bc1E126FeEC12",
    "mcsPriority": true,
    "activeTime": 3,
    "subscribedDnnList": [
      "hello",
      "ocudr"
    ],
    "subscribedUeAmbr": {
      "uplink": "123 Gbps",
      "downlink": "12 Gbps"
    },
    "sharedAmDataIds": [
      "62626-esp}W3A?hIgZ{47Qiuuj@GR:Ped>@k`Px,76390-Cd[s[TECI"
    ],
    "coreNetworkTypeRestrictions": [
      "5GC",
      "EPC"
    ],
    "nssai": {
      "supportedFeatures": "692F296F2Cb3BCA76Bc1E126FeEC12",
      "defaultSingleNssais": [

```

```

        {
            "sd": "abc123",
            "sst": 1
        },
        {
            "sd": "abc124",
            "sst": 2
        }
    ],
    "singleNssais": [
        {
            "sd": "abc789",
            "sst": 3
        },
        {
            "sd": "abc799",
            "sst": 5
        }
    ]
},
"dlPacketCount": -1,
"gpsis": [
    "msisdn-1585632",
    "msisdn-2969851"
],
"rfspIndex": 123,
"mpsPriority": true,
"forbiddenAreas": [
    {
        "tacs": [
            "d11fdA",
            "EcccaD"
        ]
    }
],
"serviceAreaRestriction": {
    "restrictionType": "ALLOWED_AREAS",
    "maxNumOfTAs": 23,
    "areas": [
        {
            "tacs": [
                "d11fdA",
                "EcccaD"
            ]
        }
    ]
},
"odbPacketServices": "ALL_PACKET_SERVICES",
"sorInfo": {
    "sorMacIausf": "Bf85A791dCCDa7D6d9754264F02EDcBc",
    "steeringContainer": [
        {
            "plmnId": {
                "mnc": "456",
                "mcc": "123"
            }
        }
    ],

```

```

        "accessTechList": [
            "NR"
        ]
    },
    "provisioningTime": "2012-04-23T18:25:43.511Z",
    "countersor": "8ebc",
    "ackInd": true
},
"ratRestrictions": [
    "NR",
    "WLAN",
    "EUTRA",
    "VIRTUAL"
],
"subsRegTimer": 2,
"ueUsageType": 9,
"internalGroupIds": [
    "E1465DF5-483-159-Fc23DE491edb354dABAA",
    "51e851ea-577-297-Ef4d7Cf28CaC0D"
],
"micoAllowed": true
},
"smData": {
    "2": {
        "dnnConfigurations": {
            "dnn1": {
                "iwkEpsInd": true,
                "sessionAmbr": {
                    "uplink": "125 Mbps",
                    "downlink": "25 Mbps"
                },
                "5gQosProfile": {
                    "priorityLevel": 79,
                    "5qi": 123,
                    "arp": {
                        "preemptCap": "MAY_PREEMPT",
                        "priorityLevel": 1,
                        "preemptVuln": "PREEMPTABLE"
                    }
                }
            },
            "upSecurity": {
                "upIntegr": "REQUIRED",
                "upConfid": "REQUIRED"
            },
            "sscModes": {
                "allowedSscModes": [
                    "SSC_MODE_2",
                    "SSC_MODE_3"
                ],
                "defaultSscMode": "SSC_MODE_1"
            },
            "3gppChargingCharacteristics": "123A",
            "pduSessionTypes": {
                "defaultSessionType": "IPV4",
                "allowedSessionTypes": [

```

```

        "IPV6",
        "IPV4V6",
        "UNSTRUCTURED",
        "ETHERNET"
    ]
},
"staticIpAddress": [
    {
        "ipv4Addr": "11.11.11.1"
    },
    {
        "ipv4Addr": "11.11.11.2"
    }
]
},
"singleNssai": {
    "sst": 2
},
"odbPacketServices": "ALL_PACKET_SERVICES",
"internalGroupIds": [
    "9ABAB803-203-299-95A9",
    "9ABAB803-203-299-95A2",
    "79e0c480-719-085-f2A55e6DDc91Df802438"
],
"sharedDnnConfigurationsId": "85868-mZE$cy"
},
"3": {
    "dnnConfigurations": {
        "dnn1": {
            "iwkEpsInd": true,
            "sessionAmbr": {
                "uplink": "125 Mbps",
                "downlink": "25 Mbps"
            },
            "5gQosProfile": {
                "priorityLevel": 79,
                "5qi": 123,
                "arp": {
                    "preemptCap": "MAY_PREEMPT",
                    "priorityLevel": 1,
                    "preemptVuln": "PREEMPTABLE"
                }
            }
        },
        "upSecurity": {
            "upIntegr": "REQUIRED",
            "upConfid": "REQUIRED"
        },
        "sscModes": {
            "allowedSscModes": [
                "SSC_MODE_2",
                "SSC_MODE_3"
            ],
            "defaultSscMode": "SSC_MODE_1"
        },
        "3gppChargingCharacteristics": "123A",
    }
}

```

```

        "pduSessionTypes": {
            "defaultSessionType": "IPv4",
            "allowedSessionTypes": [
                "IPv6",
                "IPv4V6",
                "UNSTRUCTURED",
                "ETHERNET"
            ]
        },
        "staticIpAddress": [
            {
                "ipv4Addr": "11.11.11.1"
            },
            {
                "ipv4Addr": "11.11.11.2"
            }
        ]
    },
    "singleNssai": {
        "sst": 3
    },
    "odbPacketServices": "ALL_PACKET_SERVICES",
    "internalGroupIds": [
        "9ABAB803-203-299-95A9",
        "9ABAB803-203-299-95A2",
        "79e0c480-719-085-f2A55e6DDc91Df802438"
    ],
    "sharedDnnConfigurationsId": "85868-mZE$cy"
}
}
}

```

6.4.4 PUT-AccessAndMobilitySubscriptionData

```

{
    "gpsis": [
        "msisdn-1585632",
        "msisdn-2969851"
    ],
    "nssai": {
        "singleNssais": [
            {
                "sd": "abc789",
                "sst": 3
            },
            {
                "sd": "abc799",
                "sst": 5
            }
        ],
        "supportedFeatures": "692F296F2Cb3BCA76Bc1E126FeEC12",
        "defaultSingleNssais": [
            {
                "sd": "abc123",

```



```

        "sst": 1
      },
      {
        "sd": "abc124",
        "sst": 2
      }
    ]
  },
  "sorInfo": {
    "ackInd": true,
    "countersor": "8ebc",
    "sorMacIausf": "Bf85A791dCCDa7D6d9754264F02EDcBc",
    "provisioningTime": "2012-04-23T18:25:43.511Z",
    "steeringContainer": [
      {
        "plmnId": {
          "mcc": "123",
          "mnc": "456"
        },
        "accessTechList": [
          "NR"
        ]
      }
    ]
  },
  "upuInfo": {
    "upuAckInd": true,
    "upuRegInd": true,
    "counterUpu": "3Ab5",
    "upuDataList": [
      {
        "secPacket": "aGVsbG8="
      }
    ],
    "upuMacIausf": "E0b0cCF4EcCC5CA55DBfeA3B2Ad3aE80",
    "provisioningTime": "2012-04-23T18:25:43.511Z"
  },
  "rfspIndex": 123,
  "activeTime": 3,
  "mcsPriority": true,
  "micoAllowed": true,
  "mpsPriority": true,
  "ueUsageType": 9,
  "subsRegTimer": 2,
  "dlPacketCount": -1,
  "forbiddenAreas": [
    {
      "tacs": [
        "d11fdA",
        "EcccaD"
      ]
    }
  ],
  "ratRestrictions": [
    "NR",
    "WLAN",

```

```

        "EUTRA",
        "VIRTUAL"
    ],
    "sharedAmDataIds": [
        "62626-esp}W3A?hIgZ{47Qiuuj@GR:Ped>@k`Px, 76390-Cd[s[TECI"
    ],
    "internalGroupIds": [
        "E1465DF5-483-159-Fc23DE491edb354dABAA",
        "51e851ea-577-297-Ef4d7Cf28CaC0D"
    ],
    "subscribedUeAmbr": {
        "uplink": "123 Gbps",
        "downlink": "12 Gbps"
    },
    "odbPacketServices": "ALL_PACKET_SERVICES",
    "subscribedDnnList": [
        "hello",
        "ocudr"
    ],
    "supportedFeatures": "692F296F2Cb3BCA76Bc1E126FeEC12",
    "serviceAreaRestriction": {
        "areas": [
            {
                "tacs": [
                    "d11fdA",
                    "EcccaD"
                ]
            }
        ],
        "maxNumOfTAs": 23,
        "restrictionType": "ALLOWED_AREAS"
    },
    "coreNetworkTypeRestrictions": [
        "5GC",
        "EPC"
    ]
}

```

6.4.5 GET-Amf3GppAccessRegistration

Below is the output when the sample URL is <http://localhost:8080/nudr-dr/v2/subscription-data/imsi-911000000028/context-data/amf-3gpp-access>.

```

{
    "imsVoPs": "HOMOGENEOUS_SUPPORT",
    "deregCallbackUri": "http://ocnrf-ambassador.default.svc.cluster.local/nnrf-nfm/v1/nf-instances",
    "purgeFlag": true,
    "supportedFeatures": "AF",
    "ratType": "WLAN",
    "urrrIndicator": true,
    "amfServiceNameDereg": "nudm-sdm",
    "amfServiceNamePcscfRest": "nausf-auth",
    "guami": {
        "plmnId": {

```

```

        "mnc": "123",
        "mcc": "001"
    },
    "amfId": "1234AA"
},
"pei": "imei-10000000000000001",
"amfEeSubscriptionId": "subscriptionId",
"drFlag": true,
"amfInstanceId": "abae35e5-cc45-4016-8dd4-89598e5311b9",
"pcscfRestorationCallbackUri": "http://ocnrf-
ambassador.default.svc.cluster.local/nnrf-nfm/v1/nf-instances",
"backupAmfInfo": [
    {
        "backupAmf":
"amf1.cluster1.net2.amf.5gc.mnc012.mcc345.3gppnetwork.org",
        "guamiList": [
            {
                "plmnId": {
                    "mnc": "456",
                    "mcc": "002"
                },
                "amfId": "5678AA"
            },
            {
                "plmnId": {
                    "mnc": "789",
                    "mcc": "003"
                },
                "amfId": "9876AA"
            }
        ]
    }
],
"epsInterworkingInfo": {
    "dnn2": {
        "smfInstanceId": "abae35e5-cc45-4016-8dd4-89598e5311b7",
        "pgwFqdn": "abcdefgh"
    },
    "dnn1": {
        "smfInstanceId": "abae35e5-cc45-4016-8dd4-89598e5311b9",
        "pgwFqdn": "hijklm"
    }
},
"initialRegistrationInd": true
}

```

Below is the output when the sample URL is <http://localhost:8080/nudr-dr/v2/subscription-data/imsi-911000000028/context-data/amf-3gpp-access?fields=pei,ratType,epsInterworkingInfo,backupAmfInfo,drFlag>

```

{
    "pei": "imei-10000000000000001",
    "drFlag": true,
    "ratType": "WLAN",

```

```

    "backupAmfInfo": [
      {
        "AmfName":
"amf1.cluster1.net2.amf.5gc.mnc012.mcc345.3gppnetwork.org",
        "guamiList": [
          {
            "plmnId": {
              "mnc": "456",
              "mcc": "002"
            },
            "amfId": "5678AA"
          },
          {
            "plmnId": {
              "mnc": "789",
              "mcc": "003"
            },
            "amfId": "9876AA"
          }
        ]
      }
    ],
    "epsInterworkingInfo": {
      "dnn2": {
        "smfInstanceId": "abae35e5-cc45-4016-8dd4-89598e5311b7",
        "pgwFqdn": "abcdefgh"
      },
      "dnn1": {
        "smfInstanceId": "abae35e5-cc45-4016-8dd4-89598e5311b9",
        "pgwFqdn": "hijklm"
      }
    }
  }
}

```

6.4.6 PATCH-Amf3GppAccessRegistration

```

case 1: REPLACE
[
  {
    "op" : "replace",
    "path" : "/mnc-mcc-amfId/backupAmfInfo/0/guamiList/0/plmnId/mcc",
    "value" : "998"
  }
]

case2: ADD
[
  {
    "op" : "add",
    "path" : "/mnc-mcc-amfId/backupAmfInfo/0/guamiList/1",
    "value" : {
      "amfId": "5678AA",
      "plmnId": {
        "mcc": "666",
        "mnc": "456"
      }
    }
  }
]

```

```

}}

case3: REMOVE
[
  {
    "op" : "remove",
    "path" : "/mnc-mcc-amfId/backupAmfInfo/0/guamiList/2"
  }
]

```

6.4.7 PUT-AmfNon3GppAccessRegistration

```

{
  "amfInstanceId" : "abae35e5-cc45-4016-8dd4-89598e5311b9",
  "supportedFeatures" : "AF",
  "purgeFlag" : true,
  "pei" : "imei-1000000000000001",
  "imsVoPs" : "HOMOGENEOUS_SUPPORT",
  "deregCallbackUri" : "http://ocnrf-ambassador.default.svc.cluster.local/nnrf-nfm/v1/nf-instances",
  "amfServiceNameDereg" : "nudm-sdm",
  "pcscfRestorationCallbackUri" : "http://ocnrf-ambassador.default.svc.cluster.local/nnrf-nfm/v1/nf-instances",
  "amfServiceNamePcscfRest" : "nausf-auth",
  "guami" : {
    "plmnId" : {
      "mcc" : "001",
      "mnc" : "123"
    },
    "amfId" : "1234AA"
  },
  "backupAmfInfo" : [
    {
      "backupAmf" : "amf1.cluster1.net2.amf.5gc.mnc012.mcc345.3gppnetwork.org",
      "guamiList" : [
        {
          "plmnId" : {
            "mcc" : "002",
            "mnc" : "456"
          },
          "amfId" : "5678AA"
        },
        {
          "plmnId" : {
            "mcc" : "003",
            "mnc" : "789"
          },
          "amfId" : "9876AA"
        }
      ]
    },
    {
      "ratType" : "WLAN",
      "amfEeSubscriptionId" : "subscriptionId",
      "urrrIndicator" : true
    }
  ]
}

```

6.4.8 GET-AmfNon3GppAccessRegistration

The output of **Sample URI**: `http://localhost:8080/nudr-dr/v2/subscription-data/imsi-911000000028/context-data/amf-non-3gpp-access` is:

```

{
  "pei": "imei-1000000000000001",
  "guami": {
    "amfId": "1234AA",
    "plmnId": {
      "mcc": "001",
      "mnc": "123"
    }
  }
}

```

```

    },
    "imsVoPs": "HOMOGENEOUS_SUPPORT",
    "ratType": "WLAN",
    "purgeFlag": true,
    "amfInstanceId": "abae35e5-cc45-4016-8dd4-89598e5311b9",
    "backupAmfInfo": [
      {
        "backupAmf":
"amf1.cluster1.net2.amf.5gc.mnc012.mcc345.3gppnetwork.org",
        "guamiList": [
          {
            "amfId": "5678AA",
            "plmnId": {
              "mcc": "002",
              "mnc": "456"
            }
          },
          {
            "amfId": "9876AA",
            "plmnId": {
              "mcc": "003",
              "mnc": "789"
            }
          }
        ]
      }
    ],
    "urrrIndicator": true,
    "deregCallbackUri": "http://ocnrf-ambassador.default.svc.cluster.local/
nnrf-nfm/v1/nf-instances",
    "supportedFeatures": "AF",
    "amfEeSubscriptionId": "subscriptionId",
    "amfServiceNameDereg": "nudm-sdm",
    "amfServiceNamePcscfRest": "nausf-auth",
    "pcscfRestorationCallbackUri": "http://ocnrf-
ambassador.default.svc.cluster.local/nnrf-nfm/v1/nf-instances"
  }
}

```

The output of **Sample URI**: `http://localhost:8080/nudr-dr-prov/v1/subscription-data/imsi-911000000025/context-data/amf-non-3gpp-access/all` is:

```

{
  "active": {
    "guami": "223-004-1234AA",
    "timeStamp": "2020-04-23 09:36:24.621"
  },
  "previousActive": {
    "guami": "123-004-1234AA",
    "timeStamp": "2020-04-23 09:36:17.919"
  },
  "2020-04-23 09:36:02.444": {
    "123-001-1234AA": {
      "pei": "imei-100000000000000001",
      "guami": {
        "amfId": "1234AA",

```

```

        "plmnId": {
            "mcc": "001",
            "mnc": "123"
        }
    },
    "imsVoPs": "HOMOGENEOUS_SUPPORT",
    "ratType": "WLAN",
    "purgeFlag": true,
    "amfInstanceId": "abae35e5-cc45-4016-8dd4-89598e5311b9",
    "backupAmfInfo": [
        {
            "backupAmf":
"amf1.cluster1.net2.amf.5gc.mnc012.mcc345.3gppnetwork.org",
            "guamiList": [
                {
                    "amfId": "5678AA",
                    "plmnId": {
                        "mcc": "002",
                        "mnc": "456"
                    }
                },
                {
                    "amfId": "9876AA",
                    "plmnId": {
                        "mcc": "003",
                        "mnc": "789"
                    }
                }
            ]
        }
    ],
    "urrrIndicator": true,
    "deregCallbackUri": "http://ocnrf-
ambassador.default.svc.cluster.local/nnrf-nfm/v1/nf-instances",
    "supportedFeatures": "AF",
    "amfEeSubscriptionId": "subscriptionId",
    "amfServiceNameDereg": "nudm-sdm",
    "amfServiceNamePcscfRest": "nausf-auth",
    "pcscfRestorationCallbackUri": "http://ocnrf-
ambassador.default.svc.cluster.local/nnrf-nfm/v1/nf-instances"
    }
},
"2020-04-23 09:36:10.504": {
    "123-002-1234AA": {
        "pei": "imei-10000000000000001",
        "guami": {
            "amfId": "1234AA",
            "plmnId": {
                "mcc": "002",
                "mnc": "123"
            }
        }
    },
    "imsVoPs": "HOMOGENEOUS_SUPPORT",
    "ratType": "WLAN",
    "purgeFlag": true,
    "amfInstanceId": "abae35e5-cc45-4016-8dd4-89598e5311b9",

```

```

      "backupAmfInfo": [
        {
          "backupAmf":
"amf1.cluster1.net2.amf.5gc.mnc012.mcc345.3gppnetwork.org",
          "guamiList": [
            {
              "amfId": "5678AA",
              "plmnId": {
                "mcc": "002",
                "mnc": "456"
              }
            },
            {
              "amfId": "9876AA",
              "plmnId": {
                "mcc": "003",
                "mnc": "789"
              }
            }
          ]
        }
      ],
      "urrrIndicator": true,
      "deregCallbackUri": "http://ocnrf-
ambassador.default.svc.cluster.local/nnrf-nfm/v1/nf-instances",
      "supportedFeatures": "AF",
      "amfEeSubscriptionId": "subscriptionId",
      "amfServiceNameDereg": "nudm-sdm",
      "amfServiceNamePcscfRest": "nausf-auth",
      "pcscfRestorationCallbackUri": "http://ocnrf-
ambassador.default.svc.cluster.local/nnrf-nfm/v1/nf-instances"
    }
  },
  "2020-04-23 09:36:17.919": {
    "123-004-1234AA": {
      "pei": "imei-10000000000000001",
      "guami": {
        "amfId": "1234AA",
        "plmnId": {
          "mcc": "004",
          "mnc": "123"
        }
      },
      "imsVoPs": "HOMOGENEOUS_SUPPORT",
      "ratType": "WLAN",
      "purgeFlag": true,
      "amfInstanceId": "abae35e5-cc45-4016-8dd4-89598e5311b9",
      "backupAmfInfo": [
        {
          "backupAmf":
"amf1.cluster1.net2.amf.5gc.mnc012.mcc345.3gppnetwork.org",
          "guamiList": [
            {
              "amfId": "5678AA",
              "plmnId": {
                "mcc": "002",

```



```

        "mnc": "456"
      }
    },
    {
      "amfId": "9876AA",
      "plmnId": {
        "mcc": "003",
        "mnc": "789"
      }
    }
  ]
},
"urpIndicator": true,
"deregCallbackUri": "http://ocnrf-ambassador.default.svc.cluster.local/nnrf-nfm/v1/nf-instances",
"supportedFeatures": "AF",
"amfEeSubscriptionId": "subscriptionId",
"amfServiceNameDereg": "nudm-sdm",
"amfServiceNamePcscfRest": "nausf-auth",
"pcscfRestorationCallbackUri": "http://ocnrf-ambassador.default.svc.cluster.local/nnrf-nfm/v1/nf-instances"
}
},
"2020-04-23 09:36:24.621": {
  "223-004-1234AA": {
    "pei": "imei-10000000000000001",
    "guami": {
      "amfId": "1234AA",
      "plmnId": {
        "mcc": "004",
        "mnc": "223"
      }
    },
    "imsVoPs": "HOMOGENEOUS_SUPPORT",
    "ratType": "WLAN",
    "purgeFlag": true,
    "amfInstanceId": "abae35e5-cc45-4016-8dd4-89598e5311b9",
    "backupAmfInfo": [
      {
        "backupAmf": "amf1.cluster1.net2.amf.5gc.mnc012.mcc345.3gppnetwork.org",
        "guamiList": [
          {
            "amfId": "5678AA",
            "plmnId": {
              "mcc": "002",
              "mnc": "456"
            }
          },
          {
            "amfId": "9876AA",
            "plmnId": {
              "mcc": "003",
              "mnc": "789"
            }
          }
        ]
      }
    ]
  }
}

```

```

    }
  ]
}
},
"urrrIndicator": true,
"deregCallbackUri": "http://ocnrf-
ambassador.default.svc.cluster.local/nnrf-nfm/v1/nf-instances",
"supportedFeatures": "AF",
"amfEeSubscriptionId": "subscriptionId",
"amfServiceNameDereg": "nudm-sdm",
"amfServiceNamePcscfRest": "nausf-auth",
"pcscfRestorationCallbackUri": "http://ocnrf-
ambassador.default.svc.cluster.local/nnrf-nfm/v1/nf-instances"
}
}
}

```

6.4.9 GET-SessionManagementSubscriptionData

```

[
  {
    "dnnConfigurations": {
      "dnn1": {
        "iwkEpsInd": true,
        "sessionAmbr": {
          "uplink": "125 Mbps",
          "downlink": "25 Mbps"
        },
        "5gQosProfile": {
          "priorityLevel": 79,
          "5qi": 123,
          "arp": {
            "preemptCap": "MAY_PREEMPT",
            "priorityLevel": 1,
            "preemptVuln": "PREEMPTABLE"
          }
        },
        "upSecurity": {
          "upIntegr": "REQUIRED",
          "upConfid": "REQUIRED"
        },
        "sscModes": {
          "allowedSscModes": [
            "SSC_MODE_2",
            "SSC_MODE_3"
          ],
          "defaultSscMode": "SSC_MODE_1"
        },
        "3gppChargingCharacteristics": "123A",
        "pduSessionTypes": {
          "defaultSessionType": "IPV4",
          "allowedSessionTypes": [
            "IPV6",
            "IPV4V6",
            "UNSTRUCTURED",

```

```

        "ETHERNET"
      ]
    },
    "staticIpAddress": [
      {
        "ipv4Addr": "11.11.11.1"
      },
      {
        "ipv4Addr": "11.11.11.2"
      }
    ]
  },
  "singleNssai": {
    "sd": "ABC654",
    "sst": 1
  },
  "odbPacketServices": "ALL_PACKET_SERVICES",
  "internalGroupIds": [
    "9ABAB803-203-299-95A9",
    "9ABAB803-203-299-95A2",
    "79e0c480-719-085-f2A55e6DDc91Df802438"
  ],
  "sharedDnnConfigurationsId": "85868-mZE$cy"
}
]

```

6.4.10 GET-SessionManagementSubscriptionData- Provisioning

```

[
  {
    "dnnConfigurations": {
      "dnn1": {
        "iwkEpsInd": true,
        "sessionAmbr": {
          "uplink": "125 Mbps",
          "downlink": "25 Mbps"
        },
        "5gQosProfile": {
          "priorityLevel": 79,
          "5qi": 123,
          "arp": {
            "preemptCap": "MAY_PREEMPT",
            "priorityLevel": 1,
            "preemptVuln": "PREEMPTABLE"
          }
        },
        "upSecurity": {
          "upIntegr": "REQUIRED",
          "upConfid": "REQUIRED"
        },
        "sscModes": {
          "allowedSscModes": [
            "SSC_MODE_2",
            "SSC_MODE_3"
          ]
        }
      }
    }
  }
]

```

```

        ],
        "defaultSscMode": "SSC_MODE_1"
    },
    "3gppChargingCharacteristics": "123A",
    "pduSessionTypes": {
        "defaultSessionType": "IPv4",
        "allowedSessionTypes": [
            "IPv6",
            "IPv4V6",
            "UNSTRUCTURED",
            "ETHERNET"
        ]
    },
    "staticIpAddress": [
        {
            "ipv4Addr": "11.11.11.1"
        },
        {
            "ipv4Addr": "11.11.11.2"
        }
    ]
},
"singleNssai": {
    "sd": "ABC654",
    "sst": 1
},
"odfPacketServices": "ALL_PACKET_SERVICES",
"internalGroupIds": [
    "9ABAB803-203-299-95A9",
    "9ABAB803-203-299-95A2",
    "79e0c480-719-085-f2A55e6DDc91Df802438"
],
"sharedDnnConfigurationsId": "85868-mZE$cy"
}
]

```

6.4.11 GET-SDMSubscriptions

Following is the Result Code:

```

[
  {
    "nfInstanceId": "cb59c48c-a2fa-11e9-a2a3-2a2ae2dbcce5",
    "expires": "2012-04-23T18:25:43.511Z",
    "implicitUnsubscribe": false,
    "dnn": "sasa",
    "singleNssai": {
      "sd": "651Bf9",
      "sst": 23
    },
    "callbackReference": "udr",
    "amfServiceName": "nnrf-nfm",
    "monitoredResourceUris": [
      "http://localhost:8080/nudr-dr/v2/subscription-data/"
    ]
  }
]

```

```

nai-990991@nai/context-data/amf-3gpp-access"
    ],
    "plmnId": {
      "mnc": "124",
      "mcc": "123"
    },
    "subscriptionId": "sa"
  },
  {
    "nfInstanceId": "cb59c48c-a2fa-11e9-a2a3-2a2ae2dbcce5",
    "expires": "2012-04-23T18:25:43.511Z",
    "implicitUnsubscribe": true,
    "dnn": "sasa",
    "singleNssai": {
      "sd": "651Bf9",
      "sst": 23
    },
    "callbackReference": "https://https://www.google.com",
    "amfServiceName": "nnrf-nfm",
    "monitoredResourceUris": [
      "http://localhost:8080/nudr-dr/v2/subscription-data/
nai-990991@nai/context-data/amf-3gpp-access"
    ],
    "plmnId": {
      "mnc": "124",
      "mcc": "123"
    },
    "subscriptionId": "sa"
  }
]

```

6.4.12 Post-Output-SubscriptionDataSubscriptions

Following is the Result Code:

```

{
  "supportedFeatures": "f",
  "callbackReference": "http://10.75.212.167:8787",
  "sdmSubscription": {
    "nfInstanceId": "cb59c48c-a2fa-11e9-a2a3-2a2ae2dbcce4",
    "expires": "2012-04-23T18:25:43.511Z",
    "implicitUnsubscribe": true,
    "dnn": "sasb",
    "singleNssai": {
      "sd": "651Bf9",
      "sst": 23
    },
    "callbackReference": "udr",
    "amfServiceName": "nnrf-nfm",
    "monitoredResourceUris": [
      "http://sims-udr-2-udr-simulator.sims-udr-2:5807/nudr-dr/v2/
subscription-data/nai-919090909010@nai/context-data/amf-3gpp-access"
    ],
    "plmnId": {
      "mnc": "124",

```

```

        "mcc": "123"
      },
      "subscriptionId": "sa"
    },
    "monitoredResourceUris": [
      "http://sims-udr-2-udr-simulator.sims-udr-2:5807/nudr-dr/v2/subscription-data/nai-990991@nai/context-data/amf-3gpp-access"
    ],
    "originalCallbackReference": "http://10.75.212.167:8787",
    "expiry": "2020-01-02T08:17:14.090Z",
    "subscriptionId": "7",
    "ueId": "nai-990991@nai"
  }
}

```

6.4.13 Get-Output-SubscriptionDataSubscriptions

Following is the Result Code:

```

[
  {
    "supportedFeatures": "f",
    "callbackReference": "http://mlu-pcf-api-gateway.mlu-pcf.svc/user-service/userservice/notification/imsi-111111111",
    "monitoredResourceUris": [
      "http://localhost:8080/nudr-dr/v2/subscription-data/nai-990991@nai/context-data/amf-3gpp-access"
    ],
    "originalCallbackReference": "http://mlu-pcf-api-gateway.mlu-pcf.svc/user-service/userservice/notification/imsi-111111111",
    "expiry": "2020-01-02T08:17:14.090Z",
    "subscriptionId": "2",
    "ueId": "nai-990991@nai"
  },
  {
    "supportedFeatures": "f",
    "callbackReference": "http://10.75.212.167:8787",
    "sdmSubscription": {
      "supportedFeatures": "f",
      "callbackReference": "http://10.75.212.167:8787",
      "sdmSubscription": true,
      "monitoredResourceUris": [
        "http://sims-udr-2-udr-simulator.sims-udr-2:5807/nudr-dr/v2/subscription-data/nai-990991@nai/context-data/amf-3gpp-access"
      ],
      "originalCallbackReference": "http://10.75.212.167:8787",
      "expiry": "2020-01-02T08:17:14.090Z",
      "subscriptionId": "7",
      "ueId": "nai-990991@nai"
    },
    "monitoredResourceUris": [
      "http://sims-udr-2-udr-simulator.sims-udr-2:5807/nudr-dr/v2/subscription-data/nai-990991@nai/context-data/amf-3gpp-access"
    ],
    "originalCallbackReference": "http://10.75.212.167:8787",
    "expiry": "2020-01-02T08:17:14.090Z",
  }
]

```

```

        "subscriptionId": "7",
        "ueId": "nai-990991@nai"
    }
]

```

6.4.14 GET - AccessAndMobilitySubscriptionData

```

{
  "gpsis": [
    "msisdn-1585632",
    "msisdn-2969851"
  ],
  "nssai": {
    "singleNssais": [
      {
        "sd": "abc789",
        "sst": 3
      },
      {
        "sd": "abc799",
        "sst": 5
      }
    ],
    "supportedFeatures": "692F296F2Cb3BCA76Bc1E126FeEC12",
    "defaultSingleNssais": [
      {
        "sd": "abc123",
        "sst": 1
      },
      {
        "sd": "abc124",
        "sst": 2
      }
    ]
  },
  "sorInfo": {
    "ackInd": true,
    "countersor": "8ebc",
    "sorMacIausf": "Bf85A791dCCDa7D6d9754264F02EDcBc",
    "provisioningTime": "2012-04-23T18:25:43.511Z",
    "steeringContainer": [
      {
        "plmnId": {
          "mcc": "123",
          "mnc": "456"
        },
        "accessTechList": [
          "NR"
        ]
      }
    ]
  },
  "upuInfo": {
    "upuAckInd": true,
    "upuRegInd": true,
  }
}

```

```

        "counterUpu": "3Ab5",
        "upuDataList": [
            {
                "secPacket": "aGVsbG8="
            }
        ],
        "upuMacIausf": "E0b0cCF4EcCC5CA55DBfeA3B2Ad3aE80",
        "provisioningTime": "2012-04-23T18:25:43.511Z"
    },
    "rfspIndex": 123,
    "activeTime": 3,
    "mcsPriority": true,
    "micoAllowed": true,
    "mpsPriority": true,
    "ueUsageType": 9,
    "subsRegTimer": 2,
    "dlPacketCount": -1,
    "forbiddenAreas": [
        {
            "tacs": [
                "d11fdA",
                "EcccaD"
            ]
        }
    ],
    "ratRestrictions": [
        "NR",
        "WLAN",
        "EUTRA",
        "VIRTUAL"
    ],
    "sharedAmDataIds": [
        "62626-esp}W3A?hIgZ{47Qiuuj@GR:Ped>@k`Px,76390-Cd[s[TECI"
    ],
    "internalGroupIds": [
        "E1465DF5-483-159-Fc23DE491edb354dABAA",
        "51e851ea-577-297-Ef4d7Cf28CaC0D"
    ],
    "subscribedUeAmbr": {
        "uplink": "123 Gbps",
        "downlink": "12 Gbps"
    },
    "odbPacketServices": "ALL_PACKET_SERVICES",
    "subscribedDnnList": [
        "hello",
        "ocudr"
    ],
    "supportedFeatures": "692F296F2Cb3BCA76Bc1E126FeEC12",
    "serviceAreaRestriction": {
        "areas": [
            {
                "tacs": [
                    "d11fdA",
                    "EcccaD"
                ]
            }
        ]
    }
}

```



```

    ],
    "maxNumOfTAs": 23,
    "restrictionType": "ALLOWED_AREAS"
  },
  "coreNetworkTypeRestrictions": [
    "5GC",
    "EPC"
  ]
}

```

The output of **Sample URI**: `http://localhost:8080/nudr-dr/v2/subscription-data/imsi-911000000089/77889/provisioned-data/am-data?fields=gpsis,nssai,sorInfo` is:

```

{
  "nssai": {
    "supportedFeatures": "692F296F2Cb3BCA76Bc1E126FeEC12",
    "defaultSingleNssais": [
      {
        "sd": "abc123",
        "sst": 1
      },
      {
        "sd": "abc124",
        "sst": 2
      }
    ],
    "singleNssais": [
      {
        "sd": "abc789",
        "sst": 3
      },
      {
        "sd": "abc799",
        "sst": 5
      }
    ]
  },
  "gpsis": [
    "msisdn-1585632",
    "msisdn-2969851"
  ],
  "sorInfo": {
    "sorMacIausf": "Bf85A791dCCDa7D6d9754264F02EDcBc",
    "steeringContainer": [
      {
        "plmnId": {
          "mnc": "456",
          "mcc": "123"
        },
        "accessTechList": [
          "NR"
        ]
      }
    ]
  },
  "provisioningTime": "2012-04-23T18:25:43.511Z",
}

```

```

        "countersor": "8ebc",
        "ackInd": true
    }
}

```

6.4.15 GET-AuthenticationSubscriptionData

```

{
  "encOpcKey": "ABED",
  "encTopcKey": "ACED",
  "algorithmId": "algoID",
  "sequenceNumber": {
    "sqn": "123456789ABE",
    "difSign": "NEGATIVE",
    "indLength": 5,
    "sqnScheme": "GENERAL",
    "lastIndexes": {
      "ausf": 5
    }
  },
  "encPermanentKey": "ABBA",
  "authenticationMethod": "5G_AKA",
  "protectionParameterId": "ProtecID",
  "authenticationManagementField": "ABBE"
}

```

6.4.16 PATCH-AuthenticationSubscriptionData

```

case1: REPLACE
[
  {
    "op" : "replace",
    "path" : "/sequenceNumber/sqn",
    "value" : "123456789ABC"
  }
]

case2: ADD
case3: REMOVE

```

6.4.17 PUT-AuthenticationStatus

```

{
  "nfInstanceId" : "abae35e5-cc45-4016-8dd4-89598e5311b9",
  "success" : true,
  "timeStamp" : "2018-01-02T08:17:14.090Z",
  "authType" : "5G_AKA",
  "servingNetworkName" : "5G:mnc123.mcc456.3gppnetwork.org"
}

```

6.4.18 GET-AuthenticationStatus

```
{
  "success": true,
  "authType": "5G_AKA",
  "timeStamp": "2018-01-02T08:17:14.090Z",
  "nfInstanceId": "abae35e5-cc45-4016-8dd4-89598e5311b9",
  "servingNetworkName": "5G:mnc123.mcc456.3gppnetwork.org"
}
```

6.5 Payload Reference for Overload Control

This section provides payload details for the following Overload Control operations.

- [PUT - OC Discard Policy](#)
- [PUT - Routes Configuration](#)
- [PUT - Overload Threshold Configuration](#)
- [PUT - Error Code Profiles](#)

6.5.1 PUT - OC Discard Policy

Sample OC Discard Policy Payload on Ingress Gateway:

```
[
  {
    "name": "OCDP1",
    "scheme": "PercentageBased",
    "policies": [
      {
        "level": "L1",
        "value": 0,
        "action": "RejectWithErrorCode",
        "errorCodeProfile": "error429"
      },
      {
        "level": "L2",
        "value": 5,
        "action": "RejectWithErrorCode",
        "errorCodeProfile": "error429"
      },
      {
        "level": "L3",
        "value": 15,
        "action": "RejectWithErrorCode",
        "errorCodeProfile": "error429"
      },
      {
        "level": "L4",
        "value": 25,
        "action": "RejectWithErrorCode",
        "errorCodeProfile": "error503"
      }
    ]
  }
]
```

```

    }
  ],
},
{
  "name": "OCDP2",
  "scheme": "PriorityBased",
  "policies": [
    {
      "level": "L1",
      "value": 30,
      "action": "RejectWithErrorCode",
      "errorCodeProfile": "error429"
    },
    {
      "level": "L2",
      "value": 24,
      "action": "RejectWithErrorCode",
      "errorCodeProfile": "error429"
    },
    {
      "level": "L3",
      "value": 15,
      "action": "RejectWithErrorCode",
      "errorCodeProfile": "error429"
    },
    {
      "level": "L4",
      "value": 10,
      "action": "RejectWithErrorCode",
      "errorCodeProfile": "error503"
    }
  ]
}
]

```

6.5.2 PUT - Routes Configuration

Sample PUT - Routes Configuration Payload:

```

[
  {
    "id": "traffic_mapping_http",
    "rateLimiting": {
      "methods": [
        {
          "name": "PATCH",
          "rate": 200,
          "rateLimitPolicy": "R1"
        },
        {
          "name": "GET",
          "rate": 200,
          "rateLimitPolicy": "R1"
        }
      ]
    }
  }
]

```

```

        "name": "PUT",
        "rate": 300,
        "rateLimitPolicy": "R1"
      },
      {
        "name": "DELETE",
        "rate": 200,
        "rateLimitPolicy": "R1"
      },
      {
        "name": "POST",
        "rate": 200,
        "rateLimitPolicy": "R1"
      }
    ]
  },
  "failureReqCountErrorCodeSeriesId": "P1"
},
{
  "id": "traffic_mapping_http_prov",
  "rateLimiting": {
    "methods": [
      {
        "name": "PATCH",
        "rate": 200,
        "rateLimitPolicy": "R1"
      },
      {
        "name": "GET",
        "rate": 200,
        "rateLimitPolicy": "R1"
      },
      {
        "name": "PUT",
        "rate": 300,
        "rateLimitPolicy": "R1"
      },
      {
        "name": "DELETE",
        "rate": 200,
        "rateLimitPolicy": "R1"
      },
      {
        "name": "POST",
        "rate": 200,
        "rateLimitPolicy": "R1"
      }
    ]
  },
  "failureReqCountErrorCodeSeriesId": "P1"
},
{
  "id": "traffic_mapping_http_group",
  "rateLimiting": {
    "methods": [
      {
        "name": "GET",
        "rate": 1500,

```

```

        "rateLimitPolicy": "R1"
      }]
    },
    "failureReqCountErrorCodeSeriesId": "P1"
  },
  {
    "id": "traffic_mapping_http_group_prov",
    "rateLimiting": {
      "methods": [
        {
          "name": "GET",
          "rate": 800,
          "rateLimitPolicy": "R1"
        },
        {
          "name": "PUT",
          "rate": 200,
          "rateLimitPolicy": "R1"
        },
        {
          "name": "DELETE",
          "rate": 200,
          "rateLimitPolicy": "R1"
        }
      ]
    },
    "failureReqCountErrorCodeSeriesId": "P1"
  },
  {
    "id": "traffic_mapping_http_slf_group_prov",
    "rateLimiting": {
      "methods": [
        {
          "name": "GET",
          "rate": 800,
          "rateLimitPolicy": "R1"
        },
        {
          "name": "PUT",
          "rate": 200,
          "rateLimitPolicy": "R1"
        },
        {
          "name": "DELETE",
          "rate": 200,
          "rateLimitPolicy": "R1"
        }
      ]
    },
    "failureReqCountErrorCodeSeriesId": "P1"
  }
]

```

6.5.3 PUT - Overload Threshold Configuration

Sample: PUT - Overload Threshold Configuration Payload

```
[
  {
    "svcName": "ocudr-nudr-drservice",
    "metricsThresholdList": [
      {
        "metricsName": "svc_failure_count",
        "levelThresholdList": [
          {
            "level": "L1",
            "onsetValue": 13000,
            "abatementValue": 12500
          },
          {
            "level": "L2",
            "onsetValue": 14000,
            "abatementValue": 13500
          },
          {
            "level": "L3",
            "onsetValue": 15000,
            "abatementValue": 14500
          },
          {
            "level": "L4",
            "onsetValue": 16000,
            "abatementValue": 15500
          }
        ]
      },
      {
        "metricsName": "memory",
        "levelThresholdList": [
          {
            "level": "L1",
            "onsetValue": 50,
            "abatementValue": 45
          },
          {
            "level": "L2",
            "onsetValue": 70,
            "abatementValue": 65
          },
          {
            "level": "L3",
            "onsetValue": 85,
            "abatementValue": 82
          },
          {
            "level": "L4",
            "onsetValue": 90,
```

```

        "abatementValue": 88
      }
    ]
  },
  {
    "metricsName": "cpu",
    "levelThresholdList": [
      {
        "level": "L1",
        "onsetValue": 65,
        "abatementValue": 60
      },
      {
        "level": "L2",
        "onsetValue": 75,
        "abatementValue": 70
      },
      {
        "level": "L3",
        "onsetValue": 80,
        "abatementValue": 75
      },
      {
        "level": "L4",
        "onsetValue": 90,
        "abatementValue": 85
      }
    ]
  },
  {
    "metricsName": "svc_pending_count",
    "levelThresholdList": [
      {
        "level": "L1",
        "onsetValue": 13000,
        "abatementValue": 12500
      },
      {
        "level": "L2",
        "onsetValue": 14000,
        "abatementValue": 13500
      },
      {
        "level": "L3",
        "onsetValue": 15000,
        "abatementValue": 14500
      },
      {
        "level": "L4",
        "onsetValue": 16000,
        "abatementValue": 15500
      }
    ]
  }
]
},

```



```

{
  "svcName": "ocudr-nudr-dr-provservice",
  "metricsThresholdList": [
    {
      "metricsName": "svc_failure_count",
      "levelThresholdList": [
        {
          "level": "L1",
          "onsetValue": 13000,
          "abatementValue": 12500
        },
        {
          "level": "L2",
          "onsetValue": 14000,
          "abatementValue": 13500
        },
        {
          "level": "L3",
          "onsetValue": 15000,
          "abatementValue": 14500
        },
        {
          "level": "L4",
          "onsetValue": 16000,
          "abatementValue": 15500
        }
      ]
    },
    {
      "metricsName": "memory",
      "levelThresholdList": [
        {
          "level": "L1",
          "onsetValue": 50,
          "abatementValue": 45
        },
        {
          "level": "L2",
          "onsetValue": 70,
          "abatementValue": 65
        },
        {
          "level": "L3",
          "onsetValue": 85,
          "abatementValue": 82
        },
        {
          "level": "L4",
          "onsetValue": 90,
          "abatementValue": 88
        }
      ]
    },
    {
      "metricsName": "cpu",
      "levelThresholdList": [

```

```

        {
            "level": "L1",
            "onsetValue": 65,
            "abatementValue": 60
        },
        {
            "level": "L2",
            "onsetValue": 75,
            "abatementValue": 70
        },
        {
            "level": "L3",
            "onsetValue": 80,
            "abatementValue": 75
        },
        {
            "level": "L4",
            "onsetValue": 90,
            "abatementValue": 85
        }
    ]
},
{
    "metricsName": "svc_pending_count",
    "levelThresholdList": [
        {
            "level": "L1",
            "onsetValue": 13000,
            "abatementValue": 12500
        },
        {
            "level": "L2",
            "onsetValue": 14000,
            "abatementValue": 13500
        },
        {
            "level": "L3",
            "onsetValue": 15000,
            "abatementValue": 14500
        },
        {
            "level": "L4",
            "onsetValue": 16000,
            "abatementValue": 15500
        }
    ]
}
    ]
}

```

6.5.4 PUT - Error Code Profiles

Sample - PUT Error Code Profiles Payload:

```
[
  {
    "name": "error429",
    "errorCode": 429,
    "errorCause": "Too many reequests",
    "errorTitle": "Too many reequests",
    "redirectURL": "",
    "retry-after": "",
    "errorDescription": "Too many reequests"
  },
  {
    "name": "error503",
    "errorCode": 503,
    "errorCause": "Backend not able to handle traffic",
    "errorTitle": "Backend not able to handle traffic",
    "redirectURL": "",
    "retry-after": "",
    "errorDescription": "Backend not able to handle traffic"
  }
]
```

6.6 Payload Reference for PCF Schema Management

The PCF Schema Management APIs includes:

- [PCF Schema Management - PUT](#)
- [PCF Schema Management - PUT \(VSA\)](#)
- [PCF Schema Management - GET \(VSA\)](#)
- [PCF Schema Management - VSA GET ALL SCHEMA](#)
- [PCF Schema Management - VSA GET V1](#)

6.6.1 PCF Schema Management - PUT

```
{
  "$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"
    },
    "ngNbId": {
        "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
}
}
}

```

6.6.2 PCF Schema Management - PUT (VSA)

```

{
  "$schema": "http://json-schema.org/draft-07/schema#",
  "type": "object",
  "properties": {
    "subscriber": {
      "patternProperties": {
        "^(?i)accountid$": {
          "minItems": 1,
          "maxItems": 1,
          "type": "array",
          "items": {
            "pattern": "^[a-zA-Z0-9]{1,36}$",
            "type": "string"
          }
        },
        "^(?i)imsi$": {
          "minItems": 1,
          "maxItems": 3,
          "type": "array",
          "items": {
            "pattern": "^[0-9]{5,15}$",
            "type": "string"
          }
        },
        "^(?i)msisdn$": {
          "minItems": 1,
          "maxItems": 3,
          "type": "array",
          "items": {
            "pattern": "^[0-9]{5,15}$",
            "type": "string"
          }
        },
        "^(?i)nai$": {
          "minItems": 1,

```

```

        "maxItems": 3,
        "type": "array",
        "items": {
            "pattern": "^.+$",
            "type": "string"
        }
    },
    "^(?i)extid$": {
        "minItems": 1,
        "maxItems": 3,
        "type": "array",
        "items": {
            "pattern": "[^@]+@[^@]+$",
            "type": "string"
        }
    }
},
"type": "object",
"properties": {
    "Tier": {
        "type": "string"
    },
    "BillingDay": {
        "maximum": 31,
        "type": "integer",
        "minimum": 1
    },
    "Entitlement": {
        "minItems": 1,
        "type": "array",
        "items": {
            "type": "string"
        }
    }
}
},
"usage": {
    "additionalProperties": false,
    "type": "object",
    "properties": {
        "quota": {
            "type": "array",
            "items": {
                "type": "object",
                "properties": {
                    "totalVolume": {
                        "pattern": "^[x20-x7e]{0,255}$",
                        "type": "string"
                    },
                    "name": {
                        "type": "string"
                    }
                }
            },
            "nextResetTime": {
                "type": "string"
            },
            "time": {

```



```

        "pattern": "^[x20-x7e]{0,255}$",
        "type": "string"
    },
    "outputVolume": {
        "pattern": "^[x20-x7e]{0,255}$",
        "type": "string"
    },
    "inputVolume": {
        "pattern": "^[x20-x7e]{0,255}$",
        "type": "string"
    },
    "serviceSpecific": {
        "pattern": "^[x20-x7e]{0,255}$",
        "type": "string"
    },
    "cid": {
        "pattern": "^[x20-x7e]{0,255}$",
        "type": "string"
    }
}

},
"SequenceNumber": {
    "type": "integer"
},
"version": {
    "type": "integer"
}
}
},
"definition": {
    "additionalProperties": false,
    "type": "object",
    "properties": {
        "DynamicQuota": {
            "type": "array",
            "items": {
                "type": "object",
                "properties": {
                    "InstanceId": {
                        "pattern": "^[x20-x7e]{0,255}$",
                        "type": "string"
                    },
                    "Priority": {
                        "pattern": "^[x20-x7e]{0,255}$",
                        "type": "string"
                    },
                    "InitialInputVolume": {
                        "pattern": "^[x20-x7e]{0,255}$",
                        "type": "string"
                    },
                    "Duration": {
                        "pattern": "^[x20-x7e]{0,255}$",
                        "type": "string"
                    },
                    "InterimReportingInterval": {

```

```

        "pattern": "^[x20-x7e]{0,255}$",
        "type": "string"
    },
    "InitialOutputVolume": {
        "pattern": "^[x20-x7e]{0,255}$",
        "type": "string"
    },
    "Type": {
        "type": "string"
    },
    "activationdatetime": {
        "type": "string"
    },
    "expirationdatetime": {
        "type": "string"
    },
    "InitialTotalVolume": {
        "pattern": "^[x20-x7e]{0,25}$",
        "type": "string"
    },
    "name": {
        "type": "string"
    },
    "InitialServiceSpecific": {
        "pattern": "^[x20-x7e]{0,25}$",
        "type": "string"
    },
    "InitialTime": {
        "pattern": "^[x20-x7e]{0,25}$",
        "type": "string"
    }
}

},
"SequenceNumber": {
    "type": "string"
},
"version": {
    "type": "integer"
}
}

},
"state": {
    "type": "object",
    "properties": {
        "property": {
            "type": "array",
            "items": {
                "type": "object",
                "properties": {
                    "name": {
                        "pattern": "^[x20-x7e]{0,255}$",
                        "type": "string"
                    },
                    "value": {
                        "type": "string"
                    }
                }
            }
        }
    }
}

```

```

    }
  }
},
"SequenceNumber": {
  "type": "integer"
},
"additionalProperties": false,
"version": {
  "type": "integer"
}
}
}
}
}
}

```

6.6.3 PCF Schema Management - GET (VSA)

VSA_GET_CURRENT_SCHEMA

```

{
  "type": "object",
  "properties": {
    "subscriber": {
      "patternProperties": {
        "^(?i)accountid$": {
          "minItems": 1,
          "maxItems": 1,
          "type": "array",
          "items": {
            "pattern": "^[a-zA-Z0-9]{1,36}$",
            "type": "string"
          }
        },
        "^(?i)imsi$": {
          "minItems": 1,
          "maxItems": 3,
          "type": "array",
          "items": {
            "pattern": "[0-9]{5,15}$",
            "type": "string"
          }
        },
        "^(?i)msisdn$": {
          "minItems": 1,
          "maxItems": 3,
          "type": "array",
          "items": {
            "pattern": "[0-9]{5,15}$",
            "type": "string"
          }
        },
        "^(?i)nai$": {
          "minItems": 1,
          "maxItems": 3,

```

```

        "type": "array",
        "items": {
            "pattern": "^.+$",
            "type": "string"
        }
    },
    "^(?i)extid$": {
        "minItems": 1,
        "maxItems": 3,
        "type": "array",
        "items": {
            "pattern": "[^@]+@[^@]+$",
            "type": "string"
        }
    }
},
"type": "object",
"properties": {
    "Tier": {
        "type": "string"
    },
    "BillingDay": {
        "maximum": 31,
        "type": "integer",
        "minimum": 1
    },
    "Entitlement": {
        "minItems": 1,
        "type": "array",
        "items": {
            "type": "string"
        }
    }
}
},
"usage": {
    "additionalProperties": false,
    "type": "object",
    "properties": {
        "quota": {
            "type": "array",
            "items": {
                "type": "object",
                "properties": {
                    "totalVolume": {
                        "pattern": "^[x20-x7e]{0,255}$",
                        "type": "string"
                    },
                    "name": {
                        "type": "string"
                    }
                }
            },
            "nextResetTime": {
                "type": "string"
            },
            "time": {
                "pattern": "^[x20-x7e]{0,255}$",

```

```

        "type": "string"
      },
      "outputVolume": {
        "pattern": "^[x20-x7e]{0,255}$",
        "type": "string"
      },
      "inputVolume": {
        "pattern": "^[x20-x7e]{0,255}$",
        "type": "string"
      },
      "serviceSpecific": {
        "pattern": "^[x20-x7e]{0,255}$",
        "type": "string"
      },
      "cid": {
        "pattern": "^[x20-x7e]{0,255}$",
        "type": "string"
      }
    }
  },
  "SequenceNumber": {
    "type": "integer"
  },
  "version": {
    "type": "integer"
  }
},
"definition": {
  "additionalProperties": false,
  "type": "object",
  "properties": {
    "DynamicQuota": {
      "type": "array",
      "items": {
        "type": "object",
        "properties": {
          "InstanceId": {
            "pattern": "^[x20-x7e]{0,255}$",
            "type": "string"
          },
          "Priority": {
            "pattern": "^[x20-x7e]{0,255}$",
            "type": "string"
          },
          "InitialInputVolume": {
            "pattern": "^[x20-x7e]{0,255}$",
            "type": "string"
          },
          "Duration": {
            "pattern": "^[x20-x7e]{0,255}$",
            "type": "string"
          },
          "InterimReportingInterval": {
            "pattern": "^[x20-x7e]{0,255}$",

```

```

        "type": "string"
      },
      "InitialOutputVolume": {
        "pattern": "^[x20-x7e]{0,255}$",
        "type": "string"
      },
      },
      "Type": {
        "type": "string"
      },
      },
      "activationdatetime": {
        "type": "string"
      },
      },
      "expirationdatetime": {
        "type": "string"
      },
      },
      "InitialTotalVolume": {
        "pattern": "^[x20-x7e]{0,255}$",
        "type": "string"
      },
      },
      "name": {
        "type": "string"
      },
      },
      "InitialServiceSpecific": {
        "pattern": "^[x20-x7e]{0,255}$",
        "type": "string"
      },
      },
      "InitialTime": {
        "pattern": "^[x20-x7e]{0,255}$",
        "type": "string"
      },
      }
    }
  },
  },
  "SequenceNumber": {
    "type": "integer"
  },
  },
  "version": {
    "type": "integer"
  }
}
},
"state": {
  "type": "object",
  "properties": {
    "property": {
      "type": "array",
      "items": {
        "type": "object",
        "properties": {
          "name": {
            "pattern": "^[x20-x7e]{0,255}$",
            "type": "string"
          },
        },
        "value": {
          "type": "string"
        }
      }
    }
  }
}

```

```

    }
  },
  "SequenceNumber": {
    "type": "integer"
  },
  "additionalProperties": false,
  "version": {
    "type": "integer"
  }
}
}
}
}
}

```

6.6.4 PCF Schema Management - VSA GET ALL SCHEMA

VSA_GET_ALL_SCHEMA

```

{
  "current": "v1",
  "v0": {
    "type": "object",
    "properties": {
      "subscriber": {
        "patternProperties": {
          "^(?i)accountid$": {
            "minItems": 1,
            "maxItems": 1,
            "type": "array",
            "items": {
              "pattern": "^[a-zA-Z0-9]{1,36}$",
              "type": "string"
            }
          },
          "^(?i)imsi$": {
            "minItems": 1,
            "maxItems": 3,
            "type": "array",
            "items": {
              "pattern": "^[0-9]{5,15}$",
              "type": "string"
            }
          },
          "^(?i)msisdn$": {
            "minItems": 1,
            "maxItems": 3,
            "type": "array",
            "items": {
              "pattern": "^[0-9]{5,15}$",
              "type": "string"
            }
          },
          "^(?i)nai$": {
            "minItems": 1,

```

```

        "maxItems": 3,
        "type": "array",
        "items": {
            "pattern": "^.+$$",
            "type": "string"
        }
    },
    "^(?i)extid$": {
        "minItems": 1,
        "maxItems": 3,
        "type": "array",
        "items": {
            "pattern": "[^@]+@[^@]+$$",
            "type": "string"
        }
    }
},
"type": "object",
"properties": {
    "Tier": {
        "type": "string"
    },
    "BillingDay": {
        "maximum": 31,
        "type": "integer",
        "minimum": 1
    },
    "Entitlement": {
        "minItems": 1,
        "type": "array",
        "items": {
            "type": "string"
        }
    }
}
},
"usage": {
    "additionalProperties": false,
    "type": "object",
    "properties": {
        "quota": {
            "type": "array",
            "items": {
                "type": "object",
                "properties": {
                    "totalVolume": {
                        "pattern": "^[x20-x7e]{0,255}$$",
                        "type": "string"
                    },
                    "name": {
                        "type": "string"
                    },
                    "nextResetTime": {
                        "type": "string"
                    },
                    "time": {

```



```

        "pattern": "[x20-x7e]{0,255}$",
        "type": "string"
    },
    "outputVolume": {
        "pattern": "[x20-x7e]{0,255}$",
        "type": "string"
    },
    "inputVolume": {
        "pattern": "[x20-x7e]{0,255}$",
        "type": "string"
    },
    "serviceSpecific": {
        "pattern": "[x20-x7e]{0,255}$",
        "type": "string"
    },
    "cid": {
        "pattern": "[x20-x7e]{0,255}$",
        "type": "string"
    }
}

},
"SequenceNumber": {
    "type": "integer"
},
"version": {
    "type": "integer"
}
},
"definition": {
    "additionalProperties": false,
    "type": "object",
    "properties": {
        "DynamicQuota": {
            "type": "array",
            "items": {
                "type": "object",
                "properties": {
                    "InstanceId": {
                        "pattern": "[x20-x7e]{0,255}$",
                        "type": "string"
                    },
                    "Priority": {
                        "pattern": "[x20-x7e]{0,255}$",
                        "type": "string"
                    },
                    "InitialInputVolume": {
                        "pattern": "[x20-x7e]{0,255}$",
                        "type": "string"
                    },
                    "Duration": {
                        "pattern": "[x20-x7e]{0,255}$",
                        "type": "string"
                    },
                    "InterimReportingInterval": {

```

```

        "pattern": "[x20-x7e]{0,255}$",
        "type": "string"
    },
    "InitialOutputVolume": {
        "pattern": "[x20-x7e]{0,255}$",
        "type": "string"
    },
    "Type": {
        "type": "string"
    },
    "activationdatetime": {
        "type": "string"
    },
    "expirationdatetime": {
        "type": "string"
    },
    "InitialTotalVolume": {
        "pattern": "[x20-x7e]{0,255}$",
        "type": "string"
    },
    "name": {
        "type": "string"
    },
    "InitialServiceSpecific": {
        "pattern": "[x20-x7e]{0,255}$",
        "type": "string"
    },
    "InitialTime": {
        "pattern": "[x20-x7e]{0,255}$",
        "type": "string"
    }
}

}

},
"SequenceNumber": {
    "type": "integer"
},
"version": {
    "type": "integer"
}
}

},
"state": {
    "type": "object",
    "properties": {
        "property": {
            "type": "array",
            "items": {
                "type": "object",
                "properties": {
                    "name": {
                        "pattern": "[x20-x7e]{0,255}$",
                        "type": "string"
                    },
                    "value": {
                        "type": "string"
                    }
                }
            }
        }
    }
}

```

```

    }
  }
},
"SequenceNumber": {
  "type": "integer"
},
"additionalProperties": false,
"version": {
  "type": "integer"
}
}
}
},
"v1": {
"$schema": "http://json-schema.org/draft-07/schema#",
"type": "object",
"properties": {
  "subscriber": {
    "patternProperties": {
      "^(?i)accountid$": {
        "minItems": 1,
        "maxItems": 1,
        "type": "array",
        "items": {
          "pattern": "[a-zA-Z0-9]{1,36}$",
          "type": "string"
        }
      },
      "^(?i)imsi$": {
        "minItems": 1,
        "maxItems": 3,
        "type": "array",
        "items": {
          "pattern": "[0-9]{5,15}$",
          "type": "string"
        }
      },
      "^(?i)msisdn$": {
        "minItems": 1,
        "maxItems": 3,
        "type": "array",
        "items": {
          "pattern": "[0-9]{5,15}$",
          "type": "string"
        }
      },
      "^(?i)nai$": {
        "minItems": 1,
        "maxItems": 3,
        "type": "array",
        "items": {
          "pattern": "^.+$",
          "type": "string"
        }
      }
    }
  }
}

```

```

    },
    "^(?i)extid$": {
      "minItems": 1,
      "maxItems": 3,
      "type": "array",
      "items": {
        "pattern": "[^@]+@[^@]+$",
        "type": "string"
      }
    }
  },
  "type": "object",
  "properties": {
    "Tier": {
      "type": "string"
    },
    "BillingDay": {
      "maximum": 31,
      "type": "integer",
      "minimum": 1
    },
    "Entitlement": {
      "minItems": 1,
      "type": "array",
      "items": {
        "type": "string"
      }
    }
  }
},
"usage": {
  "additionalProperties": false,
  "type": "object",
  "properties": {
    "quota": {
      "type": "array",
      "items": {
        "type": "object",
        "properties": {
          "totalVolume": {
            "pattern": "^[x20-x7e]{0,255}$",
            "type": "string"
          },
          "name": {
            "type": "string"
          },
          "nextResetTime": {
            "type": "string"
          },
          "time": {
            "pattern": "^[x20-x7e]{0,255}$",
            "type": "string"
          },
          "outputVolume": {
            "pattern": "^[x20-x7e]{0,255}$",
            "type": "string"
          }
        }
      }
    }
  }
}

```

```

    },
    "inputVolume": {
      "pattern": "^[x20-x7e]{0,255}$",
      "type": "string"
    },
    },
    "serviceSpecific": {
      "pattern": "^[x20-x7e]{0,255}$",
      "type": "string"
    },
    },
    "cid": {
      "pattern": "^[x20-x7e]{0,255}$",
      "type": "string"
    }
  }
}
},
"SequenceNumber": {
  "type": "integer"
},
"version": {
  "type": "integer"
}
}
},
"definition": {
  "additionalProperties": false,
  "type": "object",
  "properties": {
    "DynamicQuota": {
      "type": "array",
      "items": {
        "type": "object",
        "properties": {
          "InstanceId": {
            "pattern": "^[x20-x7e]{0,255}$",
            "type": "string"
          },
          },
        "Priority": {
          "pattern": "^[x20-x7e]{0,255}$",
          "type": "string"
        },
        },
        "InitialInputVolume": {
          "pattern": "^[x20-x7e]{0,255}$",
          "type": "string"
        },
        },
        "Duration": {
          "pattern": "^[x20-x7e]{0,255}$",
          "type": "string"
        },
        },
        "InterimReportingInterval": {
          "pattern": "^[x20-x7e]{0,255}$",
          "type": "string"
        },
        },
        "InitialOutputVolume": {
          "pattern": "^[x20-x7e]{0,255}$",
          "type": "string"
        }
      }
    }
  }
}

```

```

    },
    "Type": {
      "type": "string"
    },
    "activationdatetime": {
      "type": "string"
    },
    "expirationdatetime": {
      "type": "string"
    },
    "InitialTotalVolume": {
      "pattern": "^[x20-x7e]{0,25}$",
      "type": "string"
    },
    "name": {
      "type": "string"
    },
    "InitialServiceSpecific": {
      "pattern": "^[x20-x7e]{0,25}$",
      "type": "string"
    },
    "InitialTime": {
      "pattern": "^[x20-x7e]{0,25}$",
      "type": "string"
    }
  }
},
"SequenceNumber": {
  "type": "string"
},
"version": {
  "type": "integer"
}
},
"state": {
  "type": "object",
  "properties": {
    "property": {
      "type": "array",
      "items": {
        "type": "object",
        "properties": {
          "name": {
            "pattern": "^[x20-x7e]{0,255}$",
            "type": "string"
          },
          "value": {
            "type": "string"
          }
        }
      }
    }
  }
},
"SequenceNumber": {
  "type": "integer"
}

```

```
    },  
    "additionalProperties": false,  
    "version": {  
      "type": "integer"  
    }  
  }  
}  
}
```

6.6.5 PCF Schema Management - VSA GET V1

VSA_GET_V1

```
{
  "$schema": "http://json-schema.org/draft-07/schema#",
  "type": "object",
  "properties": {
    "subscriber": {
      "patternProperties": {
        "^(?i)accountId$": {
          "minItems": 1,
          "maxItems": 1,
          "type": "array",
          "items": {
            "pattern": "^[a-zA-Z0-9]{1,36}$",
            "type": "string"
          }
        },
        "^(?i)imsi$": {
          "minItems": 1,
          "maxItems": 3,
          "type": "array",
          "items": {
            "pattern": "^[0-9]{5,15}$",
            "type": "string"
          }
        },
        "^(?i)msisdn$": {
          "minItems": 1,
          "maxItems": 3,
          "type": "array",
          "items": {
            "pattern": "^[0-9]{5,15}$",
            "type": "string"
          }
        },
        "^(?i)nai$": {
          "minItems": 1,
          "maxItems": 3,
          "type": "array",
          "items": {
            "pattern": "^.+$",
            "type": "string"
          }
        }
      }
    }
  }
}
```

```

    }
  },
  "^(?i)extid$": {
    "minItems": 1,
    "maxItems": 3,
    "type": "array",
    "items": {
      "pattern": "[^@]+@[^@]+$",
      "type": "string"
    }
  }
},
"type": "object",
"properties": {
  "Tier": {
    "type": "string"
  },
  "BillingDay": {
    "maximum": 31,
    "type": "integer",
    "minimum": 1
  },
  "Entitlement": {
    "minItems": 1,
    "type": "array",
    "items": {
      "type": "string"
    }
  }
}
},
"usage": {
  "additionalProperties": false,
  "type": "object",
  "properties": {
    "quota": {
      "type": "array",
      "items": {
        "type": "object",
        "properties": {
          "totalVolume": {
            "pattern": "^[x20-x7e]{0,255}$",
            "type": "string"
          },
          "name": {
            "type": "string"
          },
          "nextResetTime": {
            "type": "string"
          },
          "time": {
            "pattern": "^[x20-x7e]{0,255}$",
            "type": "string"
          },
          "outputVolume": {
            "pattern": "^[x20-x7e]{0,255}$",

```



```

        "type": "string"
      },
      "inputVolume": {
        "pattern": "^[x20-x7e]{0,255}$",
        "type": "string"
      },
      "serviceSpecific": {
        "pattern": "^[x20-x7e]{0,255}$",
        "type": "string"
      },
      "cid": {
        "pattern": "^[x20-x7e]{0,255}$",
        "type": "string"
      }
    }
  },
  "SequenceNumber": {
    "type": "integer"
  },
  "version": {
    "type": "integer"
  }
},
"definition": {
  "additionalProperties": false,
  "type": "object",
  "properties": {
    "DynamicQuota": {
      "type": "array",
      "items": {
        "type": "object",
        "properties": {
          "InstanceId": {
            "pattern": "^[x20-x7e]{0,255}$",
            "type": "string"
          },
          "Priority": {
            "pattern": "^[x20-x7e]{0,255}$",
            "type": "string"
          },
          "InitialInputVolume": {
            "pattern": "^[x20-x7e]{0,255}$",
            "type": "string"
          },
          "Duration": {
            "pattern": "^[x20-x7e]{0,255}$",
            "type": "string"
          },
          "InterimReportingInterval": {
            "pattern": "^[x20-x7e]{0,255}$",
            "type": "string"
          },
          "InitialOutputVolume": {
            "pattern": "^[x20-x7e]{0,255}$",

```

```

        "type": "string"
      },
      "Type": {
        "type": "string"
      },
      "activationdatetime": {
        "type": "string"
      },
      "expirationdatetime": {
        "type": "string"
      },
      "InitialTotalVolume": {
        "pattern": "^[x20-x7e]{0,25}$",
        "type": "string"
      },
      "name": {
        "type": "string"
      },
      "InitialServiceSpecific": {
        "pattern": "^[x20-x7e]{0,25}$",
        "type": "string"
      },
      "InitialTime": {
        "pattern": "^[x20-x7e]{0,25}$",
        "type": "string"
      }
    }
  },
  "SequenceNumber": {
    "type": "string"
  },
  "version": {
    "type": "integer"
  }
},
"state": {
  "type": "object",
  "properties": {
    "property": {
      "type": "array",
      "items": {
        "type": "object",
        "properties": {
          "name": {
            "pattern": "^[x20-x7e]{0,255}$",
            "type": "string"
          },
          "value": {
            "type": "string"
          }
        }
      }
    }
  }
},
"SequenceNumber": {

```

```

        "type": "integer"
      },
      "additionalProperties": false,
      "version": {
        "type": "integer"
      }
    }
  }
}

```

6.6.6 PUT Profile Data

To add a new field "customFieldKey" for profile-data.

```

{
  "type": "object",
  "$schema": "http://json-schema.org/draft-07/schema#",
  "properties": {
    "profile-fields": {
      "type": "object",
      "properties": {
        "customFieldKey": {
          "type": "string"
        }
      }
    }
  },
  "patternProperties": {
    "^(?i)nai$": {
      "type": "array",
      "items": {
        "type": "string",
        "pattern": "^.+ $"
      },
      "maxItems": 5,
      "minItems": 1
    },
    "^(?i)imsi$": {
      "type": "array",
      "items": {
        "type": "string",
        "pattern": "[0-9]{5,15} $"
      },
      "maxItems": 5,
      "minItems": 1
    },
    "^(?i)extid$": {
      "type": "array",
      "items": {
        "type": "string",
        "pattern": "[a-zA-Z0-9_!#$%&€™*+/?`{|}~^.-]+@[a-zA-Z0-9.-]
+ $"
      },
      "maxItems": 5,
    }
  }
}

```

```

        "minItems": 1
      },
      "^(?i)msisdn$": {
        "type": "array",
        "items": {
          "type": "string",
          "pattern": "^[0-9]{5,15}$"
        },
        "maxItems": 5,
        "minItems": 1
      },
      "^(?i)imei$": {
        "type": "array",
        "items": {
          "type": "string",
          "pattern": "^[0-9]{14,15}$"
        },
        "maxItems": 1,
        "minItems": 1
      },
      "^(?i)imeisv$": {
        "type": "array",
        "items": {
          "type": "string",
          "pattern": "^[0-9]{16}$"
        },
        "maxItems": 1,
        "minItems": 1
      },
      "^(?i)accountid$": {
        "type": "array",
        "items": {
          "type": "string",
          "pattern": "^[a-zA-Z0-9]{1,36}$"
        },
        "maxItems": 1,
        "minItems": 1
      },
      "^(?i)pei$": {
        "type": "array",
        "items": {
          "type": "string",
          "pattern": "^(imei-[0-9]{14,15}|imeisv-[0-9]{16}|mac((-[0-9a-fA-F]{2}){6})(-untrusted)?|eui((-[0-9a-fA-F]{2}){8}))$"
        },
        "maxItems": 1,
        "minItems": 1
      },
      "^(?i)supi$": {
        "type": "array",
        "items": {
          "type": "string",
          "pattern": "^(imsi-[0-9]{5,15}|nai-.+|gci-.+|gli-.+)$"
        },
        "maxItems": 1,
        "minItems": 1
      }
    }
  }

```

```

    },
    "^(?i)gpsi$": {
      "type": "array",
      "items": {
        "type": "string",
        "pattern": "^(msisdn-[0-9]{5,15}|extid-[^@]+@[^@]+)$"
      },
      "maxItems": 1,
      "minItems": 1
    }
  },
  "additionalProperties": false
}

```

6.6.7 PUT - sm-data schema

To remove mandatory parameter for sm-data:

```

{
  "$schema": "http://json-schema.org/draft-07/schema#",
  "type": "object",
  "required": ["smPolicySnssaiData"],
  "properties": {
    "umData": {
      "patternProperties": {
        "^(.*)$": {
          "type": "object",
          "required": ["limitId"],
          "properties": {
            "allowedUsage": {
              "usageLimit": null,
              "type": "object",
              "properties": {
                "duration": {
                  "type": "integer",
                  "minimum": 0
                },
                "totalVolume": {
                  "format": "int64",
                  "type": "integer",
                  "minimum": 0
                },
                "downlinkVolume": {
                  "format": "int64",
                  "type": "integer",
                  "minimum": 0
                },
                "uplinkVolume": {
                  "format": "int64",
                  "type": "integer",
                  "minimum": 0
                }
              }
            }
          }
        }
      },
      "customAllowedUsage": {

```

```

        "usageLimit": null,
        "type": "object",
        "properties": {
            "duration": {
                "type": "integer",
                "minimum": 0
            },
            "totalVolume": {
                "format": "int64",
                "type": "integer",
                "minimum": 0
            },
            "downlinkVolume": {
                "format": "int64",
                "type": "integer",
                "minimum": 0
            },
            "uplinkVolume": {
                "format": "int64",
                "type": "integer",
                "minimum": 0
            }
        }
    },
    "grantedUsage": {
        "usageLimit": null,
        "type": "object",
        "properties": {
            "duration": {
                "type": "integer",
                "minimum": 0
            },
            "totalVolume": {
                "format": "int64",
                "type": "integer",
                "minimum": 0
            },
            "downlinkVolume": {
                "format": "int64",
                "type": "integer",
                "minimum": 0
            },
            "uplinkVolume": {
                "format": "int64",
                "type": "integer",
                "minimum": 0
            }
        }
    },
    "limitId": {
        "type": "string",
        "pattern": "[^(?!\\\\\\\\s*$).+]{1,}"
    },
    "scopes": {
        "patternProperties": {
            "^(.*)$": {

```

```

        "type": "object",
        "required": ["snssai"],
        "properties": {
            "snssai": {
                "type": "object",
                "required": ["sst"],
                "properties": {
                    "sd": {
                        "pattern": "^[A-Fa-f0-9]{6}$",
                        "type": "string"
                    },
                    "sst": {
                        "maximum": 255,
                        "type": "integer",
                        "minimum": 0
                    }
                }
            },
            "dnn": {
                "minItems": 1,
                "type": "array",
                "items": {
                    "type": "string"
                }
            }
        }
    },
    "type": "object"
},
"umLevel": {
    "enum": ["SESSION_LEVEL", "SERVICE_LEVEL"]
},
"resetTime": {
    "anyOf": [{
        "type": "string",
        "format": "date-time"
    }, {
        "pattern": "^\\\\\\\\d{4}\\\\\\\\-\\\\\\\\d{2}\\\\\\\\-\\\\\\\\d{2}T\\\\\\\\d{2}:\\\\\\\\d{2}:\\\\\\\\d{2}([Z]|((\\\\\\\\+|\\\\\\\\-)\\\\\\\\d{2}:\\\\\\\\d{2}))?$",
        "type": "string"
    }]
}
},
"umDataLimits": {
    "patternProperties": {
        "^(.*)$": {
            "type": "object",
            "required": ["limitId"],
            "properties": {

```

```

    "resetPeriod": {
      "type": "object",
      "required": ["period"],
      "properties": {
        "period": {
          "enum": ["YEARLY", "MONTHLY", "WEEKLY",
"DAILY", "HOURLY"]
        },
        "maxNumPeriod": {
          "type": "integer",
          "minimum": 0
        }
      }
    },
    "endDate": {
      "anyOf": [{
        "type": "string",
        "format": "date-time"
      }, {
        "pattern": "^\\\\\\\\d{4}\\\\\\\\-\\\\\\\\d{2}\\\\\\\\-\\\\\\\\
\\d{2}T\\\\\\\\d{2}:\\\\\\\\d{2}:\\\\\\\\d{2}(\\\\\\\\[Z]|(\\\\\\\\+|\\\\\\\\-))\\\\\\\\d{2}:\\\\\\\\d{2})?\\$",
        "type": "string"
      }]
    },
    "usageLimit": {
      "type": "object",
      "properties": {
        "duration": {
          "type": "integer",
          "minimum": 0
        },
        "totalVolume": {
          "format": "int64",
          "type": "integer",
          "minimum": 0
        },
        "downlinkVolume": {
          "format": "int64",
          "type": "integer",
          "minimum": 0
        },
        "uplinkVolume": {
          "format": "int64",
          "type": "integer",
          "minimum": 0
        }
      }
    },
    "limitId": {
      "type": "string",
      "pattern": "[^(?!\\\\\\\\s*$).+]{1,}"
    },
    "Type": {
      "type": "string"
    },
    "name": {

```



```

        "type": "string"
      },
      "priority": {
        "type": "string"
      },
      "initialServiceSpecific": {
        "format": "int64",
        "type": "integer",
        "minimum": 0
      },
      "scopes": {
        "patternProperties": {
          "^(.*)$": {
            "type": "object",
            "required": ["snssai"],
            "properties": {
              "snssai": {
                "type": "object",
                "required": ["sst"],
                "properties": {
                  "sd": {
                    "pattern": "[A-Za-f0-9]{6}$",
                    "type": "string"
                  },
                  "sst": {
                    "maximum": 255,
                    "type": "integer",
                    "minimum": 0
                  }
                }
              }
            }
          },
          "dnn": {
            "minItems": 1,
            "type": "array",
            "items": {
              "type": "string"
            }
          }
        }
      },
      "type": "object"
    },
    "umLevel": {
      "enum": ["SESSION_LEVEL", "SERVICE_LEVEL"]
    },
    "startDate": {
      "anyOf": [{
        "type": "string",
        "format": "date-time"
      }, {
        "pattern": "^\\\\\\\\d{4}\\\\\\\\-\\\\\\\\d{2}\\\\\\\\-\\\\\\\\d{2}T\\\\\\\\d{2}:\\\\\\\\d{2}:\\\\\\\\d{2}(\\\\\\\\[Z]|(\\\\\\\\+|\\\\\\\\-))\\\\\\\\d{2}:\\\\\\\\d{2})?$",
        "type": "string"
      }]
    }
  }
}

```

```

    },
    "activationdatetime": {
      "anyOf": [{
        "type": "string",
        "format": "date-time"
      }, {
        "pattern": "^\\\\\\\\d{4}\\\\\\\\-\\\\\\\\d{2}\\\\\\\\-\\\\\\\\d{2}T\\\\\\\\d{2}:\\\\\\\\d{2}:\\\\\\\\d{2}(\\\\\\\\[Z]\\\\\\\\|\\\\\\\\(\\\\\\\\\\\\\\\\+\\\\\\\\\\\\\\\\-\\\\\\\\)\\\\\\\\d{2}:\\\\\\\\d{2})?)?$",
        "type": "string"
      }]
    },
    "validityDuration": {
      "type": "integer",
      "minimum": 0
    },
    "InterimReportingInterval": {
      "type": "string"
    }
  }
},
{
  "type": "object"
},
{
  "suppFeat": {
    "pattern": "^\\\\[A-Fa-f0-9]*$",
    "type": "string"
  },
  "smPolicySnssaiData": {
    "patternProperties": {
      "^(.*)$": {
        "type": "object",
        "required": ["snssai"],
        "properties": {
          "smPolicyDnnData": {
            "patternProperties": {
              "^(.*)$": {
                "type": "object",
                "required": ["dnn"],
                "properties": {
                  "adcSupport": {
                    "type": "boolean"
                  },
                  "dnn": {
                    "type": "string"
                  },
                  "ipv4Index": {
                    "type": "integer"
                  },
                  "gbrDL": {
                    "pattern": "^\\\\\\\\d+(\\\\\\\\\\\\.\\\\\\\\\\\\d+)?",
                    "type": "string"
                  },
                  "mcsPriority": {
                    "type": "boolean"
                  }
                }
              }
            }
          },
          "pattern": "(bps|Kbps|Mbps|Gbps|Tbps)$",
          "type": "string"
        }
      }
    }
  },
  "type": "object"
}

```

```

"subscSpendingLimits": {
  "type": "boolean"
},
"mcsPriorityLevel": {
  "type": "integer"
},
"chfInfo": {
  "type": "object",
  "required": ["primaryChfAddress",
"secondaryChfAddress"],
  "properties": {
    "secondaryChfAddress": {
      "type": "string"
    },
    "primaryChfAddress": {
      "type": "string"
    }
  }
},
"praInfos": {
  "patternProperties": {
    "^(.*)$": {
      "type": "object",
      "properties": {
        "ecgiList": {
          "minItems": 1,
          "type": "array",
          "items": {
            "nullable":
true,
            "type":
"object",
            "required":
["plmnId", "eutraCellId"],
            "properties":
{
              "eutraCellId": {
                "pattern": "^[A-Fa-f0-9]{7}$",
                "type": "string"
              },
              "nid": {
                "pattern": "^[A-Fa-f0-9]{13}$",
                "type": "string"
              },
              "plmnId":
{
                "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": {
        "oneOf": [{
          "required": ["n3IwfId"],
          "required": ["gNbId"],
          "required": ["ngeNbId"],
          "required": ["eNbId"],
          "object",
          ["plmnId"],
          {
            "pattern": "^(MacroenB-[A-Fa-f0-9]{5}|LMacroenB-[A-Fa-f0-9]{6}|SMacroenB-[A-Fa-f0-9]{5}|HomeenB-[A-Fa-f0-9]{7})$",
            "type": "string"
          },
          "type": "object",
          "required": ["bitLength", "gNbValue"],

```

```

    "properties": {
      "bitLength": {
        "maximum": 32,
        "type": "integer",
        "minimum": 22
      },
      "gNbValue": {
        "pattern": "^[A-Fa-f0-9]{6,8}$",
        "type": "string"
      }
    },
    "nid": {
      "pattern": "^[A-Fa-f0-9]{13}$",
      "type": "string"
    },
    "plmnId": {
      "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})$",
      "type": "string"
    }
  },
  "presenceState": {
    "enum":
["IN_AREA", "OUT_OF_AREA", "UNKNOWN", "INACTIVE"]
  },
  "praId": {
    "type": "string"
  },
  "ncgiList": {
    "minItems": 1,
    "type": "array",
    "items": {
      "type":
"object",
["plmnId", "nrCellId"],
{
  "pattern": "^[A-Fa-f0-9]{13}$",
  "type": "string"
},
{
  "type": "object",
  "required": ["mcc", "mnc"],
  "properties": {
    "mnc": {
      "pattern": "^\\d{2,3}$",
      "type": "string"
    },
    "plmnId":
},
{
  "type": "object",
  "required": ["mcc", "mnc"],
  "properties": {
    "mnc": {
      "pattern": "^\\d{2,3}$",
      "type": "string"
    },
    "mcc": {
      "pattern": "^\\d{3}$",
      "type": "string"
    }
  }
}
},

```

```

    },
    "nrCellId": {
      "pattern": "^[A-Fa-f0-9]{9}$",
      "type": "string"
    },
    "trackingAreaList": {
      "minItems": 1,
      "type": "array",
      "items": {
        "type": "object",
        "required": [
          "plmnId", "tac"
        ],
        "properties": {
          "tac": {
            "pattern": "^[A-Fa-f0-9]{4}$|^[A-Fa-f0-9]{6}$",
            "type": "string"
          },
          "nid": {
            "pattern": "^[A-Fa-f0-9]{13}$",
            "type": "string"
          },
          "plmnId": {
            "type": "object",
            "required": [
              "mcc", "mnc"
            ],
            "properties": {
              "mnc": {
                "pattern": "^\\\\\\\\d{2,3}$",
                "type": "string"
              },
              "mcc": {
                "pattern": "^\\\\\\\\d{3}$",
                "type": "string"
              }
            }
          }
        }
      }
    }
  },
  "type": "array"
}

```

```

    },
    "globaleNbIdList": {
      "minItems": 1,
      "type": "array",
      "items": {
        "oneOf": [{
          "required": ["n3IwfId"]
        }, {
          "required": ["gNbId"]
        }, {
          "required": ["ngeNbId"]
        }, {
          "required": ["eNbId"]
        }],
      "type":
        "object",
      "required":
        ["plmnId"],
      "properties":
        {
          "eNbId": {
            "pattern": "^(MacroenB-[A-Fa-f0-9]{5}|LMacroenB-[A-Fa-f0-9]{6}|SMacroenB-[A-
            Fa-f0-9]{5}|HomeenB-[A-Fa-f0-9]{7})$",
            "type": "string"
          },
          "gNbId": {
            "type": "object",
            "required": ["bitLength", "gNbValue"],
            "properties": {
              "bitLength": {
                "maximum": 32,
                "type": "integer",
                "minimum": 22
              },
              "gNbValue": {
                "pattern": "^[A-Fa-f0-9]{6,8}$",

```


$\}$

```

        "minProperties": 1
    },
    "refUmDataLimitIds": {
        "patternProperties": {
            "^(.*)$": {
                "nullable": true,
                "type": "object",
                "required": ["limitId"],
                "properties": {
                    "monkey": {
                        "minItems": 1,
                        "type": "array",
                        "items": {
                            "type":
                                "string"

                                "limitId": {
                                    "type": "string",
                                    "pattern": "\\s*$).+]{1,}"
                                }
                            }
                        }
                    },
                    "type": "object",
                    "minProperties": 1
                },
                "bdtRefIds": {
                    "patternProperties": {
                        "^(.*)$": {
                            "nullable": true,
                            "type": "string"
                        }
                    },
                    "nullable": true,
                    "type": "object",
                    "minProperties": 1
                },
                "offline": {
                    "type": "boolean"
                },
                "allowedServices": {
                    "minItems": 1,
                    "type": "array",
                    "items": {
                        "type": "string"
                    }
                },
                "mpsPriority": {
                    "type": "boolean"
                },
                "imsSignallingPrio": {
                    "type": "boolean"
                },
                "gbrUL": {

```

```

        "pattern": "^\\\\\\\\d+(\\\\\\\\.\\\\\\\\d+)?",
        "type": "string"
    },
    "subscCats": {
        "minItems": 1,
        "type": "array",
        "items": {
            "type": "string"
        }
    },
    "online": {
        "type": "boolean"
    },
    "ipv6Index": {
        "type": "integer"
    },
    "mpsPriorityLevel": {
        "type": "integer"
    }
}

},
"type": "object"
},
"snssai": {
    "type": "object",
    "required": ["sst"],
    "properties": {
        "sd": {
            "pattern": "[A-Fa-f0-9]{6}$",
            "type": "string"
        },
        "sst": {
            "maximum": 255,
            "type": "integer",
            "minimum": 0
        }
    }
}

}

},
"type": "object",
"minProperties": 1
}
}
}

```

6.6.8 PUT-ue-policy-set schema

```

{
    "$schema": "http://json-schema.org/draft-07/schema#",
    "type": "object",
    "properties": {

```

```

    "uePolicySections": {
      "patternProperties": {
        "^(.*)$": {
          "type": "object",
          "required": [
            "uePolicySectionInfo",
            "upsi"
          ],
          "properties": {
            "uePolicySectionInfo": {
              "format": "byte",
              "type": "string"
            },
            "upsi": {
              "type": "string"
            }
          }
        }
      },
      "type": "object",
      "minProperties": 1
    },
    "pei": {
      "pattern": "^(imei-[0-9]{15}|imeisv-[0-9]{16}|mac([0-9a-fA-F]{2})((-[0-9a-fA-F]{2}){5})|.+)$",
      "type": "string"
    },
    "osIds": {
      "minItems": 1,
      "type": "array",
      "items": {
        "format": "uuid",
        "type": "string"
      }
    },
    "upsis": {
      "minItems": 1,
      "type": "array",
      "items": {
        "type": "string"
      }
    },
    "andspInd": {
      "type": "boolean"
    },
    "subscCats": {
      "minItems": 1,
      "type": "array",
      "items": {
        "type": "string"
      }
    },
    "allowedRouteSelDescs": {
      "patternProperties": {
        "^(.*)$": {
          "type": "object",

```

```

"required": [
  "servingPlmn"
],
"properties": {
  "servingPlmn": {
    "type": "object",
    "required": [
      "mcc",
      "mnc"
    ],
    "properties": {
      "mnc": {
        "pattern": "^\\d{2,3}$",
        "type": "string"
      },
      "mcc": {
        "pattern": "^\\d{3}$",
        "type": "string"
      }
    }
  },
  "snssaiRouteSelDescs": {
    "type": "array",
    "items": {
      "type": "object",
      "required": [
        "snssai"
      ],
      "properties": {
        "snssai": {
          "type": "object",
          "required": [
            "sst"
          ],
          "properties": {
            "sd": {
              "pattern": "^[A-Za-f0-9]{6}$",
              "type": "string"
            },
            "sst": {
              "maximum": 255,
              "type": "integer",
              "minimum": 0
            }
          }
        }
      }
    },
    "dnnRouteSelDescs": {
      "type": "array",
      "items": {
        "type": "object",
        "required": [
          "dnn"
        ],
        "properties": {
          "pduSessTypes": {
            "minItems": 1,

```

```

        "type": "array",
        "items": {
          "enum": [
            "IPv4",
            "IPv6",
            "IPv4V6",
            "UNSTRUCTURED",
            "ETHERNET"
          ]
        }
      },
      "dnn": {
        "type": "string"
      },
      "sscModes": {
        "minItems": 1,
        "type": "array",
        "items": {
          "enum": [
            "SSC_MODE_1",
            "SSC_MODE_2",
            "SSC_MODE_3"
          ]
        }
      }
    }
  },
  "type": "object",
  "minProperties": 1
},
"prafInfos": {
  "patternProperties": {
    "^(.*)$": {
      "type": "object",
      "properties": {
        "ecgiList": {
          "minItems": 1,
          "type": "array",
          "items": {
            "nullable": true,
            "type": "object",
            "required": [
              "plmnId",
              "eutraCellId"
            ],
            "properties": {
              "eutraCellId": {
                "pattern": "^[A-Fa-f0-9]{7}$",
                "type": "string"
              }
            }
          }
        }
      }
    }
  }
}

```

```

    },
    "nid": {
      "pattern": "^[A-Za-f0-9]{13}$",
      "type": "string"
    },
    "plmnId": {
      "type": "object",
      "required": [
        "mcc",
        "mnc"
      ],
      "properties": {
        "mnc": {
          "pattern": "^\\d{2,3}$",
          "type": "string"
        },
        "mcc": {
          "pattern": "^\\d{3}$",
          "type": "string"
        }
      }
    }
  },
  "globalRanNodeIdList": {
    "minItems": 1,
    "type": "array",
    "items": {
      "oneOf": [
        {
          "required": [
            "n3IwfId"
          ]
        },
        {
          "required": [
            "gNbId"
          ]
        },
        {
          "required": [
            "ngeNbId"
          ]
        },
        {
          "required": [
            "eNbId"
          ]
        }
      ]
    },
    "type": "object",
    "required": [
      "plmnId"
    ],
    "properties": {

```

```

        "eNbId": {
          "pattern": "^(MacroNb-[A-Za-z0-9]{5}|
LMacroNb-[A-Za-z0-9]{6}|SMacroNb-[A-Za-z0-9]{5}|HomeNb-[A-Za-z0-9]{7})$",
          "type": "string"
        },
        "gNbId": {
          "type": "object",
          "required": [
            "bitLength",
            "gNbValue"
          ],
          "properties": {
            "bitLength": {
              "maximum": 32,
              "type": "integer",
              "minimum": 22
            },
            "gNbValue": {
              "pattern": "^[A-Za-z0-9]
{6,8}$",
              "type": "string"
            }
          }
        },
        "nid": {
          "pattern": "^[A-Za-z0-9]{13}$",
          "type": "string"
        },
        "plmnId": {
          "type": "object",
          "required": [
            "mcc",
            "mnc"
          ],
          "properties": {
            "mnc": {
              "pattern": "^[\\d]{2,3}$",
              "type": "string"
            },
            "mcc": {
              "pattern": "^[\\d]{3}$",
              "type": "string"
            }
          }
        },
        "n3IwfId": {
          "pattern": "^[A-Za-z0-9]+$",
          "type": "string"
        },
        "ngeNbId": {
          "pattern": "^(MacroNGeNB-[A-Za-z0-9]
{5}|LMacroNGeNB-[A-Za-z0-9]{6}|SMacroNGeNB-[A-Za-z0-9]{5})$",
          "type": "string"
        }
      }
    }
  }
}

```



```

    },
    "presenceState": {
      "enum": [
        "IN_AREA",
        "OUT_OF_AREA",
        "UNKNOWN",
        "INACTIVE"
      ]
    },
    "praId": {
      "type": "string"
    },
    "ncgiList": {
      "minItems": 1,
      "type": "array",
      "items": {
        "type": "object",
        "required": [
          "plmnId",
          "nrCellId"
        ],
        "properties": {
          "nid": {
            "pattern": "^[A-Fa-f0-9]{13}$",
            "type": "string"
          },
          "plmnId": {
            "type": "object",
            "required": [
              "mcc",
              "mnc"
            ],
            "properties": {
              "mnc": {
                "pattern": "^\\d{2,3}$",
                "type": "string"
              },
              "mcc": {
                "pattern": "^\\d{3}$",
                "type": "string"
              }
            }
          },
          "nrCellId": {
            "pattern": "^[A-Fa-f0-9]{9}$",
            "type": "string"
          }
        }
      }
    },
    "trackingAreaList": {
      "minItems": 1,
      "type": "array",
      "items": {
        "type": "object",
        "required": [

```

```

        "plmnId",
        "tac"
    ],
    "properties": {
        "tac": {
            "pattern": "^(^([A-Fa-f0-9]{4}$)|(^([A-
Fa-f0-9]{6}$)",
            "type": "string"
        },
        "nid": {
            "pattern": "^[A-Fa-f0-9]{13}$",
            "type": "string"
        },
        "plmnId": {
            "type": "object",
            "required": [
                "mcc",
                "mnc"
            ],
            "properties": {
                "mnc": {
                    "pattern": "^\\d{2,3}$",
                    "type": "string"
                },
                "mcc": {
                    "pattern": "^\\d{3}$",
                    "type": "string"
                }
            }
        }
    }
},
"globaleNbIdList": {
    "minItems": 1,
    "type": "array",
    "items": {
        "oneOf": [
            {
                "required": [
                    "n3IwfId"
                ]
            },
            {
                "required": [
                    "gNbId"
                ]
            },
            {
                "required": [
                    "ngeNbId"
                ]
            },
            {
                "required": [
                    "eNbId"
                ]
            }
        ]
    }
}

```

```

    ]
  },
  "type": "object",
  "required": [
    "plmnId"
  ],
  "properties": {
    "eNbId": {
      "pattern": "^(MacroNb-[A-Fa-f0-9]{5}|
LMacroNb-[A-Fa-f0-9]{6}|SMacroNb-[A-Fa-f0-9]{5}|HomeNb-[A-Fa-f0-9]{7})$",
      "type": "string"
    },
    "gNbId": {
      "type": "object",
      "required": [
        "bitLength",
        "gNbValue"
      ],
      "properties": {
        "bitLength": {
          "maximum": 32,
          "type": "integer",
          "minimum": 22
        },
        "gNbValue": {
          "pattern": "^[A-Fa-f0-9]
{6,8}$",
          "type": "string"
        }
      }
    },
    "nid": {
      "pattern": "^[A-Fa-f0-9]{13}$",
      "type": "string"
    },
    "plmnId": {
      "type": "object",
      "required": [
        "mcc",
        "mnc"
      ],
      "properties": {
        "mnc": {
          "pattern": "^[\\d]{2,3}$",
          "type": "string"
        },
        "mcc": {
          "pattern": "^[\\d]{3}$",
          "type": "string"
        }
      }
    },
    "n3IwfId": {
      "pattern": "^[A-Fa-f0-9]+$",
      "type": "string"
    }
  }
}

```

```

    },
    "ngeNbId": {
      "pattern": "^(MacroNGeNB-[A-Za-z0-9]{5}|LMacroNGeNB-[A-Za-z0-9]{6}|SMacroNGeNB-[A-Za-z0-9]{5})$",
      "type": "string"
    }
  }
}
}
}
}
},
"type": "object",
"minProperties": 1
}
}
}
}

```

6.7 SLF Schema Management - PUT (SLF)

SLF_GROUP_PROV_SCHEMA

```

{
  "type": "object",
  "$schema": "http://json-schema.org/draft-07/schema#",
  "required": [
    "nfGroupIDs",
    "slfGroupName",
    "slfGroupType"
  ],
  "properties": {
    "nfGroupIDs": {
      "type": "object",
      "propertyNames": {
        "enum": [
          "NRF",
          "UDM",
          "AMF",
          "SMF",
          "AUSF",
          "NEF",
          "PCF",
          "SMSF",
          "NSSF",
          "UDR",
          "LMF",
          "GMLC",
          "5G_EIR",
          "SEPP",
          "UPF",
          "N3IWF",
          "AF",
          "UDSF",
          "BSF",
          "CHF"
        ]
      }
    }
  }
}

```

```

        "NWDAF",
        "PCSCF",
        "CBCF",
        "HSS",
        "UCMF"
    ],
    "type": "string"
  },
  "patternProperties": {
    "": {
      "type": "string",
      "minLength": 1
    }
  },
  "minProperties": 1
},
"slfGroupName": {
  "type": "string",
  "minLength": 1
},
"slfGroupType": {
  "enum": [
    "ImsHss",
    "LteHss",
    "Pcrf",
    "Ocs",
    "Ofcs",
    "Aaa",
    "UserDef1",
    "UserDef2"
  ],
  "type": "string"
},
"expiry": {
  "format": "date-time",
  "type": "string"
}
},
"additionalProperties": false
}

```

6.8 Payload Reference for UDM Schema Management

The UDM Schema Management includes:

- [UDM Schema Management - PUT \(provisioned-data/am-data\)](#)
- [UDM Schema Management - PUT\(provisioned/sm-data\)](#)
- [UDM Schema Management - PUT \(provisioned/smf-selection-subscription-data\)](#)
- [UDM Schema Management - PUT\(provisioned/sms-mng-data\)](#)
- [UDM Schema Management - PUT\(provisioned/trace-data\)](#)
- [UDM Schema Management - PUT\(provisioned/sms-data\)](#)

6.8.1 UDM Schema Management - PUT (provisioned-data/am-data)

Schema for provisioned/am-data

```
{
  "type": "object",
  "$schema": "http://json-schema.org/draft-07/schema#",
  "properties": {
    "custom": {
      "type": "string"
    },
    "gpsis": {
      "type": "array",
      "items": {
        "type": "string",
        "pattern": "^(msisdn-[0-9]{5,15}|extid-[^@]+@[^@]+|.+) $"
      }
    },
    "nssai": {
      "type": "object",
      "nullable": true,
      "required": ["defaultSingleNssais"],
      "properties": {
        "singleNssais": {
          "type": "array",
          "items": {
            "type": "object",
            "required": ["sst"],
            "properties": {
              "sd": {
                "type": "string",
                "pattern": "^[A-Za-f0-9]{6} $"
              },
              "sst": {
                "type": "integer",
                "maximum": 255,
                "minimum": 0
              }
            }
          },
          "additionalProperties": false
        },
        "minItems": 1
      },
      "supportedFeatures": {
        "type": "string",
        "pattern": "^[A-Za-f0-9]* $"
      },
      "defaultSingleNssais": {
        "type": "array",
        "items": {
          "type": "object",
          "required": ["sst"],
          "properties": {
            "sd": {
```

```

        "type": "string",
        "pattern": "^[A-Fa-f0-9]{6}$"
      },
      "sst": {
        "type": "integer",
        "maximum": 255,
        "minimum": 0
      }
    },
    "additionalProperties": false
  },
  "minItems": 1
}
},
"additionalProperties": false
},
"sorInfo": {
  "type": "object",
  "required": ["ackInd", "provisioningTime"],
  "properties": {
    "ackInd": {
      "type": "boolean"
    },
    "countersor": {
      "type": "string",
      "pattern": "^[A-Fa-f0-9]{4}$"
    },
    "sorMacIausf": {
      "type": "string",
      "pattern": "^[A-Fa-f0-9]{32}$"
    },
    "provisioningTime": {
      "type": "string",
      "format": "date-time"
    },
    "steeringContainer": {
      "oneOf": [{
        "type": "array",
        "items": {
          "type": "object",
          "required": ["plmnId"],
          "properties": {
            "plmnId": {
              "type": "object",
              "required": ["mcc", "mnc"],
              "properties": {
                "mcc": {
                  "type": "string",
                  "pattern": "^[0-9]{3}$"
                },
                "mnc": {
                  "type": "string",
                  "pattern": "^[0-9]{2,3}$"
                }
              }
            }
          }
        }
      ]
    },
    "additionalProperties": false
  }
}

```

```

    },
    "accessTechList": {
      "type": "array",
      "items": {
        "enum": ["NR",
"EUTRAN_IN_WBS1_MODE_AND_NBS1_MODE", "EUTRAN_IN_NBS1_MODE_ONLY",
"EUTRAN_IN_WBS1_MODE_ONLY", "UTRAN", "GSM_AND_ECGSM_IoT",
"GSM_WITHOUT_ECGSM_IoT", "ECGSM_IoT_ONLY", "CDMA_1xRTT", "CDMA_HRPD",
"GSM_COMPACT"],
        "type": "string"
      },
      "minItems": 1
    }
  },
  "minItems": 1
}, {
  "type": "string",
  "pattern": "^(.*)$"
}]
}
},
"additionalProperties": false
},
"upuInfo": {
  "type": "object",
  "required": ["upuDataList", "upuAckInd", "upuRegInd",
"provisioningTime"],
  "properties": {
    "upuAckInd": {
      "type": "boolean"
    },
    "upuRegInd": {
      "type": "boolean"
    },
    "counterUpu": {
      "type": "string",
      "pattern": "[A-Za-f0-9]{4}$"
    },
    "upuDataList": {
      "type": "array",
      "items": {
        "type": "object",
        "oneOf": [{
          "required": ["secPacket"]
        }, {
          "required": ["defaultConfNssai"]
        }],
        "properties": {
          "secPacket": {
            "type": "string",
            "format": "base64"
          }
        }
      },
      "defaultConfNssai": {
        "type": "array",

```



```

        "items": {
          "type": "object",
          "required": ["sst"],
          "properties": {
            "sd": {
              "type": "string",
              "pattern": "^[A-Fa-f0-9]{6}$"
            },
            "sst": {
              "type": "integer",
              "maximum": 255,
              "minimum": 0
            }
          },
          "additionalProperties": false
        },
        "minItems": 1
      },
      "minItems": 1
    },
    "upuMacIausf": {
      "type": "string",
      "pattern": "^[A-Fa-f0-9]{32}$"
    },
    "provisioningTime": {
      "type": "string",
      "format": "date-time"
    }
  },
  "additionalProperties": false
},
"rfspIndex": {
  "type": "integer",
  "maximum": 256,
  "minimum": 1,
  "nullable": true
},
"activeTime": {
  "type": "integer",
  "nullable": true
},
"mcsPriority": {
  "type": "boolean"
},
"micoAllowed": {
  "type": "boolean"
},
"mpsPriority": {
  "type": "boolean"
},
"ueUsageType": {
  "type": "integer"
},
"subsRegTimer": {
  "type": "integer",

```

```

        "nullable": true
      },
      "dlPacketCount": {
        "type": "integer",
        "minimum": -1
      },
      "forbiddenAreas": {
        "type": "array",
        "items": {
          "type": "object",
          "oneOf": [{
            "required": ["tacs"]
          }, {
            "required": ["areaCode"]
          }],
          "properties": {
            "tacs": {
              "type": "array",
              "items": {
                "type": "string",
                "pattern": "^(^([A-Fa-f0-9]{4}$)|(^([A-Fa-f0-9]{6}$))"
              },
              "minItems": 1
            },
            "areaCode": {
              "type": "string"
            }
          }
        },
        "additionalProperties": false
      }
    },
    "ratRestrictions": {
      "type": "array",
      "items": {
        "anyOf": [{
          "enum": ["NR", "EUTRA", "WLAN", "VIRTUAL"],
          "type": "string"
        }, {
          "type": "string"
        }],
        "type": "string"
      }
    },
    "sharedAmDataIds": {
      "type": "array",
      "items": {
        "type": "string",
        "pattern": "^[0-9]{5,6}-.+ $"
      },
      "minItems": 1
    },
    "internalGroupIds": {
      "type": "array",
      "items": {
        "type": "string",
        "pattern": "^[A-Fa-f0-9]{8}-[0-9]{3}-[0-9]{2,3}-([A-Fa-f0-9]
[A-Fa-f0-9]){1,10}$"

```

```

    },
    "minItems": 1
  },
  "subscribedUeAmbr": {
    "type": "object",
    "properties": {
      "uplink": {
        "type": "string",
        "pattern": "^\\d+(\\.\\d+)? (bps|Kbps|Mbps|Gbps|Tbps)$"
      },
      "downlink": {
        "type": "string",
        "pattern": "^\\d+(\\.\\d+)? (bps|Kbps|Mbps|Gbps|Tbps)$"
      }
    }
  },
  "additionalProperties": false
},
"odbPacketServices": {
  "anyOf": [{
    "enum": ["ALL_PACKET_SERVICES", "ROAMER_ACCESS_HPLMN_AP",
"ROAMER_ACCESS_VPLMN_AP"],
    "type": "string"
  }, {
    "type": "string",
    "nullable": true
  }
]
},
"subscribedDnnList": {
  "type": "array",
  "items": {
    "type": "string"
  }
},
"supportedFeatures": {
  "type": "string",
  "pattern": "^[A-Za-f0-9]*$"
},
"serviceAreaRestriction": {
  "type": "object",
  "allOf": [{
    "oneOf": [{
      "not": {
        "required": ["restrictionType"]
      }
    }, {
      "required": ["areas"]
    }
  ]
}, {
  "anyOf": [{
    "not": {
      "required": ["restrictionType"],
      "properties": {
        "restrictionType": {
          "enum": ["NOT_ALLOWED_AREAS"],
          "type": "string"
        }
      }
    }
  ]
}
]
}

```

```

        }
      }, {
        "not": {
          "required": ["maxNumOfTAs"]
        }
      }
    ], {
      "anyOf": [{
        "not": {
          "required": ["restrictionType"],
          "properties": {
            "restrictionType": {
              "enum": ["ALLOWED_AREAS"],
              "type": "string"
            }
          }
        }
      }
    ], {
      "not": {
        "required": ["maxNumOfTAsForNotAllowedAreas"]
      }
    }
  ]],
  "properties": {
    "areas": {
      "type": "array",
      "items": {
        "type": "object",
        "oneOf": [{
          "required": ["tacs"]
        }, {
          "required": ["areaCode"]
        }
      ],
      "properties": {
        "tacs": {
          "type": "array",
          "items": {
            "type": "string",
            "pattern": "f0-9]{6}$)"
          },
          "minItems": 1
        },
        "areaCode": {
          "type": "string"
        }
      }
    },
    "additionalProperties": false
  }
},
"maxNumOfTAs": {
  "type": "integer",
  "minimum": 0
},
"restrictionType": {

```

```

        "anyOf": [{
            "enum": ["ALLOWED_AREAS", "NOT_ALLOWED_AREAS"],
            "type": "string"
        }, {
            "type": "string"
        }]
    },
    "maxNumOfTAsForNotAllowedAreas": {
        "type": "integer",
        "minimum": 0
    }
},
"additionalProperties": false
},
"coreNetworkTypeRestrictions": {
    "type": "array",
    "items": {
        "enum": ["5GC", "EPC"],
        "type": "string"
    }
}
},
"additionalProperties": false
}

```

6.8.2 UDM Schema Management - PUT(provisioned/sm-data)

Schema for provisioned/sm-data

```

{
    "type": "object",
    "additionalProperties": false,
    "required": [
        "singleNssai"
    ],
    "properties": {
        "custom": {
            "type": "string"
        },
        "dnnConfigurations": {
            "type": "object",
            "additionalProperties": false,
            "patternProperties": {
                "^(.*)$": {
                    "type": "object",
                    "additionalProperties": false,
                    "required": [
                        "pduSessionTypes",
                        "sscModes"
                    ],
                    "properties": {
                        "iwkEpsInd": {
                            "type": "boolean"
                        }
                    },
                    "sessionAmbr": {

```

```

        "type": "object",
        "additionalProperties": false,
        "required": [
            "uplink",
            "downlink"
        ],
        "properties": {
            "uplink": {
                "type": "string",
                "pattern": "^\\d+(\\.\\d+)? (bps|Kbps|
Mbps|Gbps|Tbps)$"
            },
            "downlink": {
                "type": "string",
                "pattern": "^\\d+(\\.\\d+)? (bps|Kbps|
Mbps|Gbps|Tbps)$"
            }
        }
    },
    "5gQosProfile": {
        "type": "object",
        "additionalProperties": false,
        "required": [
            "5qi",
            "arp"
        ],
        "properties": {
            "priorityLevel": {
                "type": "integer",
                "minimum": 1,
                "maximum": 127
            },
            "5qi": {
                "type": "integer",
                "minimum": 0,
                "maximum": 255
            },
            "arp": {
                "type": "object",
                "additionalProperties": false,
                "required": [
                    "priorityLevel",
                    "preemptCap",
                    "preemptVuln"
                ],
                "properties": {
                    "preemptCap": {
                        "nullable": true,
                        "anyOf": [
                            {
                                "enum": [
                                    "MAY_PREEMPT",
                                    "NOT_PREEMPT"
                                ],
                                "type": "string"
                            }
                        ]
                    }
                }
            }
        }
    },

```

```

        {
            "type": "string"
        }
    ],
    "priorityLevel": {
        "type": "integer",
        "minimum": 1,
        "maximum": 15,
        "description": "nullable true",
        "nullable": true
    },
    "preemptVuln": {
        "nullable": true,
        "anyOf": [
            {
                "type": "string",
                "enum": [
                    "MAY_PREEMPT",
                    "NOT_PREEMPT"
                ]
            },
            {
                "type": "string"
            }
        ]
    }
}

},
"upSecurity": {
    "type": "object",
    "additionalProperties": false,
    "required": [
        "upIntegr",
        "upConfid"
    ],
    "properties": {
        "upIntegr": {
            "anyOf": [
                {
                    "type": "string",
                    "enum": [
                        "PREFERRED",
                        "REQUIRED",
                        "NOT_NEEDED"
                    ]
                },
                {
                    "type": "string"
                }
            ]
        },
        "upConfid": {

```

```

        "anyOf": [
            {
                "enum": [
                    "PREFERRED",
                    "REQUIRED",
                    "NOT_NEEDED"
                ],
                "type": "string"
            },
            {
                "type": "string"
            }
        ]
    },
    "sscModes": {
        "type": "object",
        "additionalProperties": false,
        "required": [
            "defaultSscMode"
        ],
        "properties": {
            "allowedSscModes": {
                "type": "array",
                "items": {
                    "anyOf": [
                        {
                            "type": "string",
                            "enum": [
                                "SSC_MODE_1",
                                "SSC_MODE_2",
                                "SSC_MODE_3"
                            ]
                        },
                        {
                            "type": "string"
                        }
                    ]
                }
            }
        },
        "defaultSscMode": {
            "anyOf": [
                {
                    "enum": [
                        "SSC_MODE_1",
                        "SSC_MODE_2",
                        "SSC_MODE_3"
                    ],
                    "type": "string"
                },
                {
                    "type": "string"
                }
            ]
        }
    }
}

```



```

    }
  },
  "3gppChargingCharacteristics": {
    "type": "string"
  },
  "pduSessionTypes": {
    "type": "object",
    "additionalProperties": false,
    "required": [
      "defaultSessionType"
    ],
    "properties": {
      "defaultSessionType": {
        "anyOf": [
          {
            "type": "string",
            "enum": [
              "IPV4V6",
              "IPV6",
              "UNSTRUCTURED",
              "IPV4",
              "ETHERNET"
            ]
          },
          {
            "type": "string"
          }
        ]
      },
      "allowedSessionTypes": {
        "type": "array",
        "items": {
          "anyOf": [
            {
              "enum": [
                "IPV4V6",
                "IPV6",
                "UNSTRUCTURED",
                "IPV4",
                "ETHERNET"
              ],
              "type": "string"
            },
            {
              "type": "string"
            }
          ]
        }
      }
    }
  },
  "staticIpAddress": {
    "type": "array",
    "minItems": 1,
    "maxItems": 2,
    "items": {

```

```

      "IpAddress": {
        "oneOf": [
          {
            "required": [
              "ipv4Addr"
            ]
          },
          {
            "required": [
              "ipv6Addr"
            ]
          },
          {
            "required": [
              "ipv6Prefix"
            ]
          }
        ],
        "additionalProperties": false,
        "type": "object",
        "properties": {
          "ipv6Addr": {
            "type": "string",
            "allOf": [
              {
                "pattern": "^(::|0?([1-9a-f][0-9a-f]{0,3})):(0?|([1-9a-f][0-9a-f]{0,3})):{0,6}(:|0?|([1-9a-f][0-9a-f]{0,3}))$"
              },
              {
                "pattern": "^(::|0?([1-9a-f][0-9a-f]{0,3})):(0?|([1-9a-f][0-9a-f]{0,3})):{0,6}(:|0?|([1-9a-f][0-9a-f]{0,3}))$"
              }
            ]
          },
          "example": "2001:db8:85a3::8a2e:370:7334",
          "ipv6Prefix": {
            "type": "string",
            "allOf": [
              {
                "pattern": "^(::|0?([1-9a-f][0-9a-f]{0,3})):(0?|([1-9a-f][0-9a-f]{0,3})):{0,6}(:|0?|([1-9a-f][0-9a-f]{0,3}))(\.\/((0-9)|([0-9]{2})|(1[0-1][0-9])|(12[0-8])))$"
              },
              {
                "pattern": "^(::|0?([1-9a-f][0-9a-f]{0,3})):(0?|([1-9a-f][0-9a-f]{0,3})):{0,6}(:|0?|([1-9a-f][0-9a-f]{0,3}))(\.\/.+)$"
              }
            ]
          },
          "example": "2001:db8:abcd:12::0/64",
          "ipv4Addr": {
            "pattern": "^(([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4]

```

```

[0-9]|25[0-5])$",
                                "type": "string",
                                "example": "198.51.100.1"
                                }
                                }
                                }
                                }
                                }
                                }
                                }
                                }
                                }
                                }
                                },
                                "singleNssai": {
                                    "type": "object",
                                    "additionalProperties": false,
                                    "required": [
                                        "sst"
                                    ],
                                    "properties": {
                                        "sd": {
                                            "type": "string",
                                            "pattern": "^[A-Fa-f0-9]{6}$"
                                        },
                                        "sst": {
                                            "type": "integer",
                                            "minimum": 0,
                                            "maximum": 255
                                        }
                                    }
                                },
                                "odbPacketServices": {
                                    "nullable": true,
                                    "anyOf": [
                                        {
                                            "enum": [
                                                "ALL_PACKET_SERVICES",
                                                "ROAMER_ACCESS_VPLMN_AP",
                                                "ROAMER_ACCESS_HPLMN_AP"
                                            ],
                                            "type": "string"
                                        },
                                        {
                                            "type": "string"
                                        }
                                    ]
                                },
                                "internalGroupIds": {
                                    "type": "array",
                                    "minItems": 1,
                                    "items": {
                                        "type": "string",
                                        "pattern": "^[A-Fa-f0-9]{8}-[0-9]{3}-[0-9]{2,3}-([A-Fa-f0-9]
[A-Fa-f0-9]){1,10}$"
                                    }
                                },
                                "sharedDnnConfigurationsId": {

```

```

        "type": "string",
        "pattern": "^[0-9]{5,6}-.+ $"
    }
}

```

6.8.3 UDM Schema Management - PUT (provisioned/smf-selection-subscription-data)

provisioned/smf-selection-subscription-data

```

{
  "type": "object",
  "properties": {
    "custom": {
      "type": "string"
    },
    "supportedFeatures": {
      "type": "string",
      "pattern": "^[A-Za-f0-9]* $"
    },
    "sharedSnssaiInfosId": {
      "type": "string"
    },
    "subscribedSnssaiInfos": {
      "type": "object",
      "patternProperties": {
        "^(.*)$": {
          "type": "object",
          "required": [
            "dnnInfos"
          ],
          "properties": {
            "dnnInfos": {
              "type": "array",
              "items": {
                "type": "object",
                "required": [
                  "dnn"
                ],
                "properties": {
                  "dnn": {
                    "type": "string"
                  },
                  "iwkEpsInd": {
                    "type": "boolean"
                  },
                  "lboRoamingAllowed": {
                    "type": "boolean"
                  },
                  "defaultDnnIndicator": {
                    "type": "boolean"
                  }
                }
              }
            }
          }
        }
      }
    }
  },
}

```

```

        "additionalProperties": false
      },
      "minItems": 1
    }
  },
  "additionalProperties": false
}

```

6.8.4 UDM Schema Management - PUT(provisioned/sms-mng-data)

provisioned/sms-mng-data

```

{
  "type": "object",
  "properties": {
    "custom": {
      "type": "string"
    },
    "moSmsBarringAll": {
      "type": "boolean"
    },
    "moSmsSubscribed": {
      "type": "boolean"
    },
    "mtSmsBarringAll": {
      "type": "boolean"
    },
    "mtSmsSubscribed": {
      "type": "boolean"
    },
    "supportedFeatures": {
      "type": "string",
      "pattern": "^[A-Za-f0-9]*$"
    },
    "moSmsBarringRoaming": {
      "type": "boolean"
    },
    "mtSmsBarringRoaming": {
      "type": "boolean"
    },
    "sharedSmsMngDataIds": {
      "type": "array",
      "items": {
        "type": "string",
        "pattern": "^[0-9]{5,6}-.+$"
      },
      "minItems": 1
    }
  },
}

```

```

    "additionalProperties": false
  }

```

6.8.5 UDM Schema Management - PUT(provisioned/trace-data)

provisioned/trace-data

```

{
  "type": "object",
  "nullable": true,
  "required": [
    "traceRef",
    "traceDepth",
    "neTypeList",
    "eventList"
  ],
  "properties": {
    "custom": {
      "type": "string"
    },
    "traceRef": {
      "type": "string",
      "pattern": "^[0-9]{3}[0-9]{2,3}-[A-Fa-f0-9]{6}$"
    },
    "eventList": {
      "type": "string",
      "pattern": "^[A-Fa-f0-9]+$"
    },
    "neTypeList": {
      "type": "string",
      "pattern": "^[A-Fa-f0-9]+$"
    },
    "traceDepth": {
      "anyOf": [
        {
          "type": "string"
        },
        {
          "enum": [
            "MINIMUM",
            "MEDIUM",
            "MAXIMUM",
            "MINIMUM_WO_VENDOR_EXTENSION",
            "MEDIUM_WO_VENDOR_EXTENSION",
            "MAXIMUM_WO_VENDOR_EXTENSION"
          ]
        }
      ],
      "type": "string"
    }
  },
  "interfaceList": {
    "type": "string",
    "pattern": "^[A-Fa-f0-9]+$"
  }
}

```

```

    },
    "collectionEntityIpv4Addr": {
      "type": "string",
      "pattern": "^(([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])$"
    },
    "collectionEntityIpv6Addr": {
      "type": "string",
      "allof": [
        {
          "pattern": "^((:|0?|([1-9a-f][0-9a-f]{0,3}))):((0?|([1-9a-f][0-9a-f]{0,3}))):{0,6}(:|0?|([1-9a-f][0-9a-f]{0,3}))$"
        },
        {
          "pattern": "^(((([::]{7}([[::]]+))|(((([::]{1,4})*[[::]]+)?:::|([[::]]+)*[[::]]+))?)$"
        }
      ]
    },
    "additionalProperties": false
  }
}

```

6.8.6 UDM Schema Management - PUT(provisioned/sms-data)

provisioned/sms-data

```

{
  "type": "object",
  "properties": {
    "custom": {
      "type": "string"
    },
    "smsSubscribed": {
      "type": "boolean"
    },
    "sharedSmsSubsDataId": {
      "type": "string",
      "pattern": "^[0-9]{5,6}-+ $"
    }
  },
  "additionalProperties": false
}

```

6.9 Payload Reference for 4G Policy Data Operations

This section provides payload details for the following 4G Policy Data Operations.

6.9.1 POST - All Entity on 4G Policy Using VSA

```

{
  "subscriber": {
    "IMSI": ["302370123456789"],

```

```

    "ACCOUNTID": ["178322212122"],
    "MSISDN": ["15145551234", "15141234567"],
    "BillingDay": 6,
    "Entitlement": ["DayPass", "DayPassPlus"],
    "custom2": "abc",
    "custom3": "abc123"
  },
  "usage": {
    "quota": [{
      "totalVolume": "100",
      "Type": "quota",
      "name": "Weekend",
      "cid": "9223372036854775808",
      "nextResetTime": "2014-01-10T02:00:00Z",
      "QuotaState": "active"
    },
    {
      "totalVolume": "100",
      "Type": "quota",
      "name": "Evenings",
      "cid": "9223372036854775809",
      "nextResetTime": "2014-02-01T00:00:00Z",
      "QuotaState": "active"
    }
  ],
  "version": 3
},
"definition": {
  "SequenceNumber": 1,
  "version": 1,
  "DynamicQuota": [{
    "InstanceId": "15678",
    "Priority": "4",
    "InitialInputVolume": "15000",
    "InterimReportingInterval": "1000",
    "Duration": "100",
    "InitialOutputVolume": "5000",
    "Type": "pass",
    "activationdatetime": "2015-03-09T11:20:32",
    "expirationdatetime": "2015-04-09T11:20:32",
    "InitialTotalVolume": "20000",
    "name": "DynamicAggregateLimit",
    "InitialServiceSpecific": "9",
    "InitialTime": "135"
  }]
},
"state": {
  "property": [{
    "name": "mcc",
    "value": "123"
  }, {
    "name": "expire",
    "value": "201402-09T11:20:32"
  }],
  "version": 1
}

```



```

    }
  }
}

```

6.10 Payload Reference for NEF

This section provides payload details for NEF.

6.10.1 GET - Access and Mobility Data

```

{
  "ratType": "EUTRA",
  "location": {
    "nrLocation": {
      "tai": {
        "nid": "",
        "tac": "",
        "plmnId": {
          "mcc": "111",
          "mnc": "11"
        }
      },
      "ncgi": {
        "nid": "",
        "plmnId": {
          "mcc": "111",
          "mnc": "11"
        }
      },
      "nrCellId": ""
    },
    "globalGnbId": {
      "nid": "",
      "eNbId": "",
      "gNbId": {
        "gNBValue": "",
        "bitLength": 22
      }
    },
    "plmnId": {
      "mcc": "111",
      "mnc": "11"
    },
    "tngfId": "",
    "wagfId": "",
    "n3IwfId": "",
    "ngeNbId": ""
  },
  "eLocationTimestamp": "2013-09-29T18:46:19Z",
  "geodeticInformation": "",
  "geographicalInformation": "",
  "ageOfLocationInformation": 0
},
  "eutraLocation": {
    "tai": {
      "nid": "",
      "tac": "",

```

```

        "plmnId": {
            "mcc": "161",
            "mnc": "23"
        },
    },
    "ecgi": {
        "nid": "",
        "plmnId": {
            "mcc": "222",
            "mnc": "22"
        },
    },
    "eutraCellId": ""
},
"ignoreTai": false,
"ignoreEcgi": false,
"globalENbId": {
    "nid": "",
    "eNbId": "",
    "gNbId": {
        "gNBValue": "",
        "bitLength": 22
    },
    "plmnId": {
        "mcc": "111",
        "mnc": "11"
    },
    "tngfId": "",
    "wagfId": "",
    "n3IwfId": "",
    "ngeNbId": ""
},
"globalNgenbId": {
    "plmnId": {
        "mcc": "111",
        "mnc": "11"
    },
    "n3IwfId": "0"
},
"geodeticInformation": "12345678912345678989",
"ueLocationTimestamp": "2013-09-29T18:46:19Z",
"geographicalInformation": "1234567891234563",
"ageOfLocationInformation": 0
}
},
"suppFeat": "",
"timeZone": "",
"regStates": [
    {
        "rmState": "",
        "accessType": ""
    }
],
"accessType": "3GPP_ACCESS",
"connStates": [
    {
        "cmState": "",

```

```

        "accessType": ""
      }
    ],
    "locationTs": "2013-09-29T18:46:19Z",
    "ratTypesTs": "2013-09-29T18:46:19Z",
    "timeZoneTs": "2013-09-29T18:46:19Z",
    "currentPlmn": {
      "mcc": "111",
      "mnc": "12"
    },
    "regStatesTs": "2013-09-29T18:46:19Z",
    "connStatesTs": "2013-09-29T18:46:19Z",
    "n3gaLocation": {
      "gci": "",
      "gli": "asss",
      "tnapId": {
        "ssId": "",
        "bssId": "",
        "civicAddress": ""
      },
      "twapId": {
        "ssId": "",
        "bssId": "",
        "civicAddress": ""
      },
      "n3IwfId": "a",
      "n3gppTai": {
        "nid": "",
        "tac": "",
        "plmnId": {
          "mcc": "111",
          "mnc": "11"
        }
      }
    },
    "hfcNodeId": {
      "hfcNid": ""
    },
    "portNumber": 0,
    "ueIpv4Addr": "198.51.100.1",
    "ueIpv6Addr": "2001:db8:85a3::8a2e:370:7334",
    "w5gbanLineType": "DSL"
  },
  "currentPlmnTs": "2013-09-29T18:46:19Z",
  "roamingStatus": true,
  "roamingStatusTs": "2013-09-29T18:46:19Z",
  "smsOverNasStatus": "",
  "reachabilityStatus": "",
  "smsOverNasStatusTs": "2013-09-29T18:46:19Z",
  "reachabilityStatusTs": "2013-09-29T18:46:19Z"
}

```

6.10.2 PUT - Access and Mobility Data

```

{
  "ratType": "EUTRA",

```

```

"location": {
  "nrLocation": {
    "tai": {
      "nid": "",
      "tac": "",
      "plmnId": {
        "mcc": "111",
        "mnc": "11"
      }
    },
    "ncgi": {
      "nid": "",
      "plmnId": {
        "mcc": "111",
        "mnc": "11"
      },
      "nrCellId": ""
    },
    "globalGnbId": {
      "nid": "",
      "eNbId": "",
      "gNbId": {
        "gNBValue": "",
        "bitLength": 22
      },
      "plmnId": {
        "mcc": "111",
        "mnc": "11"
      },
      "tngfId": "",
      "wagfId": "",
      "n3IwfId": "",
      "ngeNbId": ""
    },
    "eLocationTimestamp": "2013-09-29T18:46:19Z",
    "geodeticInformation": "",
    "geographicalInformation": "",
    "ageOfLocationInformation": 0
  },
  "eutraLocation": {
    "tai": {
      "nid": "",
      "tac": "",
      "plmnId": {
        "mcc": "161",
        "mnc": "23"
      }
    },
    "ecgi": {
      "nid": "",
      "plmnId": {
        "mcc": "222",
        "mnc": "22"
      },
      "eutraCellId": ""
    }
  },

```

```

        "ignoreTai": false,
        "ignoreEcgi": false,
        "globalENbId": {
            "nid": "",
            "eNbId": "",
            "gNbId": {
                "gNBValue": "",
                "bitLength": 22
            },
            "plmnId": {
                "mcc": "111",
                "mnc": "11"
            },
            "tngfId": "",
            "wagfId": "",
            "n3IwfId": "",
            "ngeNbId": ""
        },
        "globalNgenbId": {
            "plmnId": {
                "mcc": "111",
                "mnc": "11"
            },
            "n3IwfId": "0"
        },
        "geodeticInformation": "12345678912345678989",
        "ueLocationTimestamp": "2013-09-29T18:46:19Z",
        "geographicalInformation": "1234567891234563",
        "ageOfLocationInformation": 0
    }
},
"suppFeat": "",
"timeZone": "",
"regStates": [
    {
        "rmState": "",
        "accessType": ""
    }
],
"accessType": "3GPP_ACCESS",
"connStates": [
    {
        "cmState": "",
        "accessType": ""
    }
],
"locationTs": "2013-09-29T18:46:19Z",
"ratTypesTs": "2013-09-29T18:46:19Z",
"timeZoneTs": "2013-09-29T18:46:19Z",
"currentPlmn": {
    "mcc": "111",
    "mnc": "12"
},
"regStatesTs": "2013-09-29T18:46:19Z",
"connStatesTs": "2013-09-29T18:46:19Z",
"n3gaLocation": {

```

```

    "gci": "",
    "gli": "asss",
    "tnapId": {
      "ssId": "",
      "bssId": "",
      "civicAddress": ""
    },
    "twapId": {
      "ssId": "",
      "bssId": "",
      "civicAddress": ""
    },
    "n3IwfId": "a",
    "n3gppTai": {
      "nid": "",
      "tac": "",
      "plmnId": {
        "mcc": "111",
        "mnc": "11"
      }
    },
    "hfcNodeId": {
      "hfcNId": ""
    },
    "portNumber": 0,
    "ueIpv4Addr": "198.51.100.1",
    "ueIpv6Addr": "2001:db8:85a3::8a2e:370:7334",
    "w5gbanLineType": "DSL"
  },
  "currentPlmnTs": "2013-09-29T18:46:19Z",
  "roamingStatus": true,
  "roamingStatusTs": "2013-09-29T18:46:19Z",
  "smsOverNasStatus": "",
  "reachabilityStatus": "",
  "smsOverNasStatusTs": "2013-09-29T18:46:19Z",
  "reachabilityStatusTs": "2013-09-29T18:46:19Z"
}

```

6.10.3 GET - PDUSessionManagementData

```

{
  "dnn": "Label3",
  "dnai": "",
  "dnaiTs": "",
  "ipAddrTs": "2013-09-29T18:46:19Z",
  "ipv4Addr": "198.51.100.1",
  "suppFeat": "",
  "ipv6Addrs": "2001:db8:85a3::8a2e:370:7334",
  "ipv6Prefix": "2001:db8:abcd:12::0/64",
  "pduSessType": "IPv4",
  "pduSessionId": 0,
  "pduSessionStatus": "ACTIVE",
  "pduSessionStatusTs": "2013-09-29T18:46:19Z",
  "n6TrafficRoutingInfo": [
    {

```

```

        "dnai": "sss",
        "routeInfo": {
            "ipv4Addr": "",
            "ipv6Addr": "",
            "portNumber": 0
        },
        "routeProfId": ""
    },
    ],
    "n6TrafficRoutingInfoTs": "2013-09-29T18:46:19Z"
}

```

6.10.4 PUT - PDU Session Management Data

```

{
    "dnn": "Label3",
    "dnai": "",
    "dnaiTs": "",
    "ipAddrTs": "2013-09-29T18:46:19Z",
    "ipv4Addr": "198.51.100.1",
    "suppFeat": "",
    "ipv6Addrs": "2001:db8:85a3::8a2e:370:7334",
    "ipv6Prefix": "2001:db8:abcd:12::0/64",
    "pduSessType": "IPv4",
    "pduSessionId": 0,
    "pduSessionStatus": "ACTIVE",
    "pduSessionStatusTs": "2013-09-29T18:46:19Z",
    "n6TrafficRoutingInfo": [
        {
            "dnai": "sss",
            "routeInfo": {
                "ipv4Addr": "",
                "ipv6Addr": "",
                "portNumber": 0
            },
            "routeProfId": ""
        }
    ],
    "n6TrafficRoutingInfoTs": "2013-09-29T18:46:19Z"
}

```

6.10.5 POST - ExposureDataSubscription

```

{
    "notificationUri" : "http://http2-server-service-python36-
migration-17.default.svc.cluster.local:8080/notifications",
    "monitoredResourceUris" : [
        "http://localhost:8081/nudr-dr/v2/subscription-data/
extid-868690909214@ext/context-data/amf-3gpp-access"
    ],
    "expiry" : "2050-12-19T10:25:14.090Z",
    "supportedFeatures" : "f"
}

```

6.10.6 PUT - ExposureDataSubscription

```
{
  "notificationUri" : "http://http2-server-service-python36-
migration-17.default.svc.cluster.local:8080/notifications",
  "monitoredResourceUris" : [
    "http://localhost:8081/nudr-dr/v2/subscription-data/
extid-868690909214@ext/context-data/amf-3gpp-access"
  ],
  "expiry" : "2050-12-19T10:25:14.090Z",
  "supportedFeatures" : "fa"
}
```

6.11 Payload Reference for EIR

This section provides payload details for EIR.

6.11.1 GET-equipment-status

Sample Request: `http://10.75.229.117:31040/n5g-eir-eic/v1/equipment-status?pei=imei-1111111111&supi=imsi-1111111112&gpsi=msisdn-1111111121`
 or `http://10.75.229.117:31040/n5g-eir-eic/v1/equipment-status?pei=imei-1111111111&supi=imsi-1111111112&gpsi=msisdn-1111111121`

```
{
  "status": "WHITELISTED"
}
```

6.12 Payload Reference for SLF

This section provides payload details for SLF.

6.12.1 GET-Subscriber ID

```
{ "nfGroupIDs": { "UDM": "udm-group-name" } }
```

```
{ "nfGroupIDs": { "AUSF": "ausf-group-name", "NEF": "nef-group-name", "UDM":
"udm-group-name", "CHF": "CHFGROUP1" } }
```


A

Open API Spec for nudr-mgm

See the following OpenAPIMGM.yml file for configuration details on open API specification for nudr-mgm:

```
openapi: 3.0.0
info:
  version: 23.4.0.0.0
  title: Unified Data Repository Service API file for Mgm Interface
tags:
  - name: Management URI
    description: The API version is defined as per management requirement of
UDR
paths:
  /nudr-dr-mgm/v1/policy-data/schema/am-data:
    put:
      tags:
        - Management URI
      summary: Input a new schema and set that schema as the current schema
      which should be used
      operationId: putSchemaForAmdata
      requestBody:
        content:
          application/json:
            schema:
              type: object
            description: Adding new field "custom" for am-data schema.
            required: true
      responses:
        "201":
          description: CREATED
        "400":
          description: Bad Request
          content:
            "application/json":
              schema:
                $ref: "#/components/schemas/ProblemDetails"
        "404":
          description: Not Found
          content:
            "application/json":
              schema:
                $ref: "#/components/schemas/ProblemDetails"
        "500":
          description: Internal Server Error
          content:
            "**/*":
              schema:
                $ref: "#/components/schemas/ProblemDetails"
        "405":
```

```

        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
        deprecated: false

get:
  parameters:
    - in: query
      name: version
      schema:
        type: string
  tags:
    - Management URI
  summary: Retrieves the schema based on parameters specified for
version. If , "all" is specified as string , then all the versions of schema
will be fetched. If version like "v1" is specified , then v1 version of
schema will be fetched. If nothing is specified , then current version of
schema will be retrieved.
  operationId: getSchemaForAllVersions
  responses:
    "200":
      description: OK
      content:
        application/json:
          schema:
            type: object
    "400":
      description: Bad Request
      content:
        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "404":
      description: Not Found
      content:
        application/json:
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "500":
      description: Internal Server Error
      content:
        "*/*":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
        deprecated: false

/nudr-dr-mgm/v1/policy-data/schema/am-data/version/{versionNumber}:
put:
  parameters:
    - in: path
      name: versionNumber
      schema:
        type: string
      required: true

```

```

tags:
  - Management URI
summary: Rollback to other schema version which already exist in db
operationId: rollBackSchemaForAmdata
responses:
  "201":
    description: CREATED
  "400":
    description: Bad Request
    content:
      "application/json":
        schema:
          $ref: "#/components/schemas/ProblemDetails"
  "404":
    description: Not Found
    content:
      "application/json":
        schema:
          $ref: "#/components/schemas/ProblemDetails"
  "500":
    description: Internal Server Error
    content:
      "*/*":
        schema:
          $ref: "#/components/schemas/ProblemDetails"
  "405":
    description: Operation not allowed
    content:
      "*/*":
        schema:
          $ref: "#/components/schemas/ProblemDetails"
deprecated: false

delete:
  parameters:
    - in: path
      name: versionNumber
      schema:
        type: string
      required: true
  tags:
    - Management URI
  summary: To delete any stored schema other than the schema which is
currently in use.
operationId: deleteSchemaForAmdata
responses:
  "204":
    description: NO CONTENT
  "400":
    description: Bad Request
    content:
      "application/json":
        schema:
          $ref: "#/components/schemas/ProblemDetails"
  "404":
    description: Not Found

```

```

        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

/nudr-dr-mgm/v1/policy-data/schema/sm-data:
  put:
    tags:
      - Management URI
    summary: Input a new schema and set that schema as the current schema
    which should be used
    operationId: putSchemaForSmdata
    requestBody:
      content:
        application/json:
          schema:
            type: object
          description: Adding new field "custom" for sm-data schema.
          required: true
    responses:
      "201":
        description: CREATED
      "400":
        description: Bad Request
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:

```

```

        "**/*":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
      deprecated: false

    get:
      parameters:
        - in: query
          name: version
          schema:
            type: string
      tags:
        - Management URI
      summary: Retrieves the schema based on parameters specified for
      version. If , "all" is specified as string , then all the versions of schema
      will be fetched. If version like "v1" is specified , then v1 version of
      schema will be fetched. If nothing is specified , then current version of
      schema will be retrieved.
      operationId: getSchemaForAllVersionsSmData
      responses:
        "200":
          description: OK
          content:
            application/json:
              schema:
                type: object
        "400":
          description: Bad Request
          content:
            "application/json":
              schema:
                $ref: "#/components/schemas/ProblemDetails"
        "404":
          description: Not Found
          content:
            application/json:
              schema:
                $ref: "#/components/schemas/ProblemDetails"
        "500":
          description: Internal Server Error
          content:
            "**/*":
              schema:
                $ref: "#/components/schemas/ProblemDetails"
      deprecated: false

  /nudr-dr-mgm/v1/policy-data/schema/sm-data/version/{versionNumber}:
    put:
      parameters:
        - in: path
          name: versionNumber
          schema:
            type: string
          required: true
      tags:
        - Management URI

```

```

summary: Rollback to other schema version which already exist in db
operationId: rollBackSchemaForSmdata
responses:
  "201":
    description: CREATED
  "400":
    description: Bad Request
    content:
      "application/json":
        schema:
          $ref: "#/components/schemas/ProblemDetails"
  "404":
    description: Not Found
    content:
      "application/json":
        schema:
          $ref: "#/components/schemas/ProblemDetails"
  "500":
    description: Internal Server Error
    content:
      "*/*":
        schema:
          $ref: "#/components/schemas/ProblemDetails"
  "405":
    description: Operation not allowed
    content:
      "*/*":
        schema:
          $ref: "#/components/schemas/ProblemDetails"
deprecated: false

delete:
  parameters:
    - in: path
      name: versionNumber
      schema:
        type: string
      required: true
  tags:
    - Management URI
  summary: To delete any stored schema other than the schema which is
currently in use.
operationId: deleteSchemaForSmdata
responses:
  "204":
    description: NO CONTENT
  "400":
    description: Bad Request
    content:
      "application/json":
        schema:
          $ref: "#/components/schemas/ProblemDetails"
  "404":
    description: Not Found
    content:
      "application/json":

```

```

        schema:
          $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

/nudr-dr-mgm/v1/policy-data/schema/ue-policy-set:
  put:
    tags:
      - Management URI
    summary: Input a new schema and set that schema as the current schema
    which should be used
    operationId: putSchemaForUePolicySet
    requestBody:
      content:
        application/json:
          schema:
            type: object
            description: Adding new field "custom" for ue-policy-set schema.
            required: true
    responses:
      "201":
        description: CREATED
      "400":
        description: Bad Request
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:

```

```

        $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

    get:
      parameters:
        - in: query
          name: version
          schema:
            type: string
      tags:
        - Management URI
      summary: Retrieves the schema based on parameters specified for
        version. If , "all" is specified as string , then all the versions of schema
        will be fetched. If version like "v1" is specified , then v1 version of
        schema will be fetched. If nothing is specified , then current version of
        schema will be retrieved.
      operationId: getSchemaForAllVersionsUePolicySet
      responses:
        "200":
          description: OK
          content:
            application/json:
              schema:
                type: object
        "400":
          description: Bad Request
          content:
            "application/json":
              schema:
                $ref: "#/components/schemas/ProblemDetails"
        "404":
          description: Not Found
          content:
            application/json:
              schema:
                $ref: "#/components/schemas/ProblemDetails"
        "500":
          description: Internal Server Error
          content:
            "*/*":
              schema:
                $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

/nudr-dr-mgm/v1/policy-data/schema/ue-policy-set/version/{versionNumber}:
  put:
    parameters:
      - in: path
        name: versionNumber
        schema:
          type: string
        required: true
    tags:
      - Management URI
    summary: Rollback to other schema version which already exist in db
    operationId: rollBackSchemaForUePolicySet

```



```

responses:
  "201":
    description: CREATED
  "400":
    description: Bad Request
    content:
      "application/json":
        schema:
          $ref: "#/components/schemas/ProblemDetails"
  "404":
    description: Not Found
    content:
      "application/json":
        schema:
          $ref: "#/components/schemas/ProblemDetails"
  "500":
    description: Internal Server Error
    content:
      "*/*":
        schema:
          $ref: "#/components/schemas/ProblemDetails"
  "405":
    description: Operation not allowed
    content:
      "*/*":
        schema:
          $ref: "#/components/schemas/ProblemDetails"
deprecated: false

delete:
  parameters:
    - in: path
      name: versionNumber
      schema:
        type: string
      required: true
  tags:
    - Management URI
  summary: To delete any stored schema other than the schema which is
currently in use.
  operationId: deleteSchemaForUePolicySet
  responses:
    "204":
      description: NO CONTENT
    "400":
      description: Bad Request
      content:
        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "404":
      description: Not Found
      content:
        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"

```

```

        "500":
          description: Internal Server Error
          content:
            "*/*":
              schema:
                $ref: "#/components/schemas/ProblemDetails"
        "405":
          description: Operation not allowed
          content:
            "*/*":
              schema:
                $ref: "#/components/schemas/ProblemDetails"
      deprecated: false

/nudr-dr-mgm/v1/profile-data/schema:
  put:
    tags:
      - Management URI
    summary: Input a new schema and set that schema as the current schema
    which should be used
    operationId: putSchemaForProfileData
    requestBody:
      content:
        application/json:
          schema:
            type: object
          description: Adding new field "custom" for profile-data schema.
          required: true
    responses:
      "201":
        description: CREATED
      "400":
        description: Bad Request
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

```

```

get:
  parameters:
    - in: query
      name: version
      schema:
        type: string
  tags:
    - Management URI
  summary: Retrieves the schema based on parameters specified for
version. If , "all" is specified as string , then all the versions of schema
will be fetched. If version like "v1" is specified , then v1 version of
schema will be fetched. If nothing is specified , then current version of
schema will be retrieved.
  operationId: getSchemaForAllVersionsProfileData
  responses:
    "200":
      description: OK
      content:
        application/json:
          schema:
            type: object
    "400":
      description: Bad Request
      content:
        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "404":
      description: Not Found
      content:
        application/json:
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "500":
      description: Internal Server Error
      content:
        "*/*":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
  deprecated: false

/nudr-dr-mgm/v1/profile-data/schema/version/{versionNumber}:
put:
  parameters:
    - in: path
      name: versionNumber
      schema:
        type: string
      required: true
  tags:
    - Management URI
  summary: Rollback to other schema version which already exist in db
  operationId: rollBackSchemaForProfileData
  responses:
    "201":

```

```

        description: CREATED
      "400":
        description: Bad Request
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

  delete:
    parameters:
      - in: path
        name: versionNumber
        schema:
          type: string
        required: true
    tags:
      - Management URI
    summary: To delete any stored schema other than the schema which is
    currently in use.
    operationId: deleteSchemaForProfileData
    responses:
      "204":
        description: NO CONTENT
      "400":
        description: Bad Request
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error

```

```

        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

/nudr-dr-mgm/v1/policy-data/schema/sm-data/vsa:
  put:
    tags:
      - Management URI
    summary: Input a new schema and set that schema as the current schema
    which should be used
    operationId: putSchemaForSMDDataVSA
    requestBody:
      content:
        application/json:
          schema:
            type: object
          description: Adding new field "custom" for sm-data vsa schema.
          required: true
    responses:
      "201":
        description: CREATED
      "400":
        description: Bad Request
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

  get:

```

```

parameters:
  - in: query
    name: version
    schema:
      type: string
tags:
  - Management URI
summary: Retrieves the schema based on parameters specified for
version. If , "all" is specified as string , then all the versions of schema
will be fetched. If version like "v1" is specified , then v1 version of
schema will be fetched. If nothing is specified , then current version of
schema will be retrieved.
operationId: getSchemaForAllVersionSmDataVSA
responses:
  "200":
    description: OK
    content:
      application/json:
        schema:
          type: object
  "400":
    description: Bad Request
    content:
      "application/json":
        schema:
          $ref: "#/components/schemas/ProblemDetails"
  "404":
    description: Not Found
    content:
      application/json:
        schema:
          $ref: "#/components/schemas/ProblemDetails"
  "500":
    description: Internal Server Error
    content:
      "*/*":
        schema:
          $ref: "#/components/schemas/ProblemDetails"
deprecated: false

/nudr-dr-mgm/v1/policy-data/schema/sm-data/vsa/version/{versionNumber}:
put:
  parameters:
    - in: path
      name: versionNumber
      schema:
        type: string
      required: true
  tags:
    - Management URI
  summary: Rollback to other schema version which already exist in db
  operationId: rollBackSchemaForSmdataVsa
  responses:
    "201":
      description: CREATED
    "400":

```

```

        description: Bad Request
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

delete:
  parameters:
    - in: path
      name: versionNumber
      schema:
        type: string
      required: true
  tags:
    - Management URI
  summary: To delete any stored schema other than the schema which is
currently in use.
  operationId: deleteSchemaForSmDataVsa
  responses:
    "204":
      description: NO CONTENT
    "400":
      description: Bad Request
      content:
        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "404":
      description: Not Found
      content:
        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "500":
      description: Internal Server Error
      content:
        "*/*":

```

```

        schema:
          $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

/nudr-dr-mgm/v1/slf-group/schema/slf-group-prov:
  put:
    tags:
      - Management URI
    summary: Input a new schema and set that schema as the current schema
    which should be used
    operationId: putSchemaForSLFGroup
    requestBody:
      content:
        application/json:
          schema:
            type: object
            description: Adding new field "custom" for SLF-Group schema.
            required: true
    responses:
      "201":
        description: CREATED
      "400":
        description: Bad Request
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

  get:
    parameters:
      - in: query

```



```

        name: version
        schema:
          type: string
      tags:
        - Management URI
      summary: Retrieves the schema based on parameters specified for
version. If , "all" is specified as string , then all the versions of schema
will be fetched. If version like "v1" is specified , then v1 version of
schema will be fetched. If nothing is specified , then current version of
schema will be retrieved.
      operationId: getSchemaForAllVersionSLFGroup
      responses:
        "200":
          description: OK
          content:
            application/json:
              schema:
                type: object
        "400":
          description: Bad Request
          content:
            "application/json":
              schema:
                $ref: "#/components/schemas/ProblemDetails"
        "404":
          description: Not Found
          content:
            application/json:
              schema:
                $ref: "#/components/schemas/ProblemDetails"
        "500":
          description: Internal Server Error
          content:
            "*/*":
              schema:
                $ref: "#/components/schemas/ProblemDetails"
      deprecated: false

/nudr-dr-mgm/v1/slf-group/schema/slf-group-prov/version/{versionNumber}:
  put:
    parameters:
      - in: path
        name: versionNumber
        schema:
          type: string
        required: true
    tags:
      - Management URI
    summary: Rollback to other schema version which already exist in db
    operationId: rollBackSchemaForSLFGroup
    responses:
      "201":
        description: CREATED
      "400":
        description: Bad Request
        content:

```

```

        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

delete:
  parameters:
    - in: path
      name: versionNumber
      schema:
        type: string
      required: true
  tags:
    - Management URI
  summary: To delete any stored schema other than the schema which is
currently in use.
  operationId: deleteSchemaForSLFGroup
  responses:
    "204":
      description: NO CONTENT
    "400":
      description: Bad Request
      content:
        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "404":
      description: Not Found
      content:
        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "500":
      description: Internal Server Error
      content:
        "*/*":
          schema:
            $ref: "#/components/schemas/ProblemDetails"

```

```

        "405":
          description: Operation not allowed
          content:
            "**/*":
              schema:
                $ref: "#/components/schemas/ProblemDetails"
        deprecated: false

/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/am-data:
  put:
    tags:
      - Management URI
    summary: Input a new schema and set that schema as the current schema
    which should be used
    operationId: putSchemaForProvisionedAm-Data
    requestBody:
      content:
        application/json:
          schema:
            type: object
            description: Adding new field "custom" for UDM provisioned-data/am-
data schema.
            required: true
    responses:
      "201":
        description: CREATED
      "400":
        description: Bad Request
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "**/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "**/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

  get:
    parameters:
      - in: query
        name: version

```

```

        schema:
          type: string
      tags:
        - Management URI
      summary: Retrieves the schema based on parameters specified for
        version. If , "all" is specified as string , then all the versions of schema
        will be fetched. If version like "v1" is specified , then v1 version of
        schema will be fetched. If nothing is specified , then current version of
        schema will be retrieved.
      operationId: getSchemaForAllVersionProvisionedAmData
      responses:
        "200":
          description: OK
          content:
            application/json:
              schema:
                type: object
        "400":
          description: Bad Request
          content:
            "application/json":
              schema:
                $ref: "#/components/schemas/ProblemDetails"
        "404":
          description: Not Found
          content:
            application/json:
              schema:
                $ref: "#/components/schemas/ProblemDetails"
        "500":
          description: Internal Server Error
          content:
            "**/*":
              schema:
                $ref: "#/components/schemas/ProblemDetails"
      deprecated: false

/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/am-data/version/
{versionNumber}:
  put:
    parameters:
      - in: path
        name: versionNumber
        schema:
          type: string
        required: true
    tags:
      - Management URI
    summary: Rollback to other schema version which already exist in db
    operationId: rollBackSchemaForProvisionedAmData
    responses:
      "201":
        description: CREATED
      "400":
        description: Bad Request
        content:

```

```

        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

delete:
  parameters:
    - in: path
      name: versionNumber
      schema:
        type: string
      required: true
  tags:
    - Management URI
  summary: To delete any stored schema other than the schema which is
currently in use.
  operationId: deleteSchemaForProvisionedAmdata
  responses:
    "204":
      description: NO CONTENT
    "400":
      description: Bad Request
      content:
        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "404":
      description: Not Found
      content:
        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "500":
      description: Internal Server Error
      content:
        "*/*":
          schema:
            $ref: "#/components/schemas/ProblemDetails"

```

```

        "405":
          description: Operation not allowed
          content:
            "*/*":
              schema:
                $ref: "#/components/schemas/ProblemDetails"
      deprecated: false

/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/sm-data:
  put:
    tags:
      - Management URI
    summary: Input a new schema and set that schema as the current schema
    which should be used
    operationId: putSchemaForProvisionedSmData
    requestBody:
      content:
        application/json:
          schema:
            type: object
            description: Adding new field "custom" for UDM provisioned-data/sm-
data schema.
            required: true
    responses:
      "201":
        description: CREATED
      "400":
        description: Bad Request
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

  get:
    parameters:
      - in: query
        name: version

```

```

        schema:
          type: string
      tags:
        - Management URI
      summary: Retrieves the schema based on parameters specified for
        version. If , "all" is specified as string , then all the versions of schema
        will be fetched. If version like "v1" is specified , then v1 version of
        schema will be fetched. If nothing is specified , then current version of
        schema will be retrieved.
      operationId: getSchemaForAllVersionProvisionedSmData
      responses:
        "200":
          description: OK
          content:
            application/json:
              schema:
                type: object
        "400":
          description: Bad Request
          content:
            "application/json":
              schema:
                $ref: "#/components/schemas/ProblemDetails"
        "404":
          description: Not Found
          content:
            application/json:
              schema:
                $ref: "#/components/schemas/ProblemDetails"
        "500":
          description: Internal Server Error
          content:
            "**/*":
              schema:
                $ref: "#/components/schemas/ProblemDetails"
      deprecated: false

/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/sm-data/version/
{versionNumber}:
  put:
    parameters:
      - in: path
        name: versionNumber
        schema:
          type: string
        required: true
    tags:
      - Management URI
    summary: Rollback to other schema version which already exist in db
    operationId: rollBackSchemaForProvisionedSmData
    responses:
      "201":
        description: CREATED
      "400":
        description: Bad Request
        content:

```

```

        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

delete:
  parameters:
    - in: path
      name: versionNumber
      schema:
        type: string
      required: true
  tags:
    - Management URI
  summary: To delete any stored schema other than the schema which is
currently in use.
  operationId: deleteSchemaForProvisionedSmdata
  responses:
    "204":
      description: NO CONTENT
    "400":
      description: Bad Request
      content:
        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "404":
      description: Not Found
      content:
        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "500":
      description: Internal Server Error
      content:
        "*/*":
          schema:
            $ref: "#/components/schemas/ProblemDetails"

```



```

        "405":
          description: Operation not allowed
          content:
            "*/*":
              schema:
                $ref: "#/components/schemas/ProblemDetails"
          deprecated: false

    /nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/smf-selection-
subscription-data:
  put:
    tags:
      - Management URI
    summary: Input a new schema and set that schema as the current schema
    which should be used
    operationId: putSchemaForProvisionedSmfSelectionSubscriptionData
    requestBody:
      content:
        application/json:
          schema:
            type: object
            description: Adding new field "custom" for UDM provisioned-data/smf-
selection-subscription-data.
            required: true
    responses:
      "201":
        description: CREATED
      "400":
        description: Bad Request
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
          deprecated: false

  get:
    parameters:
      - in: query

```

```

        name: version
        schema:
          type: string
      tags:
        - Management URI
      summary: Retrieves the schema based on parameters specified for
        version. If , "all" is specified as string , then all the versions of schema
        will be fetched. If version like "v1" is specified , then v1 version of
        schema will be fetched. If nothing is specified , then current version of
        schema will be retrieved.
      operationId:
        getSchemaForAllVersionProvisionedSmfSelectionSubscriptionData
      responses:
        "200":
          description: OK
          content:
            application/json:
              schema:
                type: object
        "400":
          description: Bad Request
          content:
            "application/json":
              schema:
                $ref: "#/components/schemas/ProblemDetails"
        "404":
          description: Not Found
          content:
            application/json:
              schema:
                $ref: "#/components/schemas/ProblemDetails"
        "500":
          description: Internal Server Error
          content:
            "*/*":
              schema:
                $ref: "#/components/schemas/ProblemDetails"
      deprecated: false

    /nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/smf-selection-
    subscription-data/version/{versionNumber}:
      put:
        parameters:
          - in: path
            name: versionNumber
            schema:
              type: string
            required: true
        tags:
          - Management URI
        summary: Rollback to other schema version which already exist in db
        operationId: rollBackSchemaForProvisionedSmfSelectionSubscriptionData
        responses:
          "201":
            description: CREATED
          "400":

```

```

        description: Bad Request
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

delete:
  parameters:
    - in: path
      name: versionNumber
      schema:
        type: string
      required: true
  tags:
    - Management URI
  summary: To delete any stored schema other than the schema which is
  currently in use.
  operationId: deleteSchemaForProvisionedSmfSelectionSubscriptionData
  responses:
    "204":
      description: NO CONTENT
    "400":
      description: Bad Request
      content:
        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "404":
      description: Not Found
      content:
        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "500":
      description: Internal Server Error
      content:
        "*/*":

```

```

        schema:
          $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/sms-mng-data:
  put:
    tags:
      - Management URI
    summary: Input a new schema and set that schema as the current schema
    which should be used
    operationId: putSchemaForProvisionedSmfMngData
    requestBody:
      content:
        application/json:
          schema:
            type: object
            description: Adding new field "custom" for UDM provisioned-data/sms-
mng-data.
            required: true
    responses:
      "201":
        description: CREATED
      "400":
        description: Bad Request
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

  get:
    parameters:

```

```

- in: query
  name: version
  schema:
    type: string
tags:
- Management URI
summary: Retrieves the schema based on parameters specified for
version. If , "all" is specified as string , then all the versions of schema
will be fetched. If version like "v1" is specified , then v1 version of
schema will be fetched. If nothing is specified , then current version of
schema will be retrieved.
operationId: getSchemaForAllVersionProvisionedSmfMngData
responses:
  "200":
    description: OK
    content:
      application/json:
        schema:
          type: object
  "400":
    description: Bad Request
    content:
      "application/json":
        schema:
          $ref: "#/components/schemas/ProblemDetails"
  "404":
    description: Not Found
    content:
      application/json:
        schema:
          $ref: "#/components/schemas/ProblemDetails"
  "500":
    description: Internal Server Error
    content:
      "*/*":
        schema:
          $ref: "#/components/schemas/ProblemDetails"
deprecated: false

/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/sms-mng-data/
version/{versionNumber}:
  put:
    parameters:
      - in: path
        name: versionNumber
        schema:
          type: string
        required: true
    tags:
      - Management URI
    summary: Rollback to other schema version which already exist in db
    operationId: rollBackSchemaForProvisionedSmfMngData
    responses:
      "201":
        description: CREATED
      "400":

```

```

        description: Bad Request
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    "404":
      description: Not Found
      content:
        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "500":
      description: Internal Server Error
      content:
        "*/*":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "405":
      description: Operation not allowed
      content:
        "*/*":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
  deprecated: false

delete:
  parameters:
    - in: path
      name: versionNumber
      schema:
        type: string
      required: true
  tags:
    - Management URI
  summary: To delete any stored schema other than the schema which is
  currently in use.
  operationId: deleteSchemaForProvisionedSmfMngData
  responses:
    "204":
      description: NO CONTENT
    "400":
      description: Bad Request
      content:
        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "404":
      description: Not Found
      content:
        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "500":
      description: Internal Server Error
      content:
        "*/*":

```

```

        schema:
          $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/trace-data:
  put:
    tags:
      - Management URI
    summary: Input a new schema and set that schema as the current schema
    which should be used
    operationId: putSchemaForProvisionedTraceData
    requestBody:
      content:
        application/json:
          schema:
            type: object
            description: Adding new field "custom" for UDM provisioned-data/trace-
data.
            required: true
    responses:
      "201":
        description: CREATED
      "400":
        description: Bad Request
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

  get:
    parameters:

```

```

- in: query
  name: version
  schema:
    type: string
tags:
- Management URI
summary: Retrieves the schema based on parameters specified for
version. If , "all" is specified as string , then all the versions of schema
will be fetched. If version like "v1" is specified , then v1 version of
schema will be fetched. If nothing is specified , then current version of
schema will be retrieved.
operationId: getSchemaForAllVersionProvisionedTraceData
responses:
  "200":
    description: OK
    content:
      application/json:
        schema:
          type: object
  "400":
    description: Bad Request
    content:
      "application/json":
        schema:
          $ref: "#/components/schemas/ProblemDetails"
  "404":
    description: Not Found
    content:
      application/json:
        schema:
          $ref: "#/components/schemas/ProblemDetails"
  "500":
    description: Internal Server Error
    content:
      "*/*":
        schema:
          $ref: "#/components/schemas/ProblemDetails"
deprecated: false

/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/trace-data/
version/{versionNumber}:
  put:
    parameters:
      - in: path
        name: versionNumber
        schema:
          type: string
        required: true
    tags:
      - Management URI
    summary: Rollback to other schema version which already exist in db
    operationId: rollBackSchemaForProvisionedTraceData
    responses:
      "201":
        description: CREATED
      "400":

```



```

        description: Bad Request
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

delete:
  parameters:
    - in: path
      name: versionNumber
      schema:
        type: string
      required: true
  tags:
    - Management URI
  summary: To delete any stored schema other than the schema which is
currently in use.
  operationId: deleteSchemaForProvisionedTraceData
  responses:
    "204":
      description: NO CONTENT
    "400":
      description: Bad Request
      content:
        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "404":
      description: Not Found
      content:
        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "500":
      description: Internal Server Error
      content:
        "*/*":

```

```

        schema:
          $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/sms-data:
  put:
    tags:
      - Management URI
    summary: Input a new schema and set that schema as the current schema
    which should be used
    operationId: putSchemaForProvisionedSmSData
    requestBody:
      content:
        application/json:
          schema:
            type: object
            description: Adding new field "custom" for UDM provisioned-data/sms-
data.
            required: true
    responses:
      "201":
        description: CREATED
      "400":
        description: Bad Request
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

  get:
    parameters:

```

```

    - in: query
      name: version
      schema:
        type: string
    tags:
      - Management URI
    summary: Retrieves the schema based on parameters specified for
    version. If , "all" is specified as string , then all the versions of schema
    will be fetched. If version like "v1" is specified , then v1 version of
    schema will be fetched. If nothing is specified , then current version of
    schema will be retrieved.
    operationId: getSchemaForAllVersionProvisionedSmSData
    responses:
      "200":
        description: OK
        content:
          application/json:
            schema:
              type: object
      "400":
        description: Bad Request
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          application/json:
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false
  /nudr-dr-mgm/v1/equipment-status/schema/n5g-eir-prov:
    put:
      tags:
        - Management URI
      summary: Change EIR schema
      operationId: putApiEir
      requestBody:
        content:
          application/json:
            schema:
              type: object
      responses:
        "201":
          description: CREATED
        "400":
          description: Bad Request
          content:
            "application/json":

```

```

        schema:
          $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false
  get:
    parameters:
      - in: query
        name: versionNumber
        schema:
          type: string
        required: true
    tags:
      - Management URI
    summary: Retrieves the schema based on parameters specified for
    version. If , "all" is specified as string , then all the versions of schema
    will be fetched. If version like "v1" is specified , then v1 version of
    schema will be fetched. If nothing is specified , then current version of
    schema will be retrieved.
    operationId: getApiEir
    responses:
      "200":
        description: OK
      "400":
        description: Bad Request
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:

```

```

        $ref: "#/components/schemas/ProblemDetails"
    "405":
        description: Operation not allowed
        content:
            "*/*":
                schema:
                    $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

/nudr-dr-mgm/v1/equipment-status/schema/n5g-eir-prov/version/
{versionNumber}:
    delete:
        parameters:
            - in: path
              name: versionNumber
              schema:
                  type: string
                  required: true
        tags:
            - Management URI
        summary: To delete any stored schema other than the schema which is
        currently in use.
        operationId: deleteSchemaForEIR
        responses:
            "204":
                description: NO CONTENT
            "400":
                description: Bad Request
                content:
                    "application/json":
                        schema:
                            $ref: "#/components/schemas/ProblemDetails"
            "404":
                description: Not Found
                content:
                    "application/json":
                        schema:
                            $ref: "#/components/schemas/ProblemDetails"
            "500":
                description: Internal Server Error
                content:
                    "*/*":
                        schema:
                            $ref: "#/components/schemas/ProblemDetails"
            "405":
                description: Operation not allowed
                content:
                    "*/*":
                        schema:
                            $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

/nudr-dr-mgm/v1/subscription-data/schema/provisioned-data/sms-data/version/
{versionNumber}:
    put:

```

```

parameters:
  - in: path
    name: versionNumber
    schema:
      type: string
    required: true
tags:
  - Management URI
summary: Rollback to other schema version which already exist in db
operationId: rollBackSchemaForProvisionedSmSData
responses:
  "201":
    description: CREATED
  "400":
    description: Bad Request
    content:
      "application/json":
        schema:
          $ref: "#/components/schemas/ProblemDetails"
  "404":
    description: Not Found
    content:
      "application/json":
        schema:
          $ref: "#/components/schemas/ProblemDetails"
  "500":
    description: Internal Server Error
    content:
      "*/*":
        schema:
          $ref: "#/components/schemas/ProblemDetails"
  "405":
    description: Operation not allowed
    content:
      "*/*":
        schema:
          $ref: "#/components/schemas/ProblemDetails"
deprecated: false

delete:
parameters:
  - in: path
    name: versionNumber
    schema:
      type: string
    required: true
tags:
  - Management URI
summary: To delete any stored schema other than the schema which is
currently in use.
operationId: deleteSchemaForProvisionedSmSData
responses:
  "204":
    description: NO CONTENT
  "400":
    description: Bad Request

```

```

        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

/nudr-dr-mgm/v1/exposure-data/schema/access-and-mobility-data:
  put:
    tags:
      - Management URI
    summary: Input a new schema and set that schema as the current schema
    which should be used
    operationId: putSchemaForNEFAMdata
    requestBody:
      content:
        application/json:
          schema:
            type: object
          description: Adding new field "custom" for am-data schema.
          required: true
    responses:
      "201":
        description: CREATED
      "400":
        description: Bad Request
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:

```

```

        "*/*":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

  get:
    parameters:
      - in: query
        name: version
        schema:
          type: string
    tags:
      - Management URI
    summary: Retrieves the schema based on parameters specified for
    version. If , "all" is specified as string , then all the versions of schema
    will be fetched. If version like "v1" is specified , then v1 version of
    schema will be fetched. If nothing is specified , then current version of
    schema will be retrieved.
    operationId: getSchemaForNEFAllVersions
    responses:
      "200":
        description: OK
        content:
          application/json:
            schema:
              type: object
      "400":
        description: Bad Request
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          application/json:
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

  /nudr-dr-mgm/v1/exposure-data/schema/access-and-mobility-data/version/
  {versionNumber}:
    put:
      parameters:

```



```

    - in: path
      name: versionNumber
      schema:
        type: string
      required: true
  tags:
    - Management URI
  summary: Rollback to other schema version which already exist in db
  operationId: rollBackSchemaForNEFAMdata
  responses:
    "201":
      description: CREATED
    "400":
      description: Bad Request
      content:
        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "404":
      description: Not Found
      content:
        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "500":
      description: Internal Server Error
      content:
        "*/*":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "405":
      description: Operation not allowed
      content:
        "*/*":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
  deprecated: false

delete:
  parameters:
    - in: path
      name: versionNumber
      schema:
        type: string
      required: true
  tags:
    - Management URI
  summary: To delete any stored schema other than the schema which is
currently in use.
  operationId: deleteSchemaForNEFAMdata
  responses:
    "204":
      description: NO CONTENT
    "400":
      description: Bad Request
      content:

```

```

        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false
  /nudr-dr-mgm/v1/exposure-data/schema/session-management-data:
    put:
      tags:
        - Management URI
      summary: Input a new schema and set that schema as the current schema
      which should be used
      operationId: putSchemaForNEFSmdata
      requestBody:
        content:
          application/json:
            schema:
              type: object
            description: Adding new field "custom" for am-data schema.
            required: true
      responses:
        "201":
          description: CREATED
        "400":
          description: Bad Request
          content:
            "application/json":
              schema:
                $ref: "#/components/schemas/ProblemDetails"
        "404":
          description: Not Found
          content:
            "application/json":
              schema:
                $ref: "#/components/schemas/ProblemDetails"
        "500":
          description: Internal Server Error
          content:
            "*/*":
              schema:

```

```

        $ref: "#/components/schemas/ProblemDetails"
    "405":
        description: Operation not allowed
        content:
            "*/*":
                schema:
                    $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

get:
    parameters:
        - in: query
          name: version
          schema:
              type: string
    tags:
        - Management URI
    summary: Retrieves the schema based on parameters specified for
    version. If , "all" is specified as string , then all the versions of schema
    will be fetched. If version like "v1" is specified , then v1 version of
    schema will be fetched. If nothing is specified , then current version of
    schema will be retrieved.
    operationId: getSchemaForNEFSmAllVersions
    responses:
        "200":
            description: OK
            content:
                application/json:
                    schema:
                        type: object
        "400":
            description: Bad Request
            content:
                "application/json":
                    schema:
                        $ref: "#/components/schemas/ProblemDetails"
        "404":
            description: Not Found
            content:
                application/json:
                    schema:
                        $ref: "#/components/schemas/ProblemDetails"
        "500":
            description: Internal Server Error
            content:
                "*/*":
                    schema:
                        $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

/nudr-dr-mgm/v1/attribute-mapping/quota/{4g-attribute-name}:
get:
    parameters:
        - in: path
          name: 4g-attribute-name
          schema:

```

```

        type: string
        required: true
    tags:
      - Management URI
    summary: Retrieves an quota attribute for specified 4g-attribute-name.
    operationId: getSchemaForQuotaAttribute
    responses:
      "200":
        description: OK
        content:
          application/json:
            schema:
              type: object
      "400":
        description: Bad Request
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          application/json:
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

  put:
    parameters:
      - in: path
        name: 4g-attribute-name
        schema:
          type: string
        required: true
    tags:
      - Management URI
    summary: Adding/Updating an quota attribute.
    operationId: updateSchemaForQuotaAttribute
    responses:
      "201":
        description: CREATED
      "400":
        description: Bad Request
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:

```

```

        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

delete:
  parameters:
    - in: path
      name: 4g-attribute-name
      schema:
        type: string
      required: true
  tags:
    - Management URI
  summary: To delete an quota attribute for specified 4g-attribute-name.
  operationId: deleteSchemaForQuotaAttribute
  responses:
    "204":
      description: NO CONTENT
    "400":
      description: Bad Request
      content:
        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "404":
      description: Not Found
      content:
        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "500":
      description: Internal Server Error
      content:
        "*/*":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "405":
      description: Operation not allowed
      content:
        "*/*":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
  deprecated: false

```

```

/nudr-dr-mgm/v1/attribute-mapping/dynamicquota/{4g-attribute-name}:
get:
  parameters:
    - in: path
      name: 4g-attribute-name
      schema:
        type: string
      required: true
  tags:
    - Management URI
  summary: Retrieves an Dynamic Quota Attribute for specified 4g-
attribute-name.
  operationId: getSchemaForDynamicQuotaAttribute
  responses:
    "200":
      description: OK
      content:
        application/json:
          schema:
            type: object
    "400":
      description: Bad Request
      content:
        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "404":
      description: Not Found
      content:
        application/json:
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "500":
      description: Internal Server Error
      content:
        "*/*":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
  deprecated: false

put:
  parameters:
    - in: path
      name: 4g-attribute-name
      schema:
        type: string
      required: true
  tags:
    - Management URI
  summary: Adding/Updating an dynamic quota attribute.
  operationId: updateSchemaForDynamicQuotaAttribute
  responses:
    "201":
      description: CREATED
    "400":

```

```

        description: Bad Request
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

delete:
  parameters:
    - in: path
      name: 4g-attribute-name
      schema:
        type: string
      required: true
  tags:
    - Management URI
  summary: To delete an dynamic quota attribute for specified 4g-
attribute-name.
  operationId: deleteSchemaForDynamicQuotaAttribute
  responses:
    "204":
      description: NO CONTENT
    "400":
      description: Bad Request
      content:
        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "404":
      description: Not Found
      content:
        "application/json":
          schema:
            $ref: "#/components/schemas/ProblemDetails"
    "500":
      description: Internal Server Error
      content:
        "*/*":

```

```

        schema:
          $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

/nudr-dr-mgm/v1/exposure-data/schema/session-management-data/version/
{versionNumber}:
  put:
    parameters:
      - in: path
        name: versionNumber
        schema:
          type: string
          required: true
    tags:
      - Management URI
    summary: Rollback to other schema version which already exist in db
    operationId: rollBackSchemaForNEFSmdata
    responses:
      "201":
        description: CREATED
      "400":
        description: Bad Request
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "500":
        description: Internal Server Error
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "405":
        description: Operation not allowed
        content:
          "*/*":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

  delete:
    parameters:
      - in: path
        name: versionNumber

```



```

        schema:
          type: string
          required: true
      tags:
        - Management URI
      summary: To delete any stored schema other than the schema which is
currently in use.
      operationId: deleteSchemaForNEFSmdata
      responses:
        "204":
          description: NO CONTENT
        "400":
          description: Bad Request
          content:
            "application/json":
              schema:
                $ref: "#/components/schemas/ProblemDetails"
        "404":
          description: Not Found
          content:
            "application/json":
              schema:
                $ref: "#/components/schemas/ProblemDetails"
        "500":
          description: Internal Server Error
          content:
            "*/*":
              schema:
                $ref: "#/components/schemas/ProblemDetails"
        "405":
          description: Operation not allowed
          content:
            "*/*":
              schema:
                $ref: "#/components/schemas/ProblemDetails"
      deprecated: false

servers:
  - url: //127.0.0.1:8080/
components:
  schemas:
    ProblemDetails:
      type: object
      properties:
        cause:
          type: string
        detail:
          type: string
        invalidParams:
          type: array
          items:
            $ref: "#/components/schemas/InvalidParam"
      status:
        type: integer
        format: int32
      title:

```

```
      type: string
    title: ProblemDetails

InvalidParam:
  type: object
  properties:
    param:
      type: string
    reason:
      type: string
```

B

Open API Specification for nudr-config

The open API specification for nudr-config is as follows:

```
openapi: 3.0.0
info:
  version: 23.4.0.0.0
  title: OCUDR CONFIGURATION API SPECIFICATION
tags:
  - name: OCUDR CONFIGURATION
    description: Configuration Controller
paths:
  /nudr-config/v1/udr.nudrservice.cfg/DR-SERVICE:
    get:
      tags:
        - OCUDR CONFIGURATION
      summary: >-
        Returns configuration of Data repository service with DR-SERVICE as
key
        and udr.nudrservice.cfg as topic
      operationId: getConfiguredValuesForDR
      responses:
        '200':
          description: OK
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/DrServiceConfiguration'
        '404':
          description: Not Found
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/ProblemDetails'
        '500':
          description: Internal Server Error
          content:
            '*/*':
              schema:
                $ref: '#/components/schemas/ProblemDetails'
      deprecated: false
    put:
      tags:
        - OCUDR CONFIGURATION
      summary: >-
        Updates configuration of Data Repository service with DR-SERVICE key
and
        as udr.nudrservice.cfg topic
      operationId: putConfiguredValuesForDR
      requestBody:
```

```

    content:
      application/json:
        schema:
          $ref: '#/components/schemas/DrServiceConfiguration'
      description: DR Service Configuration
      required: true
  responses:
    '201':
      description: CREATED
    '400':
      description: Bad Request
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '404':
      description: Not Found
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '500':
      description: Internal Server Error
      content:
        '*/*':
          schema:
            $ref: '#/components/schemas/ProblemDetails'
  deprecated: false
/nudr-config/v1/udr.notifyservice.cfg/NOTIFY-SERVICE:
get:
  tags:
    - OCUDR CONFIGURATION
  summary: >-
    Returns configuration of Notify Service with NOTIFY-SERVICE as key and
    udr.notifyservice.cfg as topic
  operationId: getConfiguredValuesForNotify
  responses:
    '200':
      description: OK
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/NotifyServiceConfiguration'
    '404':
      description: Not Found
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '500':
      description: Internal Server Error
      content:
        '*/*':
          schema:
            $ref: '#/components/schemas/ProblemDetails'
  deprecated: false

```

```

put:
  tags:
    - OCUDR CONFIGURATION
  summary: >-
    Updates configuration of Notify Service with NOTIFY-SERVICE as Key and
    udr.notifyservice.cfg as topic
  operationId: putConfiguredValuesForNotify
  requestBody:
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/NotifyServiceConfiguration'
        description: Notify Service Configuration
        required: true
  responses:
    '201':
      description: CREATED
    '400':
      description: Bad Request
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '404':
      description: Not Found
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '500':
      description: Internal Server Error
      content:
        '*/*':
          schema:
            $ref: '#/components/schemas/ProblemDetails'
  deprecated: false
/nudr-config/v1/udr.diamgateway.cfg/DIAMETER-GATEWAY:
get:
  tags:
    - OCUDR CONFIGURATION
  summary: >-
    Returns configuration of Diamgateway with DIAMETER-GATEWAY key and
    udr.diamgateway.cfg as topic
  operationId: getConfiguredValuesForDiamgateway
  responses:
    '200':
      description: OK
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/DiameterConfiguration'
    '404':
      description: Not Found
      content:
        application/json:
          schema:

```

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        $ref: '#/components/schemas/ProblemDetails'
      '500':
        description: Internal Server Error
        content:
          '*/*':
            schema:
              $ref: '#/components/schemas/ProblemDetails'
    deprecated: false
  put:
    tags:
      - OCUDR CONFIGURATION
    summary: >-
      Updates configuration of Diamgateway with DIAMETER-GATEWAY as key and
      udr.diamgateway.cfg as topic
    operationId: putConfiguredValuesForDiamgateway
    requestBody:
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/DiameterConfiguration'
        description: Diamgateway Service Configuration
        required: true
    responses:
      '201':
        description: CREATED
      '400':
        description: Bad Request
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ProblemDetails'
      '404':
        description: Not Found
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ProblemDetails'
      '500':
        description: Internal Server Error
        content:
          '*/*':
            schema:
              $ref: '#/components/schemas/ProblemDetails'
    deprecated: false
  /nudr-config/v1/udr.global.cfg/GLOBAL:
  get:
    tags:
      - OCUDR CONFIGURATION
    summary: >-
      Returns Global Configuration with GLOBAL as key and udr.global.cfg as
      topic
    operationId: getConfiguredValuesForGlobal
    responses:
      '200':
        description: OK
        content:

```

```

        application/json:
          schema:
            $ref: '#/components/schemas/GlobalConfiguration'
      '404':
        description: Not Found
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ProblemDetails'
      '500':
        description: Internal Server Error
        content:
          '*/*':
            schema:
              $ref: '#/components/schemas/ProblemDetails'
    deprecated: false
  /nudur-config/v1/udr.ondemand.cfg/ON-DEMAND:
    get:
      tags:
        - OCUDR CONFIGURATION
      summary: >-
        Returns configuration of On Demand Migration service with  ON-DEMAND
as
      key and udr.ondemand.cfg as topic
    operationId: getConfiguredValuesForOnDemand
    responses:
      '200':
        description: OK
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/OnDemandMigration'
      '404':
        description: Not Found
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ProblemDetails'
      '500':
        description: Internal Server Error
        content:
          '*/*':
            schema:
              $ref: '#/components/schemas/ProblemDetails'
    deprecated: false
  put:
    tags:
      - OCUDR CONFIGURATION
    summary: >-
      Updates configuration of On Demand Migration service with ON-DEMAND as
      key and udr.ondemand.cfg topic
    operationId: putConfiguredValuesForOnDemand
    requestBody:
      content:
        application/json:
          schema:

```

```

        $ref: '#/components/schemas/OnDemandMigration'
      description: On Demand Migration Service Configuration
      required: true
    responses:
      '201':
        description: CREATED
      '400':
        description: Bad Request
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ProblemDetails'
      '404':
        description: Not Found
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ProblemDetails'
      '500':
        description: Internal Server Error
        content:
          '*/*':
            schema:
              $ref: '#/components/schemas/ProblemDetails'
    deprecated: false
  /nudr-config/v1/udr.diamgateway.congestion.cfg/DGW-CONGESTION:
    get:
      tags:
        - OCUDR CONFIGURATION
      summary: >-
        Returns configuration of diamgateway congestion with  DGW-CONGESTION
as
      key and udr.diamgateway.congestion.cfg as topic
    operationId: getConfiguredValuesForDC
    responses:
      '200':
        description: OK
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/DiamgatewayCongestion'
      '404':
        description: Not Found
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ProblemDetails'
      '500':
        description: Internal Server Error
        content:
          '*/*':
            schema:
              $ref: '#/components/schemas/ProblemDetails'
    deprecated: false
  put:
    tags:

```



```

- OCUDR CONFIGURATION
summary: >-
  Updates configuration of diamgateway congestion with DGW-CONGESTION as
  key and udr.diamgateway.congestion.cfg topic
operationId: putConfiguredValuesForDC
requestBody:
  content:
    application/json:
      schema:
        $ref: '#/components/schemas/DiamgatewayCongestion'
      description: Diamgateway Congestion Configuration
      required: true
responses:
  '201':
    description: CREATED
  '400':
    description: Bad Request
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/ProblemDetails'
  '404':
    description: Not Found
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/ProblemDetails'
  '500':
    description: Internal Server Error
    content:
      '*/*':
        schema:
          $ref: '#/components/schemas/ProblemDetails'
deprecated: false
/nudr-config/v1/udr.biservice.cfg/BULK_IMPORT:
get:
  tags:
    - OCUDR CONFIGURATION
summary: Returns Run time status of Bulk Import files
operationId: getConfiguredValuesForBI
responses:
  '200':
    description: OK
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/BIconfiguration'
  '404':
    description: Not Found
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/ProblemDetails'
  '500':
    description: Internal Server Error
    content:

```

```

        '*/*':
          schema:
            $ref: '#/components/schemas/ProblemDetails'
      deprecated: false

/nudr-config/v1/udr.bulkimportservice.cfg/BULK_IMPORT_CFG:
  get:
    tags:
      - OCUDR CONFIGURATION
    summary: >-
      Returns the configurations of bulk import with
      udr.bulkimportservice.cfg
      as topic and BULK_IMPORT_CFG as value
    operationId: getBulkImportCfg
    responses:
      '200':
        description: OK
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/BulkImportCfg'
      '404':
        description: Not Found
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ProblemDetails'
      '500':
        description: Internal Server Error
        content:
          '*/*':
            schema:
              $ref: '#/components/schemas/ProblemDetails'
    deprecated: false
  put:
    tags:
      - OCUDR CONFIGURATION
    summary: >-
      Updates configuration of subscriber bulk import tool congestion with
      BULK_IMPORT_CFG as
      key and udr.bulkimportservice.cfg as topic
    operationId: putBulkImportCfg
    requestBody:
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/BulkImportCfg'
      description: Subscriber Bulk Import Tool Configuration
      required: true
    responses:
      '201':
        description: CREATED
      '400':
        description: Bad Request
        content:
          application/json:

```

```

        schema:
          $ref: '#/components/schemas/ProblemDetails'
      '404':
        description: Not Found
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ProblemDetails'
      '500':
        description: Internal Server Error
        content:
          '*/*':
            schema:
              $ref: '#/components/schemas/ProblemDetails'
    deprecated: false

/nudr-config/v1/udr.exporttool.cfg/EXPORT_TOOL_CFG:
get:
  tags:
    - OCUDR CONFIGURATION
  summary: >-
    Returns the configurations of bulk export tool with udr.exporttool.cfg
    as topic and EXPORT_TOOL_CFG as Key
  operationId: getBulkExportCfg
  responses:
    '200':
      description: OK
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/BulkExportCfg'
    '404':
      description: Not Found
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '500':
      description: Internal Server Error
      content:
        '*/*':
          schema:
            $ref: '#/components/schemas/ProblemDetails'
  deprecated: false
put:
  tags:
    - OCUDR CONFIGURATION
  summary: >-
    Updates configuration of subscriber bulk export tool congestion with
    udr.exporttool.cfg as topic and EXPORT_TOOL_CFG as Key
  operationId: putBulkExportCfg
  requestBody:
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/BulkExportCfg'

```

```

    description: Subscriber Bulk Export Tool Configuration
    required: true
  responses:
    '201':
      description: CREATED
    '400':
      description: Bad Request
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '404':
      description: Not Found
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '500':
      description: Internal Server Error
      content:
        '*/*':
          schema:
            $ref: '#/components/schemas/ProblemDetails'
  deprecated: false

/nudr-config/v1/udr.exporttoolstatus.cfg/EXPORT_TOOL_STATUS:
get:
  tags:
    - OCUDR CONFIGURATION
  summary: >-
    Returns the status of bulk export tool with udr.exporttoolstatus.cfg
    as topic and EXPORT_TOOL_STATUS as Key
  operationId: getBulkExportToolStatus
  responses:
    '200':
      description: OK
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/BulkExportToolStatus'
    '404':
      description: Not Found
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '500':
      description: Internal Server Error
      content:
        '*/*':
          schema:
            $ref: '#/components/schemas/ProblemDetails'
  deprecated: false

/nudr-config/v1/udr.exporttoolfilestatus.cfg/EXPORT_TOOL_FILE_STATUS:
get:

```

```

tags:
  - OCUDR CONFIGURATION
summary: >-
  Returns the status of bulk export tool with
  udr.exporttoolfilestatus.cfg
  as topic and EXPORT_TOOL_FILE_STATUS as Key
operationId: getBulkExportFileStatus
responses:
  '200':
    description: OK
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/BulkExportFileStatus'
  '404':
    description: Not Found
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/ProblemDetails'
  '500':
    description: Internal Server Error
    content:
      '*/*':
        schema:
          $ref: '#/components/schemas/ProblemDetails'
deprecated: false

/nudr-config/v1/export:
  post:
    tags:
      - OCUDR CONFIGURATION
    summary: To export configuration data.
    operationId: postExportConfiguration
    responses:
      '201':
        description: CREATED
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ExportConfiguration'
      '404':
        description: Not Found
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ProblemDetails'
      '500':
        description: Internal Server Error
        content:
          '*/*':
            schema:
              $ref: '#/components/schemas/ProblemDetails'
    deprecated: false

  get:

```

```

tags:
  - OCUDR CONFIGURATION
summary: To get export id.
operationId: getExportConfiguration
responses:
  '200':
    description: OK
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/ExportId'
  '404':
    description: Not Found
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/ProblemDetails'
  '500':
    description: Internal Server Error
    content:
      '*/*':
        schema:
          $ref: '#/components/schemas/ProblemDetails'
deprecated: false
/nudr-config/v1/export/3e470fab-e131-4dbe-be67-ba7391729254/status:
get:
  tags:
    - OCUDR CONFIGURATION
  summary: Returns Export process status
  operationId: getExportStatus
  responses:
    '200':
      description: OK
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ExportStatus'
    '404':
      description: Not Found
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '500':
      description: Internal Server Error
      content:
        '*/*':
          schema:
            $ref: '#/components/schemas/ProblemDetails'
  deprecated: false
/nudr-config/v1/export/3e470fab-e131-4dbe-be67-ba7391729254/report:
get:
  tags:
    - OCUDR CONFIGURATION
  summary: Returns Export Report
  operationId: getExportReport

```

```

responses:
  '200':
    description: OK
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/ExportReport'
  '404':
    description: Not Found
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/ProblemDetails'
  '500':
    description: Internal Server Error
    content:
      '*/*':
        schema:
          $ref: '#/components/schemas/ProblemDetails'
  deprecated: false
/nudr-config/v1/export/3e470fab-e131-4dbe-be67-ba7391729254/download:
get:
  tags:
    - OCUDR CONFIGURATION
  summary: Returns Exported configuration download
  operationId: getExportDownload
  responses:
    '200':
      description: OK
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/Download'
    '404':
      description: Not Found
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '500':
      description: Internal Server Error
      content:
        '*/*':
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    deprecated: false
/nudr-config/v1/import:
post:
  tags:
    - OCUDR CONFIGURATION
  summary: To start Import of UDR Configuration
  operationId: postImportConfiguration
  responses:
    '201':
      description: CREATED
      content:

```

```

        application/json:
          schema:
            $ref: '#/components/schemas/ImportConfiguration'
      '404':
        description: Not Found
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ProblemDetails'
      '500':
        description: Internal Server Error
        content:
          '*/*':
            schema:
              $ref: '#/components/schemas/ProblemDetails'
    deprecated: false

get:
  tags:
    - OCUDR CONFIGURATION
  summary: To get import id
  operationId: getImportConfiguration
  responses:
    '200':
      description: OK
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ImportId'
    '404':
      description: Not Found
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '500':
      description: Internal Server Error
      content:
        '*/*':
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    deprecated: false
/nudr-config/v1/import/3e470fab-e131-4dbe-be67-ba7391729254/status:
get:
  tags:
    - OCUDR CONFIGURATION
  summary: Returns Import status
  operationId: getImportStatus
  responses:
    '200':
      description: OK
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ImportStatus'
    '404':

```



```

        description: Not Found
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ProblemDetails'
      '500':
        description: Internal Server Error
        content:
          '*/*':
            schema:
              $ref: '#/components/schemas/ProblemDetails'
    deprecated: false
  /nudr-config/v1/import/3e470fab-e131-4dbe-be67-ba7391729254/report:
    get:
      tags:
        - OCUDR CONFIGURATION
      summary: Returns Import report
      operationId: getImportReport
      responses:
        '200':
          description: OK
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/ImportReport'
        '404':
          description: Not Found
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/ProblemDetails'
        '500':
          description: Internal Server Error
          content:
            '*/*':
              schema:
                $ref: '#/components/schemas/ProblemDetails'
    deprecated: false
  /nudr-config/v1/nudr-drservice/logging:
    get:
      tags:
        - OCUDR CONFIGURATION
      summary: Returns Log level For Data Repository Service
      operationId: getLogLevelForDR
      responses:
        '200':
          description: OK
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/LogConfiguration'
        '404':
          description: Not Found
          content:
            application/json:
              schema:

```

```

        $ref: '#/components/schemas/ProblemDetails'
      '500':
        description: Internal Server Error
        content:
          '*/*':
            schema:
              $ref: '#/components/schemas/ProblemDetails'
    deprecated: false
  put:
    tags:
      - OCUDR CONFIGURATION
    summary: Updates Log level For Data Repository Service
    operationId: putLogLevelForDr
    requestBody:
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/LogConfiguration'
      description: Global Service Configuration
      required: true
    responses:
      '201':
        description: CREATED
      '400':
        description: Bad Request
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ProblemDetails'
      '404':
        description: Not Found
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ProblemDetails'
      '500':
        description: Internal Server Error
        content:
          '*/*':
            schema:
              $ref: '#/components/schemas/ProblemDetails'
    deprecated: false
/nudr-config/v1/nudr-notify-service/logging:
  get:
    tags:
      - OCUDR CONFIGURATION
    summary: Returns Log Level For Notify Service
    operationId: getLogLevelForNotify
    responses:
      '200':
        description: OK
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/LogConfiguration'
      '404':

```

```

        description: Not Found
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ProblemDetails'
      '500':
        description: Internal Server Error
        content:
          '*/*':
            schema:
              $ref: '#/components/schemas/ProblemDetails'
    deprecated: false
  put:
    tags:
      - OCUDR CONFIGURATION
    summary: Updates Log Level For Notify Service
    operationId: putLogLevelForNotify
    requestBody:
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/LogConfiguration'
      description: Notify Service Configuration
      required: true
    responses:
      '201':
        description: CREATED
      '400':
        description: Bad Request
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ProblemDetails'
      '404':
        description: Not Found
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ProblemDetails'
      '500':
        description: Internal Server Error
        content:
          '*/*':
            schema:
              $ref: '#/components/schemas/ProblemDetails'
    deprecated: false
/nudr-config/v1/nudr-diameterproxy/logging:
  get:
    tags:
      - OCUDR CONFIGURATION
    summary: Returns Log Level of Diameter Proxy Service
    operationId: getLogLevelForDiameter
    responses:
      '200':
        description: OK
        content:

```

```

        application/json:
          schema:
            $ref: '#/components/schemas/LogConfiguration'
      '404':
        description: Not Found
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ProblemDetails'
      '500':
        description: Internal Server Error
        content:
          '*/*':
            schema:
              $ref: '#/components/schemas/ProblemDetails'
    deprecated: false
  put:
    tags:
      - OCUDR CONFIGURATION
    summary: Updates Log Level of Diameter Proxy Service
    operationId: putLogLevelForDiameter
    requestBody:
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/LogConfiguration'
    description: Diameter Proxy Service Configuration
    required: true
  responses:
    '201':
      description: CREATED
    '400':
      description: Bad Request
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '404':
      description: Not Found
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '500':
      description: Internal Server Error
      content:
        '*/*':
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    deprecated: false
/nudr-config/v1/diam-gateway/logging:
  get:
    tags:
      - OCUDR CONFIGURATION
    summary: Returns Log Level of Diamgateway Service
    operationId: getLogLevelForDiamgateway

```

```

responses:
  '200':
    description: OK
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/LogConfiguration'
  '404':
    description: Not Found
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/ProblemDetails'
  '500':
    description: Internal Server Error
    content:
      '*/*':
        schema:
          $ref: '#/components/schemas/ProblemDetails'
deprecated: false
put:
  tags:
    - OCUDR CONFIGURATION
  summary: Updates Log Level of Diamgateway Service
  operationId: putLogLevelForDiamgateway
  requestBody:
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/LogConfiguration'
    description: Diamgateway Service Configuration
    required: true
  responses:
    '201':
      description: CREATED
    '400':
      description: Bad Request
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '404':
      description: Not Found
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '500':
      description: Internal Server Error
      content:
        '*/*':
          schema:
            $ref: '#/components/schemas/ProblemDetails'
  deprecated: false
/nudr-config/v1/nudr-ondemand-migration/logging:
get:

```

```

tags:
  - OCUDR CONFIGURATION
summary: Returns Log Level of on demand migration service
operationId: getLogLevelForMigration
responses:
  '200':
    description: OK
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/LogConfiguration'
  '404':
    description: Not Found
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/ProblemDetails'
  '500':
    description: Internal Server Error
    content:
      '*/*':
        schema:
          $ref: '#/components/schemas/ProblemDetails'
deprecated: false
put:
  tags:
    - OCUDR CONFIGURATION
  summary: Updates Log Level of on demand migration service
  operationId: putLogLevelForMigration
  requestBody:
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/LogConfiguration'
    description: Diameter Proxy Service Configuration
    required: true
  responses:
    '201':
      description: CREATED
    '400':
      description: Bad Request
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '404':
      description: Not Found
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '500':
      description: Internal Server Error
      content:
        '*/*':
          schema:

```

```

        $ref: '#/components/schemas/ProblemDetails'
    deprecated: false
  /nudr-config/v1/nudr-bulk-import/logging:
    get:
      tags:
        - OCUDR CONFIGURATION
      summary: Returns Log Level of nudr import service
      operationId: getLogLevelForBulkImport
      responses:
        '200':
          description: OK
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/LogConfiguration'
        '404':
          description: Not Found
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/ProblemDetails'
        '500':
          description: Internal Server Error
          content:
            '*/*':
              schema:
                $ref: '#/components/schemas/ProblemDetails'
    deprecated: false
  put:
    tags:
      - OCUDR CONFIGURATION
    summary: Updates Log Level of Bulk Import Microservice
    operationId: putLogLevelForBulkImport
    requestBody:
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/LogConfiguration'
    description: Diameter Proxy Service Configuration
    required: true
    responses:
      '201':
        description: CREATED
      '400':
        description: Bad Request
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ProblemDetails'
      '404':
        description: Not Found
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ProblemDetails'
      '500':

```

```

        description: Internal Server Error
        content:
          '*/*':
            schema:
              $ref: '#/components/schemas/ProblemDetails'
        deprecated: false

/nudr-config/v1/nudr-export-tool/logging:
get:
  tags:
    - OCUDR CONFIGURATION
  summary: Returns Log Level of nudr export service
  operationId: getLogLevelForExportTool
  responses:
    '200':
      description: OK
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/LogConfiguration'
    '404':
      description: Not Found
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '500':
      description: Internal Server Error
      content:
        '*/*':
          schema:
            $ref: '#/components/schemas/ProblemDetails'
        deprecated: false
put:
  tags:
    - OCUDR CONFIGURATION
  summary: Updates Log Level of Bulk Export Microservice
  operationId: putLogLevelForExportTool
  requestBody:
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/LogConfiguration'
  description: Export Tool Logging Configuration
  required: true
  responses:
    '201':
      description: CREATED
    '400':
      description: Bad Request
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '404':
      description: Not Found

```



```

        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ProblemDetails'
      '500':
        description: Internal Server Error
        content:
          '*/*':
            schema:
              $ref: '#/components/schemas/ProblemDetails'
    deprecated: false

/nudr-config/v1/nudr-config/logging:
get:
  tags:
    - OCUDR CONFIGURATION
  summary: Returns Log Level of nudr config service
  operationId: getLogLevelForNudrConfig
  responses:
    '200':
      description: OK
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/LogConfiguration'
    '404':
      description: Not Found
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '500':
      description: Internal Server Error
      content:
        '*/*':
          schema:
            $ref: '#/components/schemas/ProblemDetails'
  deprecated: false
put:
  tags:
    - OCUDR CONFIGURATION
  summary: Updates Log Level of nudr config Microservice
  operationId: putLogLevelForNudrConfig
  requestBody:
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/LogConfiguration'
  description: Nudr config Logging Configuration
  required: true
  responses:
    '201':
      description: CREATED
    '400':
      description: Bad Request
      content:

```

```

        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
      '404':
        description: Not Found
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ProblemDetails'
      '500':
        description: Internal Server Error
        content:
          '*/*':
            schema:
              $ref: '#/components/schemas/ProblemDetails'
    deprecated: false

/udr/nf-common-component/v1/egw/logging:
get:
  tags:
    - OCUDR CONFIGURATION
  summary: Returns Log Level for Egress Gateway
  operationId: getLogLevelForEgress
  responses:
    '200':
      description: OK
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/LogConfiguration'
    '404':
      description: Not Found
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '500':
      description: Internal Server Error
      content:
        '*/*':
          schema:
            $ref: '#/components/schemas/ProblemDetails'
  deprecated: false
put:
  tags:
    - OCUDR CONFIGURATION
  summary: Updates Log Level for Egress Gateway
  operationId: putLogLevelForEgress
  requestBody:
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/LogConfiguration'
  description: Diameter Proxy Service Configuration
  required: true
  responses:

```

```

    '201':
      description: CREATED
    '400':
      description: Bad Request
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '404':
      description: Not Found
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '500':
      description: Internal Server Error
      content:
        '*/*':
          schema:
            $ref: '#/components/schemas/ProblemDetails'
  deprecated: false
/udr/nf-common-component/v1/alt-route/logging:
get:
  tags:
    - OCUDR CONFIGURATION
  summary: Returns Log Level Of Alternate Route Service
  operationId: getLogLevelForAltRoute
  responses:
    '200':
      description: OK
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/LogConfiguration'
    '404':
      description: Not Found
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '500':
      description: Internal Server Error
      content:
        '*/*':
          schema:
            $ref: '#/components/schemas/ProblemDetails'
  deprecated: false
put:
  tags:
    - OCUDR CONFIGURATION
  summary: Updates Log Level Of Alternate Route Service
  operationId: putLogLevelForAltRoute
  requestBody:
    content:
      application/json:
        schema:

```

```

        $ref: '#/components/schemas/LogConfiguration'
      description: Alternate Route Service Configuration
      required: true
    responses:
      '201':
        description: CREATED
      '400':
        description: Bad Request
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ProblemDetails'
      '404':
        description: Not Found
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ProblemDetails'
      '500':
        description: Internal Server Error
        content:
          '*/*':
            schema:
              $ref: '#/components/schemas/ProblemDetails'
    deprecated: false
  /nuds-config/v1/all/logging:
    get:
      tags:
        - OCUDR CONFIGURATION
      summary: Returns Log Level Of All Services
      operationId: getLogLevelForAll
      responses:
        '200':
          description: OK
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/AllLogs'
        '404':
          description: Not Found
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/ProblemDetails'
        '500':
          description: Internal Server Error
          content:
            '*/*':
              schema:
                $ref: '#/components/schemas/ProblemDetails'
    deprecated: false
  /uds/nf-common-component/v1/igw/logging:
    get:
      tags:
        - OCUDR CONFIGURATION
      summary: Returns Log Level of ingress gateway service

```

```

operationId: getLogLevelForIngress
responses:
  '200':
    description: OK
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/LogConfiguration'
  '404':
    description: Not Found
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/ProblemDetails'
  '500':
    description: Internal Server Error
    content:
      '*/*':
        schema:
          $ref: '#/components/schemas/ProblemDetails'
deprecated: false
put:
  tags:
    - OCUDR CONFIGURATION
  summary: Updates Level of ingress gateway service
  operationId: putLogLevelForIngress
  requestBody:
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/LogConfiguration'
    description: Alternate Route Service Configuration
    required: true
  responses:
    '201':
      description: CREATED
    '400':
      description: Bad Request
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '404':
      description: Not Found
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '500':
      description: Internal Server Error
      content:
        '*/*':
          schema:
            $ref: '#/components/schemas/ProblemDetails'
  deprecated: false
/udr/nf-common-component/v1/operationalState:

```

```

get:
  tags:
    - OCUDR CONFIGURATION
  summary: Returns Operation State of OCUDR
  operationId: getOperationalState
  responses:
    '200':
      description: OK
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/OperationalStateConfiguration'
    '404':
      description: Not Found
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '500':
      description: Internal Server Error
      content:
        '*/*':
          schema:
            $ref: '#/components/schemas/ProblemDetails'
  deprecated: false
put:
  tags:
    - OCUDR CONFIGURATION
  summary: Updates on OperationState Configuration
  operationId: putOperationalState
  requestBody:
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/OperationalStateConfiguration'
    description: Operational State Configuration Update
    required: true
  responses:
    '200':
      description: OK
    '400':
      description: Bad Request
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '500':
      description: Internal Server Error
      content:
        '*/*':
          schema:
            $ref: '#/components/schemas/ProblemDetails'
  deprecated: false
/udr/nf-common-component/v1/operationalStateHistory:
  get:
    tags:

```

```

- OCUDR CONFIGURATION
summary: Returns Operation State of OCUDR
operationId: getOperationalStateHistory
responses:
  '200':
    description: OK
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/OperationalStateHistory'
  '404':
    description: Not Found
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/ProblemDetails'
  '500':
    description: Internal Server Error
    content:
      '*/*':
        schema:
          $ref: '#/components/schemas/ProblemDetails'
deprecated: false
/nudr-config/v1/udr.exporttoolstatus.cfg/EXPORT_TOOL_STATUS/{jobId}:
get:
  parameters:
    - in: path
      name: jobId
      schema:
        type: string
      required: true
  tags:
    - OCUDR CONFIGURATION
summary: >-
Returns the status of bulk export tool with udr.exporttoolstatus.cfg
as topic and EXPORT_TOOL_STATUS as Key
operationId: getBulkExportToolStatusJobId
responses:
  '200':
    description: OK
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/BulkExportToolStatusJobId'
  '404':
    description: Not Found
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/ProblemDetails'
  '500':
    description: Internal Server Error
    content:
      '*/*':
        schema:
          $ref: '#/components/schemas/ProblemDetails'

```

```

    deprecated: false
  delete:
    parameters:
      - in: path
        name: jobId
        schema:
          type: string
        required: true
    tags:
      - OCUDR CONFIGURATION
    summary: To delete any export tool job with jobId
    operationId: deleteExportToolStatusJobId
    responses:
      "200":
        description: OK
      "400":
        description: Bad Request
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
      "404":
        description: Not Found
        content:
          "application/json":
            schema:
              $ref: "#/components/schemas/ProblemDetails"
    deprecated: false

/nudr-config/v1/migration.tool.cfg/MIGRATION_TOOL:
  get:
    tags:
      - OCUDR CONFIGURATION
    summary: >-
      Returns configuration of migration tool with MIGRATION_TOOL as key
      and migration.tool.cfg as topic

    operationId: getMigrationToolConfiguration
    responses:
      '200':
        description: OK
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/MigrationToolConfiguration'
      '404':
        description: Not Found
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ProblemDetails'
      '500':
        description: Internal Server Error
        content:
          '*/*':
            schema:

```



```

        $ref: '#/components/schemas/ProblemDetails'
    deprecated: false

/nudr-config/v1/migrationtool.status.cfg/MIGRATION_TOOL_STATUS:
  get:
    tags:
      - OCUDR CONFIGURATION
    summary: >-
      Returns status of migration tool with  MIGRATION_TOOL_STATUS as key
      and migrationtool.status.cfg as topic

    operationId: getMigrationToolStatus
  responses:
    '200':
      description: OK
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/MigrationToolStatus'
    '404':
      description: Not Found
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    '500':
      description: Internal Server Error
      content:
        '*/*':
          schema:
            $ref: '#/components/schemas/ProblemDetails'
    deprecated: false

servers:
  - url: //127.0.0.1:8080/
components:
  schemas:
    NotifyServiceConfiguration:
      type: object
      additionalProperties: false
      properties:
        notifRetryCount:
          type: integer
          minimum: 0
          maximum: 3
        NotifRetryInterval:
          type: integer
          minimum: 1
          maximum: 5
        retryErrorCodes:
          type: string
        hikariPoolSize:
          type: integer
        tracingEnabled:
          type: boolean
    DrServiceConfiguration:

```

```
additionalProperties: false
properties:
  hikariPoolSize:
    type: integer
  tracingEnabled:
    type: boolean
  subscriptionDataSubscriptionsOnly:
    type: boolean
  defaultGroupIdEnabled:
    type: boolean
  defaultSLFGroupName:
    type: string
  defaultResponse:
    type: string
    enum:
      - EQUIPMENT_UNKNOWN
      - GREYLISTED
      - WHITELISTED
      - BLACKLISTED
  accessLogEnabled:
    type: boolean
  defaultResponseIMEINotFound:
    type: string

OnDemandMigration:
  type: object
  properties:
    enabled:
      type: boolean
    sourceUDRDeleteSubscriber:
      type: boolean
    realm:
      type: string
    identity:
      type: string
    sourceUdrConfig:
      $ref: '#/components/schemas/SourceUdrConfig'
SourceUdrConfig:
  type: object
  properties:
    restEndpoint:
      type: string
    realm:
      type: string
    identity:
      type: string
    hostIp:
      type: string
    hostPort:
      type: integer
DiameterConfiguration:
  type: object
  properties:
    realm:
      type: string
    identity:
```

```

    type: string
    reconnectDelay:
      type: integer
    responseTimeout:
      type: integer
    connectionTimeOut:
      type: integer
    watchdogInterval:
      type: integer
    reconnectLimit:
      type: integer
    allowedClientNodes:
      type: array
      minItems: 0
      items:
        $ref: '#/components/schemas/ClientNodes'

ClientNodes:
  type: object
  required:
    - identity
    - realm
  properties:
    responseOnly:
      type: boolean
    host:
      type: string
    port:
      type: integer
    realm:
      type: string
    identity:
      type: string
    type:
      type: string
  additionalProperties: false
GlobalConfiguration:
  additionalProperties: false
  type: object
  properties:
    egressGwEnabled:
      type: boolean
    udrServices:
      type: string
    dbServiceName:
      type: string
    udsfEnabled:
      type: boolean
    ingressHttpPort:
      type: string
    ingressHttpsPort:
      type: string
    snssai:
      type: string
    dnn:
      type: string

```

```

sbiCorrelationInfoEnable:
  type: boolean
autoCreate:
  type: boolean
subscriberActivityEnabled:
  type: boolean
autoEnrolOnSignalling:
  type: boolean
etagEnabled:
  type: boolean
enableControlledShutdown:
  type: boolean
keyType:
  type: string
keyRange:
  type: string
subscriberIdentifiers:
  type: object
  properties:
    msisdn:
      type: array
      items:
        type: string
    imsi:
      type: array
      items:
        type: string
    nai:
      type: array
      items:
        type: string
    extid:
      type: array
      items:
        type: string
ProblemDetails:
  type: object
  properties:
    cause:
      type: string
    detail:
      type: string
    invalidParams:
      type: array
      items:
        $ref: '#/components/schemas/InvalidParam'
    status:
      type: integer
      format: int32
    title:
      type: string
  title: ProblemDetails
InvalidParam:
  type: object
  properties:
    param:

```

```

        type: string
      reason:
        type: string
    DiamgatewayCongestion:
      additionalProperties: false
      type: object
      properties:
        enabled:
          type: boolean
        defaultMessagePriority:
          type: integer
        sampleCount:
          type: integer
        calculationInterval:
          type: integer
        loadSheddingRulesMap:
          $ref: '#/components/schemas/LoadSheddingRulesMap'
        priorityRules:
          type: array
          minItems: 0
          items:
            $ref: '#/components/schemas/PriorityRules'
        thresholds:
          $ref: '#/components/schemas/Thresholds'
    LoadSheddingRulesMap:
      type: object
      properties:
        CONGESTED:
          $ref: '#/components/schemas/CONGESTED'
        DOC:
          $ref: '#/components/schemas/DOC'
    CONGESTED:
      type: object
      properties:
        state:
          type: string
        discardPriority:
          type: integer
        ansWithResultCode:
          type: string
    DOC:
      type: object
      properties:
        state:
          type: string
        discardPriority:
          type: integer
        ansWithResultCode:
          type: string
    PriorityRules:
      type: object
      properties:
        ruleName:
          type: string
        messagePriority:
          type: integer

```

```

        conditions:
          $ref: '#/components/schemas/Conditions'
Conditions:
  type: object
  properties:
    requestType:
      type: string
    application:
      type: string
Thresholds:
  type: object
  properties:
    CONGESTED:
      $ref: '#/components/schemas/ThresholdsCONGESTED'
    DOC:
      $ref: '#/components/schemas/ThresholdsDOC'
ThresholdsCONGESTED:
  type: object
  properties:
    memory:
      type: integer
    cpu:
      type: integer
    queue:
      type: integer
ThresholdsDOC:
  type: object
  properties:
    memory:
      type: integer
    cpu:
      type: integer
    queue:
      type: integer
BulkImportCfg:
  additionalProperties: false
  type: object
  properties:
    lastModifiedTimeInterval:
      type: number
    pollingTimeInterval:
      type: number
    pdbiFilePath:
      type: string
    resultLogFilePath:
      type: string
    remoteHost:
      type: string
    remoteHostPort:
      type: string
    remoteDirPath:
      type: string
    remoteHostUsername:
      type: string
    fileExt:
      type: string

```

```
deleteFileFromPVC:
  type: boolean
sftpEnabled:
  type: boolean
periodicImportPoll:
  type: string
periodicExportPoll:
  type: string

BulkExportCfg:
  additionalProperties: false
  type: object
  properties:
    frequencyOfPeriodicDump:
      type: string
    startTime:
      type: string
    maxNumberOfDumps:
      type: integer
    fixedDumpFileNamePrefix:
      type: string
    multiValuedelimiter:
      type: string
    fieldDelimiter:
      type: string
    fileExtension:
      type: string
    exportMode:
      type: string
    imsiCount:
      type: integer
    msisdnCount:
      type: integer
    sftpExportEnabled:
      type: boolean
    deleteFromPVC:
      type: boolean
    remotePath:
      type: string
    serverHost:
      type: string
    serverPort:
      type: string
    remoteUserName:
      type: string
    pollingInterval:
      type: string
    subscriberRangeEnabled:
      type: boolean
    newFilePerRangeEnabled:
      type: boolean
    subscriberExportRange:
      $ref: '#/components/schemas/SubscriberExportRange'
SubscriberExportRange:
  properties:
    keyType:
```

```
    type: string
    subscriberRanges:
      type: array

BulkExportFileStatus:
  type: array
  items:
    $ref: '#/components/schemas/BEFObject'

BEFObject:
  properties:
    jobId:
      type: string
    fileName:
      type: string
    filePath:
      type: string
    completeTime:
      type: string
    startTime:
      type: string
    status:
      type: string

BulkExportToolStatus:
  type: array
  items:
    $ref: '#/components/schemas/BEObject'

BEObject:
  properties:
    jobId:
      type: string
    subscriberCount:
      type: integer
    exportedSubscriberCount:
      type: integer
    jobProgress:
      type: string
    status:
      type: string
    exportState:
      type: string

BulkExportToolStatusJobId:
  type: object
  properties:
    jobId:
      type: string
    subscriberCount:
      type: integer
    exportedSubscriberCount:
      type: integer
    jobProgress:
      type: string
    status:
      type: string
```



```
exportState:
  type: string
exportFileStatusList:
  type: array
  items:
    $ref: '#/components/schemas/BEJobIdObject'

BEJobIdObject:
  properties:
    jobId:
      type: string
    fileName:
      type: string
    filePath:
      type: string
    completeTime:
      type: string
    startTime:
      type: string
    status:
      type: string

BIConfiguration:
  type: array
  items:
    $ref: '#/components/schemas/BIObject'

BIObject:
  properties:
    importFile:
      type: string
    timeQueued:
      type: string
    timeStarted:
      type: string
    timeCompleted:
      type: string
    progress:
      type: number
    failedKeys:
      type: string
    passCount:
      type: integer
    failCount:
      type: integer
    totalCount:
      type: integer
      format: int64
    status:
      type: string

ExportConfiguration:
  type: object
  properties:
    Exportresourceid:
      type: string
    ExportId:
```

```
    type: array
    items:
      type: string
  ImportId:
    type: array
    items:
      type: string
  ExportStatus:
    type: object
    properties:
      status:
        type: string
      exportResourceId:
        type: string
      createTimeStamp:
        type: string
      percentage:
        type: string
      result:
        type: string
  ExportReport:
    type: array
    items:
      $ref: '#/components/schemas/Report'
  Report:
    type: object
    properties:
      status:
        type: string
      name:
        type: string
  ImportConfiguration:
    type: object
    properties:
      Exportresourceid:
        type: string
  ImportStatus:
    type: object
    properties:
      status:
        type: string
      exportResourceId:
        type: string
      createTimeStamp:
        type: string
      percentage:
        type: string
      result:
        type: string
  ImportReport:
    type: array
    items:
      $ref: '#/components/schemas/Report'
  Download:
    type: object
  LogConfiguration:
```

```

    type: object
    required:
      - appLogLevel
    properties:
      appLogLevel:
        type: string
        enum:
          - DEBUG
          - ERROR
          - WARN
          - INFO
      packageLogLevel:
        type: array
        items:
          $ref: '#/components/schemas/PackageLog'
  PackageLog:
    type: object
    properties:
      packageName:
        type: string
      logLevelForPackage:
        type: string
    required:
      - packageName
      - logLevelForPackage
  AllLogs:
    type: array
    items:
      $ref: '#/components/schemas/AllLogCfg'
  AllLogCfg:
    type: object
    properties:
      egress-gateway:
        type: string
      nudr-diameterproxy:
        type: string
      diam-gateway:
        type: string
      alternate-route:
        type: string
      nudr-drservice:
        type: string
      nudr-ondemand-migration:
        type: string
      nudr-notify-service:
        type: string
      ingress-gateway:
        type: string
  OperationalStateConfiguration:
    type: object
    properties:
      operationalState:
        type: string
  OperationalStateHistory:
    type: object
    properties:

```

```

    operationalState:
      type: string
    operationalStateHistory:
      type: array
      items:
        $ref: '#/components/schemas/OperationalStateHistoryArray'
OperationalStateHistoryArray:
  type: object
  properties:
    id:
      type: string
    timestamp:
      type: string
    type:
      type: string
    value:
      type: string
    status:
      type: string

MigrationToolConfiguration:
  type: object
  properties:
    migrationPauseEnabled:
      type: boolean
    keyType:
      type: string
    delete4g:
      type: boolean
    migrationRealm:
      type: string
    migrationIdentity:
      type: string
    migrationNodePort:
      type: integer
    migrationNodeHost:
      type: string
    migrationRanges:
      type: object

MigrationToolStatus:
  type: object
  properties:
    totalNumberOfSubscribers:
      type: integer
    totalNumberOfSourceUdrSuccess:
      type: integer
    totalNumberOfSourceUdrFailures:
      type: integer
    totalNumberOfTargetUdrSuccess:
      type: integer
    totalNumberOfTargetUdrFailures:
      type: integer
    totalNumberOfKeyAlreadyExistsTargetUdr:
      type: integer
    totalNumberOfSourceSubscriberNotFound:

```

```
    type: integer
status:
  type: string
timeStarted:
  type: string
timeCompleted:
  type: string
progress:
  type: integer
```

C

UDM Subscription Notification Formats

The UDM subscription notification format for different request types are as follows:

PUT- Notification Format

```
{
  "ueId": "nai-990991@nai",
  "notifyItems": [{
    "changes": [{
      "op": "REPLACE",
      "from": "",
      "path": "$",
      "newValue": {
        "dnn": "sasa",
        "plmnId": {
          "mcc": "123",
          "mnc": "124"
        },
        "expires": "2032-04-23T18:25:43.511Z",
        "singleNssai": {
          "sd": "651Bf9",
          "sst": 25
        },
        "nfInstanceId": "db59c48c-a2fa-11e9-a2a3-2a2ae2dbcce4",
        "amfServiceName": "nnrf-nfm",
        "subscriptionId": "sb",
        "callbackReference": "udr",
        "implicitUnsubscribe": true,
        "monitoredResourceUris": ["http://localhost:8080/nudr-dr/v2/
subscription-data/nai-990991@nai/context-data/sdm-subscriptions", "http://
localhost:8080/nudr-dr/v2/subscription-data/nai-990991@nai/operator-
determined-barring-data"]
      },
      "origValue": ""
    }],
    "resourceId": "http://localhost:8080/nudr-dr/v2/subscription-data/
nai-990991@nai/context-data/sdm-subscriptions/1"
  }],
  "sdmSubscription": {
    "dnn": "sasa",
    "plmnId": {
      "mcc": "123",
      "mnc": "124"
    },
    "expires": "2032-04-23T18:25:43.511Z",
    "singleNssai": {
      "sd": "651Bf9",
      "sst": 25
    }
  },
}
```

```

        "nfInstanceId": "db59c48c-a2fa-11e9-a2a3-2a2ae2dbcce4",
        "amfServiceName": "nnrf-nfm",
        "subscriptionId": "sb",
        "callbackReference": "udr",
        "implicitUnsubscribe": true,
        "monitoredResourceUris": ["http://localhost:8080/nudr-dr/v2/
subscription-data/nai-990991@nai/context-data/sdm-subscriptions", "http://
localhost:8080/nudr-dr/v2/subscription-data/nai-990991@nai/operator-
determined-barring-data"]
    },
    "originalCallbackReference": ["udr"],
    "subscriptionDataSubscriptions": [{
        "ueId": "nai-990991@nai",
        "expiry": "2020-01-02T08:17:14.090Z",
        "subscriptionId": "1",
        "sdmSubscription": true,
        "callbackReference": "http://10.75.212.167:8787",
        "supportedFeatures": "f",
        "monitoredResourceUris": ["http://localhost:8080/nudr-dr/v2/
subscription-data/nai-990991@nai/context-data/sdm-subscriptions", "http://
localhost:8080/nudr-dr/v2/subscription-data/nai-990991@nai/operator-
determined-barring-data"],
        "originalCallbackReference": "http://mlu-pcf-api-gateway.mlu-pcf.svc/
user-service/userservice/notification/imsi-9999999998"
    }]
}

```

DELETE ENTITY- Notification Format

```

{
    "ueId": "nai-990991@nai",
    "notifyItems": [{
        "changes": [{
            "op": "REMOVE",
            "from": "",
            "path": "$",
            "newValue": null,
            "origValue": ""
        }],
        "resourceId": "http://localhost:8080/nudr-dr/v2/subscription-data/
nai-990991@nai/context-data/sdm-subscriptions/1"
    }],
    "sdmSubscription": null,
    "originalCallbackReference": ["udr"],
    "subscriptionDataSubscriptions": [{
        "ueId": "nai-990991@nai",
        "expiry": "2020-01-02T08:17:14.090Z",
        "subscriptionId": "1",
        "sdmSubscription": true,
        "callbackReference": "http://10.75.212.167:8787",
        "supportedFeatures": "f",
        "monitoredResourceUris": ["http://localhost:8080/nudr-dr/v2/
subscription-data/nai-990991@nai/context-data/sdm-subscriptions", "http://
localhost:8080/nudr-dr/v2/subscription-data/nai-990991@nai/operator-
determined-barring-data"],
    }],
}

```

```

        "originalCallbackReference": "http://mlu-pcf-api-gateway.mlu-pcf.svc/
user-service/userservice/notification/imsi-9999999998"
    }]
}

```

Patch- Notification Format

```

{
    "ueId": "nai-990991@nai",
    "notifyItems": [{
        "changes": [{
            "op": "REPLACE",
            "from": "",
            "path": "/dnn",
            "newValue": "sbsa",
            "origValue": "sbsb"
        }],
        "resourceId": "http://localhost:8080/nudr-dr/v2/subscription-data/
nai-990991@nai/context-data/sdm-subscriptions/4"
    }],
    "sdmSubscription": {
        "dnn": "sbsa",
        "plmnId": {
            "mcc": "123",
            "mnc": "124"
        },
        "expires": "2032-04-23T18:25:43.511Z",
        "singleNssai": {
            "sd": "651Bf9",
            "sst": 25
        },
        "nfInstanceId": "db59c48c-a2fa-11e9-a2a3-2a2ae2dbcce4",
        "amfServiceName": "nnrf-nfm",
        "subscriptionId": "sb",
        "callbackReference": "udr",
        "implicitUnsubscribe": true,
        "monitoredResourceUris": ["http://localhost:8080/nudr-dr/v2/
subscription-data/nai-990991@nai/context-data/sdm-subscriptions", "http://
localhost:8080/nudr-dr/v2/subscription-data/nai-990991@nai/operator-
determined-barring-data"]
    },
    "originalCallbackReference": ["udr"],
    "subscriptionDataSubscriptions": [{
        "ueId": "nai-990991@nai",
        "expiry": "2020-01-02T08:17:14.090Z",
        "subscriptionId": "4",
        "sdmSubscription": true,
        "callbackReference": "http://10.75.212.167:8787",
        "supportedFeatures": "f",
        "monitoredResourceUris": ["http://localhost:8080/nudr-dr/v2/
subscription-data/nai-990991@nai/context-data/sdm-subscriptions", "http://
localhost:8080/nudr-dr/v2/subscription-data/nai-990991@nai/operator-
determined-barring-data"],
        "originalCallbackReference": "http://mlu-pcf-api-gateway.mlu-pcf.svc/
user-service/userservice/notification/imsi-9999999998"
    }],
}

```



```
    }]  
  }
```

DELETE SUBSCRIBER- Notification Format

```
{  
  "ueId": "nai-990991@nai",  
  "notifyItems": {  
    "changes": [{  
      "op": "REMOVE",  
      "from": "",  
      "path": "$",  
      "newValue": null,  
      "origValue": null  
    }],  
    "resourceId": "http://localhost:8080/nudr-dr-prov/v1/profile-data/  
nai-990991@nai"  
  },  
  "sdmSubscription": null,  
  "originalCallbackReference": ["udr"],  
  "subscriptionDataSubscriptions": null  
}
```

D

Generic- Title and its Types in Error Response

The following table lists the titles that are accompanied by any of its type.

Error Code	Title	Detail
400	Bad request	Invalid Data Content in the payload Schema validation failed for this request Invalid URI sent from client Occurrence Constraint Violation Key Not Supported(request has key which is not allowed) Invalid Value Invalid Key Value(key has invalid value) Duplicate key value in the request payload Invalid JSON Payload Invalid Number Format Payload should contain key-value pair present in URI Unknown key, the key provided in the request is invalid Invalid Content Request Data Supplied
403	Forbidden	Subscriber linked to the group cannot be deleted
404	Not Found	Subscriber does not exist Data field does not exist Requested data not found Key Not Found Group Not Found(SLF Group) Route Not Found in configured routes
405	Operation Not Allowed	Operation Not Allowed
406	Not Acceptable	Could not find acceptable representation
415	Unsupported Media Type	Content type 'application/xml' not supported
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

Error Code	Title	Detail
503	Service Unavailable	the IP address of a host (backend service) could not be determined. Timeout has occurred on a socket read or accept. Error while attempting to connect a socket to a remote address and port